



EABA^{2.0}

role-playing without boundaries



BTRC

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In addition, **EABA** owes a debt to the role-playing games that have gone before. These may have themselves had inspiration from *other* role-playing games, but I am just crediting the ones that inspired *me*.

Dungeons & Dragons® (1974), by Dave Arneson and Gary Gygax, for starting the idea of formal role-playing systems, as well as for some of the most fundamental game mechanics like attributes, skill rolls, and so on. Every role-playing game owes something to Dungeons & Dragons.

Champions® (1981), by George MacDonald and Steve Peterson, for internally consistent and intuitive game mechanics, point-based adventurer creation and attribute-based defaults. From beginning as a superhero game it has morphed into the **Hero System®** (1984), a quite good universal system.

Call of Cthulhu® (1981), by Sandy Petersen, for making a story-driven horror system that has taken on a life of its own. The depth and detail of the support material is a benchmark that all role-playing games should strive for.

Fringeworthy™ (1982), by Richard Tucholka, for being one of many Tri-Tac games that stepped outside the traditional genres and showed that there was room out there for solo designers and niche rpgs.

GURPS® (1986), by Steve Jackson, for being the first "universal system" that didn't have a particular genre welded to it, and for making a strong effort to have rules that matched reality where reality was needed. **GURPS** has more licensed fictional gameworlds than any other role-playing game, and that it works fairly well for all of them is a testament to the utility of its game mechanics.

Over the Edge™ (1992), by Jonathan Tweet and Robin D. Laws, for blurring the categories of adventurer abilities and encouraging a free-form play style less dependent on having a rulebook sitting in front of you.

Underground™ (1993), by Ray Winninger, for elegant mechanics, over-the-top setting and eye-popping graphics.

TimeLords™ (1987), **3G³™** (1988) and **CORPS™** (1990), by Greg Porter. These are my own designs, and concepts I originated for these games and those inspired from the above systems are part of **EABA**.



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<i>If you are an experienced role-player, read these first</i>	
<i>If you love details, you will love these</i>	





*EABA is a role-playing system for the new millennium. Maybe not for the next thousand years, but for enough of it for your purposes. I've tried to put everything I have learned about game design and everything I've loved about game play into **EABA**, from the way it looks on the page to the sweaty feel of dice in your hands when you know it all hinges on one die roll... yours. **EABA** gives you the ability to be heroic and get away with it, tempered by the realization that it's still realistic enough to get you hurt if you are stupid or careless.*

INTRODUCTION

EABA (pronounced *ee-buh*) is simple and to the point. Once you read the rules, they should come naturally to you, and most of the info you will need will end up on your adventurer sheet.



You can use **EABA** like you would any generic system, or you can modify it to fit any genre you want. It will play modern espionage as well as high fantasy or superheroes. Larger than life characters can play in the same world as those only slightly better than the average person, and both can have a good time.

! *There are two special things about this pdf.* If you have an *advanced* pdf reader, tapping the logo at the top left brings up a nav menu to take you to different rule sections. Second, tapping the die in the upper right brings up an on-screen die roller that handles **EABA** dice conventions. For an iPad we *highly* recommend **PDF Expert** as the reader of choice, and **qPDF** for Android devices.

Game Concepts

The rules for **EABA** were designed around a handful of simple concepts:

- ✓ *Dice rolling is fun.* Tossing a handful of dice and not knowing what's going to come up can be exciting. *Ask any casino.* You can have too much of a good thing, though. **EABA** gives you a couple of reasonable levels of dice rolling, for whatever floats your boat.
- ✓ *It's cool to be heroic.* The damage system in **EABA** makes it harder and harder to take a person out as they are injured. You can get horribly beat up and still stay on your feet. Adding trauma to an already battered body has less and less effect.
- ✓ *Variety gives character.* **EABA** adventurers do not all look alike in terms of abilities and skills. There is sufficient depth to the system to generate a world of unique adventurers.
- ✓ *No risk, no reward.* **EABA** is heroic, but you can still blow a roll and get killed, or go into shock and die before help arrives to patch you up. If there was no genuine risk of an adventurer getting taken out of the adventure, the adventure would not be half the fun.
- ✓ *Story, rules.* The **EABA** rules should be the *last* thing on your mind when you play. So, they are easy to learn and remember. What you need should be on your adventurer sheet.

Presentation

EABA is *not* designed to wow you with its looks. It is not pretentious, it is not flashy. It is designed to be clear, open, easy on your eyes and if you print it, easy on ink. It is designed in every respect to be usable as a printed game or a pdf on a tablet. If it looks a little bit like a textbook, *it is supposed to.* You read it, you learn it, you put it down and only come back to it when you *need* it. *If you need a fancy presentation to make your gaming experience complete, you will have to look elsewhere.*



What you need

To get started with **EABA** you need a handful of things:

- **dice.** The **EABA** system runs exclusively on six-sided dice, usually called 'd'. If the rules say to 'roll 2d', you roll two six-sided dice and add the results together. If the dice type has a number after it, add that amount to the total. If the rules say to 'roll 2d+1', you roll two six-sided dice, add the results together and then add 1. You will seldom need more than six dice.
- **pencil.** To mark up any printed adventurer sheet with. An eraser would be nice, too.
- **printer.** For printing the adventurer sheet and any other bits you want to hand out. *Please do not pirate this game.* It is cheap enough that your friends can afford their own copy. It is the best damn rpg you are going to find, so encourage us to keep it available...
- **priorities.** Chapters 2,3,4 and 8 are the meat of the rules. *The rest?* Think of **EABA** as a 100 page game with 200 pages of supplements thrown in. *And remember: your mind is your 'game legs', the rules are a crutch.* You do not need the crutch if your legs can do the job on their own.

What is a RPG?

A role-playing game is two things:

One, it's a game. A less athletic version of the games you played as a child, but a game nonetheless. Today, it might be valiant rebels fighting an evil interstellar empire. In other generations it could have been caped crusaders vs. masked villains, axis vs. allies, cowboys vs. indians, probably going all the way back to *homo sapiens vs. neanderthalis* ("It's my turn, you got to invent the wheel last time!").

A role-playing game just formalizes the rules of that play. Instead of "bang! you're dead!" we have rules for rolling dice. Instead of physically wrestling your friends to the ground we have numbers on a page that say who is stronger or faster. *But the idea is the same.* It is entertainment, with added aspects of competition, cooperation and creativity.

You are pretending to be someone else, in a different time and a different place. You temporarily leave the mundane world behind and become someone larger than yourself, in stature and power if not in imagination. In this alternate world you adventure and do things impossible or impractical in the real world, and you have the luxury of risking death in the name of heroism...because in the end it is just a game and no one really gets hurt.

Two, it's a story. There is no way to tell if storytelling is older than game-playing, but both are ancient. Stories in understandable written form go back almost as far as writing itself. The *Epic of Gilgamesh* contains all the elements of a great story and dates back almost five thousand years. The Lascaux cave paintings might well have been a story or an aid to storytelling, and date back over seventeen thousand years!

Something in us is inherently enthralled by stories, because there is always something that appeals to our desires which someone else can give a new perspective on. Different cultures have different outlooks, but *everyone* is captivated by a good story, a captivation that lasts into adulthood, as evidenced by the continued popularity of movies, plays, and novels. Even card games and video games are adding sophisticated storylines to set themselves apart from the rest.

A role-playing game is not just a game, or the telling of a story, but both. One person is the creator of the story and arbiter of its changes, who is usually called the gamemaster.

Everyone else is the players, those who take on the roles of the heroes in the story. We will call those heroes 'adventurers', but they can be called characters, actors, avatars or other terms in other games. The gamemaster may create a plot as fine or coarse as they can manage, but the gamemaster does not dictate how the story unfolds. Instead, they guide it, herd it, shape it.



As do the adventurers. As the gamemaster describes the setting and what is happening, the players describe what their adventurers do in response. This could be anything that would happen in a story, novel, movie or other narrative. It could be basic, but require a particular adventurer's talents, like the investigation of a crime scene or searching dusty libraries for clues to ancient treasure. It might also involve talents like picking locks or sneaking past sentries, and of course it can involve physical combat, like a dogfight, or a martial arts challenge, or mental challenges like tricky negotiations or dealing with a foe's behind-the-scenes plots and machinations.

No lone adventurer is likely to have *all* the talents needed to overcome the obstacles the gamemaster presents. Different adventurers have different strengths, and together they can overcome obstacles that no one of them could overcome alone. An adventuring group has to pool their talents to have a chance of succeeding, each adventurer using their strengths as best they are able, and counting on the other adventurers to do the same. The plot of an adventure is like the plot of a movie or novel, but there is no guarantee that all the adventurers will make it to the end of the plot, nor any certainty that the good guys will win in the end.

And that is the challenge.

The story never ends. When an adventure is completed and a plot resolves, everyone picks up the pieces and moves on. The villain may have been defeated, but escaped in the end to plot new mischief. One evil ruler may be deposed, but somewhere else a new one arises. That plot may be over and done, but the adventure is not. *And as long as people enjoy telling stories and playing games, it never will be.*

- Greg Porter

Rule guidelines

EABA is organized in a particular way, as are all its supplements.

i Examples of how to use an **EABA** rule will look like this.

Advanced Rule

Rules that are optional, but which add some detail or depth to the subject being discussed will look like this. Use them if you want. Or not.

! A **special note** about a rule or game topic will look like this. These are often things that have potential to unbalance a game or which are generally important that you know about.

! This is generally reserved for advanced rules or notes particular to a **specific gameworld**, so you will not see any of them in the core **EABA** rules.

If you are reading this on-screen and you see some isolated text in **red**, it is almost certainly a hyperlink to another part of the rules (this one goes back to the table of contents).

The **EABA** rules use the metric system, but for temperatures and speeds, English units will often be provided as well.

The only dice used in **EABA** are six-sided dice. For consistency, even die rolls will usually be referred to like $2d+0$. Unless otherwise stated, all bonuses or penalties to dice convert to no more than a +2 on a roll, with a +3 becoming an extra die, and dice rolls will always be a number of dice and +0, +1 or +2.

i A roll of $2d+2$ with a +3 for some circumstance would usually be rolled as $3d+2$.

In addition, for *most* rolls on an attribute or skill, you can count *one* full die (*before* rolling) as a '+2' instead of any existing extra amount. See also '**taking 2's**'.

i A roll of $4d+0$ or $4d+1$ could be rolled as $3d+2$ if desired.





*Any adventurer can attempt to do anything. Their chance of succeeding is another matter. **EABA** tries to break things down the way you would: Things you are sure you can do, things you are not sure about, and things that you know are impossible. You are sure you can walk and chew gum at the same time. You are equally sure that you cannot leap over tall buildings in a single bound. Neither of these is very important to an adventurer. The drama and suspense comes from that big grey area in between...*

INTRODUCTION

This short chapter is 'the system', how you make rolls, succeed, fail and figure out how hard it is to do whatever it is your adventurer is up to.



Whenever something happens that is not a foregone conclusion, someone will have to roll dice to see if the action is successful. Dice in **EABA** are always the standard six-sided dice, and you just roll as many as are appropriate for your attribute or level of skill. You are trying to match or beat a 'difficulty', which represents how hard that task is. If you get this number or better with your roll, you succeed, and some tasks give you an extra benefit based on the amount you succeed by. If you do not reach the difficulty with your roll, you fail at what you were trying to accomplish, and in some cases, a very poor roll will have adverse consequences (your gun jams, etc.).

When & why

Roleplaying is about making a story, having fun and yes, kicking some ass. **EABA** (or any system) is just a means of codifying the stuff that does not feel right if you are just making it up. The flip side means that when you do not need a die roll or a rule, you do not slow things down by insisting on using them.

The *rules* are guidelines for arbitrating sticky situations, like "I do not want to just declare that your adventurer is dead because they charged a machinegun nest while armed only with soggy bananas, so I will let the rules take care of the problem". The *system* is the overall game mechanics for handling the success and failure chances for this and other situations.

Best Three

That's all you really need to remember when making an attribute or skill roll. Your total is the sum of the **best three** die results, *plus* any fractional bonuses. If you are rolling three or less dice, you simply use all of them. You may always sacrifice *one* die from a die roll (before rolling) to count as a +2 on the rest of the roll.

i If an adventurer has a Awareness roll of $2d+1$ and is trying to spot something, they just roll $2d$ and add +1. If the dice came up '4', '6', then the total would be 11 (remember the +1). For a Firearms roll of $5d+0$, you roll $5d$ and keep only the best three results. For instance, if you rolled '2', '3', '5', '4', and '1', you would keep the '3', '5', and '4' for a total of 12. But *before rolling*, you could choose to sacrifice *one* die, and roll as if your adventurer's skill was $4d+2$ instead of $5d+0$.

In game terms, if you are rolling more than 4d and do *not* have a +1 or +2, it is usually to your advantage to sacrifice a die, since you only keep 'best three' anyway. For instance, the average of $3d+2$ is higher than the 'best three' average of $4d+0$. *Try it a few times to see how it works.*



Taking 2's

The gamemaster can choose to let a player count *all* their dice instead of 'best 3', but you count *each* die as a result of '2', and you decide this *before* rolling. This is called 'taking 2's'. This allows an *automatic* success for tasks of difficulty of no more than 2 per die you would have rolled (plus any leftover +1 or +2). *So, if you had an adjusted skill roll of 3d+2 or 4d+0, you could 'take 2's' to automatically succeed at tasks of difficulty 8 or less.* Odds are, if you *did* roll 4d+0, your chance of getting 8 or more is over ninety-seven percent. You can 'take 2's' in *any* situation that involves a die roll. For instance, you could have weapons 'take 2's' on their damage (*after* armor) if you want to avoid doing too much damage (trying to wound rather than kill). If you allow extra time spent on a task to count towards 'taking 2's', it means that *anyone* could succeed at *anything* if they just try long enough. So, you may want to limit the time benefit that can apply to this rule.

The 'best three' applies to any task in **EABA** that is competitive, or tasks where you are figuring a chance of success. Sometimes you just use the total of *all* the dice. For instance, the damage you do with a kick is your default Strength roll, using *all* the dice.

Dice and penalties

So, you have a number of dice you roll, and a difficulty to match or beat. Sometimes, things will vary one or both of these.

The general rule is things *internal* to you will affect the *number* of dice rolled, and things *external* to you affect the *difficulty* of the task.

Go back and read that again. It is important.

Slick mud may affect the total an adventurer needs to reach with an Agility roll, but that slick mud affects *everyone* equally, so it will increase the difficulty of the task. However, a sucking chest wound will affect the number of dice the adventurer gets to roll, and only affects the *adventurer*.

The things that will most commonly reduce the dice you get to roll are:

- penalties for doing multiple actions
- encumbrance
- injury or exhaustion
- doing something in a hurry

The thing that will most commonly increase the dice you get to roll is:

- extra time spent on the task

The time you spend on a task is important. Tasks generally have a default time for using them. Many things in combat are merely a fraction of a second, like pulling a trigger or blocking a sword. Other things take longer, like picking a lock or climbing a wall. A bonus or penalties for time is for the difference between the default time and the time actually spent.

Dice penalties generally affect *all* Attribute or skill rolls, but *may* be limited in scope, and it is a gamemaster call if there is any question.

i If your adventurer were carrying enough gear that they were taking a -1d penalty from their encumbrance, then their default Agility roll would be reduced by -1d, but this would *not* penalize their Awareness rolls or their Will roll if they were trying to avoid being stunned.

Dice and levels

All rolls in **EABA** use the idea that 3 levels equals 1d, and remainders are a +1 or +2 to the roll. *So, a Strength of 7 and a Strength of 2d+1 are the same thing.* Whether an attribute is referred to as dice or a value depends on the situation. If you are comparing Strength to a weight to see how far you can throw it, you use the value. If punching someone, you use the dice. Unless otherwise stated, bonuses will turn amounts of more than +2 into extra dice.

i If you have a Strength of 2d+1 (or 7) and something gives you a +4 to Strength for a particular roll, your effective Strength is 11, for an adjusted Strength roll of 3d+2.



Difficulty

This is any number you need to match or beat with a die roll. An 'average' task is a difficulty of 7, meaning that your 'best three' total has to equal or exceed 7 in order to succeed at that task. The average person (Attribute of 6, a roll of 2d+0) has a little bit better than 50-50 chance of successfully completing an average(7) task on that attribute. If you have to arbitrarily decide a difficulty, that's your guideline.

task	difficulty	average	take 2's
automatic	1	0d+1	0d+1
very easy	3	1d+0	1d+1
easy	5	1d+1	2d+1
average	7	2d+0	3d+1
challenging	9	2d+2	4d+1
hard	11	3d+0	5d+1
formidable	13	4d+0	6d+1
heroic	15	5d+1	7d+1
superheroic	17	6d+2	8d+1
impossible	19	8d+2	9d+1

The 'average' column is the attribute or skill roll you need to have for about a 50-50 chance of succeeding at a task of that difficulty with a 'best 3' roll. The 'take 2's' column is the roll you would need to *automatically* succeed if you just took a result of '2' for each full die.

i If your adventurer's skill roll is 5d+1, you know they have a decent chance at completing heroic(15) tasks and are good enough to get an automatic success on hard(11) ones. On the other hand, if your adventurer only has a roll of 2d+0, you know they can *never* succeed at a formidable(13) task, because you can't roll a total of 13 or more on only two six-sided dice.

In combination with 'taking 2's' this gives you a feel for ordinary tasks by average people. If people with a driving skill roll as low as 1d+1 can make it to work each day without incident, then it means the difficulty of driving and parking in normally encountered situations is no worse than very easy(3).

! Something that is very technology- and skill-dependent is the need for tools and supplies. *Not having the right tools or parts can make even easy tasks next to impossible.* Changing a tire is normally an easy(5) task. Try doing it without a tire iron and it gets a *lot* harder. This will be very skill and situation dependent, but generally speaking, if it is twice as hard to do, it is worth +2 to the difficulty.

The previous difficulty chart is a *subjective* one. Many tasks in **EABA** will have a difficulty based on *measurable* circumstances, like the range to a target.

Other times, the difficulty of a task is based on some characteristic of the object of your attention. In this case, difficulty is based on the value of that characteristic. For instance, trying to punch someone. Odds are they are going to try and dodge your fist. In this case, the difficulty for you is the result of *their* Agility or skill roll. Or, if you try to sneak by someone, the chance is your ability to sneak vs. the result of their Awareness roll. These are called 'opposed rolls'. For opposed rolls, ties usually go in favor of whoever is initiating the action. So, if you attack someone in melee, your skill is an opposed roll against their skill, and on a tie, you hit them, since you initiated the action. The rules or skill descriptions will usually tell you which way to do things if there is any question.

! Occasionally, there will be 'semi-opposed' rolls, where you and your opponent are rolling against a situational difficulty common to both of you, and whoever makes their roll by the most is the winner. The difficulty for each of you does not have to be the same, and it is the margin of success that matters.



The EABA Universal Scale

One of the key features of **EABA** is that most real-world relationships are handled using the table on **page 2.8**. This is the **EABA Universal Scale**, or as you are more likely to call it, 'the chart'. With a few limits and tweaks, it can handle just about all combat-related tasks, as well as most other in-game relationships. The basic **EABA** rules have a table with eleven columns, but other supplements may expand both the scope and range covered by the table. The columns are:

level: The left-most column is either a starting point or an end point. For instance, if you want to see how much you can lift, you would start with your Strength at this level and go *right* to find the appropriate 'carry' amount.

i A Strength of 11 can lift and carry 160 kilograms.

On the other hand, if you wanted to see the difficulty to hit a target at a given range, you would find the range in meters, and then go *left* to find the level of difficulty.

i A range of 16 meters is a distance level of +11.

It is *very* important to remember that the word 'level' always refers to the value in *this* column. You then look under the appropriate heading on that row to get an in-game *value* associated with that *level*.

i A range *level* of +14 is 45 meters. A time *level* of +14 is 2 minutes. Conversely, a range of 45 meters is a range level of +14 and a time of 2 minutes is a time level of +14.

Levels are useful in comparing things to get a third result.

i If you take your throwing Strength as a level and subtract the mass level of an item, it tells you the distance level you can throw it. If you take a money level for a day's wages and add a quantity level for a year's worth of working days, this gives you a yearly salary.

dice: You already know that each +3 is 1d, and remainders are either +1 or +2. This just lists it in case you have trouble doing it in your head.

damage: This is just a subjective column showing items that roll that many dice in damage, just to give you a feel for how the scale goes up. The melee weapon damage assumes a person of average Strength.

mass: What someone of a given Strength attribute can lift and stagger around with (full encumbrance). This is also used for any other mass comparisons.

distance: A given distance will have a level associated with it, in meters, or in extreme cases, in kilometers. The numbers in red are the range increments for paranormal powers and gadget design. This column is also used for movement purposes, with items listed for approximate top speeds. A distance level plus a time level tells you how far you have moved. With some **tweaks**, the distance column may also be used for area-based calculations.

size: The approximate size of an object in its longest dimension. This is used for combat targeting, among other things, and assumes roughly human proportions. Things that are very wide or narrow have size modified up or down by one or more rows, like trying to torpedo the front of a ship instead of its side. *Size is really just the inverse of distance, with human size set at +0, and is a convenience so you always remember that bigger things decrease the difficulty to hit.*

time: Which is abbreviated as seconds(s), minutes(m), hours(h), and days(d). It is important to note that in any competitive endeavor over time, time is not a factor unless one person is using a *different* amount of time than the other. The '✓' and '✗' marks are the default times for recovery of one non-lethal or lethal hit, respectively. Your 'recovery' stat may shift this default time one or more levels.



money: EABA uses 'credits' or 'Cr' as the generic unit of currency. Items of more than 1000 Credits will use kilocredits, or 'KCr'.

quantity: This column is used most often to represent consumed items, like bullets used in combat, but it can also represent information. The quantity compared to time corresponds pretty well to words of spoken information.

The quantity column is useful as a 'paper calculator' for abstract amounts or anything where you need to know how much of X goes into Y.

i An example would be if you have to pay 1000 soldiers (quantity level of +20) a salary of 250 Credits (money level of -4) per week for 8 weeks (quantity level of +6), then the money required is $(20 - 4 + 6) =$ a money level of +22, or 2 million Credits.

recovery: Whenever you do something to deplete yourself (like exertion), or have something done to you (like getting injured), you will need to recover. Different types of injury or insult will require a certain recovery threshold to recover them. Your adventurer's 'Recover' rating plus a time level is how you see how long it takes.

turn mod: EABA uses an advanced combat model that ups the threat level and ability to do things as an encounter progresses. The value in this column is just a reminder of the scaling factor used in each round of a fight.

Turn mod is really just time levels, but because it is used in a very specific way over a specific interval, it gets its own column to keep track of it easier.

So, how do I use it?

About like you would expect. Most of the values combine in fairly obvious ways. Values in your favor *reduce* the difficulty. Values against your favor *increase* the difficulty.

- i** If you move a distance of +5 (2 meters) for a time of +8 (15 seconds), the total distance you have moved is +13 (32 meters). *Close enough.*
- i** If you shoot at a distance of +12, the target is +1 difficulty for size and you spend a time of +2 taking the shot, then the final difficulty you need to roll is 11 (remember that the aiming time is in *your favor*, so it *reduces* the difficulty).
- i** If you have an Awareness of +9 and read a story with an information content (quantity) of +25, it will take a time of +16 (again, the Awareness *reduces* the difficulty).

You will certainly find other uses as you get into a game, and there will also be some exceptions where the relationships do not apply perfectly. For instance, your Strength for throwing things is not the same as your Strength for lifting things, so the distance you can throw something is *not* your Strength less the weight level. But, the table is still exceptionally useful and it beats having to leaf through the rules for special case tables.

Combined endeavors

In a situation where people can work together towards a task (like lifting a heavy object), each time you double the effort it increases effective Strength by 3 or alters the difficulty by 2. That is, two people of Strength 6 can, when working together, lift as much as a person of Strength 9. For unequal values, you generally average them and round down. So, a Strength 6 and a Strength 7 person working together would count as Strength 9, but a Strength 6 and a Strength 8 working together would count as Strength 10.



! If you are a number-crunching kind of player who likes to know their *exact* chance of doing something *before* they make a roll, then the following table is for you. This is your chance of getting a given difficulty with the listed die roll. They are listed as d+2 amounts because that also works for cases where you drop a die to get a +2, like rolling 4d+0 as 3d+2. The table shading for each column is '90% or more', '50-89%', '10-49%' and 'less than 10%'.

difficulty	die roll				
	2d+2	3d+2	4d+2	5d+2	6d+2
5	97%	100%	100%	100%	100%
6	92%	99%	99%	99%	99%
7	83%	98%	99%	99%	99%
8	72%	95%	99%	99%	99%
9	58%	91%	98%	99%	99%
10	42%	84%	95%	98%	99%
11	28%	74%	90%	96%	98%
12	17%	63%	83%	92%	97%
13	8%	50%	73%	86%	93%
14	3%	38%	62%	77%	87%
15	0%	26%	49%	66%	78%
16	0%	16%	36%	52%	66%
17	0%	9%	23%	38%	51%
18	0%	5%	13%	24%	35%
19	0%	2%	6%	12%	18%
20	0%	1%	2%	4%	10%
21	0%	0%	0%	0%	0%

Looking ahead to making an adventurer, you might think "I want my archer to be able to hit a difficulty 14 target about ninety percent of the time." And then use this table to see that you will need a skill roll of 6d+2 and give your adventurer an Agility and Archery skill that gives them this roll.

Remember that **EABA** only uses the 'best three', not the *entire* die roll. Adding in a +2 means a 'best three' roll of 18 can actually get a result as high as 20. Anything harder than a difficulty of 20 is simply impossible for mere mortals. There *are* ways around this, but that is in the *next* chapter...

Advanced table use

You *can* do more complicated things with the table if you want. Here are a few examples:

volume: the volume in hexagons (1 hexagon \approx .75 cubic meters) of a sphere is about three times the radius *level*, minus 1. The volume in hexagons of a cube whose sides are a distance level is about three times the radius level, minus 5. In both cases, the value in cubic meters would be 1 level less, and the values stay in the distance column in all cases.

i A 4 meter sphere (*radius* of 2 meters, *radius level* of +5) has a volume *level* of about $(5 \times 3) - 1 = +14$, or about 45 hexagons of total volume. A cube with sides of 2 meters would have a volume level of about $(5 \times 3) - 5 = +10$, or 11 hexagons. If you wanted to know how much a stone ball 4 meters across would weigh and said that stone weighed 2 tons per cubic meter, you would subtract 1 level to convert to 32 cubic meters and multiply that by 2 tons to get a mass of 64 tons.

area: the area in hexagons (1 hexagon \approx .75 square meters) of a circle is about twice the radius *level*, plus 1. The area in hexagons of a square whose sides are a distance level is about twice the distance level, minus 2. In both cases the value in square meters would be 1 level less, and the values stay in the distance column in all cases.

i Your starship lifepod has a solar concentrator that unfolds to an 11 meter radius. This is a distance level of +10, so it will have a total area of $(10 \times 2) + 1 = +21$, or 500 hexagons. If the gamemaster says it generates 90 watts per hexagon (quantity level of +13 is x90), then your available power is $21 + 13 = +34$, or (staying on the distance column) an output of 45,000 watts.

! You might notice that amounts in the Strength column double every +3 while everything else doubles every +2. *It seems to work out anyway*, and gives a more useful range of Strengths for adventurers. It is just a quirk of the system.



EABA Universal Chart

level	dice	damage	mass	dist./speed	size	time	money	quantity	recovery	turn mod
-12	-		.8kg	-	125m	-	15Cr	-	-10	
-11	-		1kg(pistol)	-	80m	-	22Cr	-		
-10	-		1.3kg	-	65m	-	30Cr	-	-9	
-9	-		1.6kg	-	45m	-	45Cr	-		
-8	-		2kg	-	32m	-	65Cr	-	-8	
-7	-		2.5kg	-	23m	-	90Cr	-		
-6	-		3kg	-	16m	-	125Cr	-	-7	
-5	-		4kg(rifle)	-	11m	-	175Cr	-		
-4	-		5kg	-	8m(tank)	-	250Cr	-	-6	
-3	-		6kg	.1m	6m(truck)	-	350Cr	-		
-2	-		8kg	-	4m(car)	.5s	500Cr	x.5	-5	
-1	-		10kg	.3m	3m(horse)	.7s	700Cr	x.7		
+0	0d+0		13kg		2m(person)	1s	1KCr	x1	-4	turn 1:+0
+1	0d+1		16kg	.5m	1.4m	1.4s	1.4KCr	x1.4		
+2	0d+2		20kg	.7m	1m(torso)	2s	2KCr	x2	-3	turn 2:+2
+3	1d+0	knife	25kg(child)	1m	.7m(leg)	3s	2.8KCr	x3		
+4	1d+1		32kg	1.4m	.5m(arm)	4s	4KCr	x4	-2	turn 3:+4
+5	1d+2		40kg	2m	.4m	6s	5.6KCr	x6		
+6	2d+0	sword	50kg	3m	.3m(head)	8s	8KCr	x8	-1	turn 4:+6
+7	2d+1	pistol	65kg	4m	.2m	11s	11KCr	x11		
+8	2d+2		80kg(human)	6m	.1m(hand)	15s	16KCr	x15	+0	turn 5:+8
+9	3d+0	hvy pistol	100kg	8m(man)	-	23s	23KCr	x23		
+10	3d+1		125kg	11m	-	30s	32KCr	x30	+1	turn 6:+10
+11	3d+2		160kg	16m(horse)	-	45s	45KCr	x45		
+12	4d+0		200kg(cycle)	23m	-	1m	64KCr	x60	+2	turn 7:+12
+13	4d+1	rifle	250kg	32m	-	1.4m	90KCr	x90		
+14	4d+2		320kg	45m(car)	-	2m	125KCr	x125	+3	turn 8:+14
+15	5d+0	hvy rifle	400kg	65m(sports car)	-	3m	175KCr	x175		
+16	5d+1		500kg(horse)	90m	-	4m	250KCr	x250	+4	turn 9:+16
+17	5d+2		640kg	125m	-	6m	350KCr	x350		
+18	6d+0	machinegun	800kg	175m	-	8m	500KCr	x500	+5	turn 10:+18
+19	6d+1		1.0 tons	250m	-	11m	700KCr	x700		
+20	6d+2		1.3 tons	350m(jet)	-	15m ✓	1MCr	x1000	+6	
+21	7d+0		1.6 tons(car)	500m	-	23m	1.4MCr	x1400		
+22	7d+1		2.0 tons(truck)	700m	-	30m	2MCr	x2000	+7	
+23	7d+2		2.5 tons	1km	-	45m	2.8MCr	x2800		
+24	8d+0	light cannon	3.2 tons	1.4km	-	1h	4MCr	x4000	+8	
+25	8d+1		4.0 tons	2km	-	1.4h	5.6MCr	x5600		
+26	8d+2		5.1 tons	2.8km	-	2h	8MCr	x8000	+9	
+27	9d+0		6.4 tons	4km	-	3h	11MCr	x11k		
+28	9d+1		8.1 tons	5.6km	-	4h	16MCr	x16k	+10	
+29	9d+2		10.2 tons	8km	-	6h	23MCr	x25k		
+30	10d+0		12.5 tons	11km	-	8h	32MCr	x32k	+11	
+31	10d+1		16 tons(APC)	16km	-	11h	45MCr	x45k		
+32	10d+2		20 tons	23km	-	16h ✗	64MCr	x64k	+12	
+33	11d+0	med cannon	25 tons	32km	-	1d	90MCr	EABA rules		
+34	11d+1		32 tons	45km	-	1.5d	125MCr	x125k	+13	



WHAT IS AN ADVENTURER?



EABA is a rule-based system, and the old saying goes, “when all you have is a hammer, everything looks like a nail”. That is, **EABA** looks to rule-based solutions to problems and situations of a role-playing nature. *But an adventurer is far more than a collection of numbers and an allotment of points.*

An adventurer in a gameworld represents a ‘real’ person. Someone who was born, had a family life, a childhood, friends, school, apprenticeship, college or whatever, a nation, race, religion or creed, hopes, dreams, desires, loves gained and loves lost, triumphs and defeats, goals, dreams and disappointments.

And there is no way we can put that on the front and back of an adventurer sheet. Your adventurer in the most complete and accurate sense will exist only in your mind. The rules and stats are merely a poor crutch to allow this person to interact with the physics and culture of a particular gameworld. Is this object too heavy to lift? How fast can I run? Do I have sufficient social standing to be invited to a swanky event?

So, before we get back to the rules and math and dry, featureless numbers, *stop. Stop, and think* about the gameworld. Have you read the intro for that gameworld, and any chapter that gives details on daily life and culture? What place and role do you want your adventurer to have? *This is a goal.* What place and role do they *actually* have at the start of play? *This is reality.*

There *are* in-game traits like personality, friends, enemies, status, background, and motivation, but giving life to these traits and everything else in the second paragraph is going to take a lot more than just making a line entry on the adventurer sheet.

What you get out of your adventurer is going to come from what you put into them. You do *not* have to write a lifetime biography of your adventurer before you design up their stats, but you *should* consider the following checklist before you do so:

- circumstances of your birth
- the type of childhood and family you had
- the level and type of education you have
- the breadth of your cultural knowledge
- the nature of the work you do
- the sort of status and wealth you have
- the kind of people who like and dislike you
- how you gained any special talents you have



Answer each of these in a phrase or short sentence and it will help you immensely, not just in creating your adventurer, but as you play and campaign and build the backstory of your adventurer as you move forward in game time.



BASICS

Adventurers as a bundle of numbers are going to have attributes, skills, traits and possibly powers. You will be getting points to pay for these, and in the case of traits, you can take on negative traits to get extra points. Points are split up between those usable only for attributes(A), only for skills(S), and those only for powers(P).



attribute costs: Points are simply divided between the possible choices you have for that type of points and cost 1A per point of an Attribute. If you have 40A for Attributes, then with 6 Attributes you have an average score of about 7 per attribute. Simple skills may be used even without training, at a -1d penalty on the roll for the skill's governing attribute.

i If you want a Strength of 7, it costs 7A. If you want an Agility of 9, it costs 9A, etc.

skill costs: Skills will start at basic training that merely lets you roll the attribute the skill is based on with no penalty. More advanced training adds one or more dice to this. A +0d skill costs 1S, and the *total* cost for each +1d costs double the skill bonus (+2d costs 4S, but if you already had +0d it would only be +3S).

Take a look at the **basic adventurer sheet**. It is pretty clear where everything has to go on it, and we will cover each section in turn. The front has room for all the important stuff, and there is lots more room on the back for other information if you need it. If you think you are going to be using all the features of **EABA**, then go ahead and start using the **advanced adventurer sheet**. There is no problem with upgrading during play, so if you want you can start with the basics and work your way up.

Instant adventurers

*This is a fifty page chapter. If you just want an adventurer but do *not* want the rules, then go to the end of the chapter, where there are several adventurer templates you can use with little modification in a number of genres or settings.*

Starting levels

The quantity and type of points you get to purchase an adventurer with depends on the type of campaign the gamemaster is running. This is sometimes referred to as the 'power level' of a campaign, like "who wants to make up adventurers for a heroic swashbuckling campaign?"

campaign	attribute	skill	power	trait
low normal(6)	30A	5S	-	≤9
normal(7)	35A	10S	-	≤11
heroic(8)	40A	15S	5P	≤15
grand heroic(10)	50A	20S	10P	≤20
superheroic(13)	65A	25S	30P	≤30
grand super.(18)	85A	35S	60P	≤45

The more points, the more powerful your adventurers will be, and the more powerful you can expect your foes to be as well. The number in parentheses is the *average* level in each Attribute that you could get with that amount of points if you take most of your limit in traits and put the points towards Attributes.

i There are six Attributes, so the 30A you get at the 'low normal' level only gets you an average Attribute level of 5. However, if you take 6 of the 9 points you can gain from traits and put them towards Attributes, that gets you 36A, enough for an average Attribute level of 6. In addition, 'real-world' people have low values in Fate, which bumps up the average for the other Attributes.

Points for powers are *always* optional. 'Real-world' campaigns will have no powers. Or, the gamemaster might decide to make a 'grand heroic' campaign where powers are much less common and points for them are harder to come by, or a magic-rich 'normal' world where powers are all over the place. Because they have such a powerful effect on a campaign, the gamemaster can place any limits they want on powers, including things like whether or how many P can be put towards specific effects or powers. A good power limit is that no more than half the *starting* points (round up) can be spent on a single power.



! If you *really* want to get straight into playing, just assume you have extra points from Traits at say three-quarters of the maximum, buy your Attributes and skills, grab some gear and worry about the details later.

For reference, an 'average' person has a score of 5 to 8 in most Attributes and 2 to 3 in Fate. A score of 9 in an Attribute puts you in the top ten percent and starts to be noticeable. You *look* strong, people who talk to you feel the forcefulness of your personality, and so on. A level of 11 in an Attribute would be in the top one percent of human potential.

Even 'normal' adventurers can be exceptionally good at one or two things (you *can* make an Olympic athlete from a 'normal' adventurer's points). For campaigns or gameworlds mostly filled with 'normal' people, we recommend that adventurers be 'heroic'. This gives points to be *very* good in one attribute or better than average in most of them, and have sufficient skill points to have a variety of interesting or useful skills at decent levels of competence. A 'normal' person can be as good or better at something than a 'heroic' adventurer, but will have far less depth as a person. Making an Olympic athlete out of a 'normal' set of points means that you do not have much of a life outside that narrow set of skills, but a 'heroic' adventurer can be about that good *and* have several other skills as well.

Skill-poor gameworlds

Many primitive gameworlds, especially ones with slow travel or communications, are often skill-poor as well. Adventurers for such worlds have a reduced number of starting skill points, usually half the listed amount, rounding up. The average person will only have a handful of useful talents, and must use their default roll for everything else. If adventurers are by default from an upper class or otherwise have access to a variety of knowledge not available to the vast majority of the populace, then you can ignore this *for them*, while remembering that most people will *not* have this depth of training available to them.

ATTRIBUTES

Adventurers will have six attributes, which are the foundation for their skills and some traits. These are **Strength, Agility, Awareness, Will, Health** and **Fate**. The 'average' person has enough points to purchase a 7 in all the Attributes except Fate, which is as low as is allowed for the 'real world' campaigns or those without magical or other paranormal powers (usually a Fate of 3 or 4).



There are two limits in assigning levels to your starting Attributes. The first is that no Attribute can be more than 3 points higher than the next lowest one. This keeps you from favoring one at the expense of all the others.

i If your highest Attribute is an 11, then your next lowest one must be at least an 8. If your next lowest one was a 9, then the next lowest one after that would have to be at least a 6.

The second limit is that if you are a 'normal human', you cannot have any Attribute at a level of more than 12. This upper limit may be adjusted by the **Age** trait. For instance, an old adventurer would have a lower upper limit on their Strength.

Superhuman attributes

Points in the P category can be put towards Attribute levels that exceed the normal human maximums. So, a Strength of 13 would cost 12A and 1P. You *can* buy paranormal powers to increase attributes, but buying attributes with P makes them an inherent part of you, rather than the effect of an external power. Attribute levels bought with P do *not* count towards the previous rule about the next lowest attribute (e.g. you could have a Strength of 15 and your next lowest attribute might be a 9).

Attributes can be improved in a campaign with experience or training (like weightlifting), but this is fairly hard, and you should be satisfied with the starting levels in your Attributes and should not expect to be able to boost them quickly during play.



Attributes are more inherent to an adventurer than skills. You can be dextrous without being an Olympic gymnast, or smart without being a Nobel Prize winner. Attributes are general in application, and while a good Attribute will help you be more skilled, a person who is highly skilled will be better off than a person who is just relying on natural talent.



default rolls: An attribute will be a number, like a Strength of 7. This gives you a 'default roll', which is 1d for every 3 points in the attribute, and +1 for each leftover point. So, An Agility of 7 gives you a 'default Agility roll' of 2d+1. The default roll is used for tasks using the 'pure' attribute, like "make an Agility roll to avoid slipping on the ice". It will also represent raw talent or life experience as a basis for skilled tasks, like an Agility-based skill for using a sword and shield. An adventurer who has no formal training in a skill uses their default roll **minus 1d**, which is called your 'unskilled default'. Note that some skilled tasks will have *no* 'unskilled default'.

i The adventurer with an Agility of 7 has a 2d+1 roll to use their basic Agility, but only a 1d+1 roll to do a *skilled* Agility task they have no training in. A gamemaster could say anyone could throw a punch using their default Agility minus 1d, but they could probably *not* do an acrobatic routine or pilot a helicopter with their default Agility roll, regardless of how good it was. A high Agility would make them better at it once they got *some* training, but without training they would be just as clueless as everyone else.

! The term 'default roll' will be used a lot in **EABA**. It always means the die roll for your level in an Attribute, and this is listed on the adventurer sheet next to the Attribute. Looking at Durnok the Lame (**page 3.52**), you see that his Health is an 8, and his default Health roll is 2d+2. Your 'unskilled roll' is simply the default roll minus 1d for whatever attribute is most applicable for the task.

You do not have to provide a justification for the level you decide to purchase for attributes, though it *does* add depth and background if you actually explain *why* you are exceptional one way or the other. Having a high Attribute makes it possible to have higher levels of any skill that is based on that Attribute, so if you have a specific idea for an adventurer in mind, plan the Attributes first.

Advanced adventurer sheet

We already mentioned there were two versions of the sheet used to keep track of your stats. Most of the differences between the two are in secondary functions of Attributes. For instance, differentiating how well you can see from how well you can hear. As various Attributes are described, items on the basic sheet are marked , and those *only* on the advanced sheet will be marked .

So, what should I get?

Depends on the sort of adventurer you had in mind. You can be a generalist who has similar scores in all Attributes, or you can emphasize some over the others depending on what you want an adventurer to do or be. If you want to be *significantly* better than an average person at something, an attribute should be at least a 9. This gives you a default roll of 3d+0 and a best possible roll of '18', compared to a best roll of '14' for 2d+2. If you want theoretically be able to roll a '20' on an attribute, you need at least an 11, which gives a 3d+2 roll.

fighter(melee): Strength (to do damage), Agility (to base combat skills on), Health (for endurance)

fighter(ranged): Agility (to base skills on), Awareness (to better see your targets), Strength (if using something like a bow)

scholar: Awareness (to base your skills on)

artist: Agility (to base physical skills on), Awareness (to base mental skills on)

leader: Will (to base social skills on), Health (for leading in battle), Awareness (for leading in the legislature)

athlete: Agility (to base skills on), Health (for endurance and movement), Strength (depending on field of endeavor)



Sheer physical power. Your average adult

Strength

strike d+ kick d+ throw d+

man has a Strength of 6 to 8, and a woman a Strength of 5 to 7. A professional weightlifter would have a Strength of 12 or 13, while a frail old man or small child might be a 4. Most people will fall in the 5 to 9 range.

What Strength does:

directly affects melee and unarmed damage
 directly affects how much you can carry
 contributes to your Hits

● **strike:** Default punch damage is your Strength roll minus 1d. If you are using a melee weapon like a sword, it will be rated as an addition to strike damage, like 'lethal strike+2'.

i An adventurer with a Strength of 7 (roll of 2d+1) has a default strike damage of 1d+1. If this adventurer were using a weapon with 'strike+1' damage, they would do 1d+2 when using it.

◆ **kick:** Default kick damage is your Strength roll, but kicks take a -1d to your skill roll to hit someone (more powerful, less accurate).

◆ **throw:** Default damage for the impact of a thrown item is your Strength roll minus 1d. Your Strength for throwing distance is also this amount.

● **encumbrance:** In the lower right section of the adventurer sheet are five boxes marked 'Enc.' Put an amount in each box appropriate to the listed Strength level. The small box in the upper right is the penalty on all *physical* tasks if you are encumbered. This is a subtraction from your Attribute dice *before* you roll them, and it *also* affects your movement.

Enc

Str-8

Str-6

Str-4

Str-2

Str-0

i If your adventurer has Strength 6, then the first Encumbrance box has 'Str-8'. So, you put a '-2' there. If you are carrying a total mass level of -2 in stuff, you take a -1 to your rolls.

! The lowest encumbrance penalty is a usefully large weight, but is not *entirely* realistic. After all, you would not expect a pair of Strength 6 twins to run a hundred meter dash in the same time if one of them was carrying 7kg of extra weight (not *quite* a -1 penalty). Encumbrance is a design compromise between tediously realistic and no effects at all. *If you do not need it, do not use it.*

For measuring how much you are carrying, **EABA** uses an abstract system and the most important thing is the *heaviest* items carried.

encumbrance

heaviest item carried	its level
each doubling of items this heavy	+3
each item within 2 levels of this weight	+2
each item within 4 levels of this weight	+1

Anything lighter than this *generally* does not count, but do *not* overdo it. Encumbrance is a necessary evil, otherwise adventurers could carry loads with no ill effect.

i If you were carrying something of mass level +1 (16kg), mass level +0(13kg) and two items of mass level -2(8kg), then you would count as having a total load of mass level +5(40kg). This is less than the *actual* weight of 45kg, so doing it in the abstract way is usually in *your* favor.

If you end up with negative movement, it just means it takes you an added time level to go any useful distance (e.g. a move of -2 for time of +6 is a distance of +4). A negative Attribute means a task which would *require* an Attribute roll is going to fail. If you are overburdened and you step onto a patch of ice, you *will* slip. However, you *can* do things to offset these penalties, like taking extra time (stepping very carefully onto the ice). You might *still* slip, but you have a *chance* of pulling it off.

! If you do not want to use the abstract system, encumbrance levels on the adventurer sheet can use the equivalent kilogram levels for that amount of Strength and have the exact same game effects. *So use whatever method you are most comfortable with.*



Nimbleness & dexterity. A

A person who has a job based on an Agility skill or who enjoys a lot of Agility-based recreation will be higher than average, but the run-of-the-mill person will be in the 6 to 8 range.

What Agility does:

is the base roll for most combat skills
is the base roll for most physical or craft skills
generates your Dodge score

Agility				d+
fight d+	balance d+	throw d+	dodge	

- **dodge:** Your ability to get out of harm's way. Dodge is the *maximum* difficulty increase you can give to *one* attacker you can see, and half that to everyone else (round up). And yes, dodging for 1 means that *everyone* gets +1 difficulty to hit you. Dodge is double the *full* dice in your Agility. You may use up to your full Dodge to avoid being hit, but it subtracts from *your* skill rolls when you do.

i An adventurer with an Agility of 7 (roll of 2d+1) has a Dodge of 4 (2d in Agility, times 2). If this adventurer uses their *full* Dodge to avoid attacks, any rolls *they* make in that turn take a -4. If they only dodged for 2, they would only take a -2 on their own rolls.

- ◆ **fight:** This is your fine motor control. We call it 'fight' because that's how it will apply much of the time, but it could also apply to lockpicking, playing a guitar or brain surgery.
- ◆ **balance:** Your ability to keep your feet and to coordinate actions involving your entire body. For instance, if you had a higher than normal balance, it would improve your dodge or your default for athletic skills that involve the whole body.
- ◆ **throw:** Your hand-eye (or possibly foot-eye) coordination for the purpose of throwing things or the base level for a subset of a skill that involves this sort of activity, like a baseball pitch or a soccer kick.

Awareness d+

think d+	spot d+	listen d+
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Thinking & perceiving.

People in the



academic fields will usually be above average, as are those whose livelihood or survival depends on a keen eye or sharp wits.

What Awareness does:

is the base roll for most academic skills
is the base roll for most mental or artistic skills
reflects your sensory acuity

It would be impossible to get a skill roll that is comparable to a university degree unless an adventurer's Awareness was at least a 6. Most colleges with admission standards would not even let you in without an Awareness of at least 8. With no other mitigating factors, most people will fall into the 5 to 9 range. Some skills based on Awareness cannot be used without at least +0d training. That is, no unskilled default roll is allowed on many Awareness skills. *If you do not know how to speak Quéxúiy, you cannot just wing it...*

- **spot:** This is your sight perception, or for non-human races, their primary sense.
- ◆ **hear:** This is your hearing perception, or for non-human races, their secondary sense.
- ◆ **think:** This is your Awareness if it is higher or lower for purposes of most Awareness-based skills.

i If using the **Forte** and **Weakness** traits, an adventurer could have an overall Awareness of 2d+0, but a 'think' rating of 3d+0 and a near-sighted 'spot' rating of 1d+0.



Leadership & charisma.

The forcefulness of your personality, emotional fortitude, and your ability to make your willpower override temptation or physical discomfort.

Will			d+
tough	charm d+	resist d+	

What Will does:

is the base roll for most interpersonal skills
helps you avoid stun or shock
reduces non-lethal damage taken

Dice rolls to avoid unconsciousness or shock from injury are based on Will. Fighters or anyone whose occupation puts them in harm's way or in adverse conditions will be above average, while those who have never endured hardship will be below average. Most people will fall into the 5 to 9 range, based on their occupation and upbringing.

- **toughness:** This is your ability to ignore non-lethal damage. You subtract toughness from each incident that makes you take non-lethal hits. Toughness is the *full* dice of your Will.

i If you have a Will of 9, your toughness is 3. If someone punched you for 1d+0 and rolled a '3' or less, you would take *no* damage. It would still be *unpleasant*, but you would take no effect in game terms.

- ◆ **charm:** This is your Will for personal tasks, where you can try to sway someone. It can have elements of attractiveness, but does not have to. It could just be a winning personality.
- ◆ **resist:** This is how well you handle subtle or overt attempts by words, powers, or whatever to make you do something against your will.



Fitness & endurance.

This combines aspects of overall fitness, stamina, recuperative ability and resistance to disease.

Health				d+
walk	run	sprint	recov	

What Health does:

is the base roll for some athletic skills
generates your walk, run and sprint
contributes to hits
affects how fast you recover lost hits & stamina

Outdoors types, athletes and anyone who engages in hard labor for a living will be above average, while the elderly or sedentary will probably be below average.

- **walk:** Below Health are boxes labeled 'walk', 'run', and 'sprint'. Your Walk movement level is your full Health dice plus 2, your Run movement level is your full Health dice plus 4, and your Sprint movement level is your full Health dice plus 6. Put these distance levels in the appropriate boxes. **Keep in mind that these are distance levels, not distances in meters.** The gamemaster may opt to have these listed in meters if it is more convenient that way.

i If you have a Health of 10, your Health roll is 3d+1. Since your largest full die of Health is 3, your walk *level* is +5 (2 meters), your run *level* is +7 (4 meters), and your sprint *level* is +9 (8 meters).

- **recov:** Your recovery rate is half your Health (round down), minus 4. This is the value on the Recovery column of the **Universal Chart** corresponding to your level of Health.

i If you have a Health of 10, your recovery is half your Health, minus 4, or a recovery of +1.

The short version of how recovery works is that you get a particular type of recovery (stamina, non-lethal, lethal) whenever your (recovery plus the time level spent resting) reaches certain thresholds.



Luck & magic.

The ability to alter the natural order of things to your will. If you want to be lucky, magically or psionically powerful, you want a high Fate.



What Fate does:

lets you adjust or tweak die rolls
can be used as a genre-specific Attribute

- ◆ **shield:** In gameworlds where power is resisted with power, this is your ability to resist effects.
- ◆ **power:** In gameworlds where paranormal powers are based on Fate, this is your raw ability to project power.
- **luck:** Luck is a standard **EABA** ability that lets players tweak dice in crisis situations.

The default use of Fate is for an adventurer to be 'lucky'. It is a way for a player to twist fate when they need to for their adventurer's sake. You could call it latent psi, unfocused magic, a guardian angel, whatever you want.

You have a default roll with Fate just as for other Attributes. Each *game session* you may invoke Fate to (at gamemaster option):

- give $\pm 1d$ or ± 2 to anything you do
- give $\pm 1d$ or ± 2 to anything done to you
- reroll any one die for anything done by or to you
- move you from unconscious to having 1 hit left

i Your unarmored adventurer just got shot by a $2d+1$ bullet. You decide that they will be 'lucky' and reduce damage by $1d$, so you only take $1d+1$. You could also let the $2d+1$ damage be rolled as normal, *then* force a reroll of the highest die. You could adjust their skill roll to hit you by $-1d$, wait for them to make the skill roll and force a reroll of the highest die. If you had armor, you might reduce blunt trauma through the armor by 2 points. If you had enough Fate, you could mess with their skill roll to hit you, and if they hit anyway, *then* adjust the damage result.

The first time you use Fate in a session, it is automatic (roll your default Fate dice to match or beat a total of 1). The second time, it is very easy(3), the third time it is easy(5) and so on, continually increasing. You *can* try for a multiple-die effect, counting it as that many uses *before* you roll. After attempting to use Fate this way in a game session (successful or not), cross off the lowest of the small boxes below Fate on your adventurer sheet. Using Fate *does not* decrease the Attribute, it just increases the number you have to match or beat with the default Fate roll. The penalties on using Fate to be lucky reset at the end of each session (or adventure, if you prefer).

i If you wanted to use Fate to stop $2d$ of an effect on you, then you would roll as a very easy(3) task (two uses at $1d$, so you go straight from a difficulty of 1 to 3). If you succeed, you stop $2d$ of the effect. Otherwise, you do not, and *either way* you put marks through the '1' and '3' boxes on your Fate track.

! In gameworlds without paranormal powers, we recommend that Fate as a luck ability have a maximum level of 5 (a roll of $1d+2$).

Unlike the other attributes, Fate *can* be genre-specific. In a campaign that has no unusual abilities, it would be 'luck'. In a magical gameworld, it would be 'power', while in one with psychic abilities it would be 'psi'. In general, it is used to represent some sort of inherent characteristic that is both specific to a gameworld and *independent of the adventurer's physical condition*. For instance, if your family honor is an inherent and vitally important facet of your life, then you could take out Fate, and put 'Honor' in this slot. It would not matter how badly you were injured, your Honor roll would stay the same and in fact could have the same uses as Fate in some situations.

! Making Fate a flexible attribute slot lets a gamemaster configure an **EABA**-based campaign to fit virtually any genre. Obviously, there are some limits. If you use the slot as 'Honor', then it is not available for things like magical power.



Other

You have a few secondary attributes that have multiple factors or are set apart from an attribute. These are mostly bookkeeping functions whose values will change during play.

- **stamina:** Your default stamina is equal to your Health. Stamina is a reserve that is quickly used up when you exert yourself. You can burn through it quickly, but it recovers almost as fast. If you burn through more stamina than you have, you take the excess as non-lethal hits. Mark off all boxes on the Stamina track that are greater than your Health.

i If you have a Health of 10, then your Stamina is 10.

- **hits:** This is how much damage of various types you can take without passing out or dying. It is simply your Strength plus your Health. Mark off all boxes on the hits track greater than this amount. You *can* take more hits than you have, but this means you are dying...

i If you have a Strength and Health of 7, then you have 14 hits. Put a mark through the hits box labeled '15'. Everything *above* that is your hits.

- ◆ **hit brackets:** On the **basic sheet** your hit boxes have notations like '-1d'. The interval for these is your 'hit bracket', how much damage you can take before it starts to affect you. On the **advanced sheet**, these are blank, but the spacing is a number of hits equal to a quarter of (Strength + Health), rounding nearest.

i If you have a Strength of 8 and Health of 6, your 'hit bracket' is $(8+6)/4(\text{round nearest}) = 4$. Each fourth hits box past the first (always '-0d') gets a value, starting at '-1d' and going up from there ('-2d', '-3d', etc.).

Stam	Hits
1	-0d
2	2
3	3
4	4
5	5
6	-1d
7	6
8	8
9	9
10	-2d
11	10
12	12
13	13
+10	-3d
+20	14
	15
	16
Enc	-1
Str-8	-4d
-2	17
18	
Str-6	-2
-3	19
20	
Str-4	-4
-6	20
21	
Str-2	-2
-9	-5d
22	
Str-0	0
23	
Exp	any
A	24
25	
S	-6d
26	
P	

Racial templates

The default system is designed for making human adventurers. Fantasy races or aliens or genetic modifications may have different defaults or limits. The easiest way to do this is to set up a 'racial package', something like this:

attributes	traits
Strength: -1	inherent Forte: Sight
Agility: +1	

The numbers represent an amount that is added or subtracted from the levels bought for the Attribute or skill, with a final adjusted level of at least 1 in all Attributes. In the case above, the race is on average weaker but more agile than humans. Spending 6 points on each of Strength and Agility would result in a Strength of 5 and an Agility of 7. In addition, this race has inherently keener eyesight than humans.

For purposes of Attributes being within 3 points of each other, this is determined *before* the racial package modifiers are applied. So, you could buy an Agility of 9 and a Strength of 6, and *then* the racial package would modify this to an Agility of 10 and a Strength of 5.

Races that have inherent **Weaknesses** or **Fortes** should usually be able to adjust these values the same way a human could. So, a member of this race could have *exceptionally* keen vision (+2d bonus), or a Weakness that reduces their vision to merely normal levels (+0d bonus).

In addition, different races might have inherent boons and banes that are unique to them, like genuine night vision, an allergy to iron, strong personality traits and so on, which they would get or pay points for as part of the package.

Individual **EABA** gameworlds with non-human races will probably have templates for any of those races that can be used by players.

SKILLS

If you are trying to do something that *should* require a skill, but can sort of be done with only minimal training ("point it that way, pull the trigger"), you use the most likely governing Attribute with a -1d penalty, your 'unskilled roll'. If you *do* have a skill, it means you have enough experience to avoid a penalty. You cannot use the unskilled default unless you have at least seen the skill in use. *If you have never seen a gun before, you cannot use it, even with a -1d penalty.*



Skill costs: Your S points represent formal training or experience at doing various things. If you apply 1S towards a skill, it makes your roll for that skill +0d. That is, instead of using the default roll minus 1d for unskilled use of an Attribute, you get the default roll. This is usually called 'familiarity' with the skill.

i If you have no skill at automobile driving and have an Agility of 3d+2, your *unskilled* roll behind the wheel of a car is 2d+2. If you put 1S towards Automobile skill, you have a +0d skill bonus and roll 3d+2 instead.

Complicated skills often require familiarity to use them at all. You do not expect someone to have *any* chance of doing surgery or landing a fighter jet using only an unskilled default. They would at least need a familiarity with the skill in question. If you want *more* than familiarity, the total cost is *twice the skill bonus*.

skill bonus	+0d	+1d	+2d	+3d
cost	1S	2S	4S	6S

There are three limits for applying points to skills. First, you cannot spend *more* points on one skill than the rest of your skills combined.

i A 'normal' adventurer starts with 10S, so they could *not* spend 6S of them on one skill. If they had +2S from traits for a total of 12S, *then* they could spend 6S on one skill.

The second is that no full skill can be bought, utilized (or later improved) to a level *more than* the full dice in its governing Attribute. **Specializations** can exceed this limit by 1d.

i If you have an Agility of 2d+2, you have 2 full dice in Agility, so the maximum skill *bonus* you can buy is +2d, for a skill *roll* of 4d+2. If you later improve your Agility to 3d+0, you can then work towards improving your skill *bonus* to +3d, which would give you a skill *roll* of 6d+0.

The 'full dice in the governing attribute' is usually considered to be the unencumbered, healthy level in that attribute.

i If you have an Agility of 3d+0 and an Agility-based skill at +3d, but you are taking a -1 penalty from encumbrance, your effective Agility is now 2d+2 for making Agility rolls, but you are still counted as an Agility of 3d+0 for determining the maximum skill bonus you can use.

! If this is too much trouble to keep track of, then do not worry about it. It *is* a more realistic effect than ignoring Attribute penalties, but not at the cost of getting in the way of play.

The last limit is that a *starting* adventurer can only have ten skill slots (not coincidentally, the number on the front of the adventurer sheet). You can have up to ten knowledge sets at a level above your unskilled default. For the adventurer who is an exceptional generalist, there is a skill called 'Jack of all Trades' that can help you bypass this (**page 3.24**), and a gamemaster *can* just say starting adventurers can have as many skills as they want. Just list them on the back of the adventurer sheet.

Skills and time

Some skills take longer than others to do, and this is often gameworld-dependent. To shoot a gun may take a second, while a safecracking may take hours. The gamemaster will have to set a 'default' time for such tasks. Spending *more* time (or turn mod) gives a bonus of the *difference*, spending less is a penalty of the *difference*.



Skill rolls

Within the **EABA** system and using the normal levels of task difficulty, a skill roll (attribute plus skill bonus) of $4d+0$ is the *minimum* to be considered 'professional'. The *minimum* roll after graduating a four-year college in your chosen field would be $4d+0$, *preferably more*.

The minimum skill roll for a *useful* familiarity with a skill is $2d+0$, but a skill roll of $2d+0$ makes you barely functional rather than competent. For instance, a roll of $2d+0$ means you do not have enough to '**take 2's**' on an easy(5) task, yet many drivers on the road are probably at that level of skill. And if you are from a region that has snowy roads in the winter and watch drivers from *other* regions when snow falls, you appreciate the difference a point or two of skill makes (a $2d+1$ roll *can* '**take 2's**' to get an automatic success against a difficulty of 5).

On the other hand, skill rolls of $6d+0$ or more are considered 'expert'. Anyone in that field of endeavor recognizes your competence. A skill roll of $6d+0$ is *not* the peak of human performance, but it *is* sufficient to represent an advanced college degree. The maximum possible skill roll for a normal human is around $9d+1$ ($4d+1$ attribute, $+4d$ skill, and a $+1d$ specialization). An Olympic-level archer has a skill roll of $7d+2$ or more.

! For campaign purposes, people with very high skill rolls are probably known to each other in some way. If you are a gunslinger, you likely know about other top gunslingers. If you are a Nobel-winning physicist, you likely know about other top-level physicists, and so on. In game terms, you can say it gives you the effect (but not the actual skill) of having $+0d$ in 'Area Knowledge(experts in that skill)'. That is, you do *not* have that written down as a skill, but do you get the skill roll if you need to ask a question on *that* topic. Whether or not this skill roll gets higher for exceptional levels in that skill is up to the gamemaster.



Complementary skills

If you have two skills that can be combined for a *particular* task, you get -2 on the difficulty of the task when using the *lower* of the two skills. If the two skills are within $1d$ of each other, the benefit applies to *both* skills. For instance, if you are an architect *and* a demolitions expert, it is easier for you to plant charges to take down buildings...*or* design buildings that are harder to blow up. If your skill is really just a subset of another skill, you buy it as a **specialization** for an extra $+1d$ on the skill rather than a change in the difficulty. This is significant, since at high levels of difficulty, a drop in difficulty is far more important than getting an extra die to roll.

Free skills

All adventurers get certain skill rolls at *no cost* and *without* taking up one of their ten starting skill slots. Everyone has $+0d$ skill in speaking their native language, *and* writing it *if this is appropriate to the background and gameworld*. Everyone also has a $+0d$ skill for rolls relating to where they have spent most of their life, its culture, geography, and so on. *Look at your own life for examples*. If you spent ten years in a particular town, you could go back there after a long absence and *still* be able to find your way around. This cumulative experience is your 'Native Culture' skill, and all these rolls are at $+0d$ on your Awareness. In addition, everyone gets *one* free skill related to their their culture at $+0d$. This skill is chosen by the player, but the gamemaster can veto it if it is unreasonable. An example might be that a modern American adventurer probably knows how to drive a car, so this is could be the free 'culture' skill for that adventurer.

If you want one of your free starting skills to be at *more* than a $+0d$ level, it costs you one fewer point to buy it higher, and it *will* take one of your starting skill slots.



i If the aforementioned American adventurer wanted a $+2d$ skill in driving, it would only cost them $3S$ from their starting skill points instead of $4S$.



Skill specializations

Many skills can be specialized. For instance, a doctor can be a general practitioner or could specialize as a combat medic or brain surgeon. If you specialize in a *particular* aspect of a skill, it costs +1S but gives you +1d on your skill roll for tasks within that speciality, *even if your governing Attribute is not high enough to support this roll*. For tasks within the general skill but outside the specialty, you just the the regular skill roll. *A specialized skill still only takes up one skill slot*, and you just put the specialty in parentheses after the skill. A skill can theoretically have more than one specialty, but specializations *cannot* stack on each other for additional effect.

i If you have an Awareness of 3d+0 and a Biology skill of +2d, you can specialize in 'Xenobiology'. This gives you a Biology skill roll of 5d+0 and a Xenobiology skill roll of 6d+0, and you would list it as Biology(Xenobiology). If your Awareness was only 2d+2, for a Biology skill roll of 4d+2, you could *still* do this, as the +1d specialization can exceed the normal limit allowed for skill bonuses. In this particular case, the skill and specialization would cost 5S, 4S for the +2d skill and +1S for the specialization.

If at some point in a campaign you have spent enough points on specialties that the total points would be able to increase your overall skill level, you may combine all the points, lose the specializations and get a higher overall skill bonus (which can in turn be specialized later on).

i A +2d skill costs 4S (twice the dice bonus). A +1d skill and two +1d specializations *also* costs 4S, so you might as well just combine this into an overall +2d bonus. Practically speaking, you only ever have one specialization, since for two or more the cost as an overall higher level of skill is the same or lower.



Enhanced skills

This is a different form of specialization. Instead of getting a +1d on the skill roll, the user of the skill gets a +2 benefit to something *other than the skill roll*. This benefit usually affects damage or an Attribute in a specific way. A martial artist might have strikes doing +2 damage, a technique that gives them +2 to their Agility for Dodge purposes, or a +2 to any armor they have as they use it to deflect attacks better. Or, a doctor might be able to give a patient +2 on their Health for Recovery purposes. Not all skills can be enhanced, but gamemasters are encouraged to create gameworld-specific enhanced skills. An enhancement on a skill costs +1S, and a skill can be enhanced in more than one way, as long you only use one enhancement at a time.



Enabling skills

Some skills have unique subsets that are not normally learned, and for which you take a -1d penalty at if you are forced to use the skill in that way. For instance, you might be an expert with shooting a rifle, but you have no idea how to reload an archaic muzzle-loading rifle, or have no training in the use of autofire rifles. An 'enabling skill' costs 1S and lets you ignore this penalty for *all* skills where it might apply. An enabling skill works for all specializations or enhancements a skill might have and a particular enabling skill never needs to cost more than 1S. Enabling skills are often tech and culture dependent. Campaigns set in the 1700's would not need an enabling skill for muzzle-loading weapons, since *all* firearms were muzzle-loading weapons.

The presence of an enabling skill is usually denoted by a '+' after the skill, like 'Firearms+', where the enabling skill is usually pretty obvious. In the rare case where you would need more than one enabling skill, you could just mark it '++'. Enabling skills may be a side effect of a **skill package**. Instead of needing to buy an enabling skill, you buy the skill package and get the enabling skill for free, within the limits of the skill package. A modern soldier knows how to use their assault rifle in normal *and* autofire mode, even without a special enabling skill.



Skill packages

Many **EABA** professions are based on a single skill and everything you do associated with that skill. A carpenter has 'carpentry', for instance. But sometimes a profession is composed of several unrelated skills. A gamemaster can create sets of 'skill packages' to represent this.

A skill package only takes up *one* starting skill slot and costs 1S. A skill package has up to five very specific skills at +0d. Any of these can be broken out as a separate skill by a player and improved to a full +0d skill for 1S, but this will require a spare skill slot. A sample package:

Modern soldier

Your military's regulations: +0d

Your nation's assault rifle: +0d

Your nation's infantry rocket: +0d

Your mission specialty(varies): +0d

Your military's tactics: +0d


Think of these narrowly defined skills as a *very* limited familiarity. You get +0d familiarity with that narrow focus, but the unskilled default with everything else. You have +0d with *your* nation's rifle, but -1d with anyone else's. Skill packages are 'entry level'. You would expect a person with experience to upgrade to one or more full skills.


A gamemaster can place prerequisites on skill packages. For instance, someone with a 'modern soldier' skill package has to meet minimum fitness requirements. You could define a skill package as part of a career option, saying that a term of a few years in the military gets the skill package, with one of the skills upgraded to +1d, one to +0d and one *new* +0d skill of player's choice, somehow related to the package (you learned Farsi while serving overseas), for a total cost of, in this case, 5S. This might also have some traits attached to it, like a Friend (veterans benefits), an Enemy (you could be recalled to active duty), Status (your former rank), and so on.

Skill packages can be more than just skills, they can be part of an adventurer's background, their career and explain some of their personality.

Skill trees

As a generic system, **EABA** is going to have a fairly generic skill list. Particular gameworlds will often have their own unique skills, and may have narrower ranges for a given skill than the normal list. For instance, **EABA** has a 'Blade' skill, which you can specialize for a particular weapon. A fantasy campaign might give each type of melee weapon its own separate skill, and then allow a specialization for a specific sub-type of weapon or fighting style. *A skill list for a particular gameworld should have the depth necessary for the feel of that gameworld.*

 The basic skill list has a 'Firearms' skill. In an modern campaign, you might have separate skills for pistols, rifles, crossbows and maybe shotguns, with **enabling skills** for muzzle-loading weapons and autofire weapons.

 Note that doing this will *decrease* the overall competence of adventurers. Instead of getting +0d competence in 'Firearms' for 1S, they would need to spend 4S to get +0d in each of the four cases in the example. One way to compensate for this is to give players a free specialization in the sub-skill for any skill you break up in this way, or an enabling skill appropriate to that skill. So, a person who spends 1S on 'Pistols' for +0d overall skill would get a free +1d specialization in the pistol of their choice *or* an enabling skill like 'autofire'.

Similarly, the basic **EABA** skill list is *not* exclusive. If a player wants to be a farrier and there is no 'farrier' skill listed, they can still buy the skill. All that you and the player need to know is what a farrier does, the tools needed, the circumstances in which the skill can be used, and some idea of the difficulty of various tasks. Almost every genre will have some skills specific to *that* genre, so players and gamemasters are *encouraged* to make up new skills as needed. A player in a setting of wizards and warriors will have different ideas than one in a setting of gangsters and hard-boiled detectives.



Skill listing

Skills will be listed by governing Attribute and a broad category, like '**Agility skills: Combat**'. However, it is possible that a skill can have more than one governing Attribute, and if so, the player chooses which Attribute *their* skill is based on. *Are you a good climber because you are agile as a monkey, or because you have amazing strength?* Once you decide, that is the Attribute that skill roll will be based on.

A skill includes common sense knowledge that goes with the skill. If you are a marksman, you are *not* a gunsmith, but you *still* know how to care for your weapons. If you are a skilled horseman, you are *not* a groom, but you *still* know how to saddle a horse and care for it when out in the field. In game terms, if you have a +1d skill or better, you count as +0d for the common sense things related to use of your skill.

Speed learning

We mentioned that you generally need *some* exposure to a skill to be able to use the unskilled default. Similarly, if you get a 'crash course' in a skill, you might be able to get the equivalent of one piece of a skill package. That is, a +0d level of skill in a *very* narrow range of that skill. For instance, getting a crash course in 'art history' so your spy can infiltrate a gang of art thieves. Remember that this is an *optional* rule. The requirements and limits of speed learning are:

- only one skill can be done at a time
- you need a teacher with a skill roll of >5d+0 (self-study w/gamemaster permission)
- it takes a time level of (40 minus Attribute)
- it 'wears off' at the end of the adventure

Using the skill in this way *does* give an in-game excuse to buy the skill later if desired.

! Remember that players buy skills for adventurers expecting they will get to use them. So, as the gamemaster, you will want to look at adventurers and see what the players are expecting their adventurers will be doing, and plan accordingly.

Agility skills: Combat



This is one of the more important groupings, since a lot of roleplaying is about getting into (and getting out of) fights. Unarmed and melee skills can be custom designed using the rules on **page 5.17**.

archery: Use of any sort of bow. Techniques may also be applicable for firing a slingshot, or maybe some types of speargun. *Specialization: bow, slingshot, speargun.*

blade: Use of a light, balanced weapon like a knife or sword. This or just about *any* melee weapon skill may be taught with a shield as defense, which allows the adventurer to fully utilize a shield in combat. In fantasy-oriented gameworlds, there would be at least two *separate* skills, one for knives and one for longer bladed weapons ('short blade', 'long blade'). Depending on how blades are used in a gameworld, use of a shield or two-weapon styles may be **specializations, enhanced skills** or **enabling skills**. *Specialization: knife, shortsword, longsword, greatsword.*

brawling: Semi-trained unarmed combat, including punching, kicking, biting, head butts and eye-gouging. *Specialization: punch, kick, grab, block.*

club: Use of any unbalanced weapon like a club or axe. *Specialization: mace, flail, axe.*

firearms: Use of any sort of self-powered ranged weapon appropriate to the genre. Note that in a gameworld *without* firearms, this skill would probably be called 'crossbow' and would be separate from Archery skill and not a specialization of it. In modern gameworlds, this would probably be several separate skills. *Specialization: pistol, rifle, shotgun, grenade launcher, crossbow.*
Enabling skills: autofire weapons, muzzle-loading weapons.

heavy weapon: Use of heavy weapons appropriate to the genre, often restricted to military use. Depending on genre, this skill could be broken down into several separate skills rather than specializations. For instance, in a science-fiction campaign you might have a separate skill for using starship weaponry and in a medieval campaign using a trebuchet might be a different skill than using an onager. *Specialization: cannon, machinegun, rocket launcher, catapult.*

martial arts: Formal training in efficient or esoteric unarmed combat. It has no inherent differences from Brawling in terms of game mechanics, but it is more likely than Brawling to have individual martial arts delineated by one or more **enhanced** specializations. In certain gameworlds, the enhancements that are available to martial artists may not be commonly available or require an **unusual background**. *Specialization: punch, kick, grab, parry.*

polearm: Use of any unbalanced weapon like a pike or halberd. These weapons often require both hands and thus preclude use of a shield.

sling: An example of a combat skill only usable with a single, unusual weapon. Since the skill is already for one *particular* weapon, specializations would be in techniques for *that* weapon. Other such weapons might be things like bolas or nunchaku.

staff: Use of any balanced blunt weapon like a staff or balanced bladed weapon like a spear. These might be used in one or both hands and one-handed styles may be used with a shield. *Specialization: quarterstaff, spear.*

throwing: Using weapons like a thrown axe, or lobbing things over obstacles to land in a particular spot. Because of the vastly different throwing techniques involved, this could be broken into separate skills. *Specialization: grenade, knife, axe, spear.*

wrestling: Any combat style mostly concerned with controlling the actions of your opponent, such as Judo, Jujitsu, or Chute Fighting. Wrestling as an **enhanced skill** adds +2 to Strength for grappling, throwing or damage purposes, depending on the specific maneuver attempted. *Specialization: grab, hold, throw.*

Agility skills: Transport



Transport skills are gameworld-dependent, but the broad categories here should give you a starting point. All these skills are for forms of transport where personal agility can make a difference. For large vehicles, Awareness will be the governing attribute to pilot the vehicle, or Leadership the skill used to direct a crew. Individual aspects of making a vehicle function might require non-vehicle skills (like a warp drive engineer). Transport skills also include working knowledge of social conventions or laws regarding that skill. So, if you know how to drive, you know the rules of the road, at least for where you learned how to drive.

beast riding: Ability to ride and maintain gameworld-appropriate transport animals. If there is only one type of animal, you might call the skill 'horsemanship'. *Specialization: horse, camel, dragon.*

air vehicles: Ability to pilot gameworld-appropriate air vehicles. *Specialization: ultra-light, light plane, glider, jet, helicopter, flying carpet, jetpack.*

land vehicles: Ability to drive gameworld-appropriate land vehicles. *Specialization: automobile, motorcycle, tracked, hovercraft, chariot, wagon.*

water vehicles: Ability to pilot gameworld-appropriate water vehicles. *Specialization: minisub, powerboat, jet ski.*

space vehicles: Ability to pilot gameworld-appropriate space vehicles. *Specialization: work pod, shuttlecraft, interceptor.*

Agility skills: Other

These would be skills that are most likely based off Agility, but do not fall into one of the other categories.



climbing: Techniques for scaling cliffs, walls, trees, etc. May also be based off Strength.

security systems: The ability to bypass locks and alarms. Based on Agility, it would be a mechanical skill, like lockpicking and traps. As an Awareness skill it would usually deal with electronics or computers. *Specialization: alarms, lockpicking, traps, bomb defusing.*

sleight of hand: The ability to perform certain types of magic tricks, con games and pick-pocketing. In the case of magic, a trick has a difficulty to be matched, and how impressive it is depends on the difficulty and how much the roll is made by. In the case of pickpocketing it is an opposed task against the target's Awareness roll, modified by the ease of getting at the object to be pilfered and any modifiers for the wariness of the target or whether they are distracted. *Specialization: pickpocket, magic tricks, con games.*

stealth: The ability to sneak, hide, prevent someone else from detecting that they are being followed and possibly help you **spot** if you are being followed. Each side rolls against a difficulty of shared conditions like the range between them. Things that benefit you (like camouflage, cover or darkness) increase *their* difficulty, while things like your movement will decrease *their* difficulty. Extra time they spend observing or you spend sneaking (moving very cautiously) adds to that side's roll rather than adjusting the difficulty. Whoever beats their adjusted difficulty by the most wins. Against groups of people, the easiest way to do this is to use an *averaged* Awareness and give a bonus for the quantity level for the number of observers, or use the Awareness of the *best* observer, whichever is higher. *Specialization: shadowing, stealth.*

i If you are trying to sneak by four people (quantity of x4) with average Awareness of 8 (roll of 2d+2), then they get +4 on their roll and would roll 4d+0 *once* to see if at least one of them spots you.

trades: A number of professions can be based off Agility, and are genre-dependent. Each trade is a separate skill, and each of the skills might have a specialization. Examples might be Blacksmithing, Stonemason, Carpentry or Jeweler, or entertainment skills like Dancing, Juggling, Acrobat, etc. Artistic trades like Painting, Sculpting or a skill with a musical instrument may be based on either Agility or Awareness. A trade deals with the practical and economic (i.e. making a living) aspects of a skill, while its academic counterpart deals more with theory. Trades can often be **complementary skills** for academic fields and vice versa.

Awareness skills: Academic



These are skills that are highly dependent on cognitive ability, and which usually require formal training of some kind for a useful level of proficiency. That is, you do not get an unskilled default roll unless the gamemaster allows it. This list is a *tiny* subset of the skills available. Anything you can get a two- or four-year college degree in is likely an 'academic' Awareness skill, and advanced degrees are often specializations.

chemistry: Knowledge of how to make (as safely as possible) various chemical mixes known and useful in a particular genre or gameworld. It might be called 'Alchemy' in fantasy genres. *Specializations: poisons, pharmacy, explosives.*

history: Knowledge of things past, including wars, people of note, legends, myths and geographical tidbits. This can often be a **complementary skill** for other skills with ties to the distant past. A superficial history of the area you grew up in is something you are assumed to know as part of your free Native Culture skill. *Specializations: ancient history, military history, legends.*



language: An adventurer needs a skill roll of 2d+0 to be reliably understood in a language (3d+0 to be fluent with minimal accent), *and* this roll requires at least a +0d skill level (do not use unskilled default for most languages). In societies with a high literacy rate, +0d skill also represents basic literacy, while in largely non-literate ones, +1d skill is needed to be able to read *and* write a language. If in a particular gameworld, languages are closely related, the gamemaster may allow use of a skill at -1d in the related language.

! A fun way to use languages *other than your native tongue* is to say *players* can only use and understand words of *one syllable* at a skill roll of 2d, and one extra syllable for each extra die in the roll. For instance, an adventurer of 2d skill (say 2d+0 Awareness and +0d skill) trying to find the “temple by the river” would have the *player* ask “where is place where you pray to gods near big stream?” It does a good job of conveying the awkwardness of partial fluency, and demonstrates the need for a good language skill if trying to translate complex concepts, as needed for science or diplomacy.

sciences: Theoretical/practical knowledge applicable to a specific field, the usefulness of which varies with the genre. Examples might be Aerospace Engineering, Biochemistry, Archaeology, Electrical Engineering, Mechanical Engineering or Warp Drive Engineering. *Each* of these might have its own specializations. The more tangible sciences allow you to *design* things, but not necessarily how to construct them (see **Technician**).

law: Knowledge of the genre’s legal system. From an adventurer’s standpoint this is often attempting to acquit someone accused of an offense under that system, or figuring how to do something that is unethical without it being illegal. The difficulty varies with situation (and guilt). A layman’s knowledge of the law in one region is free, as part of Native Culture skill. *Specializations: business law, criminal law.*

medicine: Knowledge of how to diagnose and treat injuries or illnesses appropriate to a particular type of biology, like ‘mammals’. Medicine as an **enhanced skill** lets a doctor add +2 to the patient’s Health (effectively +1 to Recovery) or helps a paramedic stop a bleeding injury faster. The techniques/tools will be appropriate to the genre, and may have inherent bonuses or penalties. A witch doctor who is trying to banish disease spirits is going to have a less effective skill than a modern doctor (unless disease spirits actually exist!). *In general*, the **tech era** will be a cap on the maximum difficulty a doctor can succeed at, regardless of skill. This means that medical treatments of certain difficulties are simply *not* possible without underlying technological advances.

tech	best roll
Primitive Era	10
Basic Era	12
Industrial Era	14
Atomic Era	16
Post-atomic Era	18
Advanced Era	20
early or late part of an era	±1

i If you say that organ transplants are a procedure with a difficulty of at least 16, then they are simply not possible until the Atomic Era, no matter what your skill roll. Similarly, if you say treating a punctured intestine is difficulty 13, then medieval doctors (Basic Era) can be of zero assistance.

! ‘Tech era’ as a concept can apply to things like magic as well. A magical gameworld could have a certain limit on what magic can do based on the understanding of the underlying principles, just as technology can be limited.

At gamemaster option, the specializations on Medicine may be *separate* skills, which is often dependent on the depth of the medical skills available in a gameworld. So, you could be a paramedic and have that set of skills without being able to *also* make a roll to do brain surgery. *Specializations: paramedic, surgery, veterinary.*



programming: Knowledge of how to write and manipulate any programmable system appropriate to the genre, usually computers. But, this or a similar skill could also be used for making contracts with higher powers, phrasing wishes just right, or setting up the parameters your guard golems follow. If the situation can generate reliably predictable results based on following a flowchart, odds are that a programming skill of some kind would be useful. In a modern genre this could easily be a **complementary skill** with **Security Systems**.

psychology: Knowledge of the human (or other) psyche. To unravel the motivations of an individual so that you can maybe gain an advantage or try to turn them to your way of thinking would be a roll against their Will or Awareness, modified for situation and quite often, for the time that can be spent on the task. Any specialization of psychology that relates to personal charisma can probably be bought as a separate skill that would be based on Will instead of Awareness, and whose difficulty could be adjusted by **Looks**.

Note that aspects of **Personality** will almost always apply to any situation where you are trying to influence a person's way of thinking, and Psychology is a way to help you find ways to deal with this. This skill can also be based on Will. *Specializations: con artist, seduction, intimidation, analysis.*

! Because so much of roleplaying is interacting with other inhabitants of a gameworld, it is possible to abuse this skill as a dodge to avoid 'being in character'. Even adventurers with a high level in this sort of skill *should* be roleplayed according to the situation rather than having a player just state "I am using my Psychology skill on them".

religion: Knowledge of religious tenets in the genre, including philosophical concepts. This skill is *usually* dedicated to *one* religion. It would be less useful for questions relating to other faiths. *Depending on the gameworld*, knowledge of a particular religion may also require a **Personality** that leans towards traits approved of by that religion. At the very least, your personality should not run counter to your best religious knowledge unless there is a sufficient **Background** to justify it.

Awareness skills: Magic



These are Awareness skills that are only applicable in gameworlds with magic or other paranormal abilities. In some gameworlds these skills would be Will-based.

sorcery: The basic knowledge of how to work spells, the detail varying with genre. For instance, Sorcery could be an overall skill, or each spell might require a separate skill. It depends on how a particular gameworld views paranormal powers and the time it takes to achieve mastery of them. 'Psionics' would be an equivalent skill in many science-fiction gameworlds, or a skill called 'power use' might be needed to activate superpowers in that genre. *Specializations: Spells of a particular element, particular spell types, particular spells.*

enchantment: Similar to Sorcery, but used with specialized spells that allow you to cast magical effects into items for later use. This would often be an **enhanced skill**, and the +2 benefit would be on the effect or possibly its duration. *Specializations: potions, scrolls, amulets.*

Awareness skills: Other

Skills that are based off cognitive ability or keen perception, but which are more likely to be informally taught or self-taught. Some may have an unskilled default, but this is up to the gamemaster to decide on a case-by-case basis.



area knowledge: A catch-all skill group that covers memorized rather than analytical knowledge of a particular group of people (mobsters), a large place or group of smaller places (Paris), or a category of things (like mythical animals or birds of North America). Native Culture (a **free skill**) is a very broad area knowledge. A successful use of the skill means you remember something useful about the subject when needed, and you also know where to look for information that you cannot recall at this time. The broader your area knowledge, the more difficult it will be to remember or find *specific* information.

As a general rule, an Area Knowledge will fit into one of these groups:

knowledge	examples
very broad	New York, animals
broad	NYC, mythical animals
average	Manhattan, mythical hoofstock
narrow	Chinatown, Unicorns
very narrow	Roosevelt Park, Kirin

If you are trying to use an Area Knowledge outside its normal depth, either too broad *or* too narrow, you take +4 difficulty to the task per row of difference. Simply pointing yourself or someone else in the right direction is *not* at any extra difficulty.

! Area knowledge actually works surprisingly well for spirits and deities. The 'spirit of the grove' knows a lot about the grove but not much else, while the 'god of all things' has a grasp of the big picture, but does not have ready access to the little details like individual mortals.

i If you have an Area Knowledge of 'New York' in general, it is not any harder than normal to point someone towards New York City, nor to locate someone whose specialty is New York City. But, you *would* be at +4 difficulty if someone asked you the boroughs of New York City. Someone whose skill was Area Knowledge of 'New York City' could answer that question at no penalty, but they would be at a penalty trying to answer questions about upstate New York.

Because it relies so much on memorization rather than raw talent, Area Knowledge is *seldom* a skill that can apply an unskilled default. So even if you are taking a significant penalty for being out of your depth, a person with this skill that is of *some* use is better off than someone without it at all. And remember that Area Knowledge is quite often useful as a **complementary skill** (e.g. using knowledge of a city in combination with your driving skill to help you evade pursuit).

armorers: The knowledge of how weapons and armor of a particular technology range work, and how to maintain and repair them. *Specializations:* A weapon type or armor type.

bribery: A subtle blend of psychology and diplomacy. The adventurer knows various ways to encourage people to look the other way or perform illegal or unethical actions, and can also judge how likely a given person will be vulnerable to these techniques. The difficulty of a task will depend on culture, the action desired and how much incentive can be applied. In gameworlds or parts of gameworlds where this can apply, the gamemaster should set up a 'fee schedule' and difficulty ratings for various extra-legal bits of influence. That is, if bribery is a part of daily life, then people skilled at the 'system' will have a roll high enough to '**take 2's**', do the deed and move on. *Specializations:* extortion, smuggling.



diplomacy: The ability to blend in with social groups other than your own, say the right things, smooth over minor social gaffes, and so on. It is a skill for maneuvering around highly structured or formalized social systems like castes, bureaucracies, treaties and easily offended people in positions of power. This skill could also be used to *deliberately* offend someone or sabotage a relationship if that is an adventurer's intent. *Specializations:* *court etiquette, bureaucracy.*

technician: Technician is a *class* of skills, like Trades, but usually Awareness-based instead of Agility-based, and they are often dependent on technology. An electronics tech is a 'tech', as is a bomb disposal tech, reactor operator, auto mechanic or an air traffic controller. A tech has knowledge of the tools and systems appropriate to their skill, but usually *only within the framework of that skill*. Both an air traffic controller and a reactor operator use computers, but neither will be any better off than the average person in front of the other's console. A tech skill will let you repair or construct something from plans or copy an existing object (within limits), but does *not* convey skills needed to *design* it. Conversely, a science skill may let you design a microchip, but it does not give you any practical skill at soldering an electronic circuit. A Technician skill and a corresponding Science skill are usually **complementary skills**.

! Remember, many skills require tools to be useful. Also remember that the nature of a genre's tools is *subjective*. A hairpin is the stereotypical improvised lockpick of the 20th century. People do not think you can do it or they overlook it, so an adventurer (or foe) is more likely to have one available. A 22nd century equivalent might be your 'holographic projector earrings'. After being captured, the heroine uses the electronics in the earring to pick an electronic lock. Just keep in mind that neither the gamemaster or player needs to know *how* the skill is used, merely that an adventurer has the skill and tools to use it.

scrounging: The ability to find something where other people cannot. This could be rooting through dumpsters for electronic parts, or rooting through the dirt to find edible grubs. You pick a *specific* type of scrounging when you purchase the skill, and you may have several types of scrounging skill. Examples of this skill might be Wilderness Survival, Database Mining or Junkyard Connoisseur. The difficulty of scrounging for food and water depends on the environment. Natives living in a severe environment would naturally learn this skill to a level that lets them survive there (and it might be their free culture-based skill). Their averaged skill roll would reflect the difficulty outsiders would face, and depends on the harshness of the environment. The gamemaster will set the time required for a given type of scrounging. For instance, they might say that foraging for food takes at least two hours for a skill roll at no penalty. Spending more time might give a bonus, spending less would certainly be a penalty.

i If an average desert native has a skill roll at 'Desert Scrounging' of 3d+2, their 'take 2's' skill roll is a total of 8. So, it stands to reason that if the average native can reliably survive in that region, the difficulty of finding sufficient food and water each day away from reliable sources is somewhere around a difficulty of 8 or 9. Outsiders without supplies would be using an unskilled default to try and get this number to find sufficient food, water and shelter each day.

Scrounging rolls can have varying degrees of success, the effects of which depend on the nature of the scrounging. In general, if you spend a given amount of time and make your roll, you get what you are scrounging for, and each 2 points you make the roll by means you get twice as much. If you are only scrounging to get a certain amount of something, each 2 points you make the roll by halves the amount of time it takes to find it. If you are scrounging for food, you might want to find enough for *several* people. If you are scrounging through a junkyard for a spare part, you just want to find it *quickly*.



tracking: The ability to trace a path taken by someone else, usually in the wilderness. The difficulty varies with conditions, but if it is something that the average untrained person cannot do, then that is a guide for the *low* end of difficulty. Obviously, some sorts of tracking are harder than others. Tracking is usually dependent on sight, but many animals track by scent. In either case, a **Forte** or **Weakness** on the sense will affect the skill roll (if you have +1d in your sense of smell, then if you track by scent you get a +1d on your roll).

If appropriate to a genre, the skill could instead apply to operating advanced sensors or tracing someone through an electronic network. The default time increment for no time penalty will vary with the tracking type. For following someone through the woods, it might be an hour, but for following someone through a computer network it might only be a few seconds. The difference between the default time and the actual time will be a penalty on the roll (use the **Universal Chart**).

i If the default time was *one* hour, and the tracker shows up *two* hours after the tracks were made, then the modifier will be the *difference* on the chart, or a 2 point penalty on the tracker's skill roll to follow the fading traces.

This skill can be used oppositionally to cover a trail. If the pursued person wins the roll, the amount they beat the tracker adds to the base difficulty of the task, with appropriate time and condition modifiers.

Will skills: Other

In **EABA**, Will represents force of personality and charisma, as well as your ability to resist temptation or overcome pain or hardship. People with high Will are not necessarily good looking, but they *do* have a compelling personality. Will skills will be those that are based off these characteristics.



leadership: The focus and talent required to run an organization or get others to follow you. This skill is used to convince others to follow any unpopular decisions you might make, and is compared to their Will rolls, modified by circumstances like danger, rank or **status**, potential gain and past experience with that sort of situation. Military officers, charismatic preachers or anyone that needs to persuade a group could use this skill. See **Psychology** for skills that reflect the use of charisma in one-on-one situations. *Specializations: rabble-rousing, preaching.*

acting: This skill is about voice, mannerisms and convincing observers that the actor *is* the role they are playing. A visual disguise might fool someone from a distance, but acting is needed for anything past superficial verbal interaction, and this skill deals with both. This skill is usually used as an opposed roll. Status, situation and length of the interaction would all adjust the difficulty for impersonations, while a fixed difficulty would probably be more appropriate for dramatic uses of the skill. Tools and accessories of varying sophistication may be required to do certain tasks. Trying to mimic someone's voice could be a natural talent. Trying to mimic someone's face will require some supplies. Acting can also be a **complementary skill** with many skills that involve deception or diversion. *Specializations: mimic, disguise.*



Health skills: Other

running: Running as a regular skill does little other than show that you know how to prep for a run, sprint without pulling a hamstring and avoid blisters better than the average person. However, if bought as an **enhanced skill**, you add +2 to your Health for determining your walking, running or sprinting speed. The skill itself is only rolled in contests between people with equal movement, like to see who wins a race.



i An adventurer with a Health of 7 (default roll of $2d+1$) has normal walk, run and sprint distance levels of 4, 6 and 8 (actual distance of 1.4m, 3m, and 6m). With enhanced Running skill, their Health is counted as $3d+0$, so their walk, run and sprint is now 5, 7 and 9 (actual distance of 2m, 4m and 8m).

swimming: Swimming as a regular skill means that you know how to swim, and your skill roll helps you stay above water better in less than optimum conditions. If bought as an **enhanced skill**, it will act similar to Running skill.

! There is very little reason to ever buy Running or Swimming past the +0d level as an enhanced skill. This costs 2S, takes up 1 skill slot and gives you all the benefits you will usually need.

carousing: The ability to hold your liquor (or anything else), usually learned from years of experience. Your roll is usually compared to a difficulty based on the intensity of your carousing. Making the skill roll means you suffer no (or fewer) adverse effects. Failing the roll usually results in non-lethal hits representing drunkenness. This skill would also be used oppositionally in contests against other carousers (like trying to drink them under the table). *Specializations: a particular vice.*

Special skills

This section is for skills that for whatever reason, deserve a separate mention. They will be based off Attributes particular to that skill.



jack-of-all-trades(any): This is a special skill that can be bought at +0d only, and applies only to *one* Attribute. Jack-of-all-trades skill costs 10S for this +0d, but it means that every possible skill you could use off that Attribute is at a minimum of the +0d *skilled* level, *not* the unskilled default level. Unless the gamemaster gives permission, no adventurer can have more than one Jack-of-all-trades skill. This skill is usually exempt from the 'you cannot spend more than half your skill points on one skill' rule.

i If you have Jack-of-all-trades on Agility and you have an Agility of $3d+0$, then every skilled task on Agility for you has a roll of at least $3d+0$ instead of the unskilled default of $2d+0$.

This skill may not be improved past the +0d level. It *does* count as having already spent 1S towards buying a normal skill at a higher level. This does *not* count during creation of an adventurer, only towards upgrades during play.

i If you have Jack-of-all-trades on Agility but do not have any formal training in 'Dancing', if you buy 'Dancing' at a +1d proficiency later in the campaign it will only cost 1S instead of 2S.

Jack-of-all-trades represents a lot of worldly experience, practical knowledge and an eclectic assortment of memorized tidbits (as might be the case for an older adventurer), a natural knack for picking things up, which works for adventurers of *any* age, or just being unnaturally lucky or intuitive, which could be the case in gameworlds with paranormal powers.



The *actual* way in which it works in play depends on the gameworld and the skill you are trying to use. If you have just made first contact with aliens, then clearly you are *not* speaking their language at +0d proficiency. However, you may still be communicating intent and concept better than you would with an *unskilled* default roll. Or, if you are a time traveller from 1860CE transported to 2010CE, you cannot use Jack-of-all-trades to have a default roll with a helicopter (or to buy skill with a helicopter at a reduced rate). However, you *are* much better equipped to understand the principles involved in its operation than someone without the skill.

Jack-of-all-trades does *not* count towards complementary skill bonuses.

hobbies: A 'hobby' is merely a different way of classifying any other skill (aside from special ones like Jack-of-all-trades). The adventurer has *technical* proficiency with the skill, but does not have a large depth of experience or real-world use. The easiest example would be a person who is a casual martial artist vs. someone with the same skill who learned martial arts on mean streets to help them stay alive. In the structured and sterile format of a competition they might have the same skill roll, but in a *real* fight the *real* fighter has the advantage. A skill bought as a hobby costs 1 less point than normal, with a minimum cost of 1S, but in any situation outside the structured scope of the hobby, the adventurer's skill roll only gives them 'best two' instead of 'best three'. In practical terms it means you can get a +1d proficiency as a 'hobbyist' for 1S.

i If you have a skill roll of 4d+1 bought as a hobby, then in a pressure or crisis situation you only get the best two dice, plus 1, instead of the best three, plus 1.

In order to qualify for the discount as a hobby, the skill chosen has to have both hobby *and* real-world uses. And the final skill roll for a hobby counts as 1d lower if you use it for any income determining purposes. A skill bought as a hobby *can* be improved into a real skill, provided the adventurer has accumulated some *real-world* experience in using it.

You can get the benefits of **enhanced skills** for a hobbyist skill, and the increased and decreased costs cancel each other out.

! We have talked about skills and real-world benchmarks like college degrees, but to put things in more solid terms, learning a new skill takes a *lot* of time. *Even with supervision, 1S is several months worth of training.* A four-year college degree is a +2d skill, or 4S. This is two years of study under various teachers, and *another* 4S split between college courses outside the specific degree requirements (like a +1d in a minor field of study and +0d in two other fields). And this is for a full-time course of study. *Very intense training could give you 1S in five weeks, which could be a single +0d skill, or a **Skill Package** (military 'boot camp' would be an example of very intense training).* On the other hand, just learning a skill on your own in your spare time could take most of a year for a single skill point. Look at it this way: Practical fluency in a new language (a +0d skill level) is 1S. *Realistically, how long would it take to do this?*

All of this is worth thinking about in creating an adventurer, but is more important when adventurers start gaining experience from play. This is dealt with more fully in the **Experience** section of the rules.



TRAITS

Traits fall somewhere between skills and attributes. They often come from chance, whether environmental or genetic, either to your benefit or disadvantage. *In EABA, you choose what type of chance has happened to or for your adventurer.* Traits will have a value after the name. Positive values mean you **gain** points for taking that trait, and negative values mean you **pay** points for acquiring that trait. If a word in the rules references the *use* of a trait, it will probably be capitalized, like Status. Traits fall into three broad categories:

- **open:** Suitable for any campaign or genre.
- **limited:** Suitable for *some* campaigns or genres, and the gamemaster should appraise players of limits or exclusions before adventurers are designed.
- ◆ **restricted:** Suitable only for a few genres, only available with gamemaster permission and with any arbitrary limits the gamemaster desires.

The sum of the starting points an adventurer can *gain* from traits is about a quarter of the *total* points given as a base amount. This is the *net* gain in levels, on a trait-by-trait basis. If a trait both adds *and* subtracts points, count the sum of the points, not the individual facets. Some special traits are exempt and do *not* count towards the total points gained.

Most traits have levels that can come from or go to any part of adventurer creation, unless the gamemaster has set limits on the point distribution. If a trait costs or grants points of a *particular* type, they must be allotted to or from the proper type (A, S or P).

i A trait that gives '3 points' could be spent as any combination of points that added up to 3. If the campaign had no paranormal powers, none of the levels gained could be spent on things that cost Power points. If the trait gave '3S', then these are points that can *only* be spent on skills, or traits that can be bought with any points or skill points in particular.

◆ Advantages

-varies

Advantages is a 'meta-trait'. It is a way of classifying any *other* trait that the gamemaster wants to limit to one example per group of adventurers. A real-world example might be 'ambidexterity'. This exists, and in the real world is present in less than one percent of the population. *But, if you can buy it with points, you could easily have an entire group of ambidextrous adventurers!* If the gamemaster is fine with that, it is just another trait. If the gamemaster says only one adventurer can have that trait, it is 'an Advantage'.

If only one player wants an Advantage, then it simply has the listed cost. If more than one player wants the Advantage, then they have to bid for it. Secretly and one time only, you bid some amount of *future* experience gains from play (at least 0 experience), *plus* the up front cost of the Advantage. In the case of ties, tied players bid again, but if they do not *increase* their bid they cannot win. High bidder gets it, but keeps no experience gains until it is 'paid off'. A gamemaster can start a campaign with several Advantages of their own creation and players are free to connive and deal with each other to minimize the cost to each other, but for a very desirable Advantage that only one adventurer can have, there may be a little pre-game backstabbing going on. If an Advantage can be acquired *during* play, the same process is used, but the bid is only in experience, but with a minimum bid of 10 per point the Advantage is worth.

For 1 point, an Advantage can offset a natural, biological or social penalty that other people generally have. *Again, ambidexterity.* Ordinary people take an -1d penalty for doing an Agility-based skill with their non-dominant hand. Fully ambidextrous people do *not* take this penalty. Or, maybe an Advantage is an immunity to some types of snake venom, or having the birthmark that denotes you as the Chosen One and allows you to speak truth to power without fear or retribution.



Some traits that *could* be Advantages in many different genres are below:

ambidextrous(-1A): The adventurer can use Agility skills equally well with either hand. Less than one percent of people have this ability.

mutant(-1A): The adventurer can exceed human or racial norms in their Attributes. They can *either* buy Attributes up to +2 above the limit for their age *and* ignore the maximum spread of 3 levels from highest to next highest Attribute (**page 3.5**), or have an unusually large or small body size (+1 reach and mass, -1 to be hit or vice versa), or double the duration of *one* of their **Age** brackets.

mad scientist(-1A): The adventurer has a *non-transferable* knowledge of technology one full era ahead of the rest of the world (see **Tech Eras**). The adventurer can design, build and repair gadgets that no one else can even figure out, but they have to build them one at a time. They still have to buy the skills to reflect this expertise. Because no one else can understand it, the knowledge cannot be passed on to anyone else. An adventurer can supervise construction done by others, but their personal touch is always required. If this advantage is allowed, the adventurer should also have the option to be **Larger than Life** on Awareness.

destiny(-1A): The adventurer is meant to, driven to or prophecied to do 'something important'. This could be fulfilling a lifelong dream, getting a long-delayed vengeance, or maybe even being the unwitting pawn of prophecy. What Destiny does is that *once per encounter*, if failing a Fate roll for luck would threaten your Destiny, you may claim success on that Fate roll without actually rolling for it, and then pick the result on any *one* die that is affected by that Fate roll. This *does* count as using Fate, so you still mark off a Fate box.

i If you used Fate to reroll a die, Destiny would let you choose the result on that die.

inheritance(-1 to -3): The last common Advantage is that the adventurer has a hidden heritage the player has only vaguely defined. This is something that the gamemaster gets to spin out the details on for the adventurer, *without* consulting with the player. The benefit is that the gamemaster gives the adventurer 2 points worth of benefits for each 1 point the player spends on the Advantage, with a maximum *additional* benefit of +3 points. This *can* include negative traits and positive ones, so long as the *net* benefit is 2 for 1. The only limit is that the benefit must somehow relate to the vague description given by the player.

i As the background for an unknown inheritance, a player says that their adventurer was adopted under unusual circumstances. The gamemaster decides that the adventurer is secretly the heir of the King of the Gypsies, and was hidden away through adoption because of threats against the Gypsies by the nefarious Malforian League. *That was long ago.* The Gypsies still seek their lost King, and the Malforians see the death of that heir as the blow that will break the will of the Gypsies. The adventurer has some levels of **Status** among the Gypsies, and also an **Enemy** of unknown scope and power. *Neither of these are known to the player or the adventurer yet, but both will be revealed in time.*

You can see how each of these traits might be interesting in a group of adventurers, but you also see how odd it would be for *all* of the adventurers to have the *same* trait, so we put them in as 'Advantages'.

Remember that the Advantages just listed are examples, *not* the entire list, and that players and the gamemaster can make up their own for particular gameworlds or genres, and the gamemaster can classify some of the traits that follow as Advantages.



● Age ±varies

Adventurers have a default age somewhere in the lowest adult age range for the game-world, usually somewhere between 16 and 20 years old. Adventurers may gain or lose points if they wish to start the game in a different age range. *Age is one of only three traits in the basic rules that does not count towards the number of points you can gain from traits.*

age range(human)	points		maximum
young adult(13-15)	-5A	-3S	9(3d+0)
adult(16-20)	+0A	+0S	11(3d+2)
physical prime(21-25)	+5A	+3S	13(4d+1)
mature(26-40)	+0A	+6S	11(3d+2)
middle-aged(41-60)	-5A	+9S	9(3d+0)
elderly(61-80)	-10A	+12S	7(2d+1)
extr. elderly(81-100)	-20A	+15S	5(1d+2)

! Yes, you *do* get an overall level bonus for being in your physical prime. Many Olympic athletes have a limited span in which they remain competitive at that rarefied level.

The maximums are the highest level humans can have in the *physical* Attributes (Strength, Agility, Health) in that age bracket. Aging normally is *not* a game concern unless the campaign runs a *very* long time or has long breaks between adventures. If adventurers reach these arbitrary breakpoints, apply the differences between their current and previous age. The gamemaster may wish to adjust the points gained and lost for an exceptionally long or short-lived races, or if an advanced tech allows exceptionally extended lifespans. If any Attribute is reduced to zero because of aging effects, the person dies of old age. In the real world, aging is often punctuated by *severe* events like heart attack or stroke that outright kill you, but we are just glossing that over.

i An adventurer starts play in their physical prime, and the campaign lasts long enough for them to reach the 'mature' age bracket. At this time they *lose* 5A and *gain* 3S, the *difference* in points between the two age brackets. They should be applied gradually, in context with the game.

If an adventurer suffers aging changes during play, points gained may be used just as during adventurer creation. These points may also be used for traits. Any levels lost on Attributes are divided between Attributes as desired, or a trait taken that somehow applies to aging, like a **Weakness**. Decreased Attributes *do* drop the maximum level of skill an adventurer can use, and no points are gained if an adventurer loses the ability to apply skill dice because of aging effects. Points gained on skills from aging represent general experience, and may be used for any skill or applicable trait.

! The gains from age are as much a matter of experience as a matter of years. If it is part of your adventurer's background, you can have the level adjustments for a particular age but be chronologically younger. For instance, a very young Olympic gymnast is in the 'young adult' range, but intensive training has honed their Agility and skill to that normally only acquired by someone older. On the other hand, you can be very old yet not have learned very much. Not everyone uses their all-too-finite time with equal efficiency.

● Background +1

Every adventurer has a background. But, if you write up at least 300 words of background on your adventurer (about half the text on this page), you get 1 point to spend how you want, which does *not* count towards your overall limit from traits. So, you get a benefit and there is *no* downside to it. You do need to explain something about your past, your goals for the future, and some detail on any quirks in your personality or unusual traits you might have. Answering the questions on **page 3.3** or **3.50** would be a good way to do this.

In addition, a Background lets you expand on the scope of *one* skill you have. For instance, if you were raised on a farm and have skill with an automobile, your background might let you to claim that it also covers self-propelled farm equipment and light construction equipment.



◆ Boon/Bane ±varies

Sometimes an adventurer's very existence or nature of being is dramatically different than the norm. In **EABA**, this will be a Boon or a Bane. A Boon or a Bane is almost always specific to a particular gameworld or genre. For instance, if a vampire bursts into flames if exposed to sunlight, that is *definitely* a Bane. On the other hand, the *vampire* is immortal and immune to poisons, diseases and the like, which is obviously a Boon. The limit on points that can be gained or spent on this trait is up to the gamemaster, but since they are meant to be low-level powers, a total limit of around half the starting P is reasonable. Note the almost *any* of these, even the smallest, mean the person is different in a way that defies human expectations. For instance, an ordinary adventurer with a +3 Walk speed could easily break every running speed record. You usually *cannot* get a cumulative effect from a Boon or Bane (so you cannot get 6d armor for 3P).

This trait is just shorthand for the **paranormal powers** section of the rules. The cost in P for the Boons that follow is about the same as if you had designed them as a power. Once you are more familiar with the power creation system, you can create your own set of Boons and Banes appropriate to the gameworld they are creating or running or just use this list as a guideline for how much you pay or get for a given expenditure or liability.

Once you become more familiar with the rules, you can reassign any power-specific points from this trait to a custom-designed power that does the same thing, possibly with a more efficient design or custom tweaks. The most important thing about this trait is that it is one that is exceedingly difficult to change in play. If sunlight is a Bane to a vampire, you would have to be a *really* special vampire to be able to buy off that Bane.

This short list should cover player and gamemaster needs until you are more acquainted with the **Powers** chapter:

boons	costs
age one-half as fast	1P
age one-quarter as fast	2P
age one-eighth as fast(near zero)	4P
walk speed of +3 normal	1P
recovery rating of +3 over base	1P
recovery rating of +6 over base	3P
recovery rating of +9 over base	5P
biological requirements of one-half	1P
biological requirements of one-quarter	3P
biological requirements of near-zero	5P
superhuman forte(+2d) on an Attribute	1P
+4 toughness	1P
+4 stamina	1P
+5 hits (or optionally, +1 hit bracket)	1P
2d armor against a broad class of damage	1P

banes	gains
age twice as fast	1P
age four times as fast	3P
walk speed of -4 normal	1P
recovery rating of -4 normal	1P
biological requirements of double	2P
biological requirements of quadruple	4P
biological requirements of near-constant	6P
2 stamina lost from uncommon item	1P
1d non-lethal hits from uncommon item	1P
1 lethal hit from uncommon item	1P
+1d from a broad class of damage	1P
+2d from a broad class of damage	3P

i Let's say you are in a science-fiction campaign and want to be an android. You would, among other things, want boons of age and biological requirements of 'one-eighth normal' (near zero).

It is important to remember that all of these cost P, so if the campaign does not have or allow for paranormal powers, you cannot have any Boon, and whether or not you can have a Bane that mimics a *natural* debility (and grants generic points) is up to the gamemaster. In campaigns with only small amounts of powers, remember the maximum in any one starting power (or power-like effect) is half your campaign base. So, if you started with 6P, you could only buy Boons that cost 3P or less.

Explanations:

recovery: At high levels, this is close to full regeneration. A normal person with the +9 recovery could be shot in a pistol duel at breakfast and be completely healed by lunch.

superhuman forte: You are exceptionally, inhumanly talented at a subset of an attribute. You could have the physique of a demigod, eyes like an eagle, amazing agility, astounding luck, or whatever.

biological requirements: Any three of: food, water, air and sleep. Note for the bane, that having to get four times the normal amount of sleep would be a pretty serious problem. This also affects the timeframe of things like poisons. If you want reduced requirements in two instead of three, you can get the next highest level of effect, and if you only want one, you can get a requirement of one-eighth for 1P. Conversely, if you require *extra* effect and do not want to apply it to three items, you get 1P less for having it apply to only two, and 2P less for having it apply to only one.

i If you want a Bane that says you need quadruple normal food and water, but not any change in air, this would be worth 3P instead of 4P.

damage from uncommon item: If you are merely touched by the item or condition, you take damage. It is like a paranormal power that *you* have no defense against. It may be possible for an *external* power or gadget to shield you, however (a vampire can be carried around in daylight while in their coffin, your allergy to bee stings can be negated with regular treatments, etc.). Damage is taken on exposure and each +1 time level of exposure after that. If it is a common item, it is worth 1P more. This Bane *might* be allowable more than once for the same condition.

+1d damage: If you are attacked with a particular effect, the power or attack does +1d effect or damage over the normal amount. You cannot have this *and* the Boon against it.

Enemies +1 to +4

People who do not like you *and* who are in a position to do something about it. A *minor enemy* gives you 1 point and also gives the gamemaster free rein to cause minor grief in your life an average of once per *adventure*. Minor enemies *can* be temporarily disrupted, evaded or intimidated by adventurers. A *major enemy* is worth 3 points. They will tend to cause major disruptions in your life, capable of removing you from an adventure if successful. Major enemies cannot be intimidated, but they can be avoided. Minor enemies may be major enemies with limited geographical reach. *Pervasive enemies* are worth +1 point. This represents a major or minor enemy that has a lot more resources than you, with a longer reach and a greater ability to find ways to make you miserable, or an ability to make you miserable in a permanent fashion.

i That pesky robbery conviction from ten years ago makes the police your minor enemy. Every time you apply for a job or get pulled over at a traffic stop, you can expect questions and raised eyebrows. This worth 1 point. This is a *minor enemy* because in the real world there are plenty of places you can go where your home region's law enforcement and your own checkered past will make no difference. If the gameworld was such that the conviction could affect your actions *everywhere*, you could count the police as a *pervasive* minor enemy, worth 2 points. An example might be a conviction that affects your ability to get a visa or a work permit overseas.

i Guido is unhappy. You disrupted his cousin's racket of using nuns to sell dope to school-children, and he is important in his organization. Guido wants you to be made an example of, but his reach and sources of information are limited. Guido is a major enemy, worth 3 points. If his goons get a hold of you, expect serious hurt, but his reach is limited and like local police, you can go to areas where he has no influence over you. If on the other hand, you were on the hit list of an international crime syndicate, this would be a major *pervasive* enemy, worth 4 points.

An Enemy can be *anyone* who has the power, official or otherwise, to make an adventurer's life miserable. Even employers can be an enemy of sorts, and government employers can be major or even pervasive Enemies. An employee who is insubordinate can get fired. However, a soldier who is insubordinate can get *jailed* or dishonorably discharged, or in primitive armies, whipped or keelhauled. Employers who are powerful enough to be Enemies can also be **Friends**, but usually at one level less.

! Do not think you can simply grab the points for a trait and then run away from your enemies. Think of how many books and movies center around someone who *thought* they were safe, but who ends up being chased by an agent of a distant enemy.

Experience -1

Experience is part of your life or training that for a cost of 1 point allows you to negate *up to* 2 points of a particular type of penalty on an *attribute*. For instance, a knight could have experience at fighting in heavy armor, and takes up to 2 points less penalty from any encumbrance on their physical attribute rolls. A Sherpa's experience at high altitude may mean they take a smaller reduction on their Stamina. *An experience cannot reduce a penalty to less than 1 point of effect.* So, the knight cannot reduce an encumbrance penalty all the way to zero (you would not want them to be on an even footing with a sprinter in gym shorts). Similarly, you usually cannot buy an experience that reduces damage penalties on your actions, since part of this is structural effects that experience will not help with. You can however, design a custom melee combat form with a maneuver designed to offset such penalties. Any given experience can only be bought once (the gamemaster may make exceptions), and the player *must* describe how the adventurer came to acquire it. A good way to do this would be in a **Background**.

Favors -1

This is like a powerful, one-shot **Friend**, but without the reciprocal obligation. For a cost of 1 point you have *one* 'get out of jail free' card that will work in a *particular* set of circumstances. But once used, it is gone, as is the point spent on it. A Favor *can* be awarded in play by the gamemaster if adventurers obligate someone or something powerful to help them out (the faeries award you a minor wish). Depending on who owes you a favor, it will usually get you out of jail with charges dropped if you are arrested, get you released by criminals with only a savage beating instead of killing you, pay off or cancel a significant debt, allow you to acquire something seriously illegal, or set up a meeting far beyond what your own abilities could arrange. It is possible that favors could be used to arrange the opposite for someone you do not like. That is, get *someone else* arrested, beaten, driven into debt, etc. However this would only tend to work if they were of similar or *lower* social status. *Cashing in a favor as a peasant does not let you get the Duke in trouble...*

! If a player wants their adventurer to start play with something that would normally be beyond their means or legal ability to acquire, the gamemaster may let them buy it with a Favor. The favor is expended before the game even starts and the adventurer has the item in question. *This obviously has limits.* Your homeless crazy psychic does not own a corporate jet, nor does your wealthy industrialist have a nuke hidden away somewhere.



Forte/Weakness -1A/+2A

If you use the **advanced adventurer sheet**, you will see that each attribute has multiple aspects that you can specialize in. If you have no special strength or weakness in that aspect, the value is unchanged. If you buy a Forte, you get +3 on that attribute as relates to *that* aspect, but it costs you 1A. This allows you to have a *significant* strength in one aspect of an attribute without having an overall high level. Each +3 in an attribute makes it about twice as good. You would just mark '+3' in that spot and then show your adjusted value (if needed) in the appropriate box.

If you decide to take a Weakness in part of an attribute, you get -3 on the attribute for figuring that aspect, but it gains you 2A. This allows you to have a significant weakness in one aspect without having an overall low level. Each -3 in an attribute makes it about half as good. If a weakness is readily offset by easily available technology, it is only worth 1A. A common example would be a weakness on sight that is easily correctable with glasses.

i This is someone with an overall Awareness of 8. However, they are fairly smart (a Forte on their cognitive ability), but with poor vision (Weakness on their ability to spot things), and have normal hearing (no adjustment either way).

Awareness			8	2d+2	+3	cognitive
think	spot	listen			-3	sight
3d+2	1d+2	2d+2				hearing

A Weakness can be taken more than once, but the roll for that aspect of the Attribute should not be less than zero. You *would* go to zero if you wanted to have an adventurer who was blind or deaf (Awareness as applied to that aspect of perception) or unable to walk (Health as applied to your Walk movement distance).

Similarly, if it is important for game purposes, animals with exceptionally slow movement rates may have a penalty on that aspect of Health, without affecting their overall Health score. The specific aspects for Attributes are:

Forte & Weakness options:

carry(Strength)	Your load carrying capacity for encumbrance purposes. Also affects your hit brackets .
strike(Strength)	Your damage with punches or melee weapons.
throw(Strength)	Your force and distance for thrown objects and weapons.
fight(Agility)	Your manual dexterity for doing fine work with your hands.
balance(Agility)	Your overall bodily grace for skill and dodging purposes.
throw(Agility)	Your hand-eye coordination for throwing purposes.
cognitive(Awar.)	Your ability to reason and think.
sight(Awar.)	Your ability to spot things with your eyes, or your primary sense for races that use something other than sight.
hearing(Awar.)	Your ability to hear things with your ears, or your secondary sense for races that use something other than sight.
toughness(Will)	Your ability to resist or shrug off minor injuries or bruises.
charm(Will)	Your force of personality and inherent ability to sway others. Charisma <i>often</i> has elements of physical attractiveness.
resistance(Will)	Ability to resist temptations or overcome emotional obstacles.
speed(Health)	How fast you move with your primary means of movement.
stamina(Health)	Your reserves of energy for long-term exertion.
recovery(Health)	How fast you can recover from sickness, injury or exhaustion. Also affects your hit brackets .
shield(Fate)	In gameworlds where power is resisted with power, your ability to resist unwanted effects.
power(Fate)	In gameworlds with paranormal powers, your potential for projecting power.
luck(Fate)	In gameworlds allowing use of luck, your ability to twist fate.



i An adventurer takes a Weakness on recovery. They took a bad fever as a child and it has affected their health ever since. They take a -3 on Health for determining what their recovery is. They get 2A for this, and spend the points on a Forte on hearing *and* a Forte on toughness. These cost 1A each. These are all separate traits, so the weakness counts as 2 points towards the maximum the adventurer can have (you do *not* say that because they all fall under the same trait heading that the net value is zero).

A Forte does *not* let an adventurer have an adjusted Attribute level higher than racial norms unless the gamemaster allows it. The maximum level of skill that you can use is the effective level of the attribute governing that skill, so if the Forte is the nature of the skill, then the adjusted level is what you based the skill roll on. So, a Forte on your cognitive ability *will* improve all your Academic skill rolls by +1d.

! The cost of buying all three aspects of an attribute with a Forte is the same as buying the *entire* attribute at +3 over its previous level, so there is never any reason to do this.

Animals will often have multiple levels of a Forte in the movement aspect of Health. A horse can run far faster than a human of the same Health, and a cheetah even faster. Similarly, birds fly very fast for their Health and fish and marine mammals swim far faster than humans. They simply have an adjusted Health for movement purposes high enough to match their real-world performance.

Superhuman Fortes

With gamemaster permission, points for powers can be spent on Fortes, and Fortes bought with P can be stacked up to +9 effect instead of the normal +3 limit. *They are points for paranormal abilities, after all.* This is the simplest way to have a limited super-attribute, and if you expect to have powers that use lots of stamina, just spend 3A right now for +9 stamina.

Friends -1 to -4

People who like you aside from the other adventurers. Friends cost a minimum of 1 point, and like enemies can be minor, major and pervasive. Friends do you favors rather than make your life miserable. Unlike your enemies, your friends also expect you to do them favors in return, appropriate to your adventurer's skills, abilities and status. An adventurer can call on a Friend for help whenever needed, and the adventurer can expect to have the Friend ask for a favor on a fairly frequent basis. Not so much as to disrupt the campaign, but often enough to be an inconvenience or an occasional focus for their adventures. An adventurer who does *not* help their Friends can expect that the gamemaster will eventually downgrade or even end the friendship. Friends are above and beyond the casual loyalties that come from collecting a paycheck from the same employer. Friends will bend the rules for you, *because they are friends.* In game terms, friendship as a trait trumps ideology, blood, race or nationality. This can sometimes put the adventurer in a difficult situation, but any trait is fair game to use to make an adventurer's life interesting.

Increased/decreased hits +1/-1

People can be easier or harder to kill than normal. You can gain a point by having 1 fewer hit than normal for your Strength and Health, or spend a point to have 2 more hits than normal (and no, you cannot do both). You generally cannot do either more than once without gamemaster permission and the gamemaster can restrict points gained or spent to particular types. Optionally, ±2 points can increase/decrease your **hit bracket** by 1.

Hard to kill

If the increased hits *only* count for whether or not you are dead, you get 4 hits per point spent. So, you might suffer injury penalties just as easily, but you are harder to kill than normal. For any rule involving death, dying or optionally, crippling injury, you use the increased hits total. You could also say the reverse, that the increased hits only count for unconsciousness rather than death.

◆ Larger than life -2P/-5P

The adventurer is somehow able to bend the normal laws of the universe. While most adventurers will use the 'best three' of their die rolls, an adventurer who is larger than life will use the 'best four' or even more. Each 5P spent on this trait increases the number of dice they can utilize by one (see **Best Three**). This is an *extremely* powerful trait, and is limited strictly to gameworlds with exceptional individuals who routinely violate the normal laws of nature. By this, we do not mean things like magic or psionics, but things like skilled tasks that simply should not be possible for *anyone* (requiring difficulties of 21 or more to accomplish), or attribute rolls beyond all reason, like reading newsprint from across the street, or hearing a pin drop a block away. The main genre that will use this trait is superheroes. Extremely skilled but otherwise human heroes might have one level, your four-color superheroes might have two, and some extremely powerful beings might have three. The feats possible with multiple levels of this trait shatter the real-world notions of what is and is not possible.

At gamemaster option, an adventurer can have this trait on *one* attribute *or* one skill (rather than *all* attributes and skills) for a cost of 2P per extra die they can keep. Note that if it is on an attribute, it only applies to *attribute* rolls, *not* to skills using that attribute. This will still give an adventurer the potential to be legendary, like the world's best marksman, fastest runner, most talented wizard or luckiest man alive. *Any* levels of this trait are *only* available with gamemaster permission, and the gamemaster may also set the maximum benefit allowed with the trait or consider it an **Advantage** that must be bid for.

❗ Note how limiting certain points to certain traits affects things. For instance, if you wanted a mostly normal gameworld with just a *tiny* amount of exceptional bits, then simply give all the adventurers a maximum of 1P or 2P to exceed normal human abilities with.

● Looks ±1S

All adventurers have an appearance. But not many appearances are notable enough to be worth points one way or the other. Generate a few words to describe what others see, like "black-haired roguish-looking fellow", or "blond, muscular valkyrie". Normally, looks will be worth no points. If an adventurer's appearance is so unusual it causes a reaction in those around them, it would be worth ±1S. This reaction is generally strong enough to preclude the use of skills to affect it.

❗ If you are an Orken, and the tavern has a 'no Orken' policy, it does not matter how charismatic and glib you are, you are *not* going to get in.

This is beyond the charm aspect of Will and is something that cannot be mundanely disguised. Generally, Looks is something you would get 1S for because of negative effects, but if you have a Looks that can give you a nearly automatic *benefit*, then it is something you would *pay* 1S to get. This would require approval of the gamemaster.

❗ If you look exactly like the King, you would get nearly automatic deference from anyone who knows what the King looks like. But, looking like this would require gamemaster consent, because it is going to have much greater campaign ramifications than if you looked exactly like the tavern owner down the street.

Looks *should* be a subjective thing, but if you need to apply in terms of a game mechanic, it is worth ±4 to difficulty as relates to the specific nature of the looks. If your looks is 'scruffy, nasty beggar', then expect a +4 difficulty when trying to get into a nice restaurant. If someone is a lecher, your 'blond bombshell' looks is worth a -4 difficulty to manipulate him to get what you want.

❗ Looks can also be reflected elsewhere. If your looks is 'fat', then you might take a **Weakness** on Health for running speed. or stamina.



● Motivation +1S

All adventurers have a motivation. It is why they get involved in adventure rather than tilling the fields or working in a cubicle somewhere. *It could be simple.* A secret agent's Motivation might be 'patriotism'. *It could be complex.* A warrior's Motivation might be to 'overthrow the despot whose soldiers pillaged his farm and killed his parents'. Normally a motivation is worth no points, but one which is sufficiently interesting to the gamemaster is worth 1S because it makes it easier for them to design adventures, and an added bonus is that this 1S *does not* count towards the maximum number of points allowed in traits. A motivation compelling enough to be worth points is one that the adventurer will not waver from. *It is part of what makes them who they are.* The patriotic secret agent will never betray his country, the warrior seeking to overthrow the despot will never turn down a chance for revenge nor give in to despair. In order for a Motivation to give you a game effect like this, you cannot just say "I have a Motivation that protects me", you have to role-play it and add it to the dramatic situation.

◆ Mythic Archetype special

This is not a Trait for *one* adventurer, it is a set of Traits for an entire *group* of at least **heroic level** adventurers. Each adventurer becomes an archetype common to stories and adventures dating as far back as we have recorded legends. These roles will have some limitations, but also some unique benefits. But, a group of players has to play the archetypes *as a whole*, each player taking on one of the traditional roles. If even a single player decides not to join in, then *no one* can have *any* part of the package. You do not have to have enough players for *all* the archetypes, and you *can* have more players than the number of archetypes, since some of the roles can have more than one player in that role. A group may also have more archetypes than there are players, players taking turns with the extra adventurer. The archetypes are:

the Hero: *The Hero is in transition.* He or she is becoming something more than what they ever thought they could be. The Hero is dedicating their life to something bigger than themselves. Giving birth is a heroic act in this context. The Hero does not have to be a big hulking man. The widow who leads her family across the country by covered wagon is as much a Hero as any dragonslayer. The Hero *is* the undisputed leader of the adventurers, so any group can only have one Hero. Any adventurer who does not like it can leave and not come back. This does not mean the Hero can order the other adventurers around, but it does mean that when the Hero has made up their mind, that's the way things *are* going to be, for right or wrong, and everyone else in the group has to accept it.

The Hero is *required* to have the best Strength or Agility roll of all the adventurers, superior by at least 1d to anyone else (this can be due to a **Forte**). Whichever of these Attributes is not the best must be at least as good as the second best in the group. If most conflict uses other Attributes, the gamemaster can use them instead, keeping in mind the Hero is supposed to be the *best* in the group in terms of combat or conflict. Leadership skill would be a suitable substitute for a combat skill in most cases. The Hero must be adult or physical prime for **Age** (normal point gains or losses), and must purchase at least two conflict-appropriate skills at +2d or more. No other adventurer can begin play with a higher *total skill roll* in that field of endeavor than the Hero (a 'field of endeavor' is something like 'melee combat'). The Hero also has to take +4 effect in each of two different 'heroic' **Personality** traits (normal points). These will vary with the type of Hero and genre, and approved (or are mandated) by the gamemaster. Because of these requirements, a Hero must be designed first, and other players must design their adventurers around the results. In game terms, the Hero is someone who is *already* the Hero, not the new guy yet to become one.



What the Hero gets for meeting all these requirements is the ability to be heroic. The Hero can use their Fate in the normal way for 'luck', but can also use it to be 'Larger than Life', just as if they had that trait. This is treated just like a luck roll, except instead of getting an extra 1d to roll, they get to use 'best four' instead of 'best three'. If the Hero already has 'Larger than Life', the ability *is* cumulative, but the ability cannot be used more than once on any given die roll. In addition, the Hero automatically gets +1 level of limited **Status** for free. When adventurers enter a room, people will automatically know the Hero is someone to be reckoned with.

i Neo is the Hero of *The Matrix*, but does not really qualify in game terms until late in the movie.

It might seem easy to be the Hero, but the role can be quite constraining.

the Mentor: Gives a Hero an emotional center to work from. The Mentor does not show the truth, they show the way to the truth. The Mentor could be the elderly sword master, the kindly but gruff old magician, a tribal shaman, the grandfather who raised you after your parents died, or maybe even an old Hero whose time of fame and glory has long since passed. *There is only one Mentor in a group.*

The Mentor is required to be old. Their **Age** must be elderly or extremely elderly (normal level gains or losses). The Mentor's Strength or Agility must be second only to the Hero if possible, and if not, must be the maximum for their age, though this can be reached with a Forte appropriate to the skills they are best suited for mentoring. The Mentor is supposed to be wise and skilled. Their *cognitive* Awareness must be the highest in the group by at least 1d. The Mentor must also pay for some type of ancient wisdom, philosophy or general inscrutability skill of at least +2d, and pay for two combat or conflict skills at the maximum allowed for their physical abilities.

The Mentor gets certain intangibles for this role. While the Hero has status, everyone except the Rogue recognizes that the Mentor is the wise one. *The cynical Rogue just thinks the Mentor is a crazy old coot.* The Mentor knows the way to the Truth. Instead of using it for a die bonus, the Mentor can make a luck roll to 'get a clue'. If the situation seems unresolvable, the Mentor can get an idea of some physical, emotional or other direction to head in order to find a solution. That is, the gamemaster secretly gives them a hint. It may not be *the* solution or the *best* solution, but it will be *a* solution.

i Trapped in an enemy stronghold, adventurers don't know which direction to go in order to escape. The Mentor doesn't know either, but the player successfully makes a 'luck' roll and the gamemaster has to give a suggestion that will help them figure the way out. Note again that the gamemaster *does not* point the way out, they just point to a way in which adventurers can figure their own way out.

The Mentor can also be a martyr. In a hopeless situation, the Mentor can call on reserves that even they were unaware of. If they choose this path, they gain the 'Larger than Life' trait on a luck roll, just like the Hero. However, if the Mentor fails *any* of these luck rolls, the consequences are *fatal*. That last action counts as if the roll it was used on *was* successful, and while the action performed might be key to the survival or success of the other adventurers, the Mentor suffers mortal injury or death as a result. If by some stroke of mercy or luck the Mentor is kept alive, they will permanently lose three points of Fate.

i Obi-wan Kenobi is clearly the Mentor in *Star Wars*.

If any Mythic Archetype is going to be a non-player extra, it should be a Mentor, especially for new groups that need some hints and help. Traditionally, it is the Mentor who ends up dying heroically to allow the Hero a chance at the ultimate victory. *Just ask Obi-wan...*



the Rogue: *The Rogue is flawed and proud of it.* The Rogue is the Hero without a cause, the Mentor in the making, the Companion who still looks out for himself. There can easily be more than one Rogue in a group, though there is no guarantee they will get along with each other.

The Rogue defies social convention and may be an outcast. They have a level of negative limited **Status** to reflect this (they get normal points for this), and also *at least* a pervasive minor **Enemy** (they also get points for this). The Rogue must have all Attributes within three points of each other, and purchase at least +1d in four separate skills which are either outright illegal or frowned upon in the region of the campaign. The Rogue also has +2 or +4 effect in the **Personality** trait 'cynical' (they get normal points for this). The Rogue thinks the worst of any motivation, person, or situation, since they always see others as they see themselves.

The Rogue has a heart of gold, though they seldom show it. While they may perform any number of anti-social acts, inside they are a decent person who doesn't show it very often for fear of being taken advantage of. Any time the Rogue makes a luck roll in a situation where they go *against* their cynical judgement and 'do the right thing', they get +2d instead of +1d on a successful roll. Normal use of luck gives the normal +1d. Note that 'doing the right thing' is *never* easy for the Rogue, and certainly not automatic. There *must* be times where they let bad things happen when it was within their power to stop them, but they will never admit feeling guilty about it, even if inside they are ashamed at their inaction.

i Captain Jack Sparrow is the Rogue in *Pirates of the Caribbean*.

The Rogue is the easiest archetype to play, since it is close to the way most adventurers are designed and played to begin with.

the Companion: *A Companion is the Hero's true friend, sounding board and absolute confidant.* The Companion will always be just one step away from the eternal glory and fame that will hopefully accrue to the Hero, but is never jealous or envious because of it. A group *can* have more than one Companion, but it is not recommended.

The Companion is required to be competent. If possible, they can have *no* Attribute at a level of less than two points below the average for the power of the campaign (see **page 3.4**), and must divide at least three-quarter (round down) of their *total* skill points on four skills useful in an adventuring sense. This makes them flexible and talented, but the point cost of the required skills makes it more difficult for them to purchase high levels in anything other than these four skills.

The Companion gets the **Forte** in Will for 'Resist' at no cost. This is +3 to Will when trying to avoid or withstand any situation where they would be forced to betray the Hero or anyone else they care about. But, the Hero trusts the Companion implicitly. So, if the Companion *is* somehow subverted, the Hero will never suspect it. The Companion also has the ability to 'loan' their skill. For any skill which the Hero and Companion share, the Companion may 'loan' +1d of skill to the Hero in any cooperative endeavor (the Companion's roll is reduced by 1d while this is happening). The Hero and the Companion work so well together that the Companion can anticipate the Hero's needs and work to increase the Hero's chance of success.

i Samwise is the Companion in *Lord of the Rings*. Robin is the Companion of Batman.

The Companion is tough to play because the Hero is always the one to get the glory. Companions may someday move on and become a Hero in their own right, but not for several years.

the Goddess: *The creative force personified.* She transforms those she touches, protects those she loves, is ruthless to any who would harm those in her care. While the Mentor has insight into the esoterica of their field, the Goddess has practical know-how. Alone among the archetypes, the Goddess *must* be a *female* adventurer and there is only one Goddess in a group.

The two highest total skill rolls for the Goddess must be in skills that can be used for nurturing or healing. This is also the general nature of her personality, though she can be formidable in combat if wronged.

! In ambiguous cases like magic or skills with several uses, interpret this requirement through the *intent* of this archetype.

For taking these limits, once per *adventure* the Goddess can be 'Larger than Life' in a nurturing, healing or growth-related task, even if that task takes a while. This may require extensive preparation or exotic materials, but it is an ability outside the bounds of normal medicine, science or magic (so it would *not* be subject to things like the technology limits on the use of **Medicine** skill). In addition, once per *adventure* she can be the 'Vengeful Goddess', and be 'Larger than Life' for one full turn's worth of combat skills or tasks.

i Hermione Granger is the Goddess in the *Harry Potter* movies.

Despite its few limits, the Goddess is not an easy role to play, but those who choose it can often do it well. It is an understated role that is often of great importance.

Neat Trick

-1

This is a very specific skilled task that you can do, that combines two actions into one, letting you do them both as a single major or minor action, as appropriate. Obviously, you need to be able to do *both* things as skilled tasks, and each one of them rolls separately for success if needed, but they happen at the same time in terms of combat sequencing. However, the price you pay for doing them both as one action is that *both* of them take a penalty on your skill roll equal to what the *second* action would take had you sequenced them normally.

i Your samurai's neat trick is the 'scabbard fling'. When you draw your katana, you simultaneously use the drawing motion to fling the scabbard off your katana at your opponent (drawing a weapon and making an attack are both 'major actions'). If this was your first action in a turn, then both the attempt to draw the katana *and* the flinging of the scabbard would happen on your Initiative, but *both* would be at a -3 penalty off your skill roll, just as if each was your *second* major action for the turn.

Other neat tricks might be things like drawing two guns or blades at once, firing two guns or throwing two knives at once, shooting two arrows at the same time, drawing and firing as a single action, or running and attacking as a single action. All of these are things you know how to do individually, but which you have spent extra time training so that you can do both of them at once.

Neat tricks *can* be combined, with a -3 penalty for each extra one. So, you could have 'draw two guns' *and* 'draw and fire' go off at the same time so you could draw two guns *and* shoot both as *one* action, if you were willing to take a -6 penalty on *each* task with *each* gun. Neat tricks can be powerful advantages in combat, so to prevent abuse, the gamemaster can say that an adventurer cannot have more than a tenth of their S (round nearest) in neat tricks. That will limit most adventurers to one or two of them, with the potential to develop more as they gain experience.



◆ Organization -varies

If an adventurer has **Status**, they are probably part of some larger group and have a formal or informal role in that group that gives them some status and authority. However, they do not 'own' that group. A general or president or even a king has rules or organizational guidelines they have to follow or at least pay lip service to. However, an adventurer who has paid for an 'organization' is the top dog of a group for which the adventurer calls all the shots and makes all the rules. It is like very limited Status, with the adventurer at the top. The levels spent on the organization define its size and competence.

The default (cost of 1 point) gets you +2 in quantity *level* of subordinates (that's two of them) at a competence of 'low normal' (using the campaign starting levels on **page 3.4**). Then modify this as follows:

organization	cost
+1 competence grade (not ≥ you)	±1
±1 level of people (use quantity scale)	±1
±2 loyalty (up to ±4)	±1

There is an assumed **Friendship** between you and members of your organization (this does not cost points, it just represents organization loyalty). If *they* are just in it for the paycheck and *you* treat them as disposable assets, the organization costs less. Organizations always cost a minimum of 1 point.

i If the adventurers start at a 'heroic' level, you could create an organization with eight 'low normal' members loyal to you for a cost of 5 points (+1 for two 'low normal' level people, +4 to make it eight people). You could subdivide this and say it is two 'normal' lieutenants and four 'low normal' regular followers.

An organization could be a business, criminal gang, cult or subgroup of a larger organization that has a personal loyalty to you. People in your organization are generally willing to do anything you would personally do.

Budgeting for an organization is represented by your **Wealth** (specifically, *their* wages are paid from *your* money). Even though there is *usually* a personal loyalty involved above and beyond the paycheck, they *will* quit if you do not pay them. Each point spent on the trait for loyalty gives you the effect of a level of **Status** for the organization (up to +4). You should automatically win contests of status in the organization, since *you* are at the top. Second, your levels of effective status grant the usual modifiers on difficulty, *if* your underlings are loyal to you.

i If you had two effective levels of Status, anyone trying to turn the loyalty of one of your underlings would be at +4 difficulty (+2 per level of Status).

A group of adventurers *can* pool points for a support organization. One of the adventurers will have to spend more than the rest and be 'in charge', and other adventurers have status in the organization proportional to their points.

! This trait is *not* for you to make globe-spanning empires. After all, it would take a 'heroic' leader 12 points just to have a hundred or so Normal followers. The trait is meant to allow adventurers (or some foes) to create small, close-knit groups of assistants, agents or trusted support personnel with skills you need but do not personally have. For instance, the doctor who will treat your gunshot wounds without reporting them to the police, the mechanic who will install an oil slick on your car, or a hacker who will do searches of secret databases for you. It gives them a reason to design interesting extras, and it gives them minor adventurers to play when the nature of the adventure has people doing things in widely separated places at the same time. This way you can keep the adventurers together and have the underlings working together somewhere else.

! If a heroic person put half their maximum point total (about 33 points) into having Normal followers, they could have 175,000 people in their organization. If you pay them 10 Credits an hour, your weekly payroll is 70 million Credits!



Permits -1S

Once society gets to a certain level of central government, some things are only permitted to those who have the sanction of a higher power. The simplest modern example would be a permit to own or carry a firearm. *In effect, a permit is a way for someone to get away with doing something that is illegal for everyone else.* Permits need to be designed by the gamemaster, are *entirely* subjective and quite often are geographically limited. For instance, a permit involving firearms in the United States is far broader than a permit involving firearms anywhere else. The four things to remember when creating a permit are:

- a permit has preconditions and a limited duration. *Do not expect to get a concealed weapon permit if you are an ex-felon.*
- a permit has limits. *A permit for a weapon will not let you carry it onto an airliner, but it might let you check it into secured baggage.*
- a permit is *not* needed for something that is a requirement of your job. *Soldiers do not need permits to carry guns while soldiering.*
- 'Native culture' permits generally do not cost points and only require a qualifying skill roll. *A driver's license does not normally cost 1S.*

While we are using weapons permits as an examples, things like a security clearance, commercial pilot license or a license to practice medicine could also be permits. In general, if a player pays for a permit, the permit is usually good until the adventurer does something that would cause it to be rescinded. Remember that a cost of 1S is a *significant* investment for a permit, so players will not use this trait unless the perceived benefits are worth it.

! Permits can be a way for the gamemaster to direct the actions of adventurers, something to try to acquire, or something to deal with if you are unable to acquire it. If you do not have a driving permit and drive anyway, your response to a police checkpoint will be different than it would be if you had a permit in good standing.

Personality +varies

This is any learned or acquired behavior. It is worth 1 point per +2 difficulty it adjusts your rolls. Anyone who is generally considered 'well-adjusted' can have a maximum of +4 difficulty per situation, but you *can* have more than one situation happen at the same time (locked in a tiny box full of spiders...).

There are no 'neutral' personality traits. *If they do not have a way to affect a dice roll, they are worth no points.* Generally, the more interesting personalities are the ones that are constraining or which compel an adventurer.

When the adventurer is confronted with any situation that matches the trait, they either adjust the difficulty of what they are doing, or offset penalties as appropriate (that's *different* from getting a bonus!). They also make it a priority in their lives to avoid the bad and enhance the good.

For instance, a 'racist(2)' might be at +2 difficulty when using any social skills with a member of the race they didn't like, making it difficult to gain acceptance or cooperation. A 'claustrophobe(4)' would be at +4 difficulty if doing things in a confined space, and would avoid such spaces if possible. A 'cynic(2)' would have +2 difficulty on 'people' skills, matters of trust or judging motivations. On the other hand, an 'acrophile(4)' *loves* heights. They *negate* penalties normal people take for vertigo, are comfortable in high places, and probably spend a lot of time climbing, parachuting, bungee-jumping and so on.

! Personalities can be used indirectly to modify skills. If you are known to be a heavy drinker, someone might be able to find you by keeping an eye on bars or pubs. If you are obsessive-compulsive, someone might be able to pick you out of a crowd by looking for tell-tale behaviors. Each 2 point shift from Personality is worth a -1 to the difficulty of an *indirect* task involving you, *if* the person making the roll can properly utilize their knowledge of how you think and act.



Cultural personalities

Cultures may have *global* personality traits, which the gamemaster has to create. Anyone who does not 'conform to the norm' will take a penalty in interacting with 'normal' people. It *costs* an adventurer points to *not* have that personality. If *everyone* believes in gods, it *costs* an adventurer to be an atheist. In addition, most people are assumed to have 'self-preservation(10)', which is important against coercive paranormal powers or credible threats of "your money or your life".

Secret **+1 to +4**

There is something about the adventurer that you do *not* want the rest of the world to know about. *Trivial* secrets are worth 1 point, *minor* secrets are worth 2 points and *major* secrets are worth 4 points. A *Secret must be worth the points you get*. To put it in perspective, if the secret is widely revealed (and thus is no longer secret), the adventurer must take on another trait to reflect this revelation and its side effects. For instance, a major secret is the same amount of points as a major enemy. The penalties if a secret is revealed encourage the adventurer to protect the secret. A player can suggest a secret, but the gamemaster ultimately decides what it is worth in points.

! Secrets are subjective from culture to culture. *Being a pagan in 17th century Salem is a bigger deal than being a pagan now*. Remember that in some cases you cannot get rid of the problems a revealed Secret causes without fundamentally changing who you are. If you belong to a fringe religion in a militant monotheistic culture and people find out about it, you are *not* going to change social attitudes with your experience points. To get rid of any stigma, *you will have to change to match the culture, because the culture will not change to tolerate your beliefs*. This can have its own side effects. For instance, if your **Friends** were associated with your Secret, and you change your beliefs, you might be forced by societal pressure to no longer associate with them. *The cost of having the secret revealed is losing your friends*.

Status **±varies**

An adventurer's default status is average for the game world, typically the equivalent of a middle-class citizen in terms of their rights, duties and privileges. There will usually be one level of global Status below this, and four global levels above it. Status can come from an accident of birth (your father is the King), some sort of accomplishment (you won a Nobel Prize) or be a side effect of the way you are employed (you have military rank).

Before we get into how you buy status, let's talk about what it does in a gameworld. Status is *always* relative, between you and who you are dealing with. When you are rolling dice against a fixed difficulty, each level of Status you have that is *more* than the person you are dealing with gives you a -2 to the difficulty of the task. You can intimidate better, bargain better and so on ("*How dare you demean the Duke by trying to haggle with him!*") Similarly, if you are at a status *disadvantage*, such tasks are +2 difficulty per level of Status difference ("*The offer is most generous, your Lordship.*").

In contests of status, whoever has the most wins. No dice rolling is required. *If a Senator and a nobody show up at a hotel and there is only one suite left, the Senator gets it...* In case of ties, the sphere of influence for the status contest usually decides the winner, and **Wealth** decides other ties. The 'highest status wins' is *especially* applicable in cases of limited or very limited Status. If the Major gives a Lieutenant an order, the Lieutenant does not get into a status challenge with the Major. *He says "yes, sir!" and follows the order*. You do *not* backtalk those who have more of *your type of status*, because *they win, every time*.

Status can also be a threshold. If you do not have a certain amount, there are things you just *cannot* do. If you have the low status of the 'underclass', you may be excluded from certain clubs, businesses or professions, no matter how wealthy or charming you might be. Institutionalized racism could be negative Status, negative **Looks**, or both.



Note that there are some cases where a lesser form of Status *can* trump a superior form. The police can arrest a senator. That is because this is not *really* a contest of status. The police are merely acting as an agent of an authority that is above *both* of them, and *personal* status is not an issue. If the law *does* make exceptions for certain forms of status, that's another matter. *No one arrests the President...*

To be useful, Status has to be known about. If you are the King in disguise, do not expect to be treated like the King but still stay disguised.

Status comes in three flavors: global, limited and very limited. *Global* status is just that. Everyone (within communication of where it originates) recognizes it at full value. "Yes, Mr. President. Of course, Mr. President."

Limited status only operates at full value within a profession, caste, region or fairly well-known subset of society. Military rank, or a status derived from ludicrous wealth would be an example. Limited status only counts as half its level if using it as global status. A general might have four levels of *limited* status, but a Prime Minister with three levels of *global* status has more mojo when it comes to anything outside of the military.

Very limited status is local or particular to a narrow profession or group of professions. Police have very limited status. Members of prestigious academic organizations have very limited status. Very limited status is quartered if trying to count it as global status.

Each level of global Status costs 3 points, each level of limited Status costs 2 points, and each level of very limited Status costs 1 point. Negative Status *gives* points instead of costing them. As a matter of game balance, starting adventurers should not have more than ± 3 points spent or gained on Status, and no more than ± 1 level in global Status. Note that certain sorts of **Looks** (like race) can be tied to Status.

The following table gives you a rough idea of how different types of Status compare to each other. Remember that each lesser type of Status is only worth half as much outside its sphere of influence (round the total down).

i A famous celebrity (global Status of +1) has the same influence among the general public as a police commissioner (very limited Status of +4), since the commissioner's very limited Status is halved *twice* to determine its global rating. In a place where celebrities shop or dine or vacation, the celebrity gets more respect. In any sort of police context, the commissioner gets *far* more respect.

status equivalent	global	limited	v.limited
king/president	4	-	-
prince/prime minister	3	-	-
duke/senator	2	-	-
high government	2	-	-
business magnate	2	-	-
ambassador	1	-	-
famous celebrity	1	-	-
4-star general	-	4	-
general	-	3	-
colonel	-	2	-
captain	-	1	1
lieutenant	-	1	-
police commissioner	-	-	4
police detective	-	-	2
policeman	-	-	1
skilled tradesman	-	-	1
senior professor	-	-	3
professor	-	-	2
graduate student	-	-	1
prominent doctor	-	2	-
doctor	-	1	-
pope	-	6	-
cardinal	-	5	-
bishop	-	4	-
crimelord	-	4	-

! If you need finer gradation than this, you can add types together. Intermediate military ranks might be levels of limited *and* very limited Status (see the captain as an example).

In the case of underlings confronted with multiple status problems above their level, the usual and smart response is to pass the buck upwards to someone in their own status structure who can deal with the problem on a more equal basis.

! Some forms of status can be required for certain adventurer backgrounds in a gameworld. For instance, in a Victorian Era gameworld like **Verne**, racism and sexism would have non-whites and women as an oppressed underclass that have permanent negative levels of Status. This would not prevent them from gaining the benefits of *other* types of status, just that in an equal match, they would always lose. A famous female scientist would lose in matters of status to an equally famous man, or an Indian prince would take second place to a British Duke. Inherent status and wealth limits on certain groups of the population is a powerful tool for shaping how players interact with the gameworld.

Remember that if status conveys *real* power, then it usually carries *real* responsibility. A policeman's status comes with privileges and **Permit** equivalents (like being able to carry a firearm) but also comes with responsibilities that involve risking your life (like catching criminals). While a status difference is usually worth a change in the difficulty of social or legal dealings, it is only to the extent that society allows.

! The gamemaster should be wary of letting adventurers start with any status that puts a crimp on adventure possibilities. After all, if you start play as someone with an active military rank, you cannot just pack up and go on an adventure any time you want, unless the campaign setup allows for the soldier to be an official watcher, guard or liaison for another adventurer or an organization that the rest of the adventurers work for. If status is tied to a job, then that job needs to be compatible with the sort of adventures you expect to run. After all, if you lose the job, you lose the Status.

Unusual Background

-1

This is a catch-all trait that the gamemaster can ask players to take for an adventurer that has some ability or characteristic that is unusual for the gameworld, the type of adventurer, or both. It costs 1 point. It is basically a surcharge to get an ability that others cannot. An unusual background is *also* worth a -2 adjustment to difficulty in social situations where the unusual background is relevant.

i In a 'monster hunter' campaign, a player wants an adventurer who has werewolf blood in his family's past so they can justify the trait of **Increased hits**. The gamemaster says that the adventurer must have an Unusual Background. The player takes a minor Secret of his 'family past' for 2 points, enough to pay for both the Unusual Background *and* +2 hits (the Secret is that in 'monster hunter' campaign, some of his relatives are 'monsters'). In addition to the traits bought, the Unusual Background gives him a subliminal scent that makes most werereatures in human form more accepting of him. He is not part of the 'us werereatures' group, but he is also not part of the 'them humans' group.

The obvious way to pay for your adventurer's unusual background is to detail it sufficiently in a regular **Background**.



● **Wealth/Poverty** **±varies**

Adventurers will have a starting lifestyle and savings level based on their skills and the gameworld. You can adjust both of these amounts. Spending 1 point gets you +2 on your starting lifestyle *or* +4 on savings, and you gain 1 point if you take a -2 on lifestyle *or* -4 on savings. You *can* do this more than once with gamemaster permission, and you *can* increase one and decrease the other. The player needs to explain why any numbers are different than the norm, noting that increased savings levels can possibly be turned into investments that generate income on their own (i.e. a high savings level could actually become a trust fund or inheritance).

How this altered wealth works within the game depends on the adventurer's background. They might have a job that is in exceptionally high demand (wealth), or maybe a checkered past has caused them to be blacklisted (poverty).

❗ If you have decent skills for income and a few years experience, your default lifestyle will be lower middle class, around -5. You would want +0 on your lifestyle to be upper class, or +6 to be worth a million Credits a year. This gives you a quick guide to how many points you may want to put towards Wealth.

In some gameworlds, wealth is inextricably tied to **Status** (and possibly **Organization**), and you cannot have one and not have the other. In these cases, the gamemaster will determine the relationship between the two and all use of these traits must follow those guidelines.

❗ The gameworld is a fantasy setting, and the gamemaster says you cannot have a title of nobility without sufficient lands and retainers to defend it, nor can you be something like a wealthy merchant without acquiring some inherent status to show your increased influence with your peers.

STARTING GOODS



Money is notoriously number-intensive in most role-playing games. Keeping track of what you have saved up, what you are spending and how much you are making is important, but *not* to the level of keeping track of every last credit. **EABA** tries to push this to the back by using a less finicky scale for keeping track of things. Adventurers will have three ratings related to money:

Lifestyle

Savings

Invested

lifestyle: This is a rating that represents the level of expenditure you can maintain if you have steady work. It allows for some non-essentials proportionate to your income, but more than this dips into your savings. Lifestyle is **EABA's** way to say 'you do not need to keep track of money unless you overdo it.' Lifestyle is essentially saying 'one-quarter of your total income is discretionary spending'.

savings: This is a rating that represents your cash reserves. Spend beyond your lifestyle and you get marks against it. Too many marks and you lose a level. Get a windfall and you get marks towards gaining a level. If unemployed, expenses normally covered by your lifestyle instead come out of savings. You can have a high lifestyle and low savings, a high savings but low lifestyle or anything in between.

investments: This is things like stocks, trust funds, and so on. It is similar to lifestyle, but you get it even if you are *not* working. But, you cannot overspend it as easily as lifestyle. You get a certain amount per unit of time and that is it. The advantage is that you *always* get it (within the limits of money delivery in the gameworld), and things you buy with it do not count towards lifestyle expenditures.

❗ Honestly, if you are just starting out, **just skip the next four pages for the first couple of game sessions**. Just grab some *reasonable* gear or have the gamemaster assign you some and come back to this later.



At the start of play you have a lifestyle of the *full* dice of your best *income-generating* skill, minus 10. If you do not have an income-generating skill, use the full dice of your best Attribute roll *and* assume the skill is in low demand (you *will* be poor). Adjust as follows:

adjustment	lifestyle
applicable complementary skill	+1
skill is in high demand	+1
skill is in low demand	-1
each level of wealth/poverty applied	±2
less than 1 year at job	-1
1-4 years at job	+0
5-15 years at job	+1
16+ years at job	+2

i A craftsman with a skill roll of 5d+0 and twelve years experience would have a lifestyle level of -4. A level of -4 is not bad, it just approximates your weekly disposable income on the cost column of the Universal Chart. Your approximate weekly *pay* is about your lifestyle level *plus* 4 and your hourly wage is about your lifestyle level *minus* 7. So, our craftsman has an hourly wage of about -11, or 22 Credits per hour.

In terms of conventional income brackets, lifestyle levels in *modern* terms would be:

lifestyle	class	weekly spending	yearly income
-12	homeless	≈15Cr	≈3KCr
-9	poverty	≈45Cr	≈8KCr
-6	lower class	≈125Cr	≈23KCr
-3	middle class	≈350Cr	≈65KCr
+0	upper class	≈1KCr	≈175KCr
+3		≈2.8Cr	≈500KCr
+6		≈8KCr	≈1MCr
+9		≈23KCr	≈4MCr
+12	elite	>64KCr	>10MCr

! As an aside, an adventurer can support more than just themselves. One extra person is a -1 on your lifestyle rating, and an extra -1 each time this is doubled. An extra person of the same income in the same household is +1 to the overall *household* lifestyle.

Savings is based on your lifestyle rating, with modifiers for your age (the length of time you have had to accumulate it) and Will (the more self-control you have, the more you are able to set aside). Savings is your lifestyle level plus 12, adjusted as below. You *can* have a savings level of +0, meaning you have no savings at all and are living paycheck to paycheck.

adjustment	savings
Will of 3-4	-2
Will of 5-6	-1
Will of 7-8	+0
Will of 9-10	+1
Will of 11+	+2
adult (16-20)	-1
physical prime(21-25)	+0
mature (26-40)	+2
middle-aged(41-60)	+3
elderly(61-80)	+4
extremely elderly(81+)	+3
each level wealth/poverty applied	±4

i The craftsman from the previous example is probably in the 'mature' age range. If they had a Will of 8, then their savings level would be +10 (lifestyle of -4, plus 2 for age, +12 to get savings level). They would mark off all but ten savings circles.

The way savings works is that spending from savings marks X's in one or more circles, and adding to savings erases X's. If savings is all marked in X's and you spend more, savings level goes down and you erase the X's. If it has no X's and you add to it, savings level goes up and you fill it with X's.

i If our craftsman had a savings of +10, then spending 10 marks against savings drops their savings level to +9, or adding 10 marks towards savings increases it to +11.

! As a lump sum, a savings of +3 is worth a *total* of your lifestyle+3, savings of +6 is worth lifestyle+7, savings of +9 (a year's worth of saving money) is worth lifestyle+9, and savings of +14 is worth lifestyle+11.

At the start of play, your savings rating is the cash supply to buy everything of significant value that you own. You will *certainly* be making marks against this value to acquire your starting 'stuff'. Note that stuff related to your professional skills that costs equal or less than your lifestyle, you get for free.

Investment income starts with *no* value. You have *no* investment income unless you buy it, and you buy it by reducing your starting savings level. Some of the money you have set aside has been put into income-generating investments rather than things like a car or computer or gun or armor.

If you lose a level of savings (marks equal to its full level), you can get a passive income of your savings level *before the loss*, minus 24. Each extra level of savings you lose increases the result by 1. Passive income amounts of less than -12 are generally not allowed.

i If our craftsman had some investments, the minimum amount would drop their starting savings from +10 to +9, and would give them a passive income of -14, which is too low to be useful. If they chose to drop their starting savings 2 more points down to +7, then their passive income would rise from -14 to -12, which is barely on the table.

For reference, investment income is about one week of interest on the value invested at a five percent yearly rate of return.

Investment income can usually be turned back into savings with some delay, and an overall penalty. You get a number of check marks towards increasing savings equal to your investment income level plus 22.

i If our craftsman really needed some cash and had a investment income level of -12, they could get 10 marks towards increasing their savings level (their investment income plus 22) and then drop the investment income to -13, pretty much disposing of the investments.



Loans

The abstract savings system works for moderate income and average expenses. Huge windfalls or big expenses in play usually require separate accounting. Very few people buy a house or even a new car with their normal cash on hand.

Whether or not loans are done in a gameworld or are worth the trouble are up to the gamemaster. The easiest way to do a loan is to say that the adventurer gets the money to buy an item or pay a debt without using savings marks. This would be a short, medium or long-term loan. For a short-term loan (2 years), the weekly lifestyle cost of repayment is the cash level of the loan minus 13. For a medium-term loan (6 years) it would be the level minus 15. For a long-term loan (20 years) it would be the level minus 17. Adventurers can start play in debt if the gamemaster allows, and this can actually be part of their motivation (having a bank or a loan shark as an **Enemy**, for instance). Legitimate lenders will not usually loan to you if the weekly cost is more than your lifestyle (which would equate to about one-quarter of your total income).

Paying off the loan is simply a matter of applying the payments as a continual drain on lifestyle. If you miss payments, you might have to pay more on the next payment. Miss too many payments and the repo guy or the loan shark's goons come calling. If you come into a chunk of cash, you can always pay it off at a cost of the remaining debt level plus 1.



i If our craftsman with a lifestyle of -4 needed a lot of money, they could get a loan with a weekly lifestyle cost of no more than -4. An 23,000 Credit (cost level of +9) short-term loan would be a weekly lifestyle cost of -4. A 45,000 Credit (cost level of +11) medium-term loan or 90,000 Credit (cost level of +13) long-term loan would also have this weekly lifestyle drain. If they gradually paid off half of a 23,000 Credit loan, this would leave a balance of 11,500 Credits or a cost level of +7. Paying off this remainder as a lump sum would be a cost level of +8.



Buying stuff

In play, it is fairly simple. You simply keep track of the most expensive things you spend money on each week.

weekly expense

most expensive item	its level
each doubling of that cost	+2
each item within 1 or 2 cost levels	+1

i If you bought something with a cost level of -4 and two things with a cost level of -5, then your expenses for the week had a cost level of -2.

Items less costly than this do not count, as long as they are in moderation. Your expenses compared to your lifestyle are *your* expenses, not you and all your friends' expenses. *Just because something does not count does not mean you can buy a thousand of them...*

If the game situation is such that your total spending is not at or within 2 points of your lifestyle, you erase an X, or if there are none marked off, increase your savings level.

If spending is equal or less than your lifestyle level, *you are done*. You are living within your means and no bookkeeping is needed.

If the amount is *greater* than your lifestyle, then you put an "X" in a number of savings circles equal to the difference. If you are *not* employed but wish to keep up appearances appropriate to your lifestyle (like making rent payments), this takes a number of savings circles each week equal to your lifestyle plus 4, with a minimum of 1 box marked.

starting gear: At the start of a campaign or start of an adventurer's career, you have to acquire your starting possessions. You can either use the **outfitting guidelines** on the next page to be generally equipped according to your income and social station, or you can simply add up the items you want that exceed your lifestyle, and take marks against your savings for the full value of *each* one.

Any item whose cost is equal or less than your lifestyle, *and* is legal to own, *and* for which you have at least a +0d *full* skill (*not* counting free skills or skill packages), status or other trait appropriate to, *you are assumed to have*.

i Say you have a starting lifestyle of -4 and starting savings of +10. Each savings box for you is about 250 Credits). Looking at the next page, you want to have a used car (11 savings marks), a decent computer (4 savings marks) an apartment (free if within your lifestyle) and all the furnishings and clothing that go with it (we will say 4 savings marks). These items cost you a total of 19 marks against your savings. Ten marks drops your savings to +9, nine more marks drops your savings to +8, so your remaining savings is +8 with no marks on it. But, you do own *outright* all the stuff described. Since you have a starting lifestyle of -4, everything related to your skills and interests with a cost level of -4 or less (250 Credits), you are assumed to have or can readily get.

! Because of the way savings works, one 'mark' of savings varies in value, but is usually about your lifestyle (for a lifestyle of +0, each mark would be worth about 1,000 Credits). The total number of savings marks is something like the level squared, divided by 2, plus half the level (so a savings of +10 would have $(10 \times 10)/2 + 5 = 55$ boxes worth about your lifestyle each).

! You will note that throughout the rules, costs for goods will have a price in Credits *and* a cost level. Not everyone will want to use the abstract lifestyle and savings rules and will prefer a straightforward cash economy, so the rules will cater to both needs.

Fancy & drab

All the basic rules for buying stuff and initial gear assume a *uniform* cost structure. Anyone who has ever compared urban and rural apartment prices knows this is not the case. The easiest ways to handle this are to simply say that costs of goods and services are more or less than normal. Note that home prices on the outfitting are set low just to encourage adventurers to own a place to live.



Tech-based income

Later in the rules we will bring up the concept of 'tech eras', which have a lot to do with the amount of industrialization in a society and its overall wealth. The equivalent cost for durable goods is higher in times and places with less automation and where fewer labor-saving devices are available. Less advanced societies will use the same lifestyle levels, but the prices for goods will be greatly increased. The prices in the rules are set at about the Late Atomic Era, or the present-day. Each fraction of a tech era below this is a +1 to the cost of any goods purchased, with exceptions for things produced mostly with low-skilled labor or static services (agricultural products and rents, mostly). Look at whatever you are wearing right now. Imagine what it would cost you if every last thread in that amount of fabric had been hand-spun, and then those threads hand-woven into fabric and that fabric hand-stitched into garments. The labor cost would make it a *lot* more expensive and you would own a lot less clothing...

i If the previous craftsman were for a campaign in the Basic Era (16th century or thereabouts), this would be seven fractions of a tech era earlier. They still start with a lifestyle of -4 and savings of +10, but most prices for goods or outfitting are +7 to the listed amount. For instance, a flintlock pistol on the gear list has a cost level of -4, or 250 Credits. This would be within their lifestyle, if you were using modern manufacturing methods. However, with the +7 for the low-tech manufacturing methods, it is 7 points more than their lifestyle and costs 7 boxes off savings, a *major* hit to your bank account. Or in cash terms, it would be like a modern person making a 2,800 Credit purchase. A 30 Credit pair of jeans would be 350 Credits! This is why things like a sword or armor were matters of status. If you were a peasant with a sword, it was simply *assumed* that you stole it, because there is no way your income would let ever you buy it.

The gamemaster can also adjust *specific* technologies in this way to make them more or less expensive to the average population.

Outfitting

Players can, if they wish, go through the minutia of the gear listings in the back of the rules and decide what they want to start play with. Or, to speed things up, they can just choose from one of the packages below and just select the handful of tech- or gameworld-specific items in that package. So, you can get into the game a lot quicker, and can go back later and fill in the details. The cost for the items in a package is a number of marks on starting savings, which will probably lower its level. Other notes on cost of living are on **page 7.37**.

lower-class package (lifestyle of -5):

appropriate clothing(2)(350Cr)
 weapon & armor if appropriate(2)(350Cr)
 minimal quality transport(11)(2KCr)
 skill- or interest-related possessions(2)(350Cr)
 rented lodging for lifestyle(0) *or* minimal home (45)(8KCr), -7 lifestyle cost for either

middle-class package(lifestyle of -2):

appropriate clothing(2)(1KCr)
 average weapon & armor if appropriate(4)(2KCr)
 average quality transport(40)(20KCr)
 skill- or interest-related possessions(4)(2KCr)
 rented lodging for lifestyle(0) *or* average home (100)(50KCr), -4 lifestyle cost for either

upper-class package (lifestyle of +1):

appropriate clothing(4)(5.6KCr)
 good weapons & armor if appropriate(4)(5.6KCr)
 good quality transport(40)(56KCr)
 skill- or interest-related possessions(8)(11KCr)
 professional staff(0, but lifestyle cost of +0)
 rented lodging for lifestyle(0) *or* high quality home(100)(140KCr), -1 lifestyle cost for either

i If a modern adventurer had a starting lifestyle of -5 and savings of +6, this would be lower class or lower middle class. The adventurer has a *total* of 21 savings boxes, so they could get all the lower-class items (17 savings boxes) plus anything that was related to their skills and cost -5 or less. This would drop a starting savings of +6 down to +3 (17 marks drops 6 to 5, 5 to 4, 4 to 3 and then marks two boxes off the 3).



! Lifestyle and to some extent savings are not so much about money as they are about standard of living and what it costs to have a given level of it. An ancient king can have musicians from across the land play in his feast hall. *A modern person barely getting by on a low wage job can do the same by hitting the play button on their MP3 player.* The ancient king can have servants heat water over a fire and carry it in buckets to a tub for him to bathe in. *The modern person just turns a tap.* The king can have ice in his drinks if he had people carve it up in the winter and store it in insulated caverns, carving off chunks and making him ice cubes as needed. *The modern person just opens the freezer.* This is why there is the advanced rule for tech-based cost adjustments. The things that even the least of us in the 'first world' take for granted in the Late Atomic Era would have taken a noble's level of income to support in the distant past, if those things we take for granted even *could* be duplicated.

In the 14th century the richest person in all of England had an annual income of £12,000, which depending on exchange rates would be about US\$6,000,000 in modern terms. Someone who was *merely* a baron would probably have to *run* their barony on the equivalent of US\$250,000 a year. Which is not all that hard if you consider that a common *paid* laborer (not a serf) had an annual income of about US\$1,000.

We can project into the future and think that things horribly expensive for *us* may be trivial and commonplace for *them* ("let's eat lunch at that new orbital cafe I read about!").

And that relative scale is really what money and stuff are about. If you have more, you can get a hold of better stuff. So it is not about the *exact* value of what you have in Credits, but just a measure that *you* have more Credits than *them*, and those other folks have more Credits than *you*, and your lifestyles and level of possessions differ accordingly. Your lifestyle rating is a single number that tells you how well you are living *compared to everyone else.*

Finishing up

Whether you are a new or experienced player, by this point you probably have some ideas for what sort of adventurer you want, and have probably absorbed more of the rules of the **EABA** system than you realize. *But there is more to it than that.*

The numbers on your adventurer sheet, and for that matter, the entire adventurer sheet is really just a memory aid and an anti-cheating device. You cannot just make up abilities you want when you need them, nor claim to have certain goodies you did not pay for nor which are an assumed part of your lifestyle or career.

The heart of the adventurer is *you*. Without you it is just a piece of paper or pixels on a screen. The heart of the adventurer is *also* someone else, that persona that you have created. You are the one playing it, but there is a really good chance you have created an adventurer who thinks and acts in ways that you would not. And just as you came by your beliefs, attitudes, traits and skills by your upbringing, various events, coincidences, and maybe just plain luck, so did your adventurer.

We have tried to encourage this in small ways by giving you free points and side effects for an adventurer for things like **Background**, but a good adventurer is going to have a lot of detail. *And you might not even know this detail to begin with.* It is perfectly acceptable to fill in the background of your adventurer during play, as long as this does not affect the history of the game. If you say that you have powers because your ancestry includes some 'monsters', that's cool, but kind of vague. Maybe later on you decide that your grandmother had an affair with a werewolf, it was a big scandal at the time and a dirty little family secret that no one talks about. Same basic thing, but you have fleshed it out in a way that is more interesting and gives the gamemaster more to work with.



If you are a new player, or any player trying to get a feel for a particular gameworld, read the background for that gameworld, then go through the following topics and see what the answers are to make the adventurer a little more real. You will benefit and so will the gamemaster.

What do you eat?

Are you a vegetarian, or do you feel vegetables are only suitable for fattening up your meat animals? Does the local cuisine suit your taste, or are you constantly complaining that you cannot get any good Bogosian Ale around here? Is your stomach made of steel and your taste buds burned off, or can other people see that you have a refined palate and can appreciate the finer things?

What do you wear?

What is your station in life, your status and your job, and how does this affect the way you dress? Does your rough attire mean you have to sit and wait for service while better dressed patrons are served immediately? Does your bearskin cloak make you stand out in a crowd? Do you routinely avoid official buildings and their metal detectors because you carry an illegal concealed weapon? Does that court finery you are so fond of make you a beacon for pickpockets? Does your skintight superhero costume leave *too* little to the imagination?

Where do you live?

Are you in town for the long haul, or just passing through? A new arrival, or lived here all your life? Staying in a flophouse and paying by the week, or living on the ancestral family estate? Do you have to carry everything you own with you because there's no place secure to store your things, or does your penthouse apartment have guards and a security system?

Who do you know?

No one is *truly* alone. Who is there in the world that you know by name and is useful or memorable? Your brother who still lives in the mother country? The weasel at the desk of the flophouse you live in? The flunky who screens the supplicants to the high priest? The gate guard you routinely bribe when sneaking out of town at night?

Who knows you?

Who knows you by name and thinks it worth remembering, even if you don't know them? The bartender at that place where you were tossed through the front window? The loan shark you finally paid off? The detective who questioned you about some shady goings on in the warehouse district?

Why are you here?

You are in the area for *some* reason. It could be as simple as a mundane full-time job. Are you here for the annual faire? Is this area the headquarters for your organization? Has your mercenary troop set up camp outside the walls while the captain negotiates a contract?

What do you like?

Name five things that you like. Little things, big things, it does not matter. Particular foods, countries, people, animals, colors, whatever. What are the things that you would tend to care for, both emotionally and physically? Does your warrior have an emotional attachment to their sword because it is a family heirloom, or is it just another sword? Does your cat burglar have a fondness for Ming pottery? Things like this give the gamemaster ways to make an adventurer's life (and thus the adventure) more interesting.



What do you dislike?

Name five things that annoy you. Little things, big things, it does not matter. What kind of people just rub you the wrong way? What colors or clothes would you not be caught dead wearing?

What do you want to do with your life?

Short *and* long term. Give the gamemaster and yourself something to go on. What are you doing *today*? What do you plan on doing *tomorrow*? Next week? Next month? What are your long term goals? Where do you want to be a year from now? *Five* years from now? What do you *really* want to get done before you die? Does your adventurer even think that far ahead, or do they look no farther in the future than their next payday, next score or next battle?

Answer (or at least think about) all of these questions and it will improve your adventurer immeasurably, and the gamemaster will have a much better idea of how to create scenarios that will draw the adventurers together.

Keep all this in mind as you finish things up and dig into the background detail of whatever gameworld it is you are about to enter.

Durnok the Lame

Durnok is our 'start-to-finish' adventurer example, in case you need a reference of that depth. If not, and you are not using one of the pre-generated adventurers that follow, then you are done! Head to the next chapter, because you will not need this one again until you want to make another adventurer.

background: The very first thing the player needs to know is the background of the world that Durnok exists in. The gamemaster describes a world on the verge of an Industrial Revolution, but also a world that is desperately short of industrial metals. So short, in fact, that things like copper and iron are used for high-denomination coinage. This makes things like metal armor, swords or guns playthings of the wealthy (the gamemaster decides to use modern wages and costs to keep things simple, but says all metal-rich tech is +4 cost). Everyone else has to make do with creative use of more primitive materials like wood, leather, stone and various types of glass. The gamemaster says there is no real magic, but there are alchemists who can make various potions and charms whose effects are not explainable by existing science. Politics is some mish-mash of early parliamentary government and hereditary nobility, and varies from place to place.

Armed with the basic outline, the player makes Durnok a former miner turned prospector. He hopes to someday find the lost city of Gordo Gato, where the rocks were so rich with iron you could taste the rust, and copper was as common as dirt.



points: The gamemaster sets a **campaign base** of 'heroic', for 40A and 15S, with the possibility of getting up to a total of 15 more points from various traits. The gamemaster says that there are no points for powers for *starting* adventurers, but leaves open the possibility for later on.

attributes: Durnok buys attributes as follows:

Attribute	Level	Roll	Modifiers
Strength	8	2d+2	carry, strike, throw
Agility	9	3d+0	fight, balance, throw
Awareness	7	2d+1	cognitive, +3 sight, hearing
Will	9	3d+0	toughness, charm, resistance
Health	8	2d+2	-3 speed, stamina, recovery
Fate	4	1d+1	shield, power, luck

- Strength 8** (cost 8A)
- Agility 9** (cost 9A)
- Awareness 7** (cost 7A)
- Will 9** (cost 9A)
- Health 8** (cost 8A)
- Fate 4** (cost 4A)

This is a total of 45A, so we know right away that Durnok is going to need at least 5A from traits to make this adventurer.

Note that the attribute levels run 4,7,8,8,9,9, so there is no more than 3 points between any two, as per the guidelines on [page 3.5](#).

The player writes down the costs and die rolls for all of these on their adventurer sheet, and uses the spot on the back of the sheet to record the points spent so far.

traits: Next, we will work on traits, since these can affect secondary characteristics like running speed, perception rolls, and so on. Durnok takes a **Forte** on sight (costs 1A), and two **Weaknesses**, one on his walk speed and one on his resistance to temptation (gets him 2A for each), each of which will affect his Attribute rolls in particular circumstances.

The Forte on sight means that Durnok has

Awareness	7	2d+1	cognitive
think	2d+1	spot	3d+1
listen	2d+1	+3	sight
			hearing

keen vision. Seeing things is normally his Awareness roll, which would be 2d+1. However, the Forte means that when Durnok has to roll to see something, he gets +3 and rolls 3d+1 instead.

Will	9	3d+0	toughness
tough	3	charm	3d+0
resist	2d+0		charm
		-3	resistance

Durnok is also the kind of guy who wants to get rich quick, though he

seems to be taking a while to do it. He is drawn like a magnet to 'the big score', and this lure gets in the way of his common sense. This sort of temptation is usually a Will roll of some kind to resist. Durnok has a pretty good Will roll of 3d+0, but when confronted with this Weakness, he only gets to roll 2d+0.

Last, Durnok is lame. He got out of mining

Health	8	2d+2	-3 speed
walk	3	run	5
sprint	7	recov	0
			stamina
			recovery

after a cave-in nearly killed him, leaving him with a permanent limp. Walking movement is based on Health, which is 2d+2, but in figuring Durnok's movement, the Weakness makes his Health count as only 1d+2. This means that while a normal person with his Health would have a walk, run and sprint of +4, +6 and +8, his are only +3, +5 and +7.

Durnok has two other traits. He is not a spring chicken anymore. Not as spry as when he was a young man, but not yet suffering debilitating effects of age. He has an **Age** of 'Mature', which is worth 0A and +6S, and also means he cannot use later experience to improve his Strength, Agility or Health past a level of 11. Durnok is also ornery (a **Personality**). He has a bad temper, so any social skills he uses are a fair bit harder (+4 to difficulty, for +2A). He has +6A and +6S in traits, for a total of total of 46A and 21S. *The +6S from Age does not count towards his allowed 15 points of traits, so he could take several more traits if he wanted.* He has spent 45A for Attributes, and 1A for traits, leaving him only the skill points.



skills: Most skills are going to be based on Agility or Awareness. Remember that largest skill bonus you can get is equal to the full dice in the Attribute that skill is based on. With an Agility of 3d+0 and Awareness of 2d+1, the biggest skill bonus Durnok can get is +3d for Agility skills and +2d for Awareness ones. So, barring **specializations**, this means his best Agility skill roll can be 6d+0 and his best Awareness skill roll can be 4d+1.

The player decides to round out Durnok with a selection of skills befitting his background, along with some rough-and-tumble experience he picked up once he started working on his own. Durnok gets the following skills:

agility-based	skill roll	cost
equestrian, +0d (free skill)	3d+0	0S
brawling: +1d	4d+0	2S
throwing: +0d	3d+0	1S
club: +0d	3d+0	1S
crossbow: +1d	4d+0	2S

awareness-based	skill roll	cost
mining(demolitions): +2d(+3d)	5d+1	5S
area knowledge (local mtns): +1d	3d+1	2S
scrounging (mtn survival): +1d	3d+1	2S

strength-based	skill roll	cost
climbing: +1d	3d+2	2S

health-based	skill roll	cost
running(enhanced): +0d	1d+2	2S
carousing: +1d	3d+2	2S

This has a total cost of 21S, exactly what Durnok has available. Note that his Running skill gives a +1 to movement rate, which counters out the -1 he takes from being lame. He can hobble along as fast as a normal person, but *not* as fast as a normal person who is *also* a good runner. Technically, what we did was use the Weakness plus Running skill as a dodge to shift some points from the skill side to the attribute side (gained 2A from the Weakness, spent 2S on the skill).

bookkeeping stats: Since Durnok has spent his points out exactly, we can figure all of his secondary statistics without worrying that something we buy will change them.

encumbrance: Since his Strength is 8, he puts the appropriate amounts in the encumbrance boxes, starting with a level of +0 in the first box. Durnok can carry a total weight of 13 kilograms (mass level of +0) in gear and clothing before he starts to take any penalties on his physical actions.

stamina: Since he has a Health of 8 and no problems that affect his endurance, his Stamina is 8.

hits: With a Strength of 8 and Health of 8, Durnok has 16 hits.

hit brackets: If Durnok uses the advanced adventurer sheet, he would have a hit bracket of a quarter his Strength plus Health, rounding nearest, which turns out to be 4, which is the default amount anyway.

money: Durnok has no traits affecting wealth and the gamemaster gives no bonus or penalty for his profession. With that, Durnok's default **lifestyle** is going to be:

lifestyle	modifier
default	-10
best skill(demolitions)	+5
5-15 years at job	+1
total	-4

By the table on **page 3.45**, this makes Durnok middle-class by most standards. He's not *really* good at what he does, but he *is* good enough.



Durnok's accumulated **savings** will be:

savings	modifier
default	+12
lifestyle rating	-4
Will of 5-6 (adjusted for his Weakness)	-1
mature (26-40)	+2
total	+9

The player wants Durnok to start a little down on his luck and cash-poor, but to have done well enough in the past that his stake in various operations gives him some investment income. Giving up one level of savings would give Durnok an investment income of that level of savings minus 24. So, with a starting savings of +9, he could have an investment income of -15. *This is too low to count.* If Durnok drops his savings by 5 (down to +4) he could raise this passive income to -11, or about 22 Credits a week. This is not much, but barely enough for to hold body and soul together if unemployed, and that is really all the player wants.

Looking at the **outfitting** page, we can give Durnok a weapon and armor (non-metal), basic gear for his skills, and some appropriate clothing for a total of 6 marks on his savings. This would drop his remaining +4 of savings to +3, plus 2 more marks, leaving him with little ability to exceed his lifestyle and no margin should he lose whatever job he now holds.

Durnok's lifestyle means that he can spend up to a cost level of -4 each week (about 250 Credits) without dipping into his savings, and if he does not spend a cost level of -6 (about 125 Credits), then he can add a mark to his savings. Looking at this from an adventurer standpoint, it seems that Durnok is getting back on his feet after a bit of unemployment. He has a job, but no expensive possessions and little money in the bank. *Maybe he got burned because of a bad investment? Maybe he got blacklisted and was unemployable? Maybe the injury that made him lame ate up his savings?*

Tweaks

Looking at Durnok at the end of the process, we can see a little room for improvement. Durnok can have several more points in traits. Durnok has no **Background**. This worth 1 point, and it does not count towards his total for traits. *We could put this towards Durnok's passive income to make his old investments pay a little better, or maybe improve one of his attributes or skills.* Durnok might also be avaricious enough to claim it as a **Motivation**. His past as we have described it could also give him **Friends** or **Enemies**.

and last...

The gamemaster provided some weight stats for Durnok's gear. If we use the abstract encumbrance guide in the **Gear** chapter, we see that his heaviest item has a weight of -3, and that if he is carrying everything else, it is increased by 3 points (+1 each for the crossbow, tools and leather armor), making his total weight carried +0, putting him at the -1 encumbrance penalty level. However, if he drops his tools, he would be back to no encumbrance. If we had gone with a straight kilogram measurement for encumbrance, those items would have total mass of 17 kilograms, which would be a mass level of +1. This would end up in the same encumbrance penalty bracket, for no change in game effect.

The gamemaster has the player answer the questions on **page 3.50** to flesh out Durnok. Durnok is a meat & potatoes kind of guy. He likes lots of calories, lots of salt and lots of fat. It served him well in his mining days, and he still has some muscles to feed. He tends to wear well-worn work clothes, with some leather reinforcement here and there. He has to deal with rough critters and the occasional rough person, so he covers his innards with a padded leather cuirass, and has a rock hammer on one hip, a cudgel on the other and a crossbow on his back (though the gamemaster might make him pay a few more marks of savings for the crossbow).



Durnok does not really live anywhere, but he spends his time on the fringes of the Jirto Wastes, tracing lost legends among the shifting sands, and hiring out his knowledge to mining concerns large and small.

Durnok knows just about everyone, and just about everyone knows him, but that is as far as it goes. He has no powerful friends, and no powerful enemies. He likes his climate dry, his liquor straight, unambiguous women, a good game of cards, and while he would never admit it, sunsets. He hates skunks, boiled vegetables, busybodies, people who sing off-key and official paperwork. He's not sure he ever really wants to retire, but the thought of being rich enough to do so in style has a certain appeal.

And that's Durnok.

Pre-generated adventurers

On the next few pages are some pre-designed adventurers, all designed with a **heroic** level of starting points (40A/15S), but no powers. You can do **normal** level adventurers by losing 1 point from each attribute and losing a total of 5d from skills, or make them **grand heroic** by adding 2 to each attribute and adding a total of 5d to skills. Most of these templates are usable for multiple genres, and you can tweak the attributes up or down a little as long as you keep within any attribute spacing required (**page 3.5**) and remember that if you change the number of full dice in an attribute that this will change the maximum skill bonus allowed for anything based on that attribute. Players have to add their own Background and Motivation to gain the benefits of these.

Suggested changes or additions that are easy and always useful would be increasing their **Wealth**, picking up an **Advantage** if the gamemaster has any for the campaign, or seeing if there is any **Forte** or **Experience** or **Neat Trick** that would make the adventurer significantly better at what they do.

i A Forte on the attribute their income-generating skill uses makes the attribute more useful in that respect, *and* so it will increase their listed Lifestyle and Savings numbers by +1.

EABA 2.0

Blacksburg Tactical Research Center

Name Durnok the Lame **Gender** M **Age** 33

Background Prospector and former miner, treasure hunter

Goals Make the big score, retire in style

Stam	1	1
Hits	-0d	1
	2	2
	3	3
	4	4
	5	5
	-1d	6
	6	6
	7	7
	8	8
	9	9
	-2d	10
	10	10
	11	11
	12	12
	13	13
	-3d	14
	14	14
	15	15
	16	16
Enc	+0	-1
	-1	-4d
	+2	-2
	-2	18
	+4	-3
	-3	19
	+4	-6
	-6	20
	+6	-2
	-2	21
	+8	-9
	-9	-5d
	+8	22
	Str-0	22
Exp	(any)	23
	A	24
	S	25
	-6d	25
	P	26

Attribute	roll	level	roll				
Strength	8	2d+2	carry				
strike	1d+2		strike				
kick	2d+2		throw				
throw	1d+2						
Agility	9	3d+0	fight				
fight	3d+0		balance				
balance	3d+0		throw				
throw	3d+0						
dodge	6						
Awareness	7	2d+1	cognitive				
think	2d+1		+3 sight				
spot	3d+1		hearing				
listen	2d+1						
Will	9	3d+0	toughness				
tough	3		charm				
charm	3d+0		-3 resistance				
resist	2d+0						
Health	8	2d+2	-3 speed				
walk	4		stamina				
run	6		recovery				
sprint	8						
recov	1						
Fate	4	1d+1	shield				
shield	1d+1		power				
power	1d+1		luck				
luck	1d+1						
	1 3 5 7 9						
	11 13 15 17 19						
Skills	Attribute	skill	roll				
Brawling	Agility	+1d	4d+0				
Throwing	Agility	+0d	3d+0				
Club	Agility	+0d	3d+0				
Crossbow	Agility	+1d	4d+0				
Mining(Demolition)	Aware	+3d	5d+1				
Area Kn.(Mtns.)	Aware	+1d	3d+1				
Mountain survival	Aware	+1d	3d+1				
Climbing	Streng	+1d	3d+2				
Running(enhance)	Health	+0d	2d+2				
Carousing	Health	+1d	3d+2				

head d+ torso 1d+2 arm d+ leg d+

3-6 9-12 7-8 13-18

Gear **weight**

Clothing(outdoor)	-5
Prospecting tools	-3
Crossbow(lethal strike+2)	-5
Cudgel(strike+1)	-12
Leather armor(partial, rigid)	-6
Lifestyle -4	Invested -11
Savings	

Traits **value**

Mature(age 33)	0A/6S
Forte(sight)	-1A
Weakness(resistance)	2A
Weakness(speed)	2A
Personality(ornery, +4)	2A

3.55

Rogue

Strength 8(2d+2)
Agility 9(3d+0)
Awareness 9(3d+0)
Will 7(2d+1)
Health 10(3d+1)
Fate 4(1d+1)

skills:

+1d in an unarmed combat skill
+1d in a ranged or melee skill
+1d in security systems
+0d running(enhanced)
+1d in area knowledge(choose)
+1d in a trade
+1d in a vehicle or animal riding skill
+0d in a second language
+0d in climbing

traits:

age(phys. prime,+5A/+3S)
overconfident(2)(+1A)
disdain for authority(2)(+1A)
very limited Status(1)(-1S)
minor, limited Enemy(+1S)
minor, limited Friend(-1S)
one Favor(-1S)

other:

dodge of 6
move of 6/8/10
hits of 17
stamina of 10
lifestyle of -5
savings of +7

Another word for 'rough-edged generalist'. The rogue has a good selection of skills, some of which are not the sort you would put on your job application to someplace respectable. You rely mostly on your wits, and if that does not work, your reflexes. And if neither one of those is likely to do the trick, you cheat. All your endeavors are planned with two things in mind: winning and getting away with winning.



Academic

Strength 7(2d+1)
Agility 7(2d+1)
Awareness 11(3d+2)
Will 8(2d+2)
Health 6(2d+0)
Fate 3(1d+0)

skills:

+3d in a science
+1d in a science
+1d in a second language
+1d in a combat skill as a hobby
+1d in any skill as a hobby
+1d in area knowledge(choose)
+1d in area knowledge(choose)
+0d in a vehicle or animal riding skill

traits:

age(mature,+0A/+6S)
elitist(2)(+1A)
very limited Status(2)(-2S)
minor, limited Enemy(+1A)
minor, limited Friend(-1S)
wealth(1)(-1S)

other:

dodge of 4
walk/run/sprint of 4/6/8
hits of 14
stamina of 6
lifestyle of -1
savings of +13

Anyone whose fundamental training involves the pursuit of knowledge. Not usually well-equipped to deal with the world outside their controlled environment, but can be specialized to be passably competent in one or two self-defense or survival skills.



Warrior

Strength 9(3d+0)
Agility 9(3d+0)
Awareness 8(2d+2)
Will 8(2d+2)
Health 9(3d+0)
Fate 5(1d+2)



skills:

+1d in an unarmed combat skill
 +2d in a ranged or melee skill
 +1d in a ranged or melee skill
 +0d in swimming
 +1d in area knowledge(for career)
 +0d in area knowledge(any)
 +0d in stealth
 +0d in a vehicle or animal riding skill
 +0d in leadership

traits:

age(physical prime,+5A/+3S)
 violent tendencies(2)(+1A)
 stoicism(2)(+1A)
 limited status(1)(-2S)
 minor, limited Enemy(+1A)
 minor, limited Friend(-1S)

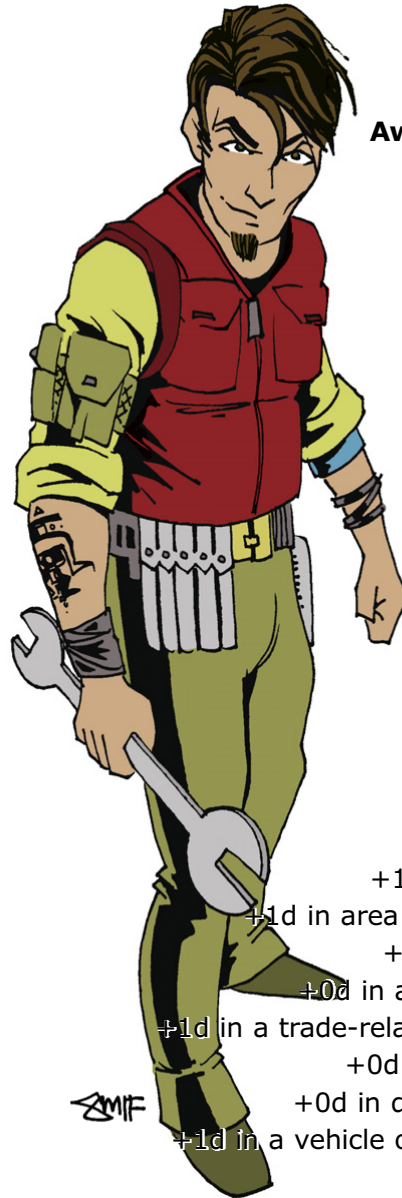
other:

dodge of 6
 move of 5/7/9
 hits of 18
 stamina of 9
 lifestyle of -5
 savings of +7

Someone whose career somehow relates to skill and willingness to causing harm. You could be a soldier, policeman or bouncer. You have enough experience to have some rank within whatever organization you work for or community you work within.

Mechanic

Strength 7(2d+1)
Agility 10(3d+1)
Awareness 10(3d+1)
Will 6(2d+0)
Health 7(2d+1)
Fate 4(1d+1)



skills:

+2d in a trade
 +1d in a related trade
 +1d in area knowledge(choose)
 +0d in a combat skill
 +0d in another combat skill
 +1d in a trade-related scrounging skill
 +0d in security systems
 +0d in diplomacy or bribery
 +1d in a vehicle or animal riding skill

traits:

age(mature,+0A/+6S)
 early adopter(2)(+1A)
 eccentric(2)(+1A)
 unkempt(2)(+1A)
 minor, limited Enemy(+1A)
 minor, limited Friend(-1S)

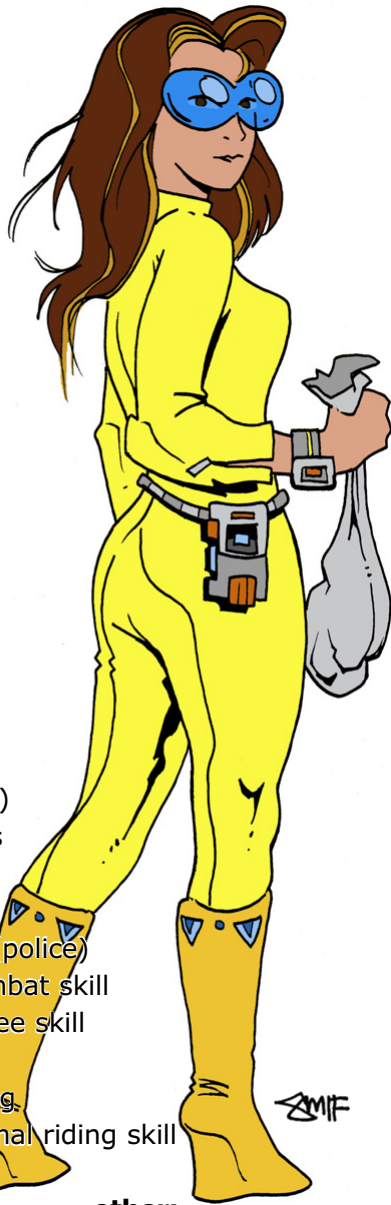
other:

dodge of 6
 move of 4/6/8
 hits of 14
 stamina of 7
 lifestyle of -3
 savings of +10

The genre-specific 'fix-it' person. They could be a mechanic, an electronics tech, an armorer or anyone who knows how to make, break and repair something important in the gameworld. Plus how to find and acquire bits that are not available through normal channels. Always has a little dirt under their fingernails, has a few personality quirks and is always interested in 'the latest thing'.

Grifter

Strength 7(2d+1)
Agility 9(3d+0)
Awareness 8(2d+2)
Will 7(2d+1)
Health 8(2d+2)
Fate 4(1d+1)



skills:

jack-of-all-trades(agility)
 +1d in security systems
 +1d in stealth
 +1d in sleight-of-hand
 +1d in area knowledge(police)
 +1d in an unarmed combat skill
 +1d in a ranged or melee skill
 +1d in climbing
 +1d in rumor scrounging
 +1d in a vehicle or animal riding skill

traits:

age(physical prime,+5A/+3S)
 self-interest(2)(+1S)
 cowardly(2)(+1S)
 minor, pervasive Enemy(+2S)
 major, limited Friend(-3A)
 one Favor(-1S)
 Wealth(-1)(+1A)

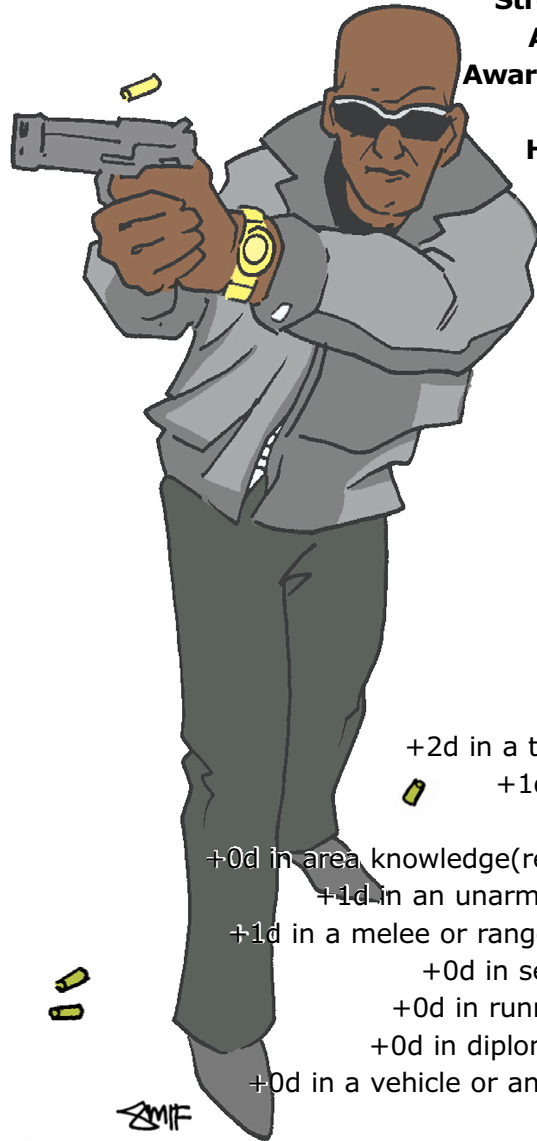
other:

dodge of 6
 move of 4/6/8
 hits of 15
 stamina of 8
 lifestyle of -7
 savings of +7

Career criminal, always looking to make it big. *The rogue, but seedier.* Has a number of useful skills, none of them legal. Always a useful sort for some people to have around, but never the sort you want marrying into your family. As an adventurer, redeemable, but needs a bit of work.

Agent

Strength 8(2d+2)
Agility 8(2d+2)
Awareness 9(3d+0)
Will 8(2d+2)
Health 7(2d+1)
Fate 5(1d+2)



skills:

+2d in a trade(detective)
 +1d in psychology
 +1d in acting
 +0d in area knowledge(related to trade)
 +1d in an unarmed combat skill
 +1d in a melee or ranged weapon skill
 +0d in security systems
 +0d in running(enhanced)
 +0d in diplomacy or bribery
 +0d in a vehicle or animal riding skill

traits:

age(mature,+0A/+6S)
 by the book(2)(+1A)
 conservative(2)(+1A)
 image-conscious(2)(+1A)
 permits(-1S)
 minor, pervas. Enemy(+2A)
 minor, limited Friend(-1S)
 minor, limited Friend(-1S)

other:

dodge of 4
 move of 5/7/9
 hits of 15
 stamina of 7
 lifestyle of -3
 savings of +11

An investigator and fix-it person, but in a social rather than mechanical sense. *The warrior in a three-piece suit.* Usually part of a larger organization like a police detective, corporate troubleshooter or government agent, but could just be a respectable independent operator like a private detective.



Basic Combat





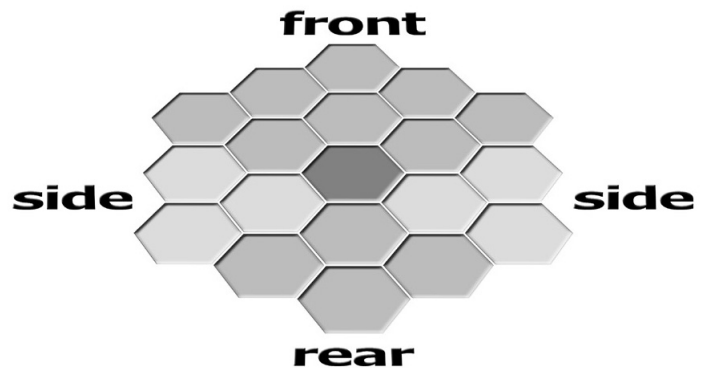
Not all adventure involves combat. But there does seem to be an awful lot of it on occasion. Combat never determines who is right or wrong, it just decides who gets the spoils and writes the account of what happened. Sometimes it can be avoided, sometimes it cannot. We generally root for the 'good guys', or maybe the 'not quite as bad as the other guys'. In a role-playing campaign, this is the adventurers and their friends.

Time

The default time unit in **EABA** is one second, a time level of +0. What you can do in a second matches what you can do in the real world: Take a step or two, say a few words, or pull a trigger, throw a punch or toss something. However, **EABA** does *not* use a constant time scale over the course of a combat or other dramatic situation, but the minimum practical time for doing 'an action' is a little less than one second. The important thing to remember is that actions are what you do, and time is simply how long it takes to do them.

Maps/distance

All distances in **EABA** are measured in meters. If you are metric-impaired, you can use yards and the game results will be the same. If a combat or scene in the game requires a map, we recommend using paper with a hexagonal grid, each hexagon (or 'hex') being one meter across from face to face:



If it matters, the 120° arc is an adventurer's front. Everything else is a side or rear arc. In basic combat, you can only attack or defend into the front arc. Normally, one person can occupy a hexagon one meter across, but if you do not need elbow room, you *can* cram more into this amount of space.

! One hexagon is three-quarters of a square meter, and as a volume, a hexagon is three-quarters of a cubic meter (a hexagon of area one meter tall). In non-metric terms, a hexagon of area is eight square feet, or about the area taken by twelve sheets of letter-size paper, and a hexagon is a volume of about 26 cubic feet, or the volume of 194 gallons of water (750kg or 1552lb).

INTRODUCTION

Combat and conflict in **EABA** is fairly straightforward, and we will just hit each concept in appropriate order. This chapter covers the basic rules for combat. Advanced topics, things that are exceptions or rarer cases are in the next chapter. So, if you do not see it here, look there.



SCALE

Any combat involving adventurers will usually operate on the following scales, which are based on the **Universal Chart**. Measurements will be both in 'levels', which are the rows on the chart, and their real-world value, which is the result on that chart. Obviously, people will be more comfortable with real-world values, but things like 'distance level' are needed because they are the base difficulty to succeed at hitting something at range.



HOW COMBAT WORKS

Combat takes place in 'turns', which are variable amounts of time, with adventurers and their foes and allies taking actions in order based on their skills and how badly they want to go first. Basic combat is:



- determine Initiative (who goes first)
- act in order of initiative (do stuff)
- repeat as necessary

Within a turn, you can do one or more major actions, which take a lot of your attention, and one or more minor actions, which take some attention, but not as much. Walking is a *minor* action. Shooting a gun is a *major* action.

You can do *multiple* actions in one turn. In the simplest case, each adventurer acts in order of initiative, does *all* their actions, then play proceeds to the next person. To be a bit more realistic, you would do *one* action, and after everyone else has done *one* action, then you can take another action, repeating until everyone is done for that turn. If you are just getting started with role-playing, we recommend that you start simple and work your way into detail as you feel you need it. **EABA** is designed to fit itself to **your** desired level of detail, so use the level **you** are most comfortable with.

In a turn, your actions will either consist of simply 'doing things', like walking, shouting orders, or other things that usually require no skill or attribute roll, and things that *do* require a roll of some kind. For these, you just take your skill or attribute roll, apply anything that adjusts the roll, and then roll against the difficulty of the task. If you succeed, you do what you were trying to do. If not, you fail at the attempt. Either way, that is *your* action, and then whoever acts next gets to try *their* hand at things. Theoretically, this is pretty simple. *Players, however, have a way of making even simple things complex...*

Combat in **EABA** uses different amounts of time for different turns. Each turn of a combat is longer than the previous one, which is a *major* departure from the way most role-playing games do things. *Why the difference?* Well, consider this.

There is a classic fight scene in a building lobby in the *The Matrix* (1999), a movie most gamers have probably seen at least once. From the first revealing of weapons to the final body falling is about one hundred fifty seconds. Even if the time on-screen was divided equally between the two protagonists, in a game with one-second rounds, this would take *seventy-five* rounds to play. *Or, about three days of your typical gamer wrangling, planning and arguing.*

*In **EABA**, this entire scene would be seven or eight rounds long.* You would do it, it would be just as accurate and dramatic, if not *more* so, and then you move on.

The **EABA** combat system is a fusion of both the realistic and the dramatic. In a game where everything else is based on real-world considerations, you have to be able to deal with modern firearms, capable of firing several shots per second, with the implication that several targets could be at risk per second. However, for the sake of enjoying the game, you also have to highlight the *dramatic*. Look at your average movie or television show fight scene, especially the longer ones. There is an awful lot of 'dead time', where people are merely assessing the situation, or trying to set up or find an opportunity. Or take a car chase. Shooting and maneuvering is *not* happening every single second. Would you actually *enjoy* role-playing a minute-long car chase if it meant you had to make sixty maneuvering rolls, sixty turn initiative rolls, and so on? *Probably not.* In **EABA**, a sixty second car chase would be *six* rounds, and pack in just as much action and tension. And more important, it would *feel* more real, both in the moment and in hindsight.



EABA gets around all this by using a *variable* time scale for combat, increasing the time in each round after the first by using the **Universal Chart**. In the beginning of a fight, the timescale is very short, you do not get to do much and the situation is very chaotic. As the combat progresses, the timescale gets longer. You can move farther, engage more targets, take time to make plans, and so on. It is a system where being able to draw your gun faster than the other guy *is* important and can be a single turn, but it is also a system where being able to run around the building, break into a car, hotwire it and drive it through the wall to surprise the bad guys can *also* be a single turn.

However, as the time spent in a conflict increases, so does the chance of resolution. If the situation that brought about the combat has not resolved by the end of the tenth round, one side or the other *will* surrender, withdraw or otherwise do something to end the conflict. If it is a chase, one side either gets away or gets caught. Remember, by the time you finish the tenth round of a fight in **EABA**, the total elapsed time for adventurers has been *sixteen minutes*. That's more than enough time for reinforcements to arrive, for you to elude pursuit, or whatever it takes to end the conflict and move on. There are ways to reset this clock, and all sort of special cases, but we will get to them later.

The important conceptual thing to remember about **EABA** is that you are no longer doing things on a second-by-second basis. If the gamemaster says a turn is thirty seconds long, it does *not* mean you get to make thirty skill rolls to shoot or hit things. Start thinking about a *goal* for each turn rather than an *action* for each turn.

So, with that high bar set for expectations, let us get into how it actually works. This will be in the order of initiative, action types, and turn sequencing.

INITIATIVE

Combat, or most any sort of time-sensitive encounter will run in 'turns'. A turn is just an arbitrary "how much stuff can I do?" interval, but practically, turns are just punctuation marks in the story of the conflict. Combat is a series of consecutive and concurrent events that happen as a continuing process, and breaking it down into any sort of turns is an artificial measure that exists only because of game mechanics. So, try to think of things as a continuing process, one goal or series of actions flowing into the next. Each of these series of actions begins with seeing who has the talent and the will to be the first to act.

Each turn begins with determining 'initiative'. This really just means "How badly do I want to go first?". This can be *really* important for two people with guns pointed at each other. Going first is usually important enough that people are willing to take a penalty to do so, and *that* is what initiative is about. *Going first is usually a penalty on your actions.*

Initiative is a **secret** declaration process. Each player takes any number of dice or tokens and just cups them behind a hand, with an amount showing from a minimum of zero to a maximum of their Agility (for combat skills) or an attribute of their choice. *You can always declare zero*. Most combat actions will have initiative based on Agility (using your **fight** value if using the secondary attributes), but if you decide to base your action on some *other* Attribute, you have to declare it before your initiative is revealed. In addition, the *first* major action you take in the round *must* be based on *that* Attribute.

i If you put some dice behind your hand and say "Strength", you are committing yourself to a first action that somehow involves a direct use of Strength or a skill based on Strength. Later actions in that turn can be based on something else *without* changing your Initiative, but the thing you *really wanted to do first* was based on Strength.



In addition to your initiative declaration, you *may* add a die or tokens of a different color, with an amount showing up to your **Dodge**. This does not affect *when* you act in a round, but it *is* a penalty on your actions just like your initiative. The difference is that the amount of your Dodge also is an increase in the difficulty for *one* other person to hit you and half that amount (round up) for everyone else to hit you. *Dodging is immediate*. It does not have to be your turn to act for dodging to be in effect. *Note that dodging halves any distance in meters you move in that turn (which is a -2 to the distance level)*.

i If you have a Dodge of 4, you can put a die of a different color behind your hand when declaring initiative, with an amount showing of no more than 4. If you had a '2' showing, *you* would take an *additional* -2 penalty on all your rolls, but one foe *you were aware of* who is trying to hit you will take a +2 to the difficulty of their task, and everyone else would take a +1 to their difficulty.

Everyone acts in order of initiative declaration, from high to low, with ties resolving in order of Agility or whichever attribute is being used. A gamemaster can choose to let each player do all their actions (AA, BB, CC), *or* let everyone do one major (and/or minor) action in initiative order, and then act again in the same order until everyone is done for the turn (ABC, ABC). If you are going before someone else, you can '**hold action**' to let them go first if you want.

The thing about initiative is that you take a penalty of your declaration on most *external tasks* you initiate that round. So, your aim (an *external* task) is affected, but not your melee damage (not a task) nor your roll to avoid being stunned (an *internal* task). *If you are hurrying to go first, you hurt your chances to succeed. But if you take your time and go last, you may not be in any condition to act when your turn finally comes around...*

i If you declare '3', then your rolls for external tasks on that turn are reduced by 3.

This is why you may be technically capable of doing several actions, but succeeding at them all is another matter. *Between the penalty for multiple actions, dodging and your initiative declaration, you may have no dice left to roll!*

Most of the time, bad guys will all declare the same initiative, just to make it easy for the gamemaster. *High profile foes are exceptions.*

You may have noticed that since the maximum initiative declaration is your Agility, someone with a higher Agility *should* always be able to go first. This is indeed the case, *if* they are willing to take a penalty on all their rolls for an initiative declaration that is that high.

! If you look up videos of real-world firefights, like police shootouts caught on dashboard cameras, you will see a lot of people desperately trying to get as much lead in the air as fast as possible. Or imagine a duel at twenty paces or gunslingers facing each other in the Wild West. Declaring high initiative to go first, to have a *chance* of putting a bullet in the other guy *before* they shoot back is the way things often work in the real world.

Ambush!

If you are in a situation where a person or group has the drop on another, or the disadvantaged party has no idea something is about to happen, it is an ambush. All this really means is that the ambusher automatically wins Initiative on the first round of the combat and does not have to declare anything except a Dodge, while the defenders are usually counted as Initiative 0 and act after all the attackers have done their actions. The circumstances of an ambush *may* allow the attackers to take full advantage of preparatory actions like **aiming**. Anyone who enters a combat by being surprised is usually counted as having declared an Initiative of 0.



! If you have won initiative and are going first, it does *not* mean you are acting in your own little time bubble. You do *not* get to run around a wall and flank someone without them *noticing*, nor do you get to saunter across an enemy field of fire because you move *before* they shoot. Having initiative means that the complex situation that is combat allows you to do certain things *in spite of* your enemies being able to see your actions and *wanting* to interfere with them. For instance, someone might see you trying to flank them, but be pinned down and unable to seek new cover. You might be able to run across an open area because your foes are reloading or distracted. You are still *noticed*, but their ability to *act* on what they see is based on *their* initiative declaration.

The initiative system *does* add a step to each turn, but it adds *lots* of tension, drama and leads to more realistic-feeling combats. It is a life-or-death wager, trading chance of success for chance of going first, without knowing ahead of time what your foes are planning. *If timing does not matter, do not use it.* Just do initiative like everyone declared zero, and they declare how much Dodge they are using before their first action or when the first attack is made against them, whichever comes first.

Action & reaction

Combat is interactive. Seldom will you be able to do something without someone else noticing it and likely trying to interfere with it. Initiative is the degree to which people are willing to go in order act first, or to react to what they expect others to do. There are two special cases to the initiative rules.

holding action: If you have the initiative, you can declare a *specific* major or minor action as 'held action'. This lets you react to something *before* it happens or has an effect. Your melee opponent retreats and you advance *at the same time*. You kick a gun out of the guard's hand *before* they have a chance to shoot you. You fire at someone the *instant* they pop out from cover.

If a turn ends and you still have not acted, on the next turn you may continue the held action, or get a penalty-free +2 on declared Initiative (or cinematically, Initiative of your *full* Agility). You are *still* waiting. In a case where people have held actions based on each other, the one with higher Agility goes first. *Imagine two gunslingers, each waiting for the other to go for their gun.* Held actions normally resolve with a +0 turn mod (that is, they take no more than 1 second). They are *individual* actions, not a series of actions. Held actions are allowed to be a little dramatic, but they do have to be *plausible*.

i You could hold action to move your normal Walk or Run distance in response to something about to happen, but you could not say you were going to run a 100 meter dash.

desperation action: The other exception is a 'desperation action'. Say you are at a small store and you see a car barrelling towards the plate glass at the end of your aisle. *This may change your plans for the turn. If you give up as much turn mod as is being used against you*, you may react *defensively* to an threat to your life. This can be *one* major or minor action at a turn mod of +0. *That is, something you can reasonably do in one second.* If a car is going to run you down, diving out of the way is an action. You may *not* do desperation actions to react to anything faster than your reflexes. *This is subjective.* You could *not* dive out of the way of a close pistol shot, but if you somehow spotted a rifle's muzzle flash three hundred meters away, you *might* be able to dive for cover before the bullet arrives.

i Someone spends +4 turn mod winding up to toss a molotov cocktail over the wall you are hiding behind. If you have +4 or more unspent turn mod, you may give up +4 turn mod to react to that with a single defensive action that takes one second or less. This action would happen *before* the molotov cocktail hits and splashes. If you did not have +4 turn mod unspent, you would not be able to scramble clear in time.



ACTIONS

In a turn of combat you get to do certain things for free. That is, with no penalty to your rolls. You may do one 'major action' or one 'minor action' with no penalties. *Remember that these **internal** penalties are subtractions to your die rolls, **not** adjustments to difficulty.*

A **major action** is an attack, whether with a sword, gun, fist or paranormal power. A major action is also any move of *more* than your walk distance and up to your **run distance**, or part or all of a complex action like picking a lock, drawing a weapon or reloading a weapon, or deciding to increase your dodge in the middle of a turn. If you use *more than* run distance and up to your sprint distance, this counts as a major action, but generates penalties for *two* major actions. This means that an Attribute or skill roll made while sprinting (like if you hit a slick spot) is at an *extra* -3 penalty.

A **minor action** is blocking, parrying, talking, moving at **walk distance** or less, or **aiming** or adjusting a weapon (like flicking a safety). **You can do one minor action as part of a major action and take no penalty for that minor action, so long as they take place at the same time.** So, you can walk *and* punch, flick off the safety on a weapon *and* shoot it, talk *and* run, and so on. However, the order *can* be important. *Do you shoot, **then** take a few steps, or take a few steps, **then** shoot?* You might not take a penalty for the *action* of moving a few steps, but you would take a penalty for being a moving firer.

You may do more than one of any non-move action in a turn. But, later, *separate* actions *in that turn* get a cumulative penalty. For each prior minor action, the penalty is -1, and for each prior major action, the penalty is -3. Most skill uses are *separate* actions, but movement at any point in a turn is usually a continuation of the *same* action and generates no extra penalty unless you change the movement type, like going from a walk (minor action) to a run (major action).

i Say that you have a long turn and you want to 1) walk & shoot, 2) shoot again, 3) walk further, 4) shoot again, 5) run. You would:

1. **walk & shoot.** The shooting takes place during or immediately after the walk with no pause. In this case the shooting only takes a penalty for the distance moved. You could, if the situation allowed, shoot and then walk, for no penalty at all on the shot.
2. **shoot again.** Since you had a prior major action, the second action takes a -3 penalty.
3. **walk.** Since you are *still* walking (extending your prior minor action), this would be a 'non-action', something that takes up time but does not count as an additional minor action. The rules do not care if you had combined it with a major action or not.
4. **shoot again.** Since this is your third major action, it takes a -6 penalty.
5. **run.** You are changing your prior minor action (walking) to a major action. This lets you cover a little more distance than normal, but since you are upgrading the action, it becomes your fourth major action, so if you had to make an Agility roll while running that last bit of distance, you would take a -9 penalty (-3 for each of the previous major actions).

i If you acted second in a melee combat and had already blocked two attacks before your chance to swing, your attack would take a -2 penalty. If you had to block a third time *after* this attack, it would be at -5, because of the previous two minor(-2) and one major(-3) actions.

! You might have noticed that the rules gives you a slight advantage if you combine your minor actions with major ones. You are streamlining the flow of play and not cluttering things up by having your minor actions require a separate resolution and tracking.



The penalties for multiple actions is just common sense. If you quickly fire two shots, the second one is going to be less accurate than the first. In addition, the number of major actions you can take in a turn may be limited by physics and technology. How many punches or kicks can you do in a given amount of time? The number of attacks you can realistically succeed at will be less than the number you can theoretically do, and we will get to that in a minute.

! Penalties to skill or attribute rolls are based on the assumption that the more *other* things you are doing, the less time you have to spend on that skill or attribute, and all other things being equal, the first thing you attempt has the best chance of success. These penalties would *not* apply in the case of *instantaneous* comparisons. If you have to make a Health roll because of injury, it will *not* take a penalty because you did a previous major action. If someone tries to kick a gun out of your hand, likewise. However, if someone is trying to sneak past you and you are busy doing three other things, then yes, it *would* be reasonable that your Awareness roll for spotting would take a penalty.

Actions & time

There is a subtle different between actions and time. An action is a task, and time is what it takes to do it. Many combat actions take a second or less and can be done in any turn, sometimes multiple times. Other tasks can take take considerably longer (like reloading a crossbow), and while this would only be one *action*, it might use an entire turn or even span multiple turns.

We will get into what **EABA** calls 'turn mod' in a moment, which represents the *intensity* with which you are doing an action. This is related to the time spent on the short side of things (you can only be so intense in a 1 second turn), but does not have to be tied to it in the long term (you can fire one shot in 15 seconds and not put any extra effort into it).

TURN MOD

This is the heart and soul of the **EABA** combat system, it is different than anything you have played before, and it is *the* most important section of this chapter. *So, read it until it is perfectly clear to you.*

The default scale for **EABA** is zero. That is, if you are looking at the **Universal Chart**, a time level of +0, a distance level of +0 and a quantity level of +0 (which is a value of x1). Everyone gets +0 (i.e. nothing) to add to these things. *That is the starting point for any combat or lengthy encounter.*

So, in the *first* round of a conflict, the time for that round is 1 second (time level of +0), movement distances have a +0 modifier, skills have +0 added to them and any consumables used are x1 the listed amount (e.g. a shooting action is pulling the trigger *once*).

Now for the interesting part. *The levels for each of these go up by +2 for each combat round after the first.* The second turn of a combat is 2 seconds long and everyone gets +2 that they can apply to one task or split between tasks. The third turn is 4 seconds long and everyone gets a +4, and so on. Turns get longer and you get inherent bonuses for the increased turn length. This bonus is called the 'turn mod'. It represents your ability to do more or focus on succeeding at a task by one or several means. Each +2 of turn mod applied represents twice the time, effort or supplies spent on that action. For instance, it could represent a flurry of blows in melee, firing several shots at a single target, or simply spending more time moving so you can cover a larger distance.

Any action you do using turn mod that also uses up some number or amount of supplies lets you get one extra hit for each 2 points you make the roll by, up to the amount of supplies used. So, if you fire two shots and make your roll by 2, you get two hits. If you fire two shots and make your roll by 10, you still only get two hits.



You still only get one major or minor action without multiple action penalties, but turn mod can counter some or all of this, or even make your rolls *better than normal*. You may split turn mod between your actions on a turn however you want, except for **ammo limits**.

For actions that take more than 1 second, you only apply turn mod for the *difference* between the *minimum* time to use the skill and the time you *actually* spend on it. Plus, you cannot apply turn mod that would exceed the actual time available in the turn, and if you have used up all the time available you may not initiate actions but can still respond to them, like using a minor action to block an attack.

i In the fifth round of a combat, the turn mod is +8 and the turn is 15 seconds long. If the game-master says a particular task has a default time of 10 seconds (time level of +7) to complete, then if you spend +1 turn mod on the task you have used up 15 seconds and cannot do anything else that turn, so you lose the unspent turn mod. If you only spend 10 seconds on the task, it gets a +0 turn mod for using the default time for *that* task, but you *do* get the remaining +8 turn to apply to whatever you can do in the remaining 5 seconds, as long as it is not on actions that take more than 5 seconds.

i To use the previous example, a soldier with a $3d+2$ skill roll with heavy machinegun spends his first action and 10 seconds to load in a new ammo belt. For his second action, he could apply +8 turn mod to his skill for a firing action, but would also take a -3 for it being his second major action, so his adjusted skill roll would be $3d+7$, which turns into $5d+1$ because each +3 gets turned into +1d. He could fire a second time, but since he is out of turn mod and it is his third major action, his skill roll would take a -6 and only be $1d+2$.

! Most of the time there will not be any need to track time *and* actions. The rule is here just to deal with potential abuses of the system.

Take a minute (a time level of +12) to wrap your head around the obvious ramifications of how you can use turn mod.

i To give an in-game example, take an adventurer with a pistol, a skill roll with that pistol of $3d+2$, and a walk movement distance of 2 meters (distance level of +5). So, on the fourth turn of a combat things would be: time level +6 (8 seconds), quantity level +6 (x8), turn mod +6.

So, one 'firing action' could use *up to* eight shots (because a +6 quantity level is x8), have an adjusted skill roll of $5d+2$ (their skill roll of $3d+2$ with a +6 for firing 8 shots), or that they could as a 'walk', move a distance of (walk of +5 (2 meters) with a +6 turn mod (8 seconds), for a distance of +11 (16 meters).

Or, some combination that adds up to +6. So, they could apply +2 to their walk distance level, +1 on their first major action with the pistol, and then using the remaining +3 to counter the -3 for firing the pistol again as a second major action.

*Think of this as a scene from a movie. The hero is moving around a warehouse, going from one place of cover to another, firing at any targets that present themselves in the process. And this is all **one** turn's action.*

That is how it works in the most basic sense. Our shooter may have fired up eight shots, but if it is only one firing *action*, they only get to hit *one* target, but could hit it more than once on a successful roll. If they split turn mod between multiple attacks, each has a lower chance of success (and uses less bullets), but they get multiple chances. It is the old 'quality vs. quantity' argument expressed in combat terms. Just remember that in **EABA**, an 'action' is really your *intent*, and that intent can involve *multiple* swings with a weapon or fist, *multiple* trigger pulls, and so on.

! A reminder that if you put *any* amount of your initiative declaration into Dodging, your move distance is halved (-2 levels), and halved *after* you apply any turn mod to how far you are going.



To put all these modifiers into their own table, the way it works would be something like this:

turn	time	elapsed	skills	distance	qty
1	1 sec	1 sec	+0	+0	x1
2	2 sec	3 sec	+2	+2	x2
3	4 sec	7 sec	+4	+4	x4
4	8 sec	15 sec	+6	+6	x8
5	15 sec	30 sec	+8	+8	x15
6	30 sec	1 min	+10	+10	x30
7	1 min	2 min	+12	+12	x60
8	2 min	4 min	+14	+14	x125
9	4 min	8 min	+16	+16	x250
10	8 min	16 min	+18	+18	x500

A fight lasting ten turns is *sixteen minutes* of in-game time. That is more than enough for an escape, for massive reinforcements to stop an escape, for air support to arrive and blast things or anything else that might be needed to bring the combat to a close.

Ammo limits

For gunfights, the amount of turn mod you can apply to a single action is limited by how many times you can fire without reloading and how long reloading takes. For instance, a quantity of x6 (like the capacity of a revolver) is a quantity level of +5. This means that one firing *action* with a revolver normally uses no more than +5 turn mod, because that uses 6 shots and you have to stop to reload. A single shot weapon would usually have just a +0 turn mod because that is the quantity level for x1 shots. You can exceed this limit by **aiming**, but for long turns there will be reloading breaks.

This can be significant, like needing 4 seconds to reload on a 4 second turn (using up the turn and you get no other actions), or just an extra major action penalty, like spending 4 seconds to reload on a 4 *minute* turn. If a turn is long enough to reload and fire again, you may do *one* action using a quantity mod (and turn mod) for the *total* number of shots fired, doing 'fire-reload-fire again' as *one* complex action.



Reloading time

Turn mod represents the intensity of your effort, while time level represents how long it takes to do something. This is important because there are things that can take time but *not* use turn mod. *Reloading is one of those things.*

If you empty a weapon, then you cannot do any more attacks with *that* weapon until you reload. Reloading or drawing a weapon is typically a major action of average(7) difficulty. The **time** it takes depends on the weapon, but it counts as a major action. If a turn is not long enough, you have to continue the action on *consecutive* turns until enough time has elapsed. *Trying to reload a muzzle-loading rifle may take a while!* The default time (and level) for readying and reloading is:

weapon action(type)	time needed
draw a weapon(major)	one action(+0)
aim a weapon(minor)	2 seconds(+2)
load single-shot/bow(major)	4 seconds(+4)
load revolver/crossbow(major)	15 seconds(+8)
load clip-fed(major)	4 seconds(+4)
load muzzle-loader(major)	30 seconds(+10)

So, reloading a clip-fed weapon takes 4 seconds and a major action. You *may* apply turn mod to the action and take longer than normal, but you do not *have* to. If you try to do a long action in *less* time than the default, you take a penalty of the time level difference, and you usually cannot take less than one-quarter the normal time (a -4 to your roll).



Overlapping actions

If you are doing an action that takes so long that it takes multiple turns, it is counted as a major action on any turn in which it is happening and any skill roll required happens at the end of the time spent. If you do something else at the same time as the action, you take a penalty on the *long* action of the largest extra action penalty for any of those turns. That is, your shorter actions are interfering with the continuing action. So, if you spent several turns running *and* trying to reload a muzzle-loading rifle, you would take -3 on the reloading roll, *not* -3 for each turn spent running.



Closing the encounter

Fights normally last no more than ten turns. This ten turn maximum duration is arbitrary but is usually sufficient. *But how exactly do you wind things down if it seems like it will run the full ten turns?*

Well, at the *start* of things the gamemaster *and* players should be thinking fifteen minutes ahead. That's a lot of time and distance and a *lot* of consumables. Players seldom have to worry about running out of ammunition because fights take much less time than they do in real life and those turns take far longer to run, but in **EABA** you have the very real problem of being able to blow through several extended magazines in a single turn. It tends to generate a different, more realistic style of play, but one which might end differently than normal. The bad guys might surrender or try to run away because they are out of ammo!

The gamemaster can set conditions on which the encounter will end. Like "keep pursuers out of line of sight for at least a minute and you get away". That's a goal that players can work towards and which fits into the turn scale. Or, "the bad guys have several hundred heavily armed reinforcements about ten minutes away from here". This means players have to escape before then, or be forced to surrender (or get massacred). Or "the clock on the doomsday device says it will go off in four minutes. If you can't fight your way through the minions and disarm it by then, Manhattan will be vaporized". How to close an encounter? *Goals and deadlines.*

! The turn mod system in **EABA** may seem a little screwy at first and you still might not have a handle on it, but it *does* work and we have a few more examples to illustrate the ranged and melee combat rules. *So, keep reading...*

COMBAT

So, if you have decided you are going to attack someone in a turn and figured when you will try it, how does it work? There are two main cases: ranged combat and melee combat.



Ranged combat

This is for any sort of ranged weapon, from a thrown rock up to a pistol, rifle, bow, crossbow and most paranormal powers that have a range. First, keep in mind any practicalities of making the attack. Some ranged weapons require both hands to fire. Some need to be braced against a shoulder, some need some free space in one or more directions (a bow needs a space wide or tall enough for the bow, a rocket launcher needs a clear space behind it, etc.). Not being able to meet the practical requirements of the weapon can make it difficult or impossible to use. Once that is out of the way, figure out the following:

in your favor:

- + whatever your base skill roll is
- + how much turn mod you will apply to the attack, but no higher than the quantity mod for your ammunition supply

against your favor:

- any Initiative you declared
- any Dodge amount you declared
- any penalty for previous major or minor actions
- any penalty for injuries
- any penalty for encumbrance

What this gives you is your adjusted skill roll, which is your base skill roll, plus or minus everything affecting how many dice you get to roll.

i You have a skill of 4d+0, a turn mod of up to +6 and a weapon capable of utilizing this much, and have lost enough hits to take a -3 penalty. If you use +4 of your turn mod on the attack, your adjusted skill is (4d skill, -3 injury, +4 turn mod) = an adjusted skill roll of 4d+1. If you spent no turn mod, your roll would be 3d+0 and if you spent all of your +6 it would be 5d+0.

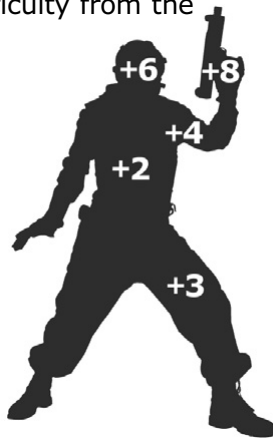


You will be rolling your adjusted skill dice against the difficulty, which is the sum of:

- the range *level* to the target. Round the distance in meters down to the next lowest range level.
- the size *level* of the target. If you are aiming at a person, the size level is just +0. If you are trying to hit a specific part of a person, it is harder. This is a 'called shot'. *You can do this in melee as well.* You simply adjust the difficulty from the

Universal Chart:

location	difficulty
torso	+2
leg	+3
arm	+4
head	+6
hand	+8



- half (round up) the distance *level* for (how much you have moved in meters *plus* how much they have moved). If someone has not yet moved this turn, use speed from the previous turn. If the firer is moving *at all*, there is at least +1 to difficulty.
- any Dodge the target is using. Remember that Dodge is only full against attacks you can see coming and usually against one attacker at most. Otherwise it is halved (rounding up).
- any situational modifiers based on external conditions. *Is the target partially obscured and hard to get a clear shot at?*

This number or better is what you need to get on the adjusted skill roll you have for that ranged weapon. If you succeed, you get *one* hit. If you fail, you miss. Because of turn mod, one action could be many shots, and let you get multiple hits from one action. **Each 2 points you make the roll by is one extra hit.**

Some weapons or ranged attacks will be limited in how many times they can be used in a turn, mostly because of reloading concerns, but if you have sufficient ammunition, you can easily take several major actions with a ranged weapon in later rounds of a combat, and each of these actions can expend several shots.

! Combat modifiers for movement are relative. If you are in a speeding car and your target is in speeding car going the *same* direction, there is little *relative* movement. This is also the case if something is coming right at you or moving directly away. Because there is usually *some* relative motion, you usually count *any* target or firer movement as at least +1 difficulty. Situation modifiers like hanging out a car window or being buffeted by slipstream are up to the gamemaster. Movement modifiers also represent how much of the turn is spent moving. After all, if you have +8 turn mod and add +6 of it to movement, you are spending more time moving than shooting.

Aiming

Ranged weapons have a special stat called Accuracy. If you aim a weapon (minor action) before firing a *single* shot or in combination with firing (remember that you can do a major and minor action at the same time!), you can subtract the Accuracy from the difficulty for range, down to a minimum range difficulty of zero. Aiming takes no turn mod, but takes at least 2 seconds (time level of +2), which means you cannot do it on the first round. Since aiming is a minor action, you *can* combine it with the major action of firing, so you can use up the *time* of a turn by aiming and fire at the very end of the aiming action. So, you *can* aim & fire on the second turn.

You can apply turn mod to an aimed shot in excess of the normal +0 allowed for a single shot. This *does* increase the *time* spent on the task. You can spend up to +6, and each +2 either adds +2 to your skill roll or decreases the difficulty by -1, in whatever combination you want. *You are doing slow, careful shots.* Each +2 used doubles the time you spend on that shot (4, 8 or 15 seconds), which places a limit on your ability to aim & fire in early turns of a fight.

! Some ranged weapons have an Accuracy of 0. This just means you have to spend extra turn mod on the shot if you want to get a skill bonus or difficulty reduction on a single shot.



i You have a turn mod of +6 (for an 8 second round) and wish to do an aimed shot with a rifle that has an Accuracy of 3, so aiming gets you a -3 on the difficulty for range. Since aiming takes 2 seconds, you cannot apply more than +4 turn mod to the action (+4 doubles the *time* spent twice, to 8 seconds). This +4 could be spent to give you +4 on your skill roll, an extra -2 on the difficulty, or +2 on the skill roll and an extra -1 on the difficulty. Note that since aiming takes two seconds and the turn is 8 seconds long, you *could* do two or more aimed shots. You would need to make sure the total time spent on them was not more than the 8 seconds in the turn, plus each of these shots after the first would have extra action penalties. For instance, you could spend +2 turn mod on each shot to get +2 on your skill roll. They would each take 4 seconds. The first would reduce the difficulty for range by -3 and give you +2 on your skill roll, and the second would also reduce the difficulty for range by -3 but be a -1 on your skill roll (+2 for the extra time, -3 for the second major action).

Whether or not aiming is to your benefit depends on the weapon, range, your skill, how much ammunition you have and how long the turn is. If you have a flintlock with one shot and it takes a minute to reload? *Aiming sounds like a good idea.* If you have pistol with a huge clip and the turn is only four seconds long? *Probably better to just pull the trigger a lot.*

Remember that you need to have a target to aim at. You cannot 'hold action' with an aim unless you are aiming *at* something, so you cannot get an aiming benefit on something that has just popped out from cover unless you guessed right and were aiming at that *exact* spot. If you are aiming at the right side of a doorway and someone pops out from the left side, you *could* use a held action to shoot them, but you would not get the benefits of aiming. If you spent the entire turn aiming and wanted to fire as well, you have to declare it as 'aim & fire', and what you are aiming at still has to be in your sights at the end of your aiming.

! Not having your action ready because you are busy min-maxing the game mechanics means the gamemaster can assess a -2 'delay of game' penalty on your actions.

Aim and Dodge

The basic aiming rules are simple: *Spend some time, get some Accuracy.* To be a little more realistic about how aiming interacts with motion, you probably should *not* be allowed to use Accuracy if you are dodging or moving at any rate faster than your Walk. In addition, if you are dodging and someone is aiming at *you*, the *effective* amount of your Dodge subtracts from *their* Accuracy (down to zero). So, not only does Dodge make it harder for someone to *hit* you, it also makes it harder for someone to *aim* at you. It is the difference between trying to swat a fly in mid-air or one that is sitting still. So, in game terms, the best way to avoid being hit at long ranges where Accuracy matters most? *Dodge!*

Aborted actions

If you are doing a long action or using turn mod to represent increased time (like aiming) and you suddenly need to alter things, you either do your current action with a -3 penalty and the current time spent, or the new action with an extra -3 penalty. For instance, you are aiming at someone, but they see you and try to duck under cover before you are finished aiming. If you had met the minimum time requirement for aiming you *could* take the shot before they get under cover, using the amount of time you had already spent, but with a -3 for snapping it off in a hurry.

That is it for basic ranged combat! Everything else on ranged combat is in the **Advanced Combat** chapter.

i BASIC RANGED COMBAT EXAMPLE

Let's say it is turn 2 of a combat, a stereotypical deal gone bad in an old warehouse. Turn 2 is:



time: 2 sec, **turn mod:** +2, **quantity mod:** x2

The first round involved drawing weapons (a major action) and starting to shoot at each other (a major action). Some folks are down, others are wounded. Round two begins, and we will deal with only two of those involved. We will call them Able and Baker. Able has an Agility of 9 (Dodge of 6) and a pistol skill of 5d+0, and Baker has an Agility of 8 (Dodge of 4) and a pistol skill of 3d+2. Neither is currently wounded, and the range between them is about 8 meters. Baker has partial cover behind a crate (his legs are protected). The gamemaster says that attacks against Baker roll against a random hit location unless a called shot modifier is taken on the difficulty to hit.

initiative: Who goes first is *very* important to both Able and Baker, but so is being successful with their actions. A range of 8 meters is a difficulty of 9. The average result for a die roll of 2d+2 is also 9, so to have about a 50-50 chance of hitting a target (barring other adjustments to the difficulty), they each need an adjusted skill roll of 2d+2.

Able gambles and secretly declares 5, *and* a Dodge of 2. The Dodge does *not* affect whether he goes first, but regardless of whether he goes first it will affect Baker's chance to hit as well as his own. Baker only declares 3, and hopes that the partial cover he has will make Able take extra difficulty for a called shot.

The result? Able goes first, and takes a -5 to his first skill roll (-5 for initiative and -2 for dodge, but he decides to use the +2 turn mod on his first action), while Baker goes second but only takes a -1 to his skill roll (-3 for his initiative and +2 because when it comes to his first action he will also use his +2 of turn mod).

combat: Able fires first. The range is 8 meters, a difficulty of 9. Able's penalties are such that he does not increase the difficulty with a called shot. Able's base skill roll was 5d+0, and he applies -5 (initiative), -2 (dodge) and +2 (using his turn mod), which makes his adjusted skill roll 3d+1. If it makes it easier to figure out, turn skill rolls into regular numbers first. This would make his base skill a +15 instead of 5d+0. Then we apply the modifiers, making it a +10, which turns back into a roll of 3d+1.

So, Able does a major action and fires at Baker, with adjusted skill roll of 3d+1 against a difficulty of 9. Able rolls an 8 and just barely misses. Able decides to take another major action and fire again. Since he has used up his turn mod he will have a 5d+0 skill roll with the previous -7 in penalties, and an *extra* -3 for his second major action, which makes his adjusted skill roll to 1d+2, making it impossible to match a difficulty of 9. Able decides to use **Fate** to get an extra +1d on the roll. He rolls a 9 this time, and barely hits. Since it was *not* a called shot, 3d+0 are rolled for a random hit location and the result is 15, a leg hit. This is blocked by the crate Baker is standing behind and has no effect. *Drat!*

Now it is Baker's turn. The difficulty for range is a 9, but Able is dodging for an additional +2, for a final difficulty of 11. The gamemaster makes a judgement call and says that even if Able cannot see bullets, the close range means he *can* see exactly where Baker's gun is pointed and can try not to be where he knows the bullets will end up. Since Able is only facing one foe, the gamemaster gives Able his full Dodge against this attack.

Baker has an adjusted skill roll of 3d+1, and rolls a 12, for one hit. Since the gamemaster specified that only people under partial cover used hit locations, this hit is a generic torso hit with no special location effects.

damage: We have not done the damage rules yet, so this example will be continued when we get to that point. *But it does not look good for Able...*



Melee combat

Melee combat includes unarmed combat like brawling or martial arts, or use of any weapon or power that needs to strike an opponent by getting past their skill with a melee combat form. These have different rules for specific aspects of how they work, but all melee combat operates on the same basic principles.

Melee combat is an opposed skill roll. Your difficulty to hit someone is based on their circumstances. If someone is unable to defend or is surprised, the difficulty is merely very easy(3). If they are not using a melee skill and are *just dodging*, the difficulty would be very easy(3) *plus* their effective Dodge. This would be their **base defense**. If your attack fails to match or beat that, you just plain miss.

If they are using a melee skill, the difficulty to hit them is their skill roll plus any Dodge that applies. Anyone may use their unskilled default on Agility to attack **or** defend with. *Anyone can throw a punch or swing a club...*

When it is your turn to act, you attack as a *major* action that tries to match or beat their defense. If they are using a melee skill, this defense counts as a minor action for them. Their defense is a reaction and it does *not* have to be their turn to act in order to try to block or parry your attack. Whoever has the higher initiative may choose who rolls first. This is important because one person could theoretically 'take 2's' to match the opposing difficulty. When you attack, you are either going to get a clean hit, a clean miss, or a miss that is *because* they blocked or parried it. This allows you to judge special combat effects related to whether you actually touched the other person, their weapon or shield.

i If you attack someone who dodges for 4, their base defense is 7. If they have a final adjusted defensive roll of 14 and blocked, then your attack profile is: roll 14 or more and you hit, roll 7-13 and they block, and roll 6 or less and you cleanly miss.

When it is *their* turn to act, they may try to make an attack on you as a major action for them and you attempt to block or parry it as a minor action for you. If you have declared a Dodge and are in melee combat, the effective Dodge *adds* to your defensive skill roll, and *subtracts* from your offensive one.

i You have a base skill roll of 4d+0, have Initiative of 2 and a Dodge of 3. Your roll to *defend* would be 4d+1 (base skill *minus* Initiative, *plus* Dodge), and your roll to *attack* would be 2d+1 (base skill *minus* Initiative, *minus* Dodge).

You can attempt to block or parry any number of attacks made against you, but each is a minor action, so they will accumulate -1 penalties on your skill roll after the first block or parry. And note that if you have already made an attack, your first block or parry is at -3 because of the prior major action. If you are acting at the same time as an opponent, you *may* declare 'attack & block' as a single action.

But, no matter how skilled you are, if there are *enough* attackers, one is likely to overcome your defensive skill. However, as a practical matter, three people with swinging weapons or six with thrusting weapons is as much as can practically surround and attack a single person.

In an attack, *if it is important for the weapon*, you should announce 'cut' or 'thrust'. Advanced weapon and armor rules may give different types of attacks more or less effect against different types of armors. An armor that might be good against slashing attacks might not do so well against thrusts. Or, certain weapons may have only an edge or only a point and would be limited to one type of attack.

Since called shots affect your difficulty, and your difficulty is *their* skill roll, trying to make a called shot to hit a particular part of an opponent simply adds to *their* skill roll to defend against the attack, or the difficulty of making an unopposed attack. Similarly, half of your movement level adds to their roll (the difficulty) just as it does for ranged combat.



i Against *punches*, the head is a target with a difficulty modifier of +4. So, if trying to punch a foe in the face, they get a +4 to their defending skill roll. If trying to punch someone who is not defending, the default difficulty is 3, so a punch to their face would be a difficulty of 7.

Unarmed combat

Punches and kicks use all the normal melee combat rules. However, kicks and foot-based maneuvers are at a -3 penalty to skill rolls but do +3 strike damage, and punches and hand-based maneuvers are at no penalty and do +0 strike damage. *You kick harder than you can punch, but usually not as accurately.* Damage from punches usually non-lethal and from kicks is half-lethal, and if it matters for any other rules, counts as a blunt thrusting attack.

Blocking and parrying

In game terms, a 'block' is usually something done with a non-weapon (like a shield). *This is the default for a defensive melee skill roll.* You take the full force of the attack on the item (*clang!*), and if the attack exceeds the armor of that item, it and you (your arm) take any remaining damage. A block uses your adjusted skill roll for whatever is appropriate for the blocking object. You *can* block with a weapon, but it is possible that this will badly damage or even ruin one or both weapons. A battle axe used to block a staff? *No problem.* A staff used to block a battle axe? *Likely to be a problem.* Your punch blocked with their knife? *Ouch!* A 'parry' is a defense maneuver meant to *deflect* an attack rather than taking its full force. A skill roll to parry an attack is done with a -3 penalty. However, if a parry succeeds, the attack is deflected away from you. As an optional rule, subtract 1d from the attacking weapon's damage and apply the remainder to the item doing the parrying (see **Breaking Things**). Subtract an extra 1d for each 2 points the parry roll is made by.

i You *can* parry a battle axe with a fencing foil, you just have to make the roll by enough...

Some armors may be good at deflecting melee attacks and will give the wearer an inherent bonus to their parrying attempts or to their base defense even if not defending. Shields can be used to block a blow *or* deflect (parry) it. Shields *also* give an inherent bonus to the melee skill of the user, depending on their size. Shields are usually worth a +2 to +4 bonus to skill on the defense. This would mean that attempting a 'parry' with a large shield(+4) would be at a +1 bonus to skill. Now, note that you are *not* deftly turning blades aside with something like a large shield. Instead of taking the attack head-on, you are merely angling the shield so that the attack glances off without damaging the shield.

You *can* attempt to block or parry with bare (or preferably armored) hands or arms. This resolves in exactly the same way. For any *non-lethal* damage you take from a block or parry, you get to subtract your **Toughness**. Note that the only benefit to *blocking* punches or kicks with your bare arms is that you get to take the damage on your arms, which has lesser effect (**page 4.18**). Generally, you do *not* parry lethal weapons with bare hands. You instead parry the hand holding the weapon. Even so, the note about attacks doing 1d less to a parrying item (your hand) should probably apply.

Specialized combat

Aficionados of any *specific* combat form will find fault in any *generic* combat system, because it does not cover *their* favorite in sufficient detail. But, **EABA** can model *specific* types of melee combat for a genre. Between the basic and advanced combat rules, there is a differentiation between cut and thrust, blunt and sharp, lethal and non-lethal damage. Weapon reach is dealt with, as are skill specializations and the effects of particular attack types on different sorts of armor. Add into this the combo maneuvers that you can do with one or more **Neat Tricks** and you should be able to handle everything from martial arts to fencing, giving extra depth to a genre-important combat form and allowing players to specialize their adventurers in ways that simulate real-world or fictional techniques and styles.



Reach

It should be easier than normal to kick someone in the leg or punch them in the head. If using random hit locations, punches get a -4 to the roll (minimum result of 3) and kicks get a +4 to the roll (maximum result of 18). If attempting a called shot, punches to the head are +4 difficulty and kicks to the legs are +2 difficulty.

Reach also matters in melee combat as a matter of weapon length. Sword vs. knife, for instance. Melee weapons have a stat called 'length'. Short weapons like punches, kicks and knives barely reach into adjacent hexes. Medium weapons like swords can hit anywhere in any adjacent hex, and long weapons like polearms can hit targets up to 2 hexes away. When a melee combat roll is about to be made and one person has superior reach, the other person gets a -2 penalty on their skill roll per level of length difference. On the other hand, if the person attacking with the shorter weapon can find a way to keep the range to *their* benefit, this effect is reversed. People can advance and retreat (walk as minor action, then attack), so to force a shorter melee 'range' means putting someone in a position where they cannot retreat (like backing them against a wall).

i If you try to grapple someone who has a polearm, you first have to get in range of their weapon, and are at -4 on your defense roll against their attacks (the grapple has short range, the polearm has long range, so -4 for two levels of difference). However, if you get well inside their weapon's reach, the length of the polearm is a liability, and they would take a -4 penalty on *their* defense roll.

Having increased/decreased physical size can act to adjust the effective reach of a melee attack, or be an edge in case of equal weapons. If your opponent has the same sword as you, but their arms are half a meter longer, they have longer reach and can utilize this to their advantage.

A martial art bought as an **enhanced skill** can, as its enhancement, have a one step increase in the effective length of its unarmed attacks to represent a particular attack or defense style.

i BASIC MELEE COMBAT EXAMPLE



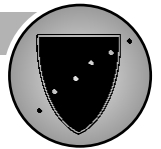
Let's say it is round 2 of a combat, a stereotypical deal gone bad in an old warehouse. Turn 2 is:

time: 2 sec, **turn mod:** +2, **quantity mod:** x2

For melee, our combatants are Carmen and Danielle. Carmen has an Agility of 8 (Dodge of 4) and a Knife skill roll of 3d+2, while Danielle has an Agility of 9 (Dodge of 6) and a Brawling skill roll of 4d+0. Carmen has a knife, which does strike-1 lethal damage. Carmen has a Strength of 7, which means her strike damage is normally 1d+1 (the roll for her Strength, minus 3), and her damage with the knife will be 1d+0 (but note that it is *lethal* damage). Danielle has a Strength of 7 as well, so her punches have a damage of 1d+1 in non-lethal damage.

initiative: Since you automatically get to defend against melee attacks you can see coming, going first is not as critical as it was for pistol-armed Able and Baker. Danielle does not want to get sliced up with a knife, but Carmen knows that Danielle has more skill. Carmen declares 1 for initiative and Danielle declares zero, but puts in 3 for her Dodge. Because it is turn 2, each of them gets a +2 turn mod to apply.

combat: Carmen stabs at Danielle. Danielle *could* block, but since she is unarmed, this would mean she would take a knife jab to her arm. If she parries, she takes a -3 penalty, and because the weapon is short enough and the range close enough, the gamemaster says that Danielle *can* parry the knife arm rather than the knife itself. Carmen uses her +2 turn bonus and stabs with a skill roll of 4d+0 (skill of 3d+2, -1 for Initiative and +2 for turn mod), and Danielle parries with an adjusted skill roll of 4d+0 (base skill of 4d+0, +3 for dodging, -3 for the parry, and does not use any of her turn bonus). Danielle wins the roll and the knife misses its mark.



If we wanted to narrate the situation, we could compare the skill rolls. Say that Danielle rolled a 14 for her defense, which is declared as a parry. Danielle has a base defense of 6 (very easy(3) plus her Dodge of 3). So, the chances would look like this: Carmen rolling 14 or more means a hit. Carmen rolling 6 through 13 means Danielle successfully parried, and Carmen rolling 5 or less means Danielle was ready to parry but Carmen cleanly missed. So, if Carmen actually rolled a 13, we would narrate it as "Carmen jabs at Danielle, but Danielle jigs and deflects Carmen's attack harmlessly to one side." *Keep this sort of thing in mind.* The way the dice fall can help you generate the narrative, whether in combat or elsewhere.

When it becomes Danielle's turn to act, she takes a chance and punches Carmen. This is taking a chance because Carmen will probably choose to block the attack *with her knife*. *If Carmen succeeds in her defense, Danielle will punch the knife instead of Carmen!* Danielle's adjusted skill roll for the attack is 3d+1 (base skill of 4d+0, -3 for dodging, -1 for doing a block as a prior minor action, and she uses her +2 turn mod), and Carmen's adjusted skill roll for defense is 2d+1 (base skill of 3d+2, -1 for Initiative, -3 because she has done a major action already). Danielle wins the roll with a total of 13 to Carmen's 8, so she avoids the knife and hits Carmen for 1d+1 non-lethal damage. The narration would be "As Danielle deflects Carmen's knife with her left hand, she steps inside Carmen's guard and punches her with the right."

damage: We haven't done the damage rules yet, so this example will be continued when we get to that point. Danielle *has* scored a hit, but it is unlikely to end the fight.

DAMAGE & ARMOR

Okay, so you connected with a weapon (or foolishly let yourself get hit by one). *What do you do now?* Usually, things go in this order:

- determine hit location (optional)
- reduce damage done by armor
- apply any location-based effects (optional)
- apply any damage reduction from prior injury

Not all of these steps are going to apply to all hits. For instance, if *none* of them apply, you just roll the damage and apply it to your hits.

Hit location

First, the gamemaster decides *where* you were hit. The default is that hits go for the 'center of mass'. If you are *not* aiming for something *specific*, then you are trying to hit 'the middle' of the target. And since this is where a lot of important bits are, this *usually* works. In this case, any torso armor will be what is counted against the attack. This is fairly 'cinematic', in that you can run around without a helmet and still be counted as fully armored for purposes of taking damage. But if a target is partially obscured or you would rather use *random* hit locations, roll 3d+0:

roll(3d)	location	after armor effect
3-6	Head face(3-4) neck(5) skull(6)	+3, max of 6d
7-8	Arms upper arm(7) lower arm(8)	-3, max of 2d
9-12	Body shoulder(9) chest(10) abdomen(11) hips & groin(12)	+0, max of 4d
13-18	Legs upper leg(13-14) lower leg(15-16) foot(17-18)	-3, max of 2d



The 'after armor effect' means that the *largest* damage type (ties to non-lethal) is adjusted by that amount **after** defenses are *penetrated*, *plus* there is a maximum you can take from a hit. The ± 3 amounts usually become $\pm 1d$ before rolling. *However, attacks always do at least 1 hit if they penetrate defenses.* In the case of non-lethal damage, the 1 hit remainder *can* be reduced to zero by Toughness.

i If you took $1d+0$ through armor on a head hit, it would be increased to $2d+0$ (not $1d+3$). If you took $1d+0$ on a leg hit, it would be reduced to $0d+1$ (because of the minimum effect of 1 hit).

The detailed hit locations are really just for **called shots** and cases where only part of a hit location is actually covered. Like 'did the snake bite you on your exposed leg, or the part where you have the heavy boot?'

Armor

Once you have decided *where* damage has been taken, *then* you deal with armor. Armor comes in two varieties, rigid and flexible. Flexible is more comfortable to wear, is less constricting on your movement and easier to conceal, but does not stop damage as well as rigid armor. Armor has a rating in dice just like damage. **However, you do *not* roll armor dice, you subtract them from damage.**

Damage that gets through armor will probably be in terms of dice. So a $3d+0$ attack hitting a $2d+0$ armor does $1d+0$ damage. As a *basic* armor rule, the difference between a rigid and a flexible armor is simple. Rigid armor transmits 1 non-lethal hit for every full $1d$ of damage stopped by armor, and flexible armor transmits 2 non-lethal hits for every full $1d$ stopped by armor. **Even non-lethal impact damage is transmitted through this way.** Your Toughness *does* apply, but all non-lethal damage from *that* hit adds together first. Location effects *do* apply.

i If you took 4 non-lethal hits from blunt trauma plus 2 more from armor penetration, your Toughness applies *once* against a 6 point non-lethal attack.

There is one *very* important subcase for how armor and damage interact. *What you do if there are fractions on the armor and damage dice, like a $2d+1$ attack hitting a $1d+2$ armor?* You just convert the attack and defense into numbers, subtract one from the other and then turn it back into dice. For instance:

damage	armor	result
$2d+2(8)$	$1d+0(3)$	$1d+2$ penetration(5)
$2d+2(8)$	$1d+1(4)$	$1d+1$ penetration(4)
$2d+2(8)$	$1d+2(5)$	$1d+0$ penetration(3)
$2d+1(7)$	$1d+2(5)$	$0d+2$ penetration(2)
$2d+0(6)$	$1d+2(5)$	$0d+1$ penetration(1)

If you take non-lethal and lethal damage through armor at the same time because of blunt trauma, you apply the non-lethal damage first.

Blunt trauma

The basic rules differentiate between rigid and flexible armor, but this can be expanded on. The idea of blunt trauma really only applies to something that has a *physical* impact, like a bullet, arrow, chop or thrust. Slices and things like energy weapons generally do *not* do blunt trauma. For purposes of applying Toughness, all non-lethal hits from blunt trauma plus armor penetration add together before applying Toughness once. If you wish to add a little more detail to non-penetrating hits, assume that any full die of armor *not* used to stop a hit adds 1 to Toughness against that blunt trauma.

i If a $3d+0$ attack does blunt trauma through a $4d+0$ armor, it does 1 point less because of the $1d$ of armor that the attack did *not* penetrate.

! It is possible in many settings and historical periods to have armor that is next to impossible to penetrate. A pair of heavy knights in melee are unlikely to *breach* the steel plates of their foe. However, powerful hits can badly bruise someone through otherwise impervious defenses. Imagine someone 'getting their chimes rung' by a head hit that does not penetrate their helmet.



! The **EABA** rules are a simple model that is nonetheless very close to the way weapons and armor *actually* interact. Things like modern firearms are exceptionally consistent in how well they penetrate, and armors are consistent in how well they resist penetration. If you shoot a bullet at a steel plate and the first one does *not* go through, then if you shoot a hundred more at that plate, none of them are likely to go through unless they hit a previously weakened spot by chance. If the first bullet penetrates the steel, it is almost certain that if you shoot a hundred more at the steel, they will *all* penetrate. So, subtracting armor dice from weapon dice *before* rolling handles this very well. If the damage dice are less than or equal to the armor dice, nothing *ever* penetrates. On the other hand, if damage dice are more than armor dice, something *always* penetrates.

People are another matter. A large attack might miss everything vital, or a small attack could hit a key location. And **EABA** handles that too. Once you get through armor, *then* you roll remaining damage to give random variation in the damage done. A low damage roll represents a grazing hit, while a high damage roll indicates something more vital was struck.

! The **EABA** damage model works on the theory that a medium-caliber pistol to the head ruins the day (if not life) of *any* adventurer. For reference, damage runs along the following scale:

damage	equivalent
1d+0	light pistol (.22 is 1d+1)
2d+0	medium pistol(9mm is 2d+1)
3d+0	heavy pistol (.44 Mag is 3d+1)
4d+0	light rifle(5.56mm is 4d+1)
5d+0	heavy rifle (7.62mm is 4d+2)
6d+0	heavy MG (12.7mm is 6d+1)
8d+0	light vehicle cannon (30mm)
12d+0	medium vehicle cannon (75mm)
15d+0	heavy vehicle cannon (120mm)

This would be the guide for comparing wierd or alien weapons to current technology.

Damage

You have hit, figured out where you hit, and figured out how much damage you dealt. *Now you figure out what it does.*

Damage comes in three varieties: lethal, half-lethal and non-lethal. You can also deal damage to Stamina, but that's a special case that is usually the result of paranormal powers. Damage dice are always *all* the dice, *not* the 'best three'. And remember, you are *only* rolling dice that got through any defenses.

Lethal damage is like a bullet or blade or fragmentation grenade. Weapons doing lethal damage tear, cut or puncture, and usually bleed quite a bit. All the dice and fractions in lethal damage do lethal hits. Bruising hits through armor may be partially or completely overwritten by the lethal hits done.

i A 2d+1 bullet does 2d+1 lethal hits. Roll 2d+1, take the result and mark off that many hits.

Half-lethal is like a club, a mace, an explosion or a kick. Weapons doing half-lethal damage bruise, break and crush tissue. They may not bleed as much, but they can cause internal damage more severe than the outward appearance of a wound might show. Mark the hits that penetrate defenses as non-lethal, then upgrade half (round down) of the hits done by the attack *plus* the blunt trauma to lethal hits. You apply Toughness against the non-lethal hits *before* upgrading to lethal hits.

i If after Toughness, you took 7 half-lethal damage from a club and 2 non-lethal from damage that your armor partially stopped, you would mark 9 non-lethal hits and then upgrade 4 of those hits to lethal damage.



Cracking heads

Half-lethal melee weapons are 'less lethal' melee weapons. However, on called shots of +4 difficulty or more, you can choose to hit a muscular spot and do all damage as non-lethal, or a bony spot and do all damage as lethal damage.

! As a gamemaster or player, remember that many of you have never taken a lethal hit and may have only taken a few non-lethal ones. Damage of 1 lethal hit is something to go to an emergency room to have stitched up. Adventurers may be made of sterner stuff, but all the average people in the game setting may have little experience with trauma and react or overreact accordingly.

Non-lethal damage is like a stunner or most punches. Weapons that do only non-lethal damage can bruise or disorient, but have no effects that are likely to require hospitalization. All dice and fractions in this damage do non-lethal hits. However, once you have taken *all* your hits, further non-lethal damage is marked as lethal. Toughness applies against non-lethal damage *before* it is applied.

Applying damage

You have a damage track on the right of the adventurer sheet. Damage taken is a notation of '✓' and 'X' marks. A '✓' mark indicates a non-lethal hit, and an 'X' mark indicates a lethal hit. You start at the top of the track and work your way down.

i This adventurer has taken 2 lethal hits and 3 non-lethal ones.

Stam	Hits
1	X
2	X
3	✓
4	✓
5	✓
6	
7	
8	

The three important things to remember are:

one: if lethal and non-lethal damage is dealt by the *same* attack, you mark the non-lethal hits first.

i If a hit did 4 points of non-lethal damage and 2 points of lethal damage *at the same time*, like a lethal attack that mostly just bruised you through your armor but barely penetrated, you mark four '✓' and then turn two of them into 'X'.

two: If you take more non-lethal hits than you have, the remainder counts as lethal hits. 'Bruising' starts to become 'breaking'.

three: you always mark lethal hits on top of existing non-lethal ones (turning ✓ into an X), starting at the top of the damage track and working your way down.

i If you had 5 non-lethal hits marked off and then took 2 hits of lethal damage, you would turn the top two '✓' into 'X'.

Damage effects

These are pretty simple. Whenever you mark a ✓ or an X through a box with something in it like '-1d', almost all skill and attribute rolls are reduced by that amount. In addition (and this is *very* important), **all damage you take from that point is also reduced by 3 for each -1d penalty**, but you *always* take at least 1 lethal or non-lethal hit for anything that gets through defenses or Toughness. If you take lethal and non-lethal hits at the same time, the reduction is proportionate to the damage done. *Think of it this way:* If you get shot in the arm, getting shot there *again* will not incapacitate it as much as the first shot did. This reduction of damage applies *last*. Generally, damage is done in this order:

1. blunt trauma plus armor penetration
2. ±location effects
3. apply Toughness if appropriate
4. roll damage dice
5. then apply any prior injury effects



i Say that you are wearing a 2d+0 rigid armor, have a Toughness of 2, have taken enough hits to put you at a -1d penalty, and are hit in the head with a 3d+1 lethal attack. This is as complex as it ever gets in **EABA**, and would resolve like:

1. A total of 1d+1 penetrates armor (3d+1 vs. 2d+0), and you take 2 points of blunt trauma (because rigid armor stopped 2d of damage)
2. Since this is a head hit, +1d damage to the *lethal* part, making it 2d+1 (add to lethal because the blunt trauma was a lesser amount than the lethal damage)
3. Toughness reduces the blunt trauma to zero
4. Roll 2d+1, in this case getting a total of 7
5. Apply the prior injury effect of -3, so you take a total of 4 additional lethal hits

Because the damage roll was 2d+1 and you take a minimum of 1 hit from anything that exceeds defenses, this attack could have done anywhere from 1 hit (on a 2d+1 roll of 3 or 4) to 10 hits (on a 2d+1 roll of 13).

The real world is full of examples where people survived attacks even though they were shot multiple times or stabbed dozens of times.

EABA reflects this. You can be impaired and take a penalty fairly easily, but you can often take *quite* a beating before you go down.

Speaking of which, during the creation of your adventurer, you marked a spot on the hits track equal to your Strength plus Health. If you take *more* damage than this, you pass out until you have at least one unmarked hit. If you have taken more than your hits in *lethal* damage, you have to make a Health roll with a difficulty of 11 (this does *not* take the penalty for your injury). **If you fail, you die.** If you succeed, you are just unconscious or in shock. If you take more damage (any kind) and cross another dice threshold, you have to make another Health roll, but each threshold past your *actual* hits is a -1d penalty to the roll.



Stunning

When you take damage, there is a chance it disrupts your concentration or disorients you. If damage taken made you cross a dice penalty threshold (including the -0d one), you have to make a Will roll with a difficulty of easy(5). This roll *is* adjusted by injury penalty effects and you *may* use unallocated turn mod for it. *This* roll *does not* count as a major or minor action, it is merely your instantaneous reaction to being hurt.

If you *fail* the roll, your concentration is broken. If you were doing a major or minor action across multiple turns, *you have to start over*. Recovering your poise if you fail this roll *is* a major action, using damage-adjusted Will and all remaining turn mod, up to that needed for an automatic success ('taking 2's'). You *may* attempt this action immediately upon being failing the free roll. For as long as you remain stunned, your Dodge is zero, and you may take no *other* major actions until you recover from being stunned. You may take *minor* actions normally, so you *can* defend yourself against attacks in melee, walk or do things that take little effort. Stunning *is* an advanced topic, but it is highly recommended.



Partial incapacitation

Damage is generally seen as a whole, a pool of lost hits that causes you to take increasing penalties. More specific rules are covered in the Advanced Combat chapter, but in general if you take equal more than your Health in a single hit, that part of the body is incapacitated, and this includes from non-lethal damage. So, if a Health 7 person takes 7 non-lethal hits from a punch to the face, they are knocked out. If they take a bullet to the leg for 7 points, that leg can no longer be used, etc. You have still taken hits and have an overall penalty appropriate to the total damage taken, but *that* body part is going to be useless for a while. This requires that you know a *specific* hit location, a generic body hit does not count for this purpose.



i DAMAGE EXAMPLE



We ended the ranged combat example with Able taking a hit from a pistol at short range. If we say this is something like a 9mm, then the damage will be around $2d+1$ lethal. We have already done examples of armor, so we will say Able has no body armor and takes the full $2d+1$. The dice are rolled, and the result is a total of 7. Able has taken no hits before this, so he just marks off seven **X**'s on his hits track. This means he has crossed the $-0d$ and $-1d$ thresholds for damage effects (you only count the highest one). The important thing is that he has crossed a damage threshold and has to make an easy(5) Will roll to avoid being stunned. Able has a normal Will roll of $2d+2$, but he takes a $-1d$ penalty for severity of his injuries, giving him a $1d+2$ to reach a difficulty of 5, a 50-50 chance. If he fails, he could immediately try again as a *major action* on *this* turn, but his roll *would* take all penalties for previous major actions on *that* turn.

If he failed the initial roll, then on the following turn he might try again as his first major action, on his normal turn initiative. This puts him in a bind, as he *really* wants to go first so he does not get shot again, but he *needs* to make the Will roll, and even if he *does* make the Will roll, doing so will use some part of his turn bonus for that turn, leaving him less or even none to apply to his combat skills. *The moral of the story?* Have a decent Will roll and keep a little turn mod unspent if you think you will need it.

i DAMAGE EXAMPLE

In the melee combat example, we ended with Danielle clocking Carmen with a $1d+1$ punch. Carmen has a Will of 7, which means she has a Toughness of 2. So, she can ignore the first 2 points from any non-lethal hit. Danielle rolls her $1d+1$ damage for a total of 5, so Carmen takes 3 non-lethal hits, marking three **/**'s on her hits track. This crosses the $-0d$ damage threshold, so she has to make a Will roll with no penalty and a difficulty of 5. Rolling $2d+1$, she can 'take 2's' to automatically get a 5. She has not taken enough damage to suffer any ill effects...yet.

RECOVERY

Once you have taken damage, and usually after the fighting is over, you can start to recover from it. This is where your **Recovery** stat comes in.

stamina: Whenever you could recover *any* non-lethal hits due to time spent resting, you recover *all* lost Stamina. Stamina will be used more in some gameworlds than others. The next important mention of it will be in the **Advanced Combat** chapter.

non-lethal hits: When the time level spent resting *plus Recovery* equals 20, you recover 1 non-lethal hit, and 1 more non-lethal hit each time this interval elapses.

level	time	recovery
+18	8m	+5
+19	11m	
+20	15m /	+6
+21	23m	
+22	30m	+7
+23	45m	
+24	1h	+8
+25	1.4h	
+26	2h	+9

lethal hits: When the time level spent resting *plus Recovery* equals 32, you recover 1 lethal hit, and 1 more lethal hit each time this interval elapses.

+27	3h	
+28	4h	+10
+29	6h	
+30	8h	+11
+31	11h	
+32	16h X	+12

i If you have a Recovery of +1, you recover one non-lethal hit each 11 minutes and one lethal hit each 11 hours. Also, after 11 minutes you would get back *all* Stamina that had been used.

When we say 'each time this interval elapses', we mean each time the clock runs out the amount of time for the *initial* recovery. So, if you recover your first non-lethal hit at a time level of +20 (15 minutes), you recover another non-lethal hit every 15 minutes.



There *are* things you can do that can affect your recovery rate. Rest, supplies necessary for recovery and comfortable surroundings can add +1 or +2 to your Recovery. In the case of lethal injury, medical care using an **enhanced skill** can add +2 to your Health, which is good for a +1 to your Recovery. Advanced tech (or magic or other powers) can also provide benefits, especially for wound recovery. Regen tanks and autodocs are staples of the science-fiction genre, and magical spells to speed healing are part of the fantasy genre.

On the other hand, pushing yourself when you are injured, ignoring doctor's advice, poor medical care or conditions can decrease your recovery or negate it altogether. Recovery implies *not* doing the things that caused the problem in the first place. Strenuous activity resets the recovery clock for lethal *and* non-lethal hits.

i If you would normally recover one lethal hit each 16 hours and you do something to strain yourself 8 hours into it, you lose that 8 hours and restart the clock from when you stop aggravating your injury.

What counts as 'strenuous' is fairly subjective and up to the gamemaster, but the player would be advised to err on the side of caution for their adventurer..

i In the damage example for ranged combat, Able took 7 lethal hits. If that is where he was when combat ended, then he would be able to start recovering that damage. Let's say he has a Recovery rate of +0 and ends up in a hospital, for a bonus of +3, giving him a total of +3, as long as he stays in the hospital. A time level of +29, plus his Recovery of +3 is +32, so he gets back the first lethal hit of damage after a time level of +29, or 6 hours. Assuming he stays in the hospital, he continues to get back lost hits, 1 every 6 hours, so it will take 42 hours for him to recover the 7 lethal hits he took.



Realistic recovery

The basic recovery rules are meant to get adventurers back on their feet fairly quickly, and are *far* faster than is realistic for lethal damage, even with modern medicine. To make things more realistic, hits after the first are recovered after an *elapsed* time of +2 time levels, not for *each* time the initial time level repeats. In the previous example, this would mean Able would not get back the seventh lost hit until *16 days* after he had been shot, and that is assuming he does not engage in activity to slow the recovery process. *Severe* injuries can take months or even *years* to fully recover from. If you want to compromise, use an elapsed time of +1 instead of +2. In the previous example, Able would take 2 days to recover his injury at that rate.



i In the damage example for melee combat, Carmen had taken 3 non-lethal hits from getting punched. If Carmen had a Recovery of -1, then after the fight, she would get back the first non-lethal hit (and *all* lost Stamina) after a time level of +21, or 23 minutes, and the second and third hits at further 23 minute intervals. If we were to use the advanced rule mentioned above, she would recover the first non-lethal hit at a time level of +21, the second at a time level of +23 and the last after a total time level of +25.

That's it for basic combat! Everything else is **Advanced Combat**, the tweaks, special cases and details that are only relevant to certain gameworlds. You will surely use *some* of them, but probably not all of them.





The more you want to get out of a game system, the more you have to put into it. But not everyone wants minutia and obscure details. Putting all of those in the basic combat rules would bog it down and turn off many gamemasters or players. So, the core of combat and conflict resolution is the basic rules, and everything else is optional, and you can gradually work your way into it.

INTRODUCTION



The combat and damage system in **EABA** is designed around a simple principle: One medium-caliber pistol shot or a well-placed sword blow *should* be able to *kill* a normal person, or at least render them unconscious and bleeding. *And years of adventuring experience do not matter.* You do not magically gain the ability to absorb more damage. At best, you become healthier and stronger, and *more likely* to survive that bullet or sword, but it is never *guaranteed*.

The **EABA** advanced combat rules are merely embellishments of this principle, side cases of damage for specific weapons, or bits of realism and detail that you may or may not want or need. Consider *everything* in this chapter as an 'advanced topic'. Things in blue would be 'really advanced topics'. The length of the chapter is irrelevant. Take what works for *you*, and leave the rest.

INITIATIVE

This will be all the advanced topics relating to initiative, sequencing and turn structure.



Stamina use

Fighting is inherently stressful. 'Fight or flight' reflex has kicked in, adrenaline is pumping, and you are running, punching, swinging weapons and dodging or blocking attacks. This can wear you out *very* quickly. *This is probably the single most important advanced topic for combat, and one that is usually ignored in most game systems.*

At the end of *each* turn of a combat, all those in the combat burn some Stamina, based on their actions and how much time they spend doing them. Every time you run through your Stamina track, you take 1 non-lethal hit (Toughness does *not* apply), and this has all the normal effects of non-lethal damage. You will take penalties on your rolls if you cross a damage threshold, you can pass out from it, and so on. *After* you take the non-lethal hit, your Stamina track resets and you do it all over again. The rate at which you go through Stamina is:

action	amount
walking or minimal physical effort	+0
running or moderate physical effort	+1
sprinting or maximum physical effort	+2
in melee combat	+1
turn mod or time used on effort	+amt used
activate/use a power as an action	its drain

Add up anything that applies, and take the Stamina loss and the effects *end* of the turn.

i If you were in melee(+1) and *used* +6 turn mod during the turn, this adds up to +7. If you had a Stamina of 6, you would burn 6 points, take 1 non-lethal hit, reset Stamina, then burn 1 more Stamina. Since an average person only has 6-7 Stamina, you can use it up *very* fast. A sprinting person with 6 Stamina will be on the edge of their fifth non-lethal hit (and a -1d penalty) at the end of the fifth turn (elapsed time of 30 seconds).



running: If you are moving at your Run rate, it burns 1 extra Stamina per turn.

sprinting: If your movement rate for the turn is more than your Run distance level, it burns 2 extra Stamina per turn. Note that from a standing start on turn 1 of a fight, you only move at a Run as you accelerate up to Sprint.

i If you applied a turn mod of +3 to movement and your walk, run and sprint rates were +5, +7 and +9, then a movement distance for the turn of up to +8 (walk+3) would count as a walk, a distance of up to +10 would be a run (run+3) and a distance of +11 or 12 would be a sprint.

in combat: If you are in melee combat but only moving at your Walk rate, this is the same as moderate exertion and is +1 Stamina per turn. If you want to give people more combat endurance, leave this factor out.

turn mod used: The turn mod you use is just the fraction of the turn you are doing things that can wear you out. In general, if you are doing something from the table that has a **+1 or more** Stamina cost, then using it over time will add turn mod to the total Stamina cost. If you are doing something exerting that takes time but not turn mod (like holding a heavy weight over your head), you use the time level instead. If something (including powers) has **no** drain, you can use it as long as you like.

activate/use a power: Many paranormal powers (spells, psionics, superpowers) will have a 'drain' or Stamina cost. If the power has a long duration, you just burn the Stamina when you turn the power on or each time you renew it. If the power has a short duration (like a fireball or energy bolt) or is a draining power you can maintain by will alone, then you pay the Stamina cost plus the total turn mod you use, just like for any other physical effort. Keep in mind that this is a case where time and turn mod are separate things, and you can have *multiple* time expenditures going on at the same time.

i Say it is turn 10 of a fight (8 minutes long, +18 turn mod). You have an energy bolt with a drain of +1 per use, a force field stays on for a minute at a drain of +1, and a flight power you maintain by will alone and has a drain of +1 for each +9 of movement distance. So, if you use +18 turn mod on firing energy bolts, hover the whole turn *and* keep the force field going, it looks like this:

Stamina costs	amount
energy bolt	+1
+18 <i>turn mod</i> used on energy bolt	+18
flight power at power level of +9 or less	+1
maintaining flight for <i>time</i> of +18	+18
force field	+1
renew force field eight times	+8
total	+47

That's a *lot* of Stamina. If you had a Stamina of 11 it would *still* be 4 non-lethal hits at the end of the turn. Of course, it is an eight minute turn of energy blasting, flying and using a force field. But it goes to show that anyone with long duration powers that have any sort of drain needs to have a good Stamina. Note that the flight power uses *no turn mod* this turn but does take *time* (even if just hovering, you are *flying* for the whole turn). As a matter of game balance, if you want to cover extra *distance*, you have to apply actual turn mod to the action instead of time.

There are two ways to reduce stamina use. The first is to exit the combat. If you leave the scene and do not come back, you are no longer in the fight and are no longer burning stamina at that rate. The other way is to reduce your level of participation in the fight. The biggest factors in stamina use are turn mod and any stamina-using powers that you are sustaining. If you slack off and avoid the most intense part of the fighting (by using less of your turn mod), you use less stamina. And of course if the turn is long enough, you can just spend part of it resting (see **page 5.25**) so you can get your stamina back!

Debilitating losses of stamina are what *really* end a lot of fights. *One side or the other is simply too exhausted to continue!*



Complex situations

In basic combat, a person does *everything* they want to do when it becomes their Initiative to act, or everyone does one major and/or minor action, then people repeat this sequence until everyone is done.

If you want to subdivide a turn, say that each independent major or minor action someone wants to initiate has to be separated by 3 points of initiative, and the turn ends when everyone has finished for the turn (initiatives *can* go into negative numbers). Minor actions that are responses to other people (like blocks) do not count.

i If you declare '4' for initiative in a round and want to draw and fire a gun, then your draw happens on an initiative of 4, and the shooting on an initiative of 1. In between these two things, people with Initiatives of 3 or 2 get to act, and might do things that affect your shot. In game terms, what you do on Initiative 4 happens on Initiative 4, but in practical terms, it is a series of actions that begins on initiative 4 and continues down the initiative numbers until you get your next action. This would be a case where a **Neat Trick** of 'draw and fire' would let you do *both* actions on initiative 4.

Remember that each action you take normally suffers a penalty of your initiative, *plus* any penalties for doing more than one major action. If you do complex sequencing, the maximum turn bonus you can apply to one action is based on the action. Ranged weapons will be limited to a quantity mod of their remaining supply of ammunition. Movement, melee and unarmed attacks can use any portion of the turn mod they wish. For purpose of combat modifiers, you are counted as using the *maximum* movement that you did at that or any previous point in the turn.

i You declare '4' for initiative. Let's say the turn mod you have available is +4 and your run distance is normally +8. If you apply your +4 turn mod to movement, your movement level becomes +12, or 23 meters. If someone shoots at you, the modifier for your movement is +6 (half the level for your movement plus their movement). Even if this was a turn where you took three actions, and you did not change position on your last action, you are counted as moving the *maximum* rate you had during the turn. The reason for this is to keep you from running really fast, then stopping and taking no penalty on *your* action.

Another way to do sequencing is to consider turn mod as a clock. If you have initiative and spend +6 turn mod on an action, and your foe goes second but only spends +4, then they will get their second action before you do, so between you(A) and them(B) a turn sequence might be A,B,B,A. This is interesting but does not work perfectly because spending +6 turn mod on several quick pistol shots is faster than spending +4 turn mod on running. So it only works for sequencing actions of the *same* type, like if everyone is moving or shooting.

Multiple combats

The ever-lengthening turn scale works *very* well for combats where everyone is at the same location. *But what if a situation divides the combatants into separate groups?* This could be a problem if a group with a turn length of 2 seconds runs into a group having a turn length of 2 minutes!

First, you have to make sure this is *actually* the case. If a turn is long enough that people in one part of the combat can move to or launch attacks against where the other one is going on, then it is still all *one* combat and *one* location. It is just one large combat and one large location. If the gamemaster expects that separate groups are going to run into each other, the best thing to do is synchronize them from the start. So, if reinforcements are notified of a problem on turn 3, insert them into the combat timeline at turn 3.



Their movement towards the combat (and Stamina use) will have the same turn mod as everyone else in the fight, and when they arrive, plug them seamlessly in.

However, if the combats *are* separate entities that started at different times, the best thing to do is at the start of the next turn, you reset back to turn 1. The situation that separated combatants leads to new opportunities and new chaos, so the time scale starts short and lengthens again as the situation restabilizes. *This is one of the few ways in which a combat can last more than ten turns, when a situation changes dramatically enough that it is like starting a new combat!*

If someone becomes a participant in ongoing combat by surprise, they are assumed to have already used as much turn mod as the person who surprised them and have Initiative of 0.

i If you spend +6 turn mod on movement, turn a corner and surprise a guard, the guard is counted as having used +6 turn mod already and has an Initiative of 0 for the remainder of the turn.

Tweaked turn scale

The normal combat system has turn length increased as described elsewhere. If you are not comfortable with this, or it does not seem right for you for a particular encounter or genre, you can always go to fixed turn length and run combats as many turns as you want, or adjust the turn scale to match what you want the players to be able to do in a turn. You would just find the appropriate turn mod for that turn length and apply it to each turn.

i If you were running a fantasy gameworld and felt that a turn length of 6 seconds was about right, then you could just arbitrarily declare that turns were 6 seconds long and every turn had a +5 turn mod for players to apply as they wished between skills, attributes and movement. Or, you could see that things were bogging down and just say "Okay, next round is going to be a minute long and have a +12 turn mod."

Spotting things

It was not mentioned in basic combat, but it should be pretty obvious: *You cannot attack something you cannot see.* Sure, you can lob a grenade blindly into a room, but you are at least assuming the presence of a target. But movies, stories and even real life are full of situations where someone gets the drop on someone else because of distraction or cover or good planning. The easiest way to handle spotting in combat is to assume that anything happening that is obvious is...well...obvious. *No roll is needed.* Do not make life more complicated than it has to be. If you have to determine what 'obvious' is, it would be a difficulty you can '**take 2's**' to meet with an appropriate Awareness roll. In good visibility, this is a range level of twice this amount.

i If you an Awareness for seeing things of $3d+1$, then anything of difficulty 7 or less is 'obvious'. In this case, a range level of +14, or 45 meters.

Anyone who leaves your sight or other senses during combat has to be reacquired if they reappear stealthily or from an unexpected direction. This is an Awareness roll against half the difficulty for range (round down) for visual spotting, or the normal difficulty for range for things you try to spot through hearing. Any penalties for **weapon arcs** will apply to your Awareness for visual spotting (it *is* harder to see something sneaking up from behind). If there are multiple ways to spot something, you use the *one* you want or think gives you the best chance, but you do *not* use all of them.

Spotting rolls for something that is happening in the midst of other actions does *not* count as an action, you are merely noticing changes in an evolving situation, and such free Awareness rolls may not apply any turn mod. However, making a *deliberate* spotting or listening roll is a minor action. In the case where you *are* spending time on the action, you *may* apply any part of your turn mod towards the roll. *If you spend time looking/listening, you have a better chance of seeing/hearing something.*



In poor visibility, difficulty for spotting will be higher, and it could be that *nothing* is obvious and actions are required to spot *anything*.

vision arc	awareness roll
front	+0 penalty
side	-3 penalty
rear	-6 penalty
indirect	-varies

vision condition	difficulty
default vision	+range level/2(d)
well lit & open	+0
poor lighting	+2
dusk	+4
moonlight	+6
starlight	+8
no light	vision n/a
sight related to a $\geq 4d$ skill	-2

light obscurement, 50% cover	+2
medium obscurement, 75% cover	+4
heavy obscurement, 90% cover	+6
total obscurement	vision n/a
item (movement - time)(not < 0)	-total/2(d)
item size	\pm size level

hearing condition	difficulty
default hearing	+range level
no background noise	+0
background conversation	+2
traffic noise or light machinery	+4
background melee combat	+6
background gun combat	+8

to hear gunshots	-level of damage
to hear obvious powers	-level of effect
to hear silenced gunshots	-dice of damage
to hear subtle powers	-dice of effect
to hear your name	-4
sound related to a $\geq 4d$ skill	-2

i You are looking in your front arc and something moves 8 meters (distance of +9) in 4 seconds (time of +4), 200 meters away (distance of +18). Noticing it is half the range level (+9), *minus* half its (movement minus time) for -2, for a difficulty of 7. Odds are pretty good you will spot it.

indirect: This modifier is worth noting as a special case. It means you are seeing things through some other device, like a surveillance camera or a periscope, which limits the range and quality of what you can see.

Bear in mind you can have gear which alters these modifiers, from a flashlight that changes lighting for everyone, to night vision goggles that affect the apparent lighting for just the wearer. Similarly, the level of obscurement can be changed in an instant. Going prone in waist-high grass takes you from 50% cover to *nearly* 100% cover (they can't see *you*, but they *can* see if the grass moves). *And also bear in mind that obscurement is not always the same as armor.* The tall grass might hide you, but it does *not* stop machinegun bullets...

! The 'your name' difficulty adjustment for hearing is what is known as the 'cocktail party effect'. Having become used to hearing it all our lives, we are very good at pulling our name out of the clutter of background noise. So, you might not hear *what* someone is saying about you, but you *would* be likely to catch that someone was talking *about* you. A low-tech society's non-scientific awareness of this might be what is behind the superstitions of not speaking certain names (like devils or fey), lest the being in question hear you and show up to see what is being said about them. Similarly, the skill-related adjustment reflects that you are attuned to the sounds of your profession and are more likely to hear them. For instance, as a gamer, odds are that you will pick up the rolling of dice over background noise easier than most people.

! If you look at them, all of these visibility and hearing modifiers are really just interpretations of values on the **Universal Chart**. For instance, the modifier for object under 50% cover is the same as the modifier for a torso-sized target (about 50% of a person). So, once you remember that sight rolls are half the difficulty for range and hearing is the full difficulty for range, you should be able to wing most of the rest.



Movement

There are not many special rules for movement that you will need on a regular basis. The ones that do exist are here just because you may occasionally need to look one up.

acceleration: In the basic rules, you walk as a minor action, run as a major action and sprint as a major action that counts as two, noting that your *total movement level* for a turn is your appropriate movement rate plus turn bonus. So, you may *not* take three major actions and run for *each* of them to cover more ground. Instead, you choose your movement level and then apply turn mod to represent how much of the turn is spent moving.

In the real world, you cannot get up to full speed instantly. In order to sprint, you have to have been running on the previous turn, or use +2 of your turn mod to go from stationary or a walk to a sprint, which effectively means you cannot sprint on the first turn of a combat, since the turn mod is +0.

i You have a walk, run and sprint movement level of 4, 6 and 8. It is turn 3 of a combat, so the turn mod is +4. If you had been running on the previous turn, you could sprint on this turn and move a total distance during the turn of +12 (movement of +8 with a +4 turn mod). If however, you were going from a walk or standing start and wanted to sprint this turn, it would cost you +2 of your turn mod, so you could move a maximum distance level of +10. You would use all of your turn mod to do this (+2 to accelerate, and +2 on your sprinting movement level).

jumping: Unless you have an enhanced skill to affect it, your standing jump distance level is half of Strength or Health (round nearest), whichever you are basing the jump off of. Your vertical jump distance is a quarter your Strength or Health (round nearest). A 'vertical jump' is what you can get your whole body over. If you are moving, you can add half (round nearest) your movement distance level to your attribute.

i If you have a Health of 10, you have a standing horizontal jump distance of +5 (2 meters) and vertical jump distance of +3 (.7 meters). If your sprint distance was +9, you could add +5 to your Health to get +15, for a running jump distance of +8 (6 meters) and vertical jump distance of +4 (1.4 meters).

swimming: Swimming distance is handled like walk/run/sprint, except all the numbers are reduced by 6. You can cover most alternate forms of movement (flight, burrowing, etc.) just an addition/subtraction to walk/run/sprint.

i If you have a walk movement level of 4, then your swimming equivalent of walk/run/sprint is -2/0/2 (the world record speed would be 5).

Maps

Combat maps are glossed over in the basic combat rules. *This is deliberate.* Maps will inherently slow things down and can turn an emotionally dramatic combat into a tactical board game. A good gamemaster can describe scenery and positions of people in sufficient detail for short encounters, or make a very simple diagram showing relative positions and ranges. *As each turn gets longer, the exact distances become less and less important.* If you can run fifty meters in a turn, it's pretty safe to say the gamemaster should let you run fifty-one meters if that puts you in a more advantageous range band for shooting someone (or getting away from being shot!).

However, in *some* cases a map or detailed diagram *is* integral to the situation. If you are trying to rescue hostages, you want the *total* floor plan of the building. If you are infiltrating an enemy castle, *you* might not know the floor plan, but the *gamemaster* needs it because if things go south (and you know they will!), then rooms and corridors and placement of guards and traps all become something you need at your fingertips.

The moral of the story is to use no more (and no less) detail on the table than is needed. *Determining that level comes with experience.*



SKILL USE

There are lots of special cases regarding the use of skills in a game system with a sliding duration turn scale.

The first few topics will be general cases, and then we will handle ranged combat, melee combat and other specialized situations.



Outmatched

In any *competitive* situation in **EABA** where you have a *base skill roll* or attribute roll that is at least 2d more than your opponent, *you win*. It may take a while, but the *outcome* is not in doubt. This is the roll of professor vs. student, dojo master vs. 1st degree black belt, or chess grand master vs. the talented kid at the high school chess club. Unless there is a pressing time consideration or the underdog can narrow the dice gap to less than 2d, the better person can just say they 'outmatch' the loser and describe in dramatic terms how it happens. This is a competitive version of '**taking 2's**', and is useful for neutralizing sentries, sneaking past inattentive guards, running con games on unsuspecting marks, picking the pockets of the unwary or other tasks that really do not need to be handled as a detailed, time-sequenced encounter. It will not work in *every* competitive situation, but it *is* a way to speed up many encounters when you have an adventurer of high skill dealing with a normal person. *It is also a way for a high-skill extra to deal with an adventurer without the player knowing about it.* Taking 2's and outmatching can turn simple combats into the statement "I deal with the sentry quickly and silently", and you move on to the next encounter. If outmatching requires multiple skills, *all* must outmatch the opponent.

However, if time is a consideration, you have to play it out. If the alarm has *not* been raised, outmatching to get past the outer ring of sentries can take as long as it needs to. On the other hand, if the alert *has* been sounded, then every turn an obstacle can slow you down is a turn that ways for you to escape can be closed off..

If you want, you can even apply outmatching to group situations. Take the *lowest* applicable skill in the more skilled group and the *highest* of the applicable skills in the other group. Each group gets the level of the quantity mod they have (i.e. x8 guys would get a +6). If the difference between the groups is 2d or more, one group outmatches the other. Note that you should assess some stamina use for long outmatching situations.

i You have two martial artist adventurers with skill levels of 6d+0 against six thugs with skill levels of 3d+0. The martial artists have a quantity of x2 for a quantity level of +2, adjusting their skill to 6d+2. The thugs have a quantity of x6 for a quantity level of +5, adjusting their skill to 4d+2. The difference is 2d, so the pair of martial artists do their thing and 'outmatch' the six thugs. The gamemaster would just narrate the adventurers tearing through the thugs, and you then move on towards a more challenging confrontation.

It is even possible for the gamemaster to outmatch a player or a group of players, but not without good reason. You can tell the players "The guards outnumber you enough to outmatch you. We do not need to play it out. You can surrender and go along quietly, or they can drag your unconscious bodies off to the the holding cells after beating you bloody. *Your call.*" Players will probably be unhappy with you, but it might be giving them the best choice in a bad situation. *Of course, having done this to the adventurers, you are now obligated to create a situation where the players can extricate them...*

Just remember that outmatching is usually *not* for tasks based on a single, short action, which is what 'taking 2's' is for. A chess grandmaster outmatching a talented kid *still* needs a certain number of turns to do it. To quietly dispose of the sentry *still* requires that you sneak up on him, and unless this sneaking is a single move from nearby concealment, you would do it as outmatching rather than 'taking 2's'.



Dialogue

As turns get longer during the course of a combat, the extra time allows for the witty or gritty repartee between foes that you often see in the movies. This usually has no *direct* game effect, but a clever player could and *should* use it to try and turn the situation to their advantage. Knowing things that could cause a foe to act irrationally *or* predictably can give you the same sort of bonus as a feint, or cause someone to make a Will roll because of a personality Trait. The difference is that you can just *say* you are feinting. Using dialogue to get a combat bonus requires that the *player* actually get into the role and the situation and *make it happen*. Not all players can or are willing to make the effort to do the dialog *and* find the game mechanic advantage in it, but they *should* be encouraged when they do.

i In the final fight scene of the movie *Quantum of Solace*, James Bond has defeated Dominic Greene, and the only thing keeping Greene from plummeting into fiery wreckage is Bond's grip on his hair. A single gunshot is heard from the rooms of General Medrano, where Bond's female compatriot (Camille Montes) is at. Greene, either realizing he has failed Quantum and is doomed anyway, or desperately seeking an advantage, tells Bond in a mocking voice "Sounds like you just lost another one!". *Greene is using his knowledge of Bond's history and personality.* He is either trying to goad Bond into dropping him (a fate preferable to capture) or to cause Bond to hesitate, or lift Greene up to the walkway where he might be able to escape or turn the tables. *In this case, the latter.*

Depending on how you look at it, Bond either does *not* fail his Will roll, does *not* succumb to a desire for revenge and drop Greene into the flames, or *does* fail his Will roll and puts saving Camille ahead of capturing Greene. Bond yanks Greene up to the walkway and leaves him there, and runs off to find out what has happened in the general's rooms. Greene then makes a limping escape attempt from the exploding facility.

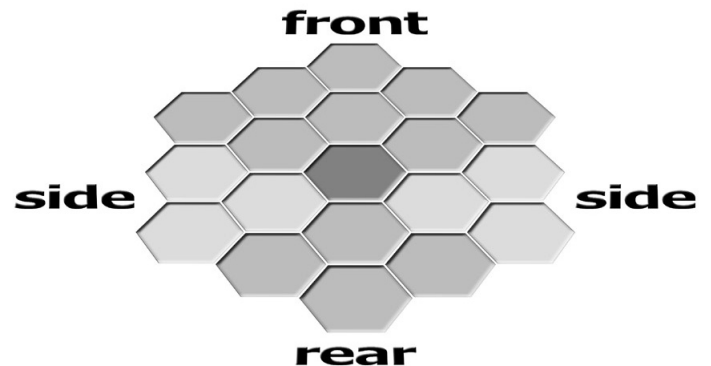
GENERAL COMBAT

There are a few advanced topics that apply to both ranged *and* melee combat.



Weapon arcs

The 120° arc in front of a person is where they can make combat rolls and visual spotting at no penalty. The 60° arc to *one* side is a -3 penalty to attacks *and* defense rolls. Which side this will be depends on your situation. For instance, pretend you have a rifle against your shoulder and see which side arc it is easier to fire into. Pretend you have a sword and shield and see which side is harder to protect with the shield. Visual **spotting** to either side takes a -3 penalty because it is in your peripheral vision. Attacks, defenses and visual spotting to an off side or rear 120° arc are at a -6. These combat penalties can be partially offset by relevant **Experience**, effects of an **enhanced skill**, or simply by use of turn mod.



In addition to weapon arcs, people can be disadvantaged because they are prone or otherwise hindered. Trying to attack or defend while prone is a -6 penalty to unarmed or melee combat. Being seated, kneeling or at a similar disadvantage is a -3 penalty. You can have an Experience or enhanced skill to deal with these penalties, like a martial art that deals with maneuvers from these positions.

! There are also situations that have to be dealt with on a case-by-case basis. For instance, if you have a knife and your foe is prone, you might have to kneel to stab them.



Remember that because of the length of a turn, simply moving to someone's side or rear is no guarantee they will take a penalty. They could easily have seen you coming and turned to face you without needing initiative or an action to do so.

! Unless a player sets up a compelling game situation, it is unlikely they can start an action in front of a person and then get a combat advantage by moving around behind them to make their attack.

Nonetheless, there *are* situations where you can make this work for you. For instance, if two people are fighting one, the two can maneuver so the one cannot keep them *both* in the front arc.

Mass fire

There will occasionally be situations where there are a *lot* of people trying to do the same combat action against a single target. Usually this is a lot of people shooting at adventurers or something similar. Rather than having every last one of the extras make a skill roll, clump them into groups of similar weaponry and skill rolls, and then apply a quantity level based on the number of them in that group. This adjusts their skill roll and becomes the chance that the group as a whole gets a hit or multiple hits. This is a case where a massed *melee* attack could get multiple hits on a target.

i Eight people would be a quantity level of +6, so you could make *one* skill roll with +6 on top of any other modifiers, to see if that group of x8 people gets one or more successes.

For each ten attacks (round down), a success at mass fire gets one hit, and each 2 points the difficulty is beat by becomes an extra hit or hits. So, if there were thirty attacks, a barely successful roll would result in three hits to the target. Making the roll by 2 would result in six hits to the target.

i A dozen bandits shoot their sixguns (once) at a fleeing bounty hunter, who is 20 meters away (difficulty of +11), on a horse with a movement modifier of +6 (half its distance level), for a final difficulty of 17. The bandits only have adjusted skill rolls of 3d+2, giving them *as individuals* a pretty poor chance (about 9% each). Rather than rolling for them individually, you see that the closest quantity level to a dozen (x11) is +7. So, apply a +7 modifier to their skill roll (making it 6d+0) and roll *once* to see if the bounty hunter gets hit. Since there are more than ten but less than twenty attackers, making the roll to hit means the bounty hunter is hit *once*, and again for each 2 points the roll beats the difficulty.

The cumulative probability of doing things this way is not *exactly* the same and its accuracy varies depending on the skill level, starting difficulty and quantity, but it is a *lot* more streamlined to resolve. It can also be used to speed up certain melee combats, like where the martial arts master faces down several lesser foes at once but cannot *quite* outmatch them for an automatic victory. All of them make one roll as a group to hit him *once*, while he makes rolls to try and hit one of them, to try to reduce their numbers and thus their mass fire bonus.

Dramatic called shots

This is where you want to do something showy or cinematic. It is an extra +4 difficulty on top of the normal called shot or task difficulty, but if you pull it off, you get any beneficial side effect or visual effect from the attack that you want, *within reason*. For instance, Zorro slicing a 'Z' into the shirt of his enemy, or slicing through a candelabra of lit candles without knocking any of them over. Or, a motorcyclist lays their bike down to slide under a low obstacle and then pops it back upright and keeps on riding. Or, you shoot at a tank of something flammable and use the dramatic called shot to *guarantee* that it explodes for you. There are all kinds of things you can do with a dramatic called shot, and the modifier is meant to allow clever players with skilled adventurers to do cinematic things.



RANGED COMBAT



These will be advanced topics relating almost exclusively to use of ranged weapons. Odds are good that you will find *something* in here that you will want to use on a regular basis.

Autofire

Some weapons or powers have a mode that would be called 'autoburst' or 'autofire'. For a firearm, this means that each time you pull the trigger, the gun fires three or ten times, respectively. *This is still only one major action, though.* What it means is that you can get multiple hits up to a level of +3 (autoburst) or +7 (autofire) over the actual turn mod used.

i If it was the first turn of a combat (+0 turn mod) and you pulled the trigger once on an autoburst weapon, you could get up to 3 hits. This would be 1 hit for making your skill roll, 1 more for making it by two and 1 more for making it by 4 or more).

The maximum turn mod you can apply to an action using an autofire weapon is based on the quantity mod for the number of autoburst or autofire attacks you do. That is, you apply turn bonus based on how many times you pull the trigger, not on how many *shots* are fired.

i If your weapon has an autofire mode and a 30 round clip, then you pull the trigger three times and the clip is empty (10 rounds per trigger pull). Trigger pulls x3 would be a +3 quantity level, so you can use up to +3 of turn mod on this action, but get any number of hits within reason. That is, you could get up to +10 quantity level of hits (turn mod + autofire bonus), but this is x30 hits and you are unlikely to make your skill roll by 58 points to get 29 extra hits... However, you might do a 'best 3' roll of 20 and get the maximum possible number of hits for those circumstances.

If you only wanted to fire 10 rounds, you could. This would be a x1 quantity (+0 quantity level), so if you applied no turn mod you could still get up to a +7 quantity level of hits (up to x11 hits). *Actually, to x10 hits, but you see how it works...*

And this kind of makes sense, since you probably have a better chance to get more hits with three ten-round bursts than with one thirty-round burst. And while it might take longer, ten three-round autobursts is probably better than three ten-round bursts. However, autofire is really useful for **covering fire**, which is figured based on how much lead you are filling an area with, and this would be the time level of the turn plus the autofire bonus.

i If you were doing covering fire over a 4 second turn (time level of +4), then an autofire weapon would let you use up to a quantity level of +11 in bullets (x30), while a semi-auto would only let you use a level of +4 in bullets (x4).

In the occasional case where you can see the effects of the weapon, because of something like tracer ammunition or because you see dust kicked up by bullet impacts, it reduces the difficulty for range by 2, *if the weapon is using at least 20 shots.*

i A 30 round clip would give you a +3 quantity level for autofire (3 trigger pulls). If you had tracer ammunition and used at least 20 shots on *one* action you could reduce the difficulty for range by 2.

If there are multiple rules in play that give extra successes for making a roll by a certain amount, then you increase the number of hits by 1.

! Whether or not autofire is in your best interest depends on the situation. For instance, if you have a turn mod of +0, then autofire or autoburst gives you the chance of multiple hits with each attack. On the other hand, if you have a turn mod of +8 and your foe is at long range, you might be better off firing two major actions of individual shots with a +4 turn mod each, since the difficulty to hit will be fairly high and using lots of shots on autofire would mostly be wasted.



Shotguns

For rule purposes, a 'shotgun effect' is what you get from a ranged weapon or any attack that makes multiple attacks simultaneously rather than sequentially. 'Buckshot' from a shotgun is the most common example. Shotguns are also capable of firing a single large projectile, called a 'slug'. The rules for shotguns can also apply to some melee attacks. A claw might be treated as several small attacks that happen at the same time, rather than one large one. You could also use this effect for a weapon which fires bursts so rapidly that they all hit at about the same time, even though they are *technically* separate shots.

A shotgun can fire a small number of large shot, or a large number of smaller shot. The way you work it out is to take the damage for the 'slug', add 1d, and then split this amount so that the damage dice plus the number of hits adds up to this total.

i If you had a 3d+1 slug, you would add 1d to get 4d+1, and you could choose to load ammunition that would do one of the following:

- 1 hit at 3d+1 (because 1 + 3d+1 = 4d+1)
- 2 hits at 2d+1 (because 2 + 2d+1 = 4d+1)
- 3 hits at 1d+1 (because 3 + 1d+1 = 4d+1)
- 4 hits at 0d+1 (because 4 + 0d+1 = 4d+1)

All of these add up to 4d+1. The difference is in the size and number of the pellets. If you make your roll to hit with a shotgun, you hit with *all* the pellets. Each of the pellets will act against armor separately, and may have different effects against different hit locations. But the total damage that gets through defenses counts as *one* hit, so for instance, blunt trauma through armor would only apply Toughness once against the *total* of the non-lethal damage.

A weapon or damage that has a shotgun or shotgun-like effect will have a small 'g' after the damage, like this: 2d+1^g.

While a pellet blast from a shotgun is far less effective against armored targets, it can be *more* effective against unarmored ones. Because the multiple pellet hits happen simultaneously, they count as a single hit for purposes of crossing damage thresholds or **crippling damage**. This means that it would be a better stopper than an autofire attack of similar damage, which counts each hit *separately* for these purposes. Any other combat effect that acts the same way could be counted as doing this, so if your master archer fires two arrows simultaneously at a target (with a **Neat Trick**), the *total* damage would be used for determining if there was crippling damage, not the individual hits.

Pellet spread

Because the pellets from a shotgun spread out after firing, a shotgun using pellets *can* lose some of its extra hits at range, as the spread becomes bigger than the target. The easiest way to handle this is to roll for hit location of the first pellet hit. Remaining hits alter the hit location roll by one-quarter the distance level to the target (round nearest), alternately adding and subtracting from the initial location. If the initial location roll is odd, add the amount, if even, subtract it (or just flip a coin). Hit location results of less than 3 or more than 18 are misses.

i You hit a foe with three pellets at a range of 11 meters. This is a distance level of +10, so the location shift is 3 points (one-quarter of +10, round nearest). The first location rolled is 9, a shoulder hit. Since this an odd number, the second hit adds and goes to location 12, in the hip. The third hit subtracts 3 and hits in location 6, the skull. On the other hand, if it had been at a range of 2 meters, the displacement on each would only be 1 point, and the hits would have been to the shoulder(9), chest(10) and lower arm(8).

In addition, very small shot can suffer from losing energy at range (see **Damage at range**).



Continuous beams

Futuristic weapons like lasers, or some kinds of paranormal effects can fire a continuous beam. Instead of multiple shots fired as a single action, an uninterrupted stream of energy goes from the attacker to the target. This is a nearly infinite rate of fire, like pointing a fire hose at someone. Such weapons count as autofire *and* can get a quantity mod of up to +14 **over** the normal turn mod allowed. That is, it counts as a *huge* number of shots (large quantity level) that happen in a small amount of time. **Unlike normal autofire, this bonus can be applied to your chance to hit.**

Such a weapon would have an energy bank rated in a number of shots, and you would apply the quantity mod desired, up to +14 per turn, *plus* any turn mod used. In addition, to represent the potential of extra damage by holding a beam on a single spot on a target, you can trade in +2 of this extra quantity mod on an attack to get +1 damage if you do hit, and you can do this for up to +7 damage. Continuous beams can be steered towards a target like autofire.

i You have a continuous beam laser with 250 shots and the current turn mod is +2. So you have up to +16 that can be applied to your skill (+14 for the laser, +2 for turn mod), or +14 that can be traded 2-for-1 for extra damage on your hits. An example might be to give your skill roll a +8 bonus and apply the other +6 as +3 (or +1d) on the damage. Using a +14 quantity mod means you use 125 shots and a +16 quantity mod is 250 shots (your laser *plus* the turn mod), so you *could* empty the weapon with a *single* action on this turn. As you can see, any weapon using the continuous beam modifiers has to have a *really* large energy supply or a really frugal user. Such weapons often have very low damage and requires these huge bonuses in order to boost damage to useful levels.

Damage that has a continuous beam effect will have a small 'c' after the damage, like this: 2d+1^c.

Covering fire

This is in the advanced combat section, but it is a tactic that you have probably seen in every action movie ever made. Someone fills an area with bullets or arrows or laser beams to make someone else keep their head down or otherwise discourage them.

The difficulty of getting a hit is just statistics, since you are not aiming at anything specific. The difficulty is +3 over the normal amount for the range, plus the quantity *level* of hexes you are filling with the attack.

i If you wanted to pepper the top of an 8 meter wall with bullets to make some bad guys keep their heads down, a quantity of x8 is a level of +6. So, if this wall was 45 meters away (range difficulty of +14), the difficulty for covering fire is 14 (range) + 3 (covering fire) + 6 (8 hexes covered) = 23. That's a pretty high difficulty.

You can reduce this difficulty by the amount of fire you put into an area. The quantity *level* of bullets or beams or arrows reduces difficulty, and the length of the turn increases it. If it is necessary for dramatic purposes, you can use covering fire for *part* of a turn, for instance making people keep their heads down while someone uses +4 turn mod to move from one position of cover to another.

i Using the previous example, we will say it is an 8 second turn (time level of +6), and you have four guys with autofire rifles and 30 round clips (which they can easily empty in 8 seconds). Since a quantity of x120 is a level of +14, this makes the adjusted difficulty 23 (from previous example) + 6 (time level) - 14 (lots of bullets) = 15. This is still not great, but it does mean that each meter of wall has a bullet whizzing by it twice a second. Some will miss high, some will hit the wall, but others will be insanely dangerous for anyone poking their head out of cover. Since they have time to reload, they could boost their quantity to x240 for a quantity level of +16, which would drop the final difficulty to 13 instead of 15.

You can even do covering fire with single shot weapons, provided you have enough people with them.

i If the turn mod is +6, this is an 8 second turn. If all you needed to do was cover a 1 meter wide doorway from a range of 16 meters to keep an enemy archer pinned, six bowmen could combine efforts to do *one* covering fire. That is, bows are single shot weapons which would have a quantity mod of x1, so x6 of them would be a quantity level of +5. In fact, they have time to reload and fire again, which would be x12 shots for a quantity level of +7. So, the difficulty would be +11 (range) + 3 (covering fire) + 1 (doorway) + 6 (turn length) - 7 (a dozen arrows) = 14. Anyone and everyone crossing that doorway over that 8 seconds (up to a dozen, we suppose) has a chance to be hit equal to the average archer skill roll against a difficulty of 14.

If a target is *in* the area or the instant a target *enters* the covered area, you get a roll to hit them, which may be adjusted by the size of the target. So, someone who could not see you behind a hedge *could* lay covering fire into some or all of the hedgerow and might hit you by sheer chance. *Not being seen does not help if there is only one place for you to be hidden.*

Target movement or Dodge does not really matter against covering fire, since you are not aiming *at* them, you are just hoping to hit them by accident. You are exactly as likely to dodge into the path of a random shot as you are to dodge out of its way. The size of the target *does* matter, as they might just be peeking around the corner. To avoid people abusing the rules, partially exposing yourself to fire should just roll random hit location to see if the attack hit cover or the person.

! Technically speaking, covering fire might hit anything *between* you and the covered area, so you *should* include anything in that arc of fire as the area that is dangerous to be in, enter or cross at no additional increase in difficulty.

i If we use the first example of four people with autofire rifles laying covering fire on a wall, the final difficulty was 15. A called shot to the head would be +6 difficulty, making it 21, or impossible on a 'best 3' roll. To keep people from peering out and rule-lawyering they will not be hit, on any exposure you roll a random hit location and if it is the body part you were showing, bad luck for you.

You can get multiple hits with covering fire. Assume that the total number of hits you can get with covering fire is not more than the number of shots fired. So if your covering fire is two quick shots while your friend dashes past the open doorway, you can hit no more than two people showing themselves or hit one person twice and anyone else showing up is safe for the time being.

Covering fire lasts until the end of the turn or for whatever chunk of turn mod you were applying it over, whichever comes first. A side effect of this is that people choosing to stay under cover and avoid exposure to covering fire give up that amount of their own turn mod for that turn.

i If you say that you are using covering fire for +6 time on a turn that has +8 turn mod, then any foe who cowers behind cover until you are done has given up +6 of their turn mod for that turn, so they only have +2 left to use once covering fire ends.

Covering fire

People tend to have a good idea of what attacks will do to them and how concentrated covering fire might be. If one hit can ruin their life, they (*or even adventurers!*) have to make a Will roll of (24 minus attacker's difficulty) in order to expose themselves to fire. Leadership as an enhanced skill could adjust someone's Will by ± 2 . So, in the first example, those behind the wall need to make a Will roll against a difficulty of $(24 - 15) = 9$ in order to expose themselves and shoot back. Other circumstances can adjust the Will roll, like having a political commissar with a pistol who will shoot you for cowardice if you do not do it..



Damage at range

Many ranged weapons are slowed by passage through the atmosphere. This is not noticeable at short range, but is a significant effect at longer range. For instance, the *real-world* energy of some commonly used calibers is about:

weapon	muzzle	23m	90m	350m
9mm	100%	91%	72%	43%
5.56mm	100%	90%	66%	30%
7.62mm	100%	96%	86%	57%
12.7mm MG	100%	97%	90%	68%

And so you know, in **EABA**, a 25% change in energy is about ± 1 damage. If you want to drop damage with range, the *general* rule is that ranged weapons lose $0d+1$ of damage at a range level of its full dice of damage plus 12, and another $0d+1$ each +2 range levels after that.

i A 9mm pistol with a damage of $2d+1$ goes to $2d+0$ at a range of +14 (45 meters), to $1d+2$ at a range of +16 (90 meters) and $1d+1$ at a range of +18 (175 meters), while a 5.56mm rifle with a damage of $4d+1$ would drop to $4d+0$ at a range of +16 (90 meters) and $3d+2$ at a range of +18 (175 meters).

This is not all that accurate. Ranged weapons lose energy based on their drag, weight, density and velocity, while the *only* game stat we have to model it with is raw damage. Light bullets may lose energy faster as they slow down, heavy bullets slower. Long arrows with a high surface area slow down quickly, while heavy rounds from a cannon lose energy very slowly. *The only real reason for using a declining damage rule is for dramatic effect.* If the adventurers are being chased, increasing the range means that even if they are hit by their pursuers, they will take less damage or their armor has a better chance to stop it. And similarly, fleeing villains have the same advantage. Remember that this rule only applies if the weapon is impeded by the medium it is passing through. Bullets fired in the vacuum of space do not slow down, or weapons with an explosive payload do not care how fast they are going when they arrive at the target.

Advanced aiming

An important note about aiming is that if a weapon has recoil or requires some sort of manipulation of the weapon between shots, then aiming only applies to one shot or one action. If you have to draw another arrow from your quiver or work the bolt of a rifle or the weapon jerks in your hand, or you change targets, the aiming bonus is lost after your firing action, as is any benefit from turn mod used.

If none of the above apply, you *can* retain the adjusted Accuracy of the weapon or attack from action to action with a basic aiming action. Skill bonuses are still lost, however.

i If you have +8 of turn mod to play with and a laser rifle with no recoil, you could aim and then spend +6 turn mod for an extra +2 Accuracy and a +2 to your skill roll. This leaves you with +2 turn mod out of your original +8, so you could do a second aimed shot at the *same* target by using that +2 of turn mod, and this second shot would still get the Accuracy+2, but you *would* not get the +2 skill bonus and would have a -1d on your roll for the second major action. You could use the +2 turn mod you have left to partially offset the multiple action penalty, so your actions would be: First shot at +2 skill and Accuracy+2, second shot at -1 skill and Accuracy+2.

You *may* try to aim something like an autofire or autoburst weapon with recoil (you are pulling the trigger once for one firing action), but only the very first shot counts as aimed. Whatever difficulty is offset by Accuracy does *not* apply to later shots, so the Accuracy used is added to the amount you have to make the roll by to get the *first* extra hit.

i If you have an autofire rifle with an Accuracy of 3, you normally get one extra hit for each 2 points you make the roll to hit by. If the first shot was aimed, you would need to make the roll by 5 to get a second hit (the normal 2 points *plus* Accuracy), and then by the normal 2 more than this for each additional hit.



Accuracy tweaks

The maximum Accuracy possible using nothing more than open sights is 4. You *could* tweak this to allow differences for alien races by saying the 'open sights' limit is the full dice in Agility plus 1. Time and bracing might improve this, but peering across a couple of grooves or holes at either end of a weapon is going to be fairly low compared to what you can do with technology. The conditional benefits to aiming mentioned in the basic combat chapter break down something like this:

pistol	accuracy
using one hand(default)	+0
using both hands	+1
braced against solid object	+1

submachinegun	accuracy
using both hands(default)	+0
using one hand	-2
braced against solid object	+1

rifle/shotgun/crossbow	accuracy
using both hands & shoulder(default)	+0
using one hand & shoulder	-2
firing from hip	no aiming
braced against solid object	+1

mounted weapon	accuracy
tripod or mounting(default)	+0
dismounted	no aiming

In general, the maximum range level for a called shot is (20 + Accuracy - called shot modifier).

i A pistol with an Accuracy of 1 can do a called shot to a hand (+8 difficulty) at a maximum range level of $(20 + 1 - 8) = +13$, or 32 meters. A rifle with an Accuracy of 4 can do a head shot (+6 difficulty) at up to $(20 + 4 - 6) = +18$, or 175 meters. At gamemaster option, actions that adjust Accuracy can affect this maximum range.

Technology allows for improvements on the inherent Accuracy of a weapon. The most likely improvement is a telescopic sight, which can be added to many weapons for extra Accuracy (+1 or +2 for readily available models).

Larger or more advanced weapons can have stabilized mounts, and can even compensate for target movement, changes in temperature, air pressure, wind, even the cumulative wear and tear from using the weapon. All of these increase the potential Accuracy of a weapon, though some of them actually just offset a particular increase in difficulty (like wind). At the most rarefied end of performance, it is fairly safe to say a person with a handheld weapon can never utilize more Accuracy than double the full dice in their *base* skill roll. A skilled person can better compensate for their own heartbeat, breathing and so on, all of which are very important when trying to hit a tiny target at long range.

i If you had a skill roll of 4d+1, the maximum Accuracy *you* could utilize would be double your *full* skill dice, or an Accuracy of 8. On the low end, if you were firing a rifle with an unskilled default roll of 1d+2, the maximum Accuracy *you* could utilize would be 2. In *both* cases, you *could* get the benefit of turn mod for a higher *adjusted* Accuracy, but this does *not* adjust the Accuracy you can utilize from your *base* skill roll.

The technology scale of **EABA** is broken into eras (**page 7.2**), and the maximum Accuracy of a weapon at various eras is below (right now we are between Atomic and Post-Atomic):

tech era	acc limit
primitive	4
basic	7
industrial	11
atomic	18
post-atomic	29
advanced	47
fractional era change (round acc up)	±25%

Yes, the potential Accuracy of high tech weapons is incredible, but remember these are weapons that can handle starship combat ranges (so an Accuracy of 47 makes 4,000 kilometers a range difficulty of 0!). The higher the Accuracy, the more specialized the weapon is going to be. A sniper rifle might be customized for a *particular* user and have ammo custom loaded for that *particular* gun.



! For those into the technical side of things and understand what these terms mean, Accuracy compared to MOA is *about* as follows, assuming Accuracy, +1 for bracing, +2 of turn mod and a dice roll to hit of 14 (about a 90% chance of success).

MOA	accuracy	'head shot' range
4	3	125m
3	4	175m
2	5	250m
1	10	500m
.5	12	1000m
.25	14	2000m

If you do not know what all this means, a rough version is that a *lower* MOA is a *more* accurate weapon and that an MOA of 1 means the bullets will fall within about 2.5 centimeters of the target at a range of 100 meters. A modern military rifle using bulk ammunition is between 2 and 4 MOA (note that this Accuracy goes well with the skill roll of a soldier with little experience). A *good* hunting rifle is *capable* of 1 MOA (though many rifles and many hunters are *not* that good), while something like the US M24 sniper rifle can do .5 MOA and the finely tuned (and impractically bulky) competition rifles can do about .25 MOA.

Throwing things

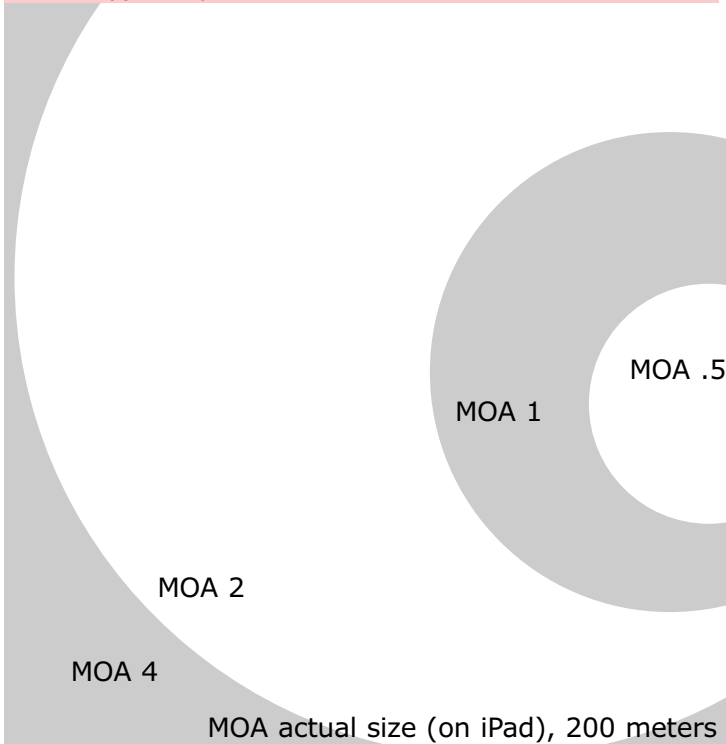
In *theory*, you can throw something a distance level of your Strength minus the weight level of the object. And if you happen to be in a total vacuum and do a two-handed, full-body throw, the numbers probably work. However, for the more likely case of throwing something one-handed in an atmosphere, you need to adjust things. Thrown objects, no matter how light, are never counted as having a mass level of less than -6 (negative mass levels *add* to throw range). This covers the effects of wind resistance against maximum throw range.

throwing	distance mod.
base distance	Str-3(or throw)
two-handed throw(if possible)	+3
preparation(major action)	+1
running throw(each +4 distance)	+1
light/dense object	±1

i A Strength 8 person throws a grenade after a windup on the previous action. This is a one-hand throw. The grenade counts as a mass level of -6, so throw range is Strength-3(5), preparation(+1), minus the grenade mass(-6), for a total distance level of +12 (23 meters). This could be increased to a distance of +13 or even +14 with a running throw or it might count as a dense object for +1 range. Remember that you can have a **Forte** on throwing, and also buy Throwing as an **enhanced skill** to give extra throwing power.

A miss with a thrown object or indirect fire is usually in a random direction, off by a distance level of +1 per point of miss (maximum of half the range). Thrown weapons generally do throw damage, modified by the weapon type. Sharp or pointy objects do lethal damage, hard but blunt objects like a rock do half-lethal damage. Very dense blunt objects *can* do lethal damage as thrown weapons.

Thrown weapons that use forms of leverage or stored energy (like a sling) count as a Strength or bonus to Strength, increasing range and damage, and often use blunt projectiles that count as lethal damage. A sling stone would be a typical example.





MELEE COMBAT



These will be the advanced topics relating almost exclusively to the use of melee weapons and unarmed combat forms. If you are trying to customize melee combat for a particular genre or game-world, this is the place to be.

Custom combat forms

In basic combat your melee options are limited. Unarmed attacks can punch and kick, weapon attacks can strike, and both can block and parry. Mention is made of enhanced skills and specialization to customize things, but this is insufficient if you want to have a campaign where intense specialization is the norm (like a martial arts-based campaign). So, if you want to go that route, use the following guide.

For custom purposes, an unarmed *or* armed combat skill gets a number of maneuvers. This starts at three maneuvers for a skill of +0d, and +1 more for each +1d of skill.

i A skill of +3d means you know six maneuvers for that skill.

These maneuvers are bought with 'points' (not character points, just a bookkeeping measure for *this* section). The sum of 'points' for the entire skill has to be zero. For the basic combat options, the maneuvers are:

brawling: punch (strike(thrust)+0, +0 to skill)
kick (strike(swing)+3, -3 to skill)
block (+0 defense, +0 to armor)
parry (-3 defense, +3 to armor)

melee: thrust (strike+weapon, +0 to skill)
swing (strike+weapon, +0 to skill)
block (+0 defense, +0 to armor)
parry (-3 defense, +3 to armor)

wrestling: grab (allows followup)
throw (-2 to your Dodge)
crush/pin (+1 to your Strength)
move

! Note that someone with only a +0d skill level would only get three of the listed maneuvers.

If you want to create a custom combat form, just pick and choose from the maneuvers. Each maneuver can take whatever name you want and each can have variants. A 'round-house punch' is a strike, and so is a 'round-house kick'. They are just different maneuvers with different modifiers.

'Followup' maneuvers require that you first succeed at a basic maneuver, like 'grab then throw'. By default, a followup maneuver uses the same Strength or damage as the basic maneuver for any comparison purposes, but it can have its own modifiers to increase or decrease this. A followup is part of the *same* major action as the basic maneuver and the followup intent is declared *before* you know if the basic maneuver is successful.

i If your intent is to 'grab and throw', then that's how you announce the attack. If you do not declare the 'throw' at the time of the basic maneuver, then you cannot add it after you see if the 'grab' was successful.

basic maneuvers	followup maneuvers
strike(thrust)	disarm
strike(swing/cut)	throw
strike(throw)	crush
block	move
grab	

The basic maneuvers are explained elsewhere. If you are not differentiating between thrust and cut effects (**page 5.22**), then just call that maneuver 'strike'. Each maneuver can have unique modifiers, but before we get to that, an explanation of maneuvers:

strike: An attack with a body part (bare or armored) or a weapon (held or worn). Strike (throw) *requires* a weapon, which you lose possession of by using it this way.

block: Interposing something between an attack and its target. Any bonus to armor gained by modifiers on this maneuver will either apply to what is used to block with or to any armor in general.



grab: A grab done like any other melee attack. We call it a 'grab', but it can be *any* maneuver that lets you leverage an opponent somehow. You declare if it is a one- or two-handed grab, or this could be inherent in the situation. Your opponent may attempt to break free as a major action or as a minor action as part of defending against a followup maneuver. Any difference in 'hands' involved is +3 for whoever has more hands in the attempt. So, if you have a two-handed grab and they can only resist with one hand, you get +3.

disarm: You may attempt to knock a weapon from someone's grip. Your damage or Strength (if you grabbed them) is rolled against their Strength. If you win, the weapon is knocked from their grasp, landing no more than a step or so away. A disarm that follows a block does not require a called shot, but all other disarm attempts require the basic maneuver target the attacker's arm, which is +4 difficulty.

throw: You attempt to knock someone down. Your damage or Strength (if you grabbed them) is rolled against their Strength. If you win, this puts your opponent in a prone position. If done as a followup from a grab, you *may* do half-lethal damage of up to your strike+5 with the throw (you *slam* them into the ground).

crush: As a followup maneuver you are using leverage or nearby objects to cause damage by pressure alone. Crush damage usually counts armor like a bash ([page 5.22](#)), but crush damage from one hand is -6 on normal strike damage (-3 if using both hands). A crush can happen in addition to a normal attack, so it is possible for a strike/crush to have the strike be stopped by armor but still have the crush cause damage. A crush that follows a grab can also be defined as a 'pin'. You are putting an opponent in a position where movement, if even possible, would cause damage. If your potential roll for damage is *more than* their Strength, they are pinned and cannot move or use weapons.

move: Lets you pivot the pair of you in place or move at a rate appropriate to you carrying them. A classic use of this in the movies would be to pivot the grabbed person in place just in time to have them be a **bullet shield** for you. If done as as followup to anything but a grab it cannot do more than have you trade positions.

Once you have some ideas for maneuvers, apply the following modifiers to customize *each* maneuver, noting that while the total cost for the *skill* is zero 'points', individual maneuvers do *not* have to cost zero. Tactical benefits have a negative 'point' cost on this table.

modifier	points
final required 'point' total on skill	zero
skill is an enhanced skill	special
±1 maneuver	±2
maneuver may use followup maneuver	-1
maneuver adds 1 point to your Dodge	-3
maneuver offsets -1 penalty of some type	-1
maneuver negates 1 point of your Dodge	+1
maneuver negates 1 point of opponent's Dodge	-1
+1 initiative on maneuver(max. +1)	-2
-1 initiative on maneuver(max. -2)	+1
±1 strike/Strength(max. ±3)	±1
±1 skill on maneuver(max. +3)	±1
±2 strike/Strength on followup(max. ±6)	±1
±2 skill on followup(max. ±6)	±1
+1 deflect with maneuver(max. +6)	-1
+1 rigid armor with maneuver(max. +3)	-1
+1 on reach(maximum of +2)	-1
make unarmed combat lethal	-2
make punches half-lethal	-1
make unarmed combat non-lethal	-1
maneuver can be done armed <i>or</i> unarmed	-2

i Take the standard 'parry' maneuver. This is a zero cost maneuver that gets +3 points for '-3 to skill' and -3 points for '+3 deflect with maneuver', which balances out to a +0 cost.

The gamemaster may arbitrarily declare that certain maneuvers have to be learned first, or in a specific order as skill increases.



enhanced skill: If the skill can only be bought as an enhanced skill, you get +2 points *per maneuver*. You can allot these evenly or cram them all into one maneuver *if it is appropriate for the skill or gameworld*. However the 'point' total for the sum of the skill must be zero.

maneuvers: You can increase or decrease the maneuvers available at the +0d level of skill. So, you could get +2 points for the overall skill if a +0d level of skill only had two maneuvers.

followup: To do a followup maneuver, you need to have that maneuver be part of the skill, and the basic maneuver you use has to have this modifier. A maneuver and followup count as one action, though it may have more than one skill roll. A followup maneuver *cannot* lead into another followup maneuver.

i If you wanted to be able to disarm someone after a strike, you would need to have the 'disarm' maneuver *and* your 'strike' maneuver needs the 'followup' modifier (and be successfully used).

increase your dodge: Declaring a maneuver with this modifier increases your Dodge by 1 until your next opportunity to take a major action. The maneuver becomes a deft motion that makes you an unpredictable target.

negate your dodge: This is a maneuver that requires a solid, predictable stance. A common use would be with a grab, where you sacrifice your dodge to pay for the modifier 'negates opponent's dodge'. This modifier never reduces effective Dodge to less than zero and you cannot get more points for it than your Dodge.

negate foe's dodge: Your maneuver affects your opponent's ability to dodge attacks. Strictly speaking, any effect in this modifier is adjusted down 1 for each full +3 of Strength and/or size between those involved.

i If you grab the foot of a giant robot, its Dodge is *not* affected (not that it matters much, anyway).

offset penalty: Your maneuver lets you ignore some degree of internal dice penalty. This could be injury, visibility, consecutive actions or even a style that offsets penalties for being prone or positionally disadvantaged.

i You have a 'dragon fighting with broken wing' maneuver that has a built-in offset to counter some of any injury penalties you may have taken.

±1 Initiative: Your maneuver is slower or faster than your declared Initiative. This means that if everyone declared zero for Initiative, you would either automatically go first or last. In the **Gear** section, you will see that some melee weapons have this effect inherent to them, they are just slower to bring to bear than a lighter weapon wielded with the same Agility.

±1 strike: Your maneuver has more or less force than normal, affecting your unarmed strike damage *or* that of any weapon used. A kick does +3 strike damage but also has the '-3 skill on maneuver' modifier. If you can only apply it on a followup maneuver, it has double effect. The maximum *total* benefit is +6.

i If you have a grab that follows up into a throw, you can either spend 1 point to get +1 on the Strength of the grab *and* the throw, or spend 1 point to get +2 on the Strength of *just* the throw.

±1 skill: Your maneuver is more or less accurate than normal. This modifier does not care about attribute levels or skill limits and is merely a function of the maneuver. A common use is to allow easier called shots, while a less skillful maneuver may be taken to pay for increased strike damage. If you can only apply it on a followup maneuver, it has double effect. The maximum *total* benefit is +6.

+1 deflect: This is normally applied to the 'block' maneuver, and means that if successful the attack is deflected rather than taken head-on. Whatever is used to block with gets +1 to its armor or toughness to reflect the deflection (even if it had no defense to begin with). This is how the standard 'parry' maneuver is done.



+1 rigid armor: This modifier means you use the maneuver to make the most of any rigid armor you are wearing. Until your next opportunity to take a major action, any rigid armor struck by an attack gets +1 to its value, up to +1d on its effective value.

+1 reach: This maneuver has a longer reach than normal. Generally this means you are extending your body to push the attack just a little bit further than expected.

make lethal: This modifier only applies to half-lethal or non-lethal attacks, usually kicks and punches. Either through toughened body parts, precise placement or other techniques, the attack counts as lethal damage rather than half-lethal. This is not cutting someone open with your bare hands, but could be something like a kick to a joint, an elbow to the temple and strikes that can be lethal in effect even without breaking the skin. In some genres these techniques will work equally well on inanimate objects. You may require that such lethal attacks be at least a +4 called shot to represent the precision of the attack.

make non-lethal: This modifier makes a half-lethal or lethal attack non-lethal, allowing it to be merely subduing rather than crippling.

More

If you are going to design a skill, doing it out to the +3d level (six maneuvers) should take care of most of your needs, and the level of customization should let you make a useful copy of most martial arts, fighting styles and specialized weapon moves. You could even design only the maneuvers out to a +2d level of skill and then let players create their own custom maneuver once their adventurer has become a master of that particular art.

! The gamemaster may say that for armed combat, the various +1 maneuvers require a specific weapon. For instance, you might have a +1 Initiative maneuver that only works with katanas. If using a longsword, you would get no bonus.

i Let's say you wanted to make a 'secret ninja art' that is offensively oriented and has a small number of powerful moves for someone who is meant to attack from a position of surprise.

You choose the following maneuvers: strike, disarm, throw, and apply the following overall modifiers of 'enhanced skill', which we apply as +2 points for *each* maneuver, and -1 maneuver for (at +0d the skill only has two maneuvers).

strike	disarm	throw
enhanced(+2)	enhanced(+2)	enhanced(+2)
+1 Initiative(-3)	+4 Str(-2)	+4 Str(-2)
followup allowed(-1)		
-1 maneuver(+2)		

Our ninja art effectively only has one maneuver, a strike, with two potential followup maneuvers. If we started off with a ninja who had a Strength and Agility of 9 and only +1d in the skill (he is a new guy), then his profile would look like this:

strike: An attack that acts at +1 on declared initiative, with a skill roll of 4d+0 and non-lethal damage of 2d+0 (their normal strike of 2d+0).

disarm: On a successful strike to the weapon arm, make an attempt at 3d+1 (strike+4 damage) vs. the target's Strength to knock a weapon from their grasp.

throw: On a successful strike you get a 3d+1 roll (strike+4) vs. the target's Strength to knock them down.

The followups happen as part of the *same* action as the strike and take no extra action penalty.

If you use these rules, keep in mind the subtle variations that are possible. For instance, the difference between a 'throw' and a 'takedown' would be that the latter hurts your own Dodge as you go down with your foe. A wrestler would have maneuvers designed to 'pin' instead of 'crush' (though they could use the crush damage if needed). A fencer might have moves with high Initiative, and maybe a lunge with extended reach, while a 'sword dancer' might have moves that improve their Dodge and ability to deflect attacks.



Cut vs. thrust vs. chop

Melee weapons vary in the ways they can do damage. Not just in the sharp vs. blunt sense. You can cut with a knife, *or* stab. However, you can chop, cut or thrust with a sword, you can *only* chop with an axe, and *only* stab with a spike, though we suppose you could smack someone with the flat of an axe blade or badly slice them with a spike tip. Punches and kicks count as blunt thrusting attacks. Cuts or slices generally do not do any blunt trauma.

Cutting attacks require that you have three directions of 'swing' to make an unrestricted attack (right, left and up). If your sword extends a meter past the end of your arm and there is only half a meter between the end of your arm and the walls and ceiling, your style will be cramped. Each direction of freedom lost will give your opponents +2 on their defense rolls or their difficulty to be hit, as your more constrained attack is easier to defend against. Lethal cutting attacks cause **blood loss** 1 time level *faster* than thrusting attacks. Lethal cutting attacks have to do Health+2 from a single attack to count as **crippling damage** on a **torso** hit. *Cuts and slashes often have to get past your ribs to get to the vital bits underneath.*

Thrusting attacks only need one direction of free movement, in the direction of the attack, and if you do not have that, then you cannot attack anyway. Lethal thrusting attacks have to do Health+2 in hits from a single attack to the **arms** or **legs** to count as crippling damage. *A hole in your arm or leg is less likely to incapacitate it than a deep, muscle-severing gash.*

! Some melee weapons like war hammers, battle axes or poleaxes had reversible heads, with a piercing spike that did 1 point less damage, but counted it as armor-piercing vs. lower quality or lower-tech armors.

Feints

In melee combat, the amount of any turn bonus you use for offensive or defensive rolls represents the fraction of the turn you are devoting to those actions. If you and a foe each have a +4 turn bonus and they use theirs on attack and you use yours on the defense, then they are being the more aggressive. Your ability to attack, feint, block or parry is your skill plus the time you devote to it.

However, a feint *can* be a special melee or unarmed combat action designed to throw an opponent off guard, making a *subsequent* attack more likely to succeed. This is done by a bit of real-world bluffing and guessing. The attacker declares how much turn mod they are applying to their attack, then puts a red (minus) *or* black die (plus) behind their hand showing an amount that is no more than either the turn bonus they have left after declaring, or twice their dice in the skill, *whichever is lower*. This is not their skill *roll*, but their dice *bonus* in the skill, like +1d, +2d, etc. So, if you only have +0d skill, you cannot feint.

Then the defender has to commit turn mod to their defensive skill roll. The attacker then reveals the hidden die. If it is a *red* die, they *subtract* the amount from their *declared* turn bonus to determine the *actual* turn mod used, and apply the result to their skill roll, and if it is a *black* die, they *add* it to their *declared* turn mod to determine the *actual* turn mod used and apply the result to their skill roll.

i If you were in the third turn of a fight, the turn mod would be +4. As an attacker, you might declare +2 of your turn mod on a melee attack, then hide a die showing either up to -2 (red) or +2 (black). If you chose -2, you would *actually* be using zero turn mod on the attack, and if you chose +2, you would actually apply all +4 of your turn mod to the attack. But your opponent has to choose *their* turn mod for defense not knowing how the attacker has applied their potential spread.



The idea is that if the attacker declares a lot of turn mod and reveals a subtraction, they might fake an opponent in committing a lot of their turn mod to *that* defense, and have less for dealing with the *next* attack. Or, if they declare a low amount of turn mod but then *add* to it, they might overcome an opponent who did not devote enough to their defensive roll.

This takes extra time, but *can* add a bit of dramatic tension to a duel or other one-on-one situation.

All-or-nothing

If you give up all ability to defend yourself in melee (including dodging), you can attack with a bonus to your skill *or* to the damage you do. An example might be grabbing a sword with both hands to plunge it deep into an armored monster, knowing that if you fail, you have left yourself wide open to the monster's counterattack. An all-or-nothing attack acts as one of (your choice):

+3 bonus to skill roll
 -3 penalty to opponent's defensive skill roll
 +3 to damage done with the attack

You have no defense and are only a difficulty of 3 to be hit by other melee attacks until your initiative on the *next* turn (or your next action if using **Advanced sequencing**). The benefits of an all-or-nothing attack are by nature a supreme or last-ditch effort, and so it is not to be done lightly.

! If you look at stats and weapons and armor, you can see that a medieval warrior can wear armor that is unlikely to be penetrated by medieval melee weapons. This can be sort of boring from a gaming standpoint, but is nonetheless realistic. *This is what made knights powerful.* No one except a knight could withstand attacks by one, and knight vs. knight combats would be decided by called shots, desperation moves or the sheer exhaustion of your opponent.

Shields

Shields were mentioned in the basic combat rules, and simply provide a bonus to your defensive roll. If the bonus for the shield is what makes the difference between being hit and not being hit, then the shield takes the full brunt of the attack. This can bounce off the shield, or penetrate its armor and damage its hits (see **Breaking Things**). Cutting attacks that damage a shield will take gouges out of it, doing hits to it. Thrusting attacks, including arrows and bullets, generally do no hits to the shield itself, and any leftover damage penetrates the shield and hits the user, either in the arm holding the shield or a part of the body being protected. The user of the shield can elect to sacrifice 1 hit of the shield and have a thrusting attack that penetrates the shield miss them instead. This is not entirely realistic and has its limits, but it is a dramatic way to model a shield being pincushioned with arrows until it has to be discarded.

Bashing & falling

Bashing and falling are the same thing in terms of the rules. One is falling horizontally into something, the other is vertical. There is not much difference between falling off a building and getting hit by a bus...unless the bus runs you over.

Falling damage is usually lethal damage, it is just spread over a larger area than something like a punch, kick or weapon hit. The ground might be soft, but falling is often a structural disruption. You crack your skull, twist an ankle, break your arm, that sort of thing. So even if it is not a cut or a bullet wound, it is still *lethal* damage for how long it takes to heal from it. Because this damage can affect a large area, you usually *do not* apply **location modifiers**.

i Attacks against your legs may take -3 to the damage they do after armor, but *not* if that damage comes from jumping from a height.



If an impact is a *controlled* attack like a tackle, it is half-lethal damage and hits one part of the body, usually the torso. If it is falling or the equivalent, it usually affects the body as a whole unless you are choosing to take the impact on a certain part. For falling, it does lethal damage the same as the dice roll for the distance level fallen, with a maximum of 7d+0 (terminal velocity). If you bash yourself into someone it is half-lethal and you take half the damage you deal to them (round down), usually as a torso hit. These numbers assume a relative parity between the objects involved and reasonable speeds. A bug hitting a car windshield does not damage the windshield. A bird hitting an airliner cockpit is another matter.

Remember that Toughness can be used to subtract from any impact damage that does non-lethal hits. Unless specifically designed to protect against whole-body impacts, armor does not help all that much. It is not the ground that is the problem, it is the sudden stop when you hit it. *Having armor means you are merely falling onto your armor instead of the ground. Armor does protect against pointy bits, and bashes that hit that part of the body (think of American football padding), and will act to stop extra damage from something like a rough or irregular surface.*

Regular armor on the spot taking the impact gets 0d+1 per 1d of armor, with a maximum effect of 0d+2. Armor designed for just this purpose has a maximum effect of 1d+1. Armor is mostly useful when a big thing and a small thing run into each other. One is the bug, the other is the windshield.

The nature of what hits what will adjust the effective damage:

condition	impact effect
preparation	-2
proper gear	-1
better of Strength or Agility	-1 per +3 attribute
water(damage is half-lethal)	-1 per +2 distance
very soft surface	-1 per +3 distance
soft surface	-1 per +4 distance
average surface	+0
rough surface	+1 per +4 distance
enhanced skill	-2

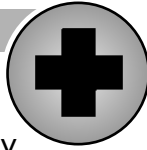
i If you jumped off a third story balcony (about 8 meters) onto normal dirt, the better of your Strength and Agility was 8 and you were wearing sturdy boots to protect your ankles, you would take 1d+1 lethal damage (distance level of +9, -2 for controlled fall, -1 for proper gear, and -2 for your attribute. Against the boots' likely armor of 0d+1, you would take 1d+0 lethal hits. Lethal damage of 1d+0 means you take an average of 3-4 lethal hits. Odds are good you would cross a damage threshold, it would hurt quite a bit, and you would be limping for a while until the lethal hits healed up. The *minimum* damage would be 1 lethal hit, and you would be hurt, but you could tuck and roll and keep going. *Maximum* damage would be 6 lethal hits, possibly enough to be **crippling damage**, snapping an ankle or leg and rendering you unable to walk. If you had simply fallen, you would *not* get the -2 for preparation or -1 for gear, so damage would be (distance level of +9, -2 for soft surface), equals +7 or 2d+1, potentially doing up to 13 lethal hits! You might take as little as 3 hits and just be sore for a few days, or land on your head and snap your neck!

An enhanced skill for falling would be something like acrobatics or gymnastics or any skill that teaches the proper way to land and absorb the stress of impact. Obviously, this and other modifiers in your favor are only good up to a point. *Your sturdy boots and an ability to tuck and roll is not going to be all that helpful if your parachute fails to open...*



DAMAGE

These are advanced topics relating to how damage is done and its effects on people or objects. First, since many *players* have never taken any real damage, a little perspective...



What is damage?

For an average person with a Strength and Health of 7, they have the default **hit bracket** of 4. This means they can take 5 hits before it starts impairing their dice rolls (-0d at 1 hit, then -1d at 5 hits). *But, in real-world terms, what is damage like?* Well, *any* lethal damage, even a single hit, is something that you would probably go to an emergency room to get treated. If done as a single injury, it is something like this:

1 hit: *You feel it and do **not** like it.*

non-lethal: A hit strong enough to leave a bruise and tempt you to utter some choice profanity. A stubbed toe, a black eye, cracking your head on a low overhang. Cowards, low Will civilians and those with no experience at dealing with pain and damage will do things to avoid a repeat of the experience. Visual effects (bruising) may last a few days, but 'damage' disappears pretty quickly.

lethal: A gash that requires a few stitches, a broken nose, a deep bruise, a barely cracked rib. Visual signs could last days, but in game terms, the 'damage' is usually gone by the next day.

5 hits: Something painful and impairing enough to cut attribute use in half and destroy unskilled defaults (a -1d penalty cuts an attribute roll of 2d+1 to 1d+1, and an unskilled default of 1d+1 to 0d+1). Sufficient to cause poorly motivated individuals to immediately stop what they are doing, vacate the scene and tend to their injuries. A good chance of stunning an average person.

non-lethal: A strained ankle, a mild concussion, a severe abdominal bruise or strained shoulder.

lethal: A serious knife slash or stab, light damage from a 9mm pistol, a skull fracture, cracked jaw, lost teeth, multiple cracked ribs, hairline fracture of an arm or leg, several broken fingers or toes, a modern grenade going off 3 meters away.

9 hits: This is an incapacitating, or in the case of lethal damage, a crippling or life-threatening injury. Individuals of low Will may pass out. Effects are sufficient to negate the combat potential of poorly skilled individuals (a skill roll of 2d+1 becomes 0d+1).

non-lethal: A solid connect from a prize fighter, a beanbag round from a riot gun at close range, a blast of pepper spray to the face, a long jolt from a taser, a nearby stun grenade.

lethal: About average damage for a modern police pistol, average for a sword wielded by a stronger-than-average man or their maximum damage for a dagger, the average result from trying to jump to the street from a third-story balcony. If untreated, can cause sufficient blood loss to be fatal, and is too difficult for an untrained average person to be able to stop the bleeding.

13 hits: This will immediately take down or render most people ineffective (-3d penalty to skill and attribute rolls). For *any* human, the result of this much damage in *one* hit is going to be **crippling damage**.

non-lethal: A knockout punch from a prize fighter, a solid boot to the head from a martial artist, the non-lethal part of damage from a 2kg high explosive charge going off in an adjacent hex (however, the lethal part of the blast would probably kill you).

lethal: About average damage from an assault rifle hit, a blast of large buckshot to the chest, a well-placed axe blow to the head, a modern grenade going off at your feet, or the average lethal damage from getting hit by a car moving 115kph(72mph).



Stamina recovery

Stamina is recovered all at once to minimize bookkeeping, but if you want to recover it incrementally, it would be 1 point each time your recovery plus the time level equals 10. This would allow you to take short recoveries during long combats to get back some lost stamina.



If your Recovery was +1, you could get back 1 point of Stamina each 45 seconds (time level of +11). You would just give up an appropriate amount of turn mod for the amount of time.



Crippling damage

In games, most real-world effects of injury are just glossed over. *You get hurt, you heal up, you move on.* But the world is full of disabled veterans, and accident or crime victims for whom *one* unlucky blade, bullet, landmine or slip down a stairs became an extended, maybe even life-long disability. We do not suggest you do *that* to your adventurers, but for long-term plot potential and realistic short-term combat effects, **EABA** has 'crippling damage'.

To use this rule, total the damage done by that attack, then add back in anything *subtracted* for location or prior injury effects. If this total is equal or greater than your Health, the result of that hit is 'crippling damage'. This would usually be one bullet, one slash, etc. Damage that is *actually* taken is not changed.

i If your Health is 8 and you are shot for 3d+0 in the arm (-3 effect) then you roll 2d+0 to see how many hits you take. To see if it is crippling damage you add 3 to this amount and see if it is 8 or more (your Health). The *actual* hits you lose from that shot are unchanged.

If you are not using hit locations or the hit is to an unimportant extra, then the result of crippling damage is being knocked unconscious and staying that way until enough time elapses sufficient for you to recover one non-lethal hit. *Technically*, you might *not* be unconscious. *You might be rolling on the ground screaming....*

head: You are knocked unconscious and will stay that way until a time elapses sufficient for you to recover one non-lethal hit. In the real world, crippling effects from non-lethal damage would be a concussion. A hit from lethal damage could result in brain damage, lost teeth, broken jaw or nose, loss of an eye or possible disfigurement.

torso: You are automatically **stunned**. All parts of the body are affected by the damage penalty taken, as for the normal damage rules, but there is no additional immediate effect.

For non-lethal damage, you have had the wind knocked out of you. For lethal damage, you may have broken ribs, internal bleeding, pierced organs or other effects that will be fatal without extraordinary luck, magic or good medical care.

arm: You lose all ability to use the arm and hand. You cannot hold, lift or use objects in a combat situation, though once out of combat, slow, non-stressful tasks might be possible. Roll to see whether the arm hit was the one the person favors (50% chance). All lifting tasks can only be done with one hand. For non-lethal damage, this is a severe bruise and temporary nerve damage and it will stay that way until a time elapses sufficient for you to recover one non-lethal hit, after which it is usable but still bruised. For a lethal crippling effect, it could be severed muscles, nerves or tendons, broken bones or even loss of fingers, hand or even arm, depending on the weapon and the damage done.

legs: You lose the use of a leg. It can bear no weight, and the best you can do is use it to help you balance on the other leg. You cannot kick, run or sprint, and your walk movement level is a maximum of +3 (1 meter, plus any turn bonus used). For non-lethal damage this is a severe bruise, cramps or temporary nerve damage and will stay that way until a time elapses sufficient for you to recover one non-lethal hit, after which it is usable but still bruised. For lethal damage, it could be severed muscles, nerves or tendons, broken bones or even loss of toes, foot or even some or all of the leg, depending on the weapon and the damage done.

whole body: You are automatically **stunned**. All parts of the body will be affected by the damage penalty you have taken, as for normal damage rules, but there is no additional immediate effect. For non-lethal damage, you have had the wind knocked out of you. For lethal damage, it varies by type. You may have organ damage, temporary blindness or deafness, extensive lacerations or burns. No single part of you is *extensively* damaged, but all of you is *somewhat* damaged.



In addition to the location-specific effects, all crippling damage takes +4 time to heal *those* hits if using the basic recovery rules, or you can use the **Realistic recovery** rule to represent the additional time the body requires to repair a crippling impairment.

Variable toughness

All adventurers have a **Toughness**, which is how much non-lethal damage they can ignore from a single hit, either because they do not bruise easily or can shrug off the pain. But, not all body parts are equally tough. Your solar plexus (or for some, parts further south) are not nearly as tough as your skull. If you *really* want to add the detail, you can use the table below for random hit locations or called shot effects involving *non-lethal* damage, using this instead of the generic 'after armor effects' on **page 4.18**. You can also choose to say these modifiers only affect damage at the instant it is taken for purposes of being stunned or knocked out, but it does not actually alter the hits marked off.

hit location	toughness
face(3-4)	-1
neck(5)	+0
skull(6)	+4
upper arm(7)	+0
lower arm(8)	+0
shoulder(9)	+1
chest(10)	+2
abdomen(11)	-2
hips/groin(12)	+1/-3
upper leg(13-14)	+1
lower leg(15-16)	+0
feet(17-18)	+0

i If you are a man with a Toughness of +2 and you get kicked in the crotch, your adjusted Toughness goes to -1, so you actually take 1 *more* non-lethal hit than normal after armor is penetrated. This could either be 'real' damage *or* just to see if that particular stereotypical hit stuns you a bit. On the other hand, if you had been punched in the skull, your effective Toughness would be +6, but for a punch in the face your effective Toughness would be +1.

Continuous damage

Some attacks and damage sources are going to have a continuous effect. Being stabbed *happens*. Being on fire *continues to happen*. Damage effects that continue over time usually decline with time as well. The way these things normally work is that they have a maximum duration measured as a time level. Each time level that elapses between exposure and when the effect runs out does additional damage. Weak effects may do 1 additional hit each 2 time levels, normal ones do 1 additional hit each time level and strong effects may do 2 additional hits each time level. If defenses are not penetrated by the initial attack, this extra damage adds to the damage of the attack.

i If a flaming liquid is a 1d+0 effect and lasts a minute (time level of +12), then after being hit, each time level that elapses does 1 extra hit. So, you would take up to 12 *extra* hits of damage. If you were wearing a 2d+0 armor against this attack, you would start taking flame damage through the armor once the *extra* effect reached +4 (this would raise the 1d+0 base effect to 2d+1, sufficient to penetrate your armor).

To keep track of things like this in the middle of a fight, the time level and turn mod are interchangeable.

i If the previous example happened late in a fight and you quickly put yourself out, the gamemaster might say it that it took you +6 of turn mod to extinguish the flames, and this would let you know how much damage you took or how much got through your armor.

The best armor

Is other people... In the event that the only thing between you and an attack is *someone else* (a common movie situation), the structure of a person's torso is generally good for reducing damage going through them by half their Health. *Less their armor, of course*. Front and back of an armor counts as the armor's rating plus 1d, so going through front and back of a 2d+1 armor counts as 3d+1. *This is a dramatic rule. Also remember the mess this is going to cause...*



Bleeding

Any *lethal* attack has the potential to cause continuing blood loss, which means losing *more* hits. In extreme cases this can be fatal. Subtract half the *lethal* damage of the largest *single* injury from your total hits. If the injury is not treated in this amount of time, you will lose 1 additional hit from blood loss, and another each +2 time levels. Generally, you will not lose more hits from blood loss than the hits of the largest injury, and hits lost from bleeding do *not* affect rate of *future* bleeding. However, if you have taken half or more of your hits in lethal damage from a single hit, hits lost from bleeding *can* eventually be fatal. If you are using bleeding as an advanced topic, you may use Fate to deal with a bleeding injury. A successful adjusted Fate roll will stop the bleeding, though this may be a fragile situation that precludes any activity for fear of starting the bleeding again.

i If you have 14 hits and just took 10 hits of lethal damage, subtracting half of the damage from hits is a time level of +9, or 23 seconds. If you do not stop the bleeding in 23 seconds you will take another hit, and additional hits at time levels of +11, +13, +15 and +17, until you have taken 5 additional lethal hits from blood loss. On the other hand, if you had taken 14 out of 14 hits from one attack, you would take additional damage after a time level of +7 (11 seconds), giving a medic little time to stop the bleeding before you crossed a negative threshold and died.

Blood loss can be stabilized in one minute with a medical skill roll against a difficulty of the hits lost in the largest hit, or faster if you wish to add to the difficulty by the time levels less than one minute. Trying to bandage yourself up means taking *your* injury penalties on the roll. A medical skill can be specialized to stop bleeding injuries, or bought as an **enhanced skill** decreasing the time required to make a roll, or increase the time before hits are lost. If you are in combat and apply turn mod to a medical roll, this means the roll is made at the *end* of the time represented by that turn mod.

Blood loss is a special case of lost hits when it comes to recovery purposes. Any society advanced enough to do blood transfusions can replace the lost blood, which presumably replaces the lost hits. Sufficient transfusions can recover hits lost due to bleeding, allowing normal healing on any remaining injuries.

! Technology like 'quick-clot bandages' or futuristic equivalents may provide bonuses to skill rolls made to stop bleeding.

Structural recovery

As a gamemaster judgement call, some sorts of injuries can be 'healed' for *impairment* purposes fairly quickly, but remain damaged for keeping track of hits lost. Most of these cases are where broken bones are involved. You would not expect a broken forearm to be something you would *want* to use, but anyone who has ever had their arm in a cast is aware that you have functional use of the arm long before the bones are fully knit. You still do not want to do anything that will impede healing, but the cast negates *some* of the penalty you would take for having broken a structural element your arm depends on.

Armor interactions

The way specific attacks interact with specific armors is part of the history of warfare. Each advance in armor has been met by an advance in weaponry, or vice versa. Sometimes poor defenses made a particular attack type the king of the battlefield, sometimes a particular attack rendered virtually all defenses useless. *Look at firearms.* Once reliable firearms found their way to battlefields in quantity, personal armor like plate or mail disappeared. It was an expensive encumbrance that would *not* save you from bullets, so it was discarded in favor of mobility. On the other hand, modern, well-funded armies now typically armor all their soldiers, giving them a large advantage against unarmored opponents.

Following are some game notes that you might want to apply to your gameworlds as you become more comfortable with **EABA**:

flexible armors: Materials that are softer than the weapon (like a knife vs. leather) usually count as inappropriate against lethal thrusting weapons or attacks, so the total armor is reduced by 1d against the attack.

organic armors: Like wood, bone, and leather. They are inappropriate vs. modern firearms, which are *also* counted as thrusting attacks. So, a 2d+0 flexible leather armor would be like having no armor at all against a gun.

! Silk would be an exception to this, and silk armor would act normally against most firearms through the middle of the Industrial Era.

rigid armors: These provide a glancing surface that can cause marginal hits to be deflected. Rigid armors or rigid items that are incidental barriers get +1d effect if the hit roll is made *exactly*. This includes a blocking roll with a shield or a parry with a weapon or shield. Rigid armors, depending on the technology and the gameworld, may also provide a permanent +1 or +2 bonus to defensive melee rolls or an increase in difficulty on ranged attacks because of superior glancing surfaces. This would be listed in the notes for a particular armor.

Gambesons

This is a padded underlayer worn under many types of medieval armor. It has low inherent protection (0d+2), but when worn in conjunction with another armor it gives +1 to Toughness *in addition to any benefit it gives from layering*. For instance, in combination with a 1d+2 armor it gives a total protection of 2d+0 *and* stops 1 more point of blunt trauma than normal. The padding of a gambeson makes it more bulky (but still concealable under a thin armor like mail), but its insulating nature can increase stamina costs because of heat buildup.

! Armor rules in any game involve compromises between realism, adventurer survivability and ease of use. We *hope* that this is the best mix of those compromises, but there will still be things you will want to make 'house rules' for.

area effects: If damage fills an area (like an explosion or running through fire), then the damage does not have a 'hit location' and it does not hit your center of mass. *It hits all of you at the same time*. So there is no simple and accurate way of dealing with how much damage hits you if you are *partially* armored.

The quickest way to do this is to reduce your effective armor if you are not fully covered. Break your armor coverage into the average (round nearest) for *each* of your head, torso, arms and legs. Your 'whole body' armor will be the average of these four areas. If your head armor is the *lowest* of these four areas or the armor on the arms is the *highest*, subtract 0d+1 from the average result, down to a minimum of zero effective armor.

i You have on a 3d+2 bulletproof vest and a 4d+2 frag grenade goes off next to you. An armor of 3d+2 is a total of +11. You divide this +11 by the four areas (head, torso, arms, legs) to get a result of +3 or 1d+0 of effective armor. Since you have *no* head armor, subtract another point, for an effective armor of only 0d+2, meaning that you would take 4d+0 damage. If you had on an equivalent 3d+2 helmet, then the average for the four areas is +6, with no 'head' penalty, so you would have an effective armor of 2d+0 and take 2d+2 from the 4d+2 attack.

If an area is unprotected, special effects of damage (and crippling effects) are assumed to be to the most vulnerable of the unprotected parts. If your legs are unprotected, damage is going to affect your movement. If your arms are unprotected, your hands may be useless. In the case where *only* arms and legs, or only the head is unprotected, it may be reasonable to apply location modifiers to the damage.



Explosions

Explosions come in two types, fragmentation and blast. It is possible to have both at the same time, but to keep things simple you usually just use one or the other. Blast damage is half-lethal and fragmentation is lethal. Blast damage is mostly non-lethal, but includes the damage from explosion-generated debris.

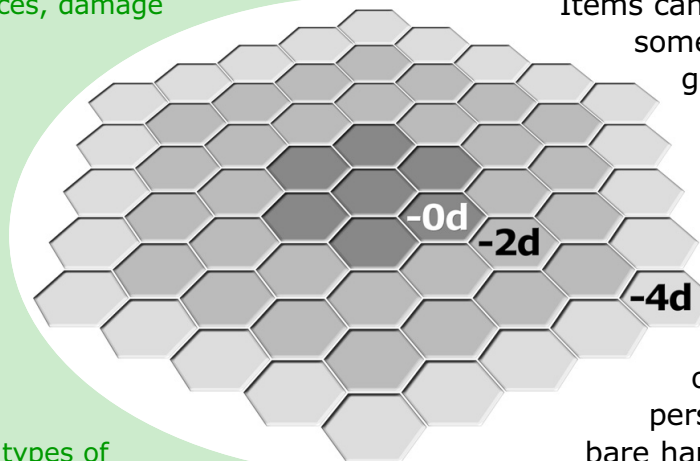
Explosions all work the same way. In the hex of the explosion and adjacent hexes, damage is normal. This is effectively everything within a range of 1.4 meters (range level of +4). Out to a distance of +2 from this, damage drops by -2d, and the process repeats until you run out of damage. Something in contact with an explosion probably takes +2d effect and counts blast as *lethal* damage, +1d more if tamped.

i A 7d+0 explosion does 7d+0 in the hex where it happens and the adjacent hexes (out to a range of +4). At longer distances, damage drops off like this:

range level	effect
0-4(0-1.4m)	-0d
5-6(2-3m)	-2d
7-8(4-7m)	-4d
9-10(8-15m)	-6d

i It is possible that some types of explosion will drop in effect faster or slower than this, but the default is suitable for most types of explosion and fragmentation weapons. As a quick note, a modern frag grenade has a lethal explosion damage of somewhere in the 3d to 5d range, making it a serious threat to about 3 meters, and capable of injury out to 7 meters.

! Just so you know, a ten kiloton atomic bomb is a blast damage of about 26d+0 and could possibly kill someone (6d+0 blast damage) out to a range of 500 meters. Not a *perfect* simulation, but you should not have to use it very often...



Breaking things

If it matters, *stuff breaks*. Gear and weapons have an Armor and Hits. Inanimate objects do not take non-lethal hits. If an object loses all its hits, it is *definitely* broken, and depending on the nature of the damage and the object, may or may not be repairable. A book with bullet holes in it may still have *some* utility, a book that has been burned to a cinder does not. This has to be decided on a case-by-case basis if the usability of an object is important to an adventure one way or the other. For instance, a book with bullet holes can still be mostly read. *A spellbook with some runes blasted out of it may be a different matter.*

And in almost all cases, even a total repair can have side effects. If your hard drive crashes, the drive can be replaced, but the same cannot be said of the *contents* of the drive unless you had a backup.

Items can be incidental armor in some cases, and can be a gamemaster prop for the use of Fate to mitigate damage. Everyone has heard tales of the lucky coin, cigarette lighter or iPod that saved someone's life by stopping a bullet. In general, any object that an average person cannot break with their bare hands probably has an armor of at least 1d+2, and if it can be structurally damaged and still have a chance of working, then it has at least 2 hits. There is a little more detail on this in the **Gear** chapter.

In detail, in order to keep working an object gets a roll of its hits (0d+1 per hit) and needs to make an average(7) roll to keep working. Rugged or **durable** objects get +1d to the roll. Many weapons and tools will count as durable.

i An item with 6 hits has taken 2 from damage. It gets a roll of 2d+0 and has to roll a 7 or better to keep working.



Ammunition types


Over the ages, weapons have been optimized to have certain effects, or have them as a side effect of the weapon itself. Weapons of war have even been *downgraded* in effectiveness by both sides in a conflict. The Pope once banned crossbows as being too inhumane for use against Christians, though one suspects the ease with which a marginally-trained peasant could use one to puncture an upper-class noble had something to do with it as well. Hollow-point or other bullets that expand on impact leave larger, more lethal wounds than bullets that are merely penetrators, yet the Hague Convention (1899CE) prohibits expanding bullets as weapons of war. Most nations have signed onto this document, and adhere to it even today. *Fielding armies to slaughter each other is fine, but using nasty ammunition apparently hurts people's feelings.*

The specialty ammunition or special weapon effects adventurers might run into are: armor piercing, penetrating, stopping power, and battering, all of which *can* apply to melee weapons if you want to customize them. The default attack type in the basic combat rules has no special effect on armor or the target, and would be the equivalent of a round-nose copper jacketed lead bullet.

armor piercing: Armor piercing is both a characteristic of an attack *and* a comparison between an attack and a type of armor. For instance, a modern lead bullet is not all that armor-piercing, but against primitive armors it acts that way. An armor piercing effect simply reduces the total effect of armor (plus any incidental cover) by 1d. If it is a *designed* characteristic of an attack, it reduces the effect of armor at that level of tech or lower by 1d (this includes fractional era differences). So, a previous generation's armor piercing rounds will not get the benefit against modern armor. Armor piercing as a *designed* characteristic is *not* cumulative with *incidental* armor piercing effects like bullets vs. organic armors.

There is also something called 'semi-armor piercing', which is usually a normal round with a small hardened core. It is better than normal at penetrating, but not as good as full armor-piercing. If you really need this degree of detail, such rounds would count as armor piercing against incidental cover and flexible armor but not against anything designed as rigid armor. So it might be great at getting through a car door or a heavy table or a soft bulletproof vest, but has no *extra* ability against rigid body armor or an armored car.

penetrating: A penetrating attack is the poor cousin of armor-piercing. It is not *designed* to be any better at penetrating armor, but does so as a side effect of its speed or geometry. A small, high-velocity bullet will often be penetrating. The damage of the weapon is increased by 1 *before* being compared to armor, but any damage that penetrates armor is reduced by 2, to a minimum of 1 hit of damage. Against *unarmored* targets, the net effect is to reduce the damage done by 1 point. A weapon will not be both armor piercing *and* penetrating. Damage that has a penetrating effect will have a small 'p' after the damage, like this: 2d+1^p. Modern rounds that have this characteristic might be the 5.56mm x 45, 5.7mm FN or 4.6mm HK.

 There are interminable arguments on the merits of particular types of bullet, caliber and such, with very strongly held opinions on each side. **EABA** does not make any value decisions on a particular weapon, but just gives you tools to model a particular effect in game terms if you so desire.

Lucky shots

At gamemaster option, a **dramatic called shot** (or possibly any called shot that succeeds by 4 or more) can be used to reduce an foe's effective armor by 1d. This *only* applies to defenses or armor with weak spots like joints or gaps. History has documented examples where improbable but possible lucky hits have gotten past defenses, like Richard of Cornwall taking an arrow through the eyeslit of his helmet at Berwick in 1296CE.



stopping power: Whether real or imagined, some weapons have a reputation for being man-stoppers, with an incapacitation potential more than their energy would indicate. Big, slow bullets often have this characteristic. An attack with stopping power is considered to have 1 point less damage before being compared to armor, but any amount that penetrates armor is increased by 2. The net effect is +1 damage against unarmored targets.

Damage that has a stopping power effect will have a small 's' after the damage, like this: 2d+1^s. Modern rounds that are considered to have this characteristic might be the .45ACP and .357 Magnum.

battering: Battering damage is for attacks that are not very good at penetrating armor, but if they *do* penetrate, they can have a devastating effect. Really big, fairly slow projectiles might have this characteristic. An example would be solid shot from a large cannon, or a rock hurled by a catapult. Neither of these would be as effective at penetrating a barrier as a special projectile, but if one *does* plow through a barrier, the results are catastrophic. An attack with battering affects armor normally, but any damage that gets through armor is increased by +2 per die of damage in the weapon *before* armor was applied. This is usually considered a fixed bonus, but you can choose to make it a roll if you want.

i A 5d+0 battering attack hitting a 4d+0 armor gets 1d+0 through armor, so it does 1d+10 hits (1d through armor, +2 for each die of the *initial* attack). You could also roll it as 4d+1 instead of 1d+10 (the +10 becomes an extra 3d+1).

Fortunately, the parameters that make an attack 'battering' also drop its damage dice. You *cannot* simply take a 5d+0 rifle and give it special ammunition that makes it do 5d+0 battering. The stopping power modifier is what you use for specialized ammunition for regular weapons. Damage that has a battering effect will have a small 'b' after the damage, like this: 2d+1^b. No modern hand-held weapons would be counted as battering damage.

i A lethal 2d+0 attack of each type hits rigid 2d+0 armor. We are just going to look at armor penetration and ignore the blunt trauma effects..

default: 2d+0 attack vs. 2d+0 rigid armor, target takes no damage.

armor piercing: 2d+0 attack vs. armor reduced in effect to 1d+0, target takes 1d+0 damage.

penetrating: Effective 2d+1 attack vs. 2d+0 rigid armor, target takes the minimum of 1 lethal hit.

stopping power: Effective 1d+2 attack vs. 2d+0 rigid armor, target takes no damage.

battering: 2d+0 attack vs. 2d+0 rigid armor, target takes no damage.

i A 2d+0 attack of each type hits rigid 1d+0 armor.

default: 2d+0 attack vs. 1d+0 rigid armor, target takes 1d+0 damage.

armor piercing: 2d+0 attack vs. armor reduced in effect to 0d+0, target takes 2d+0 damage.

penetrating: Effective 2d+1 attack vs. 1d+0 rigid armor, target takes 1d+1 damage, reduced by 2 to 0d+2 damage.

stopping power: Effective 1d+2 attack vs. 1d+0 rigid armor, target takes 0d+2 damage, increased by 2 to 1d+1 damage.

battering: 2d+0 attack vs. 1d+0 rigid armor, target takes target takes 1d+0 damage, +4 for the battering effect, for 1d+4 damage.



i ADVANCED RANGED COMBAT EXAMPLE



Here is the classic scene from *The Matrix* that was mentioned in the Basic Combat chapter. To keep things simple we assume:

	Neo/Trinity	guards	soldiers
attributes	13	7	9
skill rolls	7d+1	3d+1	5d+0
hits	26	14	18
toughness	4	2	3
stamina	13	7	9
dodge	8*	4*	6*

Neo and Trinity have 5d+0 effective Strength if using martial arts as an **enhanced skill (page 3.14)**. This would give them a punch damage of 4d+0 and a kick damage of 5d+0. Because of the nature of the gameworld, Neo and Trinity have a more-or-less 'invisible dodge'. Even if they are not visibly bobbing and weaving, they do *seem* to be harder to hit if they choose to.

*Remember that Dodge is only at full value against *one* attacker and attacks you can see. Most of the time it will be halved against gunfire.

For all the good it did them in this scene, any armor the guards or soldiers had was as effective as soggy tissue paper, so we will act as though they have none. Given the nature of the world, Neo and Trinity probably have **Larger than Life (page 3.34)**, and we will assume that they use 'best four' instead of 'best three' when rolling 4d+0 or more. Neo is apparently **ambidextrous (page 3.27)**, and this is a *major* consideration, since he fires two pistols for much of the combat. He also has the **Neat Trick (page 3.38)** of 'double draw'. He can, as a single major action, draw a weapon with *each* hand, a trick he ends up doing several times in this scene.

Setup: A good setup is vital. *This cannot be emphasized enough.* Not just the physical parameters, but setting a mood or feel for things. A good verbal description goes a long way to eliminating the need for a map. Using a description that matches a common experience of the players helps a lot too. If all the players have been to 'Squires Center', then saying "the area looks a lot like the entrance lobby of Squires Center" gives the players a feel for things far better than a diagram on a sheet of paper ever could.

In our case, the setup is a corporate lobby, a central access point with a metal detector, a conveyor belt for bags to be scanned, and chairs or desks for a few guards on either side, one guard sitting about three meters to the right, another standing at the metal detector, and three more about four meters to the left. Beyond this is a long open area maybe twenty meters long with a bank of elevators in an alcove at the end. The long axis of the open area has numerous square columns faced with marble a few meters from the walls and three meters apart, plus a column on either side of the elevator alcove. This gives three paths from the metal detector to the elevator with the central area between the pillars being about six meters across. Keeping with our own guidelines, we will *not* use a diagram and let you visualize the ongoing action in your mind as it is described. *And, you can always find a video clip of the scene online if you want...*

We begin as Neo walks through the metal detector, and the guard asks him to remove all metal objects. Neo flips open his coat to reveal a veritable arsenal. The guard utters a few choice words. Neo and Trinity are effectively **ambushing (page 4.5)** the guards, so they will get some free actions. Because we are using a lot of advanced rules, we will run the combat using **complex sequencing (page 5.4)**. This adds some complexity to the turn structure (naturally), but also helps show the action in a way that more closely matches the movie.



! Because a few of you are going to watch and re-watch this scene while comparing it to the **EABA** description, times in parentheses like this (0m22s) will be based on the '0m0s point' at the first (and last) utterance of profanity by the first guard. And if you do *not* intend to go watch this scene again in an **EABA** context, you *should*.

TURN 1 (turn mod: +0, quantity mod: x1)

1

Turn length: 1 second

Initiative: It's an ambush, Neo and Trinity act first as though they had **held action (page 4.6)**, and the guards do not get any major actions until Initiative 0. With an Agility of 13, Neo and Trinity have an effective Initiative of 13, but no penalty. This means they *theoretically* can take five major actions before the guards, on Initiative 13, 10, 7, 4, and 1.

Neo: On Initiative 13 (0m1s) he punches the guard, using a skill roll of 7d+1 against a fairly low difficulty for the guard's unarmed combat skill, which is 3d+2. Remember that even though they are ambushed, the guards *can* take reactive minor actions like defending themselves in melee, or making Awareness rolls to gain information on something they could or should be seeing or hearing.

Neo succeeds and plants his palm in the guard's chest for 4d+0 non-lethal damage, which rolls 12 hits. He subtracts his Toughness of 2 and only takes 10 hits, but this is more than the guard's Health, making this **crippling damage (page 5.26)**, knocking him out of the fight. If Neo was using a skill that let him do half-lethal damage with his punches (**page 5.19**), then the attack would have marked 10 non-lethal hits and then marked half of them up to lethal hits. He would have still taken over his Health in a single hit, so it would still be crippling damage.

On Initiative 10 (0m3s), Neo draws a machine pistol with each hand (his previously mentioned neat trick). Drawing a weapon as a major action is a task of Average(7) difficulty on the appropriate skill. This is his second action, but because it is a neat trick it counts penalties like it was his third action, which would be a -6 penalty. So he would be rolling 5d+1 against an Average(7) difficulty to draw each machine pistol. He is good enough to **'take 2's' (page 2.3)** on each and get an automatic success.

On Initiative 7 (0m4s), he fires a machine pistol in **autofire mode (page 5.11)** at the guard on the right. This is a range of 3 meters, which is a difficulty of 6. This is Neo's fourth major action, so it takes a -3d penalty, dropping his effective skill from 7d+1 to 4d+1. Neo rolls 4d+1 and gets a result of 10, for 3 hits (note that he could have also done a 'take 2's' for a result of 9 and automatically gotten two hits). The machine pistol has a lethal damage of 2d+2 for each hit. The first hit rolls 8 damage, putting the guard past the -1d threshold. This means the second hit will do 3 points less damage because of the **declining damage effect (page 4.21)**. It rolls 8, so after the -3 it does 5 damage, putting the guard at the -3d threshold. The last hit does 9 points less damage because of the declining damage effect, and rolls 7, doing the minimum of 0d+1 damage, but this is a total of 14 hits, which is what the guard has, so even if he had not taken crippling damage from the first hit, he is now unconscious and **bleeding (page 5.28)** to death.

! Technically, both this shot and the next one were into side arcs for an extra -3 penalty (**page 5.9**). In practical terms, Neo could have made the first shot into one edge of his side arc (rolling 3d+1 instead of 4d+1) and the following shot into his front arc (at no additional penalty).



On Initiative 4 (0m6s), Neo fires at one of the three guards on the left. Neo takes his *fifth* major action, which is at a -4d penalty, so he has a 3d+1 skill roll against a difficulty of 7, since the range to the guards is 4 meters. He rolls a 9, and gets two hits. Rolling damage, the results are 7 and 5, for a total of 12 lethal hits, one of which did crippling damage. By the time the first guard hits the ground, Neo has drawn and fired two machine pistols.

On Initiative 1, Neo holds action in case one of the remaining guards is fast enough on the uptake to be a threat, and starts to swing both machine pistols around to face them.

Trinity: On Initiative 13 she draws a machine pistol as a major action, 'taking 2's' for an automatic success, and steps forward to go around the metal detector.

Guards(2 remaining): The ambushed guards only get one major action on Initiative 0 (0m7s). One guard is drawing a weapon, and the other guard is diving out of his chair and declaring his full Dodge of 4 (possibly as a **desperation action (page 4.6)**).

end turn: Neo uses 1 stamina for being in melee combat. Neo has also expended 10 rounds (one autofire) from each of his two machine pistols, each of which has a 30 round clip.

EABA elapsed time: 1 second

TURN 2 (turn mod: +2, quantity mod: x2)

2

Turn length: 2 seconds

Initiative: Neo and Trinity each declare 8, which means they will lose 8 points off their skill rolls. This guarantees they go first since the guards cannot declare more than their Agility of 7. *The remaining two guards however, do not know this.* They just know that three *other* guards just went down in an eyeblink. From a game standpoint, they have a skill roll of 3d+2 and need to hit a difficulty of 7 for the range. So, the amount they use for Initiative should be enough to let them reliably hit someone at close range. They each declare 5. This would drop their effective skill to 2d+2 on their first major action (skill roll of 3d+2, -5 for Initiative, +2 for turn mod).

Neo: On Initiative 8 (0m9s) he swings the machine pistol from the right and shoots it at a guard on the left. The difficulty is 7 and his adjusted skill roll is 4d+2 (7d+1 skill roll, -8 for Initiative). He rolls a 14 and hits the guard 4 times, each at 2d+2 lethal damage. Even with **declining effects (page 4.21)** on damage after the first hit, he goes down.

On Initiative 5 (0m10s), both Neo and the remaining guard act (Neo goes first because of higher Agility). The guard is diving for cover and dodging, Neo is shooting at him. The difficulty is 11 (range difficulty of +7, +2 for the guard's movement and +2 more for the guard's Dodge). Neo's adjusted skill roll is 4d+1 (7d+1 skill roll, -8 for Initiative, -3 for second major action and +2 for using his turn mod on this action). Neo rolls a 10 and barely misses. The guard successfully gets behind a pillar.

On Initiative 2 (0m12s), Neo ducks behind a pillar. Because the quantity modifier for the turn is x2, his autofire use expended 20 rounds from one weapon (emptying it) and 10 rounds from the other (leaving 10 left), while the remaining guard has a fully loaded revolver. The guard grabs his walkie-talkie and says "Backup! Send backup!" (0m13s).



Trinity: On Initiative 8 she walks around the metal detectors. This is a minor action, and over the course of the turn she and the remaining guard come into line of sight of each other (0m16s). She has an action, he does not. She plugs him at close range with an autofire blast from her machine pistol, expending twenty rounds in the process for a +2 turn modifier on the shot. She can 'take 2's' and *still* hit him (difficulty of no more than 11 and she has an adjusted skill roll of 5d+1). Perhaps fortunately, the camera only lingers on this guard for a moment as he goes down.

end turn: No one has moved at more than a walk and there was no melee combat, so no stamina was used.

Neo: Has used 1 stamina

Trinity: Has used 0 stamina

EABA elapsed time: 3 seconds

TURN 3 (turn mod: +4, quantity mod: x4)

Turn length: 4 seconds

3

Initiative: Neo and Trinity are the only people here. The combat *could* reset to zero at this point, but the gamemaster says that it is a continuing scene.

Trinity: Discards her empty weapon, picks the duffel bag off the conveyor belt (0m23s) and walks forward. Both of them walk an effective distance of +6, or 3 meters.

Neo: Discards his two empty weapons (0m26s) draws two regular pistols (0m28s) as a single action and walks forward.

end turn: No combat is taking place and both of them are merely walking, so no stamina is used. The sound of running, booted feet is heard in the distance.

Neo: Has used 1 stamina

Trinity: Has used 0 stamina

EABA elapsed time: 7 seconds

! Taking into account changes in perspective and slow-motion, roughly 15 'real' seconds have elapsed.

! Because it is merely a leadup to the *real* meat of the fight, the first three turns might have been run using the **Outmatching** rule (page 5.8). Neo and Trinity would have had a "group" skill roll of 8d+0 (their skill, +2 for a quantity mod of x2) and the guards would have had a "group" skill roll of 5d+0 (their skill, +4 for a quantity mod of x4). This beats the minimum 2d difference for outmatching, so Neo and Trinity could simply declare victory and move on. Of the five guards, only one managed to draw a weapon and call for help by the time it was over, which is a pretty clear indication that they *were* totally outmatched by Neo and Trinity. However, the 'calling for help' *was* dramatically important, so playing it out made a difference in this case.

TURN 4 (turn mod: +6, quantity mod: x8)

Turn length: 15 seconds

4

Initiative: Neo and Trinity expect things will be happening, but not just yet, and declare zero.

Neo/Trinity: At a certain point (0m30s) they **hold action** (page 4.6). They expect there to be trouble on the next turn and want to count as having declared their full Agility, but without taking a penalty for it. Because there is a slight lull in combat, they can do this with no problem.

Soldiers: Run up to the scene (0m33s), take positions under partial cover (0m38s), and the leader shouts "Freeze!". There are ten soldiers, in two equal groups, one group on either side of pillars on the right and left close to the elevator.

end turn: The soldiers are using turn mod, and running, so they expend 7 stamina (+6 for turn mod, +1 for running).

Neo: Has used 1 stamina

Trinity: Has used 0 stamina

Soldiers: Have used 7 stamina

EABA elapsed time: 15 seconds



! While the arrival of the soldiers was well-timed for movie pacing, the soldiers, fully armed and organized, must have been on break right down the hall to respond to a call for assistance that fast. From the guard's call of "Backup! Send backup!" to the fully deployed soldiers yelling "Freeze!" was only seconds of movie time.

TURN 5 (turn mod: +8, quantity mod: x16)

5

Turn length: 15 seconds

Initiative: Neo and Trinity have a held action, so their initiative counts as their Agility, which is 13, but they take no penalty for it. However, they each add their full Dodge of 8 to the mix. This will *not* affect sequencing, but *will* affect their use of skills. Note that since they cannot see anything to dodge at the moment, the effect of the Dodge will be halved, even though the penalty on Neo and Trinity's action is *not* halved. The guards, not knowing what they are up against yet, declare 6, an amount that shows an unwillingness to let someone get the drop on them, but not so much that it would keep them from being able to hit *normal* targets.

The soldiers are behind the four columns flanking the elevator alcove and one column on each side towards Neo and Trinity. Since Neo and Trinity have moved 3 meters down the 20 meter hall and the last pillar is 17 meters down the hall, the soldiers are from 11 to 14 meters distant.

Neo: On Initiative 13 he runs as a major action (0m42s), heading for one side of the gallery where the soldiers are using pillars as partial cover. On the way there he uses a second major action on Initiative 10 (0m43s) to start shooting at the closest guard. The range will be 8 meters after he gets close to the wall, for difficulty of 9. He has an effective skill roll of 5d+0 (7d+1 skill roll, -8 for dodging, -3 for second major action, and uses +4 of his turn bonus (using 4 bullets). He rolls 4d+2 against a difficulty of 12 (range of 8 meters is a difficulty of 9, +3 for half his running distance level). Note that the distance he moved is half normal because he is **dodging (page 4.5)**. He rolls a 9 and misses (even with **Larger than Life (page 3.34)**).

On Initiative 7 (0m46s) he repeats the process with the other pistol, for an adjusted skill roll of 4d+0 (he loses -1d for a third major action). *He chooses to roll 3d+2 instead of 4d+0 and misses again.* Dramatically speaking, we can say that the guards have partial cover, so either the difficulty of the shot was a little higher, or the shots that might have hit actually hit what they were standing behind.

Trinity: On Initiative 13 (0m42s) she dodges, drops the duffel bag and runs towards the opposite side of the gallery. She takes cover behind a pillar while the soldiers' attention is drawn towards Neo's gunfire. She then holds action on her second major action (on Initiative 10), waiting for an opportunity.

Soldiers(10 of them): We will say that three on each side have automatic rifles with 30 round clips, and two have pump shotguns with 8 round internal magazines. This is important to note for several reasons. The shotguns can only fire 8 shots before they have to be slowly reloaded, so the maximum turn mod they can use is +6 (for a x8 quantity). Doing this would empty the weapons this turn, and it would take them quite a while to reload the shells one at a time. So they will choose to use no more than a +2 quantity mod each time they are fired (2 shots). The assault rifles will be used in an autofire mode, which limits them to three pulls of the trigger, a quantity modifier of +3. However, they *do* get the possibility of getting multiple hits for *the* action. Remember that three trigger pulls is *not* three actions, it is one action at a +3 for quantity mod *plus* the possibility of getting multiple hits.

This turn has a length of 15 seconds, so they can fire on Initiative 6, try to reload on Initiative 3 and then fire again on Initiative 0 if they still have a chance of success...



The soldiers take shots with autofire rifles and pump shotguns at Neo and Trinity on Initiative 6 (0m42s). They have an adjusted skill roll of 3d+2 or 4d+0 (base skill roll of 5d+0, -6 for Initiative and +2 quantity mod for the shotguns and +3 quantity mod for the assault rifles). The range is about 11 or 14 meters, both of which are difficulty of 10, with an additional +4 because of Neo and Trinity's (halved) dodge and another +3 because Neo and Trinity have moved a distance level of +6, for a final difficulty of 17. *They all miss.*

! They would have been better off firing lots of individual shots for a +8 turn mod and not having to reload, but we are just replaying the action as shown on-screen.

! Their chances were about 9% for a 3d+2 roll. If their targets had been people with Dodge of 4 instead of 6 or a run distance of +4 instead of +6, their chances would have been 16%. And if they had in addition declared an Initiative of 3 instead of 6, they would have an extra +1d on the skill roll and the chances would have been 36%. So you can see that your choice of tactics and the quality of your foes can make a *huge* difference. Note also that Neo and Trinity's dodge negated any Accuracy bonus that the soldiers might have gotten from **aiming (page 4.12)**.

! The other option the gamemaster could have used would have been **mass fire (page 5.10)**. If we said there were two groups of four auto-rifles, each group would have a quantity mod of +4, in addition to the quantity mod for the rate of fire in the group (+3). This would have made their adjusted skill roll 5d+1. In addition, since there are multiple rules being used that give a chance for multiple hits, any result that gets a hit would get an extra hit (see the end of the **autofire** rules on **page 5.11**).

For their next action, they would attempt to reload (on Initiative 3), but other things happen first.

Trinity: Had a held action and was waiting for a soldier to pause to reload. This happens after he finishes his Initiative 6 action (1m7s). She acts right after he shoots (she also acts on Initiative 6), popping around a pillar and kicking him (1m8s). Her adjusted skill roll is 5d+1 (7d+1 skill roll, using +8 of turn bonus, -8 for dodging, -3 more for the second action, and -3 because she is kicking). The difficulty for him to defend is his adjusted melee skill roll of 6d+0 (4d+2 skill roll with a +4, half her movement from earlier in the turn (**page 4.12**) because she was running. It is easier for him to defend because she has spent part of the turn moving towards him. She rolls 5,4,3,3,2 and he rolls 6,4,3,3,2,1. However, Trinity has **Larger than Life** and keeps 'best 4' for a total of 16 (remember the +1 in her 5d+1 roll), while the soldier only keeps 'best 3' for 13. If he had chosen to roll 5d+2 instead of 6d+0 his total would have been 15, so Trinity would have gotten him either way.

Trinity connects for 5d+0 half-lethal damage (3d+0 non-lethal, then 2d+0 lethal). Even after the soldier's Toughness is applied, the non-lethal damage does over his Health in one hit, so it counts as crippling damage. Against an extra, this takes him out. He staggers back from a kick to the gut and neck, hits the wall and goes down.

! In the movie, Trinity kicks the gun out of his hands, then rather angrily kicks him in the chest and then in the neck. *The important thing is that he goes down.* The player or gamemaster can embellish the results in dramatic fashion as long as it does not affect the outcome. However, Trinity *will* try something later that is both dramatic *and* requires a rule-based adjudication.



Neo: On Initiative 4 (0m53s), he uses some of his movement to dive and roll behind a pillar and provide cover from the soldiers, drops his pistols (which are not actually empty) and attempts to draw a pair of machine pistols. His adjusted skill roll is $0d+2$ ($7d+1$ skill roll, -8 for dodging, -12 because this pair of draws counts as his *fifth* major action). but he decides to use Fate to give him a $+1d$ on this roll (you figure Neo has a lot of Fate and can afford to burn some). This keeps his roll at $1d+2$ for each draw, and he rolls a 7 and an 8, barely succeeding. He now has a pair of ready machine pistols. He has used up all of this turn's $+8$ bonus already, so he had nothing left to apply to rolls like this. *He does nothing else this turn.*

Trinity: On Initiative 3 (1m11s), she ducks back behind a pillar to get cover from the soldiers.

Soldiers(9 remaining): On Initiative 3 (1m11s), the soldiers with assault rifles are busy reloading. This would have an adjusted skill roll of $2d+2$ (skill roll of $5d+0$, -6 for Initiative, -3 for their second major action and $+2$ for turn bonus). Since they have a total turn bonus to use of $+8$ and only $+3$ can be used emptying their clips (on Initiative 6 and maybe Initiative 0), they are applying the remaining $+2$ to this action. The difficulty of reloading is Average(7). There are seven soldiers with assault rifles left, and we will say four of them reload successfully. Using $+2$ turn mod does double the normal reloading time to 8 seconds, but since the turn is 15 seconds long they still have plenty of time to shoot.

One of the soldiers with a shotgun is *not* out of ammunition, and is 3 meters away from Trinity (near the soldier she just kicked). The difficulty of his shot is 13 ($+6$ for a range of 3 meters, $+4$ for her Dodge, $+3$ for her movement). His adjusted skill roll is $2d+2$ (base skill roll of $5d+0$, -6 for Initiative, -3 for a second major action and $+2$ quantity mod for the shotgun). He needs to roll well on $2d+2$ to reach a 13, and fails. Either Trinity successfully gets behind the pillar first, or he misses (1m11s). Either way it is the same result.

Soldiers(9 remaining): On Initiative 0, the ones who have reloaded realize that firing again would be at an adjusted skill roll of $2d+0$ (base skill roll of $5d+0$, -6 for Initiative, -6 for their third major action and $+3$ for their remaining turn bonus), so they do nothing. Even if they fired in semi-auto mode they could only get a $+3$ quantity bonus, since that is all the turn bonus they have left (remember that you can never have a bigger quantity bonus than your remaining turn bonus).

The ones who have not reloaded have nothing to lose by trying to reload again. They would also have an adjusted skill roll of $1d+2$. For the sake of making the example easier, we will say the rest of them reload.

end turn: Neo and Trinity are both running and dodging, plus Trinity was in melee, so we will call this maximum exertion for $+2$, plus the turn mod of $+8$, for 10 stamina each.

Neo: Has used 11 stamina

Trinity: Has used 10 stamina

Soldiers: Have used 7 stamina

EABA elapsed time: 30 seconds

The gamemaster pauses the action at this point to describe bullets flying, the marble facade disintegrating under a hail of gunfire, exposing the cement pillars underneath, the staccato bursts of gunfire echoing wierdly up and down the gallery, and over the din, the barely audible tinkle of brass shell casings hitting the floor by the hundreds. This sets a visual picture in everyone's minds that cannot be duplicated with miniatures on a map. The player for Trinity says that since Neo is armed and shooting and Trinity is unarmed, most of the soldiers' attention should be focused on him. The gamemaster agrees, so Neo is being shot at from both sides of the lobby. The player for Neo shoots Trinity's player a dirty look. Trinity's player shrugs and says "hey, it was *your* plan."



TURN 6 (turn mod: +10, quantity mod: x30) **6**

Turn length: 30 seconds

Initiative: Neo and Trinity continue to make the most of their superior skills and attributes. Neo declares 12 and uses no Dodge, and Trinity declares 9 and a Dodge of 3. The soldiers declare 6, as this gives them a reasonable chance of success at 3 major actions when you factor in the +10 turn mod. Remember that people using autofire and 30 round clips can use a maximum of +3 turn mod on any one action. As we said, autofire is not their best action choice, but it is in the script, so that is how it runs.

Neo: On Initiative 12 Neo pops out from behind a pillar and starts shooting at soldiers with his machine pistols as he walks towards them (1m17s). His adjusted skill roll is 3d+1 (7d+1 skill roll, -12 for initiative, and he uses none of his turn mod, which only uses 10 rounds of ammunition). His walk closes the distance to the soldiers by 3 meters (he applies none of the turn bonus to it). This closes the range to the soldiers to 5 meters (closest) and 8 meters (furthest). He shoots at the furthest one, which is a difficulty of 12 (+9 for range, +3 for half of Neo's walking distance level). He rolls a 14 and hits the soldier 2 times for 2d+2 lethal damage on each hit. The soldier goes down (1m22s).

On Initiative 9 (1m27s) he repeats the process. His skill roll drops by -3 for a second major action, but he uses the +2 turn mod allowed by emptying the rest of the machine pistol's clip (2 bursts of 10 shots), for an adjusted skill roll of 3d+0. He shoots at one of the closer soldiers, which drops the difficulty to 9 due to the shorter range. He rolls a 9, only hitting with one shot. Because one hit might not take the soldier out, Neo wants to roll for a random **hit location (page 4.18)**. Rolling 3d+0, he gets a total of 5, for a head hit, specifically, the neck. The **location effect** for a head hit is +1d damage after armor is taken into account, so the 2d+2 hit becomes a 3d+2 hit. Rolling for damage, the result is 10, over half the soldier's Health. This is crippling damage to the head, which is an automatic unconsciousness result.

! If Neo used the normal one bullet per trigger pull, he would be able to get a quantity bonus of up to +10 on an action (quantity of x30) on either machine pistol, but then each pistol would only get a maximum of one hit. By taking a smaller bonus but using autofire, he has the potential to get multiple hits on a target and conserve his turn bonus to counter consecutive action penalties.

On Initiative 6 Neo acts before the soldiers due to his higher Agility. He uses the other machine pistol to shoot at the last soldier on this side of the hall (1m29s). Neo has a total of +7 turn bonus remaining, and he can use a maximum of +3 turn mod on the shot (3 autofire bursts of 10 shots each). His adjusted skill roll is 3d+1 (7d+1 skill roll, -12 for initiative, -6 for a third major action, +3 turn mod, and +3 because he uses Fate for the second time to add to the roll). The previous shot was at 8 meters, but Neo uses +2 of his remaining turn bonus to increase his walk distance from 3 meters to 6 meters. This closes the range to the last soldier to 5 meters, a difficulty of +7, +4 for walking (distance level of +8) is 11. He rolls 3d+0 and gets a 13, hitting the guard twice, and he goes down.

Trinity: On Initiative 9, she sees a soldier on her side of the gallery drawing a bead on Neo. She slips around the other side of his pillar (walk movement) and kicks him (1m34s). *In a fancy way*. She aims for his shotgun, which the gamemaster says is a +4 difficulty, *and* she wants to disarm him in such a way that she can catch the weapon and use it (a **dramatic called shot, page 5.10**), which is another +4 difficulty. She has an adjusted skill roll of 4d+2 (7d+1 skill roll, -9 for initiative, -3 more for Dodge, and uses +4 of her turn bonus for the attack). He has a defending skill roll of 5d+2 (4d+2 skill roll, -6 for initiative, -3 because she came out of his **side arc (page 5.9)**, he uses +3 of his turn bonus, gets +1 because Trinity was walking, her movement (**page 4.12**) improves his defense rather than penalizing her attack, +4 for the called shot and +4 for the dramatic called shot).



Trinity wins the contest of skills (mostly because she keeps 'best 4' and he only keeps 'best 3', so she lands a kick to the weapon. Even though this is a dramatic called shot, the gamemaster says she has to break his grip on the weapon, otherwise people would be kicking the swords out of the hands of giant robots. The gamemaster says her damage will act like a Strength, and the soldier has to use *his* Strength to keep a grip on the weapon.

Trinity's kick damage is $5d+0$ vs. the soldier's Strength of $3d+2$ (or $4d+2$ if we give him a bonus for a two-handed grip). She rolls a total of 15, he rolls a 13, so the shotgun goes flying. Doing something with it is her next action.

On Initiative 6 she acts before the soldiers. She catches the shotgun (part of the dramatic called shot effect), turns and shoots him in the back (1m38s). This is a difficulty of +3 for the range of 1 meter, and +1 because she was walking, for a total difficulty of 4. Her adjusted skill roll is $2d+1$ ($7d+1$ skill roll, -9 for Initiative, -3 for her Dodge, -3 for her second major action). She uses none of her remaining turn bonus, and 'takes 2's' to get an automatic hit. If the shotgun is using heavy buckshot, she probably gets three hits at $1d+1$ each.

Because these all hit at the exact same time (**page 5.12**), there is no declining damage effect. On average, three $1d+1$ hits would do about 14 lethal hits. This might not kill him, but it is *certainly* going to be crippling damage, so it is safe to say he is out of the combat.

Soldiers(5 remaining): They get their first action on Initiative 6, after Neo and Trinity. All three of the ones on Neo's side of the gallery are down, leaving two near the pillar next to the elevator alcove on his side. Trinity has taken out the two closest to her, leaving one 3 meters away at the next pillar and two more at the pillar next to the elevator alcove on her side.

The soldier closest to Trinity is focused on shooting at Neo and does not turn to deal with Trinity until he gets his action on Initiative 3. All the remaining soldiers are shooting at Neo (1m43s), who is across the lobby and just past the pillars, a distance of about 9 meters. Their adjusted skill rolls are $4d+0$ ($5d+0$ skill roll, -6 for Initiative, +3 for the maximum turn bonus they can use with their assault rifles). The difficulty is +10 for the range of 9 meters, +4 for Neo's movement (his most recent move was at a rate of +8) and the gamemaster gives an extra +1 difficulty because of the pillars that block part of the view, for a total difficulty of 15. They actually have a decent chance ($\approx 26\%$ each), and the gamemaster says they will choose to roll $3d+2$ instead of $4d+0$ (**page 2.2**). One of them hits, rolling a 6,4,3 and the +2 makes 15. Neo uses Fate for the third time (successfully) and makes the soldier **reroll the die (page 3.10)** that came up '6'. He does and gets a '5', which makes his total 14 instead of 15, for a near miss.

Neo: Neo is starting to get to where he is risking failure if he uses Fate, *and* is on his fourth major action. His adjusted skill roll for anything would be $1d+0$ (skill roll of $7d+1$, -12 for Initiative, -9 for fourth major action and he has +2 turn bonus left if he needs it. He does nothing at Initiative 3. He does not actually change position at this time, but he is still counted as using the maximum movement he had done at any point in the turn, which is a distance level of +8 (6 meters).



Trinity: One of the soldiers saw what she did to his nearest companion on Initiative 6, but he was engaged in shooting at Neo. Trinity sees him turn at nearly point blank range to shoot at her, but she goes first on Initiative 3. Still holding the shotgun, she shoots him first (1m40s). Her adjusted skill roll is $2d+1$ ($7d+1$ skill roll, -9 for Initiative, -3 for her Dodge, -6 for her third major action, and she uses Fate for the first time to get an extra $+1d$). She only fires one shot, so she gets no turn bonus. The difficulty is $+5$ for a range of 2 meters, and $+1$ because she was walking for a total difficulty of 6. She rolls a 6 and hits the soldier, with results similar to the last one she shot.

Soldiers(4 remaining): On Initiative 3, all their weapons are empty from having shot at Neo, except one with a shotgun who shoots again and misses. The ones with empty weapons attempt to reload. Their adjusted skill rolls are $3d+0$ ($4d+2$ skill roll, -6 for Initiative, -3 for second major action, and they use $+4$ of their turn mod). We will say they all make the average(7) reloading task.

end turn: At this point, everyone is pretty much ruined in terms of trying to do further actions. Trinity ducks back behind the pillar so that the remaining soldiers cannot see her. Trinity was in melee combat and walking (1 stamina), while Neo was in ranged combat and walking (0 stamina). The remaining soldiers were merely in ranged combat (0 Stamina).

Neo: Has used 11 stamina

Trinity: Has used 11 stamina

Soldiers: Have used 7 stamina

EABA elapsed time: 1 minute

TURN 7 (turn mod: $+12$, quantity mod: $\times 60$)

7

Turn length: 1 minute

Initiative: There are four soldiers left, all of whom have loaded weapons, one of them a shotgun with two shots left. Neo has a pair of empty machine pistols, and Trinity has an empty shotgun. Neo and Trinity continue to make the most of their superior skills and attributes. Neo declares 9 and a Dodge of 2, and Trinity declares 9 and a Dodge of 3. The soldiers do 6 again, hoping to take advantage of the high turn mod.

Neo: On Initiative 9 (1m50s) Neo moves at his walk rate down the side of the lobby, and acrobatically cartwheels as a major action so he can grab a soldier's dropped (but loaded) assault rifle. His adjusted skill roll is $3d+2$ (base skill roll of $7d+1$, -9 for Initiative, -2 for Dodge). The gamemaster says this is a challenging(9) task, and Neo makes the roll. He now has an assault rifle in one hand and is a few meters from the end of the lobby. Neo reminds the gamemaster that he has 'Acrobatics' as an **enhanced skill (page 3.14)** and that when he uses it as a major action he gets $+2$ to his effective Agility for Dodge without taking the corresponding penalty on his own actions. This gives him an effective Dodge of 4 instead of 2 (because his base Dodge increased by 2 when his Agility for Dodge purposes went from $4d+1$ to $5d+0$, but he still only takes a -2 penalty on his own actions.

On Initiative 6 he continues to move towards the far wall, while doing a one-handed autofire shot at one of the guards while cartwheeling (2m4s). His adjusted skill roll is $2d+2$ ($7d+1$ skill roll, -9 for Initiative, -2 for dodging, -3 for his second major action, and $+0$ of turn bonus (using 10 rounds). The difficulty is $+7$ for the range of 5 meters and $+3$ for his move distance for a total difficulty of 10. The gamemaster docks Neo an *extra* $-1d$ on this skill roll for firing one-handed, and Neo uses Fate again to get a $+1d$ to counter this. He rolls $2d+2$ and gets lucky with exactly a 10, for a hit (a 42% chance). The assault rifle has a damage of $4d+1$ lethal, and odds are very high this will be a crippling hit and take down the soldier.



Soldiers(3 remaining): They all act on Initiative 6 (2m4s). The closest is 3 meters away with an assault rifle. His adjusted skill roll is 3d+2 (4d+2 base skill roll, -6 for Initiative, +3 for the highest turn bonus he can use). The difficulty is +6 for a range of 3 meters, +3 for Neo's move distance and another +2 for Neo's dodge (remember that Neo has an effective Dodge of +4, even if he only gets half effect (round up) against all this gunfire), for a total difficulty of 11. He rolls a 10 and narrowly misses (the soldier had a 74% chance). The second closest soldier has a blinding flash of self-preservation and ducks back behind a pillar so Neo cannot shoot him. The third soldier is furthest away, near the opposite wall, and shoots at Neo. The modifiers are the same, except the range is 6 meters instead of 3, for a final difficulty of 13. He also misses (he had a 50% chance).

Neo: On Initiative 3 he continues his cartwheel and will end up behind a pillar (2m10s), but on his way there he uses the last 20 rounds in the assault rifle to shoot at the closest soldier. His adjusted skill roll is 2d+1 (7d+1 skill roll, -9 for Initiative, -2 for dodging, -6 for his third major action, and +2 of turn bonus (using 20 rounds).

The player says that Neo is just doing one long autofire burst to empty the clip and that his use of Fate from the previous shot should apply here if the gamemaster is going to assess the one-hand penalty on him again. The gamemaster grudgingly agrees, but says Neo's Fate track is bumped up a notch as though he *had* rolled Fate again. The player starts to argue, but then thinks better of it. The difficulty of the shot is +6 for a range of 3 meters and +4 for his movement, for a final difficulty of 10. Neo makes the roll (a 28% chance), the guard takes 4d+1 lethal damage and goes down. Neo finishes his move behind a pillar.

Neo: On Initiative 0, Neo has +10 of his turn bonus left unused, but does nothing except drop the empty assault rifle (2m12s).

Trinity: She is absent for the rest of the combat actions and is presumably staying out of the way of Neo's gunfire and looking for opportunities. She uses none of her turn bonus and is neither running nor fighting, so she uses no Stamina.

Soldiers(2 remaining): On Initiative 0 they can not see anyone, and given what has happened to everyone else, they are not feeling particularly courageous. The furthest one does nothing, and the closer one lays down a short burst of **covering fire (page 5.13)** against the pillar Neo is hiding behind. This is not the smartest idea, since the covering fire expires at the end of the turn, but hey, not all combat decisions are smart ones.

end turn: No one did anything to burn stamina, so totals are the same as last turn.

Neo: Has used 11 stamina

Trinity: Has used 11 stamina

Soldiers: Have used 7 stamina

EABA elapsed time: 2 minutes

TURN 8 (turn mod: +14, quantity mod: x125) **8**

Turn length: 2 minutes

Initiative: There are only two soldiers left. Neo declares 6 and no dodge, the soldiers declare 6 again, with the closer one also declaring a dodge of 2. Trinity is busy somewhere polishing her nails.

Neo: Draws yet another pair of machine pistols on Initiative 6 (2m14s). His adjusted skill roll is 4d+1 (7d+1 base skill roll, -6 for Initiative, -3 because this counts as a second major action). He 'takes 2's' and automatically makes the average(7) task for each weapon draw.



On Initiative 3 Neo steps out from behind the pillar, starts walking down the hall and lays down **covering fire (page 5.13)** against the pillars the soldiers are hiding behind (2m19s). Neo's player says that since he is not aiming at a particular target, he should be able to fire both machine pistols to generate a large volume of fire and have it count as a single action. Since Neo is ambidextrous and this is not quite a neat trick, the gamemaster allows Neo to use a quantity mod for the total ammo capacity of the machine pistols on the covering fire, emptying both in the process.

Neo is covering a line of hexes 4 meters long to pin down anyone who might pop out from behind the three pillars to Neo's right. The base difficulty for range is +6 for the nearer soldier and +8 for the further one. The covering fire is +3 difficulty, and +4 more for x4 hexes covered, and Neo is walking for +3 more. So, the base difficulty is 16 for the closer soldier and 18 for the further one.

This is reduced by the quantity *level* of the fire he is laying down (+12 for x60 bullets), but it is increased by the time *level* involved, which has to be at least +3 (the quantity for each gun is x30 or a level of +10 and autofire is +7, so +3 time makes up the difference, 30 shots in 3 seconds). The net 9 points of reduction in difficulty makes the chance 7 for the nearer soldier and 9 for the further. Anyone who shows themselves from behind a pillar will be attacked *before* they get a chance to do anything, using this skill roll and appropriate difficulty.

The covering fire will last for +3 turn mod, which is enough for Neo to close with the nearer soldier. The closest soldier chooses not to show himself at this time. The furthest soldier pops out from behind cover to shoot at Neo, and is subject to a covering fire roll. Neo's adjusted skill roll of 2d+2 rolls an 11, hitting for 2d+2 lethal damage, twice. The result on the first hit is 10, and the soldier takes a crippling injury and goes down without firing a shot.

Soldiers(1 remaining): On Initiative 3, the sole remaining soldier pops out from behind his pillar (*after* Neo's covering fire ends) and Neo is at point blank range (2m25s). However, his gun is empty, as are Neo's machine pistols. *Oops*. This is a situation where a gamemaster could ask a player how much turn mod they are going to commit to the action, and then *after* the turn mod is allocated, tell them that their weapon is empty. *It would be mean, but fair.*

Neo: On Initiative 0 Neo walks up the soldier's chest and kicks him in the head, literally knocking him head over heels (2m26s). In *practical* terms, Neo is just doing a punch on him to avoid the extra -1d penalty for a kick, and just embellishing the details of what happened after the fact. Neo's adjusted skill roll is 4d+1 (base skill of 7d+1, -6 for Initiative, -9 for his fourth major action, and he uses +6 of his turn bonus). The soldier has an adjusted defensive skill roll of 4d+2 (base skill roll of 5d+0, -6 for Initiative, +2 because he is dodging, +3 for Neo's movement). Neo wins the roll (mostly because he gets to keep 'best four') and hits him. His strike damage is 3d+0, and if we say it is a punch it is all non-lethal hits. The damage roll is a total of 15. The gamemaster sees that the soldier has no chance and just takes him out. The player says the excellent damage roll is the aforementioned kick to the head, ending the scene with a dramatically described flourish.

end turn: Neo was in melee combat and used +6 turn mod on that action, so he burns 7 stamina. This takes him past his total of 13, so he marks off 1 non-lethal hit, erases his stamina track and puts 5 new marks on it. Trinity used no stamina.

Neo: Has used 18 stamina

Trinity: Has used 11 stamina

The combat is over. Screen time is about 2m30s, while elapsed game time is somewhere around 4 minutes.



Critique: Obviously, the movie scene was scripted to have a certain outcome, and we chose stats and skill levels for this example to generate *that* outcome. Nonetheless, it is *still* reasonable. Most of the dice rolls used were in the average range. If we had skewed the stats of the combatants a little more, the outcome would have been much more certain and maybe even have ended a turn sooner.

There are a few options that *could* have been done, but were not. The soldiers could have used **mass fire** in their opening salvo against Neo. The turn clock *could* have been reset to zero after the first five guards were eliminated, or they simply could have been **outmatched**. This would have had soldiers arrive in a more realistic amount of time rather than the near-teleport they did in the movie.

Note that from a *rules* standpoint, all that discarding and drawing of weapons made sense for Neo. Reloading is a two-handed task, so with two weapons he would have to put the first weapon down, reload the second, then put the second one down, reload the first weapon and then pick up the second one again. Dropping the weapons and just drawing new, fully loaded ones was far faster.

The movie has this scene last about 2m30s, with some slow-motion scenes and time split between the characters, while the **EABA** version took about four minutes. If it had been run as two combats, the total **EABA** combat time would have been a little more than one minute. If run as one combat and it took one less turn, it would have been two minutes.

Aftermath: In game terms, Neo and Trinity have burned a lot of stamina. With a Health of 13, this means their Recovery is a +2. Neo can, if resting in the elevator for a bit, recover 1 non-lethal hit when his recovery plus the time level equals +20 (8 minutes). He might be able to speed this a little, or maybe have a **Forte** on Recovery. After this time, he also recovers *all* lost stamina.

! Stamina and non-lethal hit recovery works this way to try to mimic real-world effects. If you have just run a marathon, you are physically drained, but you can recover *some* energy fast enough to be up and about in a short time, but you will not recover long-term reserves sufficient to run another marathon for quite a while. Letting you recover stamina quickly allows you to do multiple short bursts of activity without ruining yourself, but the loss of non-lethal hits makes you pay a longer term price for extended periods of exertion or stress.

The second combat probably would have taken six turns instead of four because of lower turn mod bonuses, so people would not have been doing as many actions. So, in about 8 turns of combat (and a dozen pages of descriptive text), we dealt with seventeen combatants, melee and ranged combat, called shots, covering fire, dramatic actions, autofire, mass fire, outmatching, taking 2's, reloading, the expenditure of several hundred rounds of ammunition, and adequately simulated both realistic and near-superheroic levels of ability in this classic movie scene. *Without using a single map or diagram.*

Of the 15 opponents in this scene, 3 were incapacitated by unarmed combat and likely survived (1 guard, 2 soldiers), while 12 were shot (4 guards, 8 soldiers). Of those who were shot, probably half were killed instantly, while the rest were immediately incapacitated. *Whether they were evacuated by the time the elevator came back down is another matter...*

And being able to do something this complex this easily, without a map, is *why* we have adopted the expanding time scale for **EABA** combats. Just as much drama, just as much neat skill and gun-fu, in a *lot* less real-world playing time.



Those afraid of the universe as it really is, those who pretend to nonexistent knowledge and envision a Cosmos centered on human beings, will prefer the fleeting comforts of superstition. They avoid rather than confront the world. But those with the courage to explore the weave and structure of the Cosmos, even where it differs profoundly from their wishes and prejudices, will penetrate its deepest mysteries.

- Carl Sagan

INTRODUCTION

If you are a fan of science fiction, fantasy, horror or alternate history, you are aware there is a nearly infinite number of odd paranormal effects used in fiction, and used in ways that are often unique to a particular setting. This means that to set up a paranormal power list for a *universal* rpg like **EABA** could require *hundreds* of pages, giving each *possible* power its own writeup.

Or, we could use a *lot* less pages and instead create a system of parameters and options that let you mix and match components, enhancements and limits to *create* the exact effect you want. It *is* some extra work up front, but gives you a *lot* more flexibility. The basic **EABA** rules will also give you some pre-designed sample powers and enough detail to use them as a base to create dozens more.



i A 'force field' is an effect that stops damage, and uses energy to power it. 'Armor' is an effect that stops damage, is in a gadget and requires no energy, but it could also be inherent to you and not a gadget, like armored skin. A 'force wall' is an effect that stops damage, is usable at range, protects an area and uses energy. Instead of just having a list of powers with 'armor', 'force field' and 'force wall', we just have the building blocks that can be combined to make these powers and let you customize them how you want.

The power system in the core **EABA** rules is going to be an explanation of the system, **sample powers** to show you how it works and ways to modify them.

Which way you do it is up to you. For new players, we recommend letting the game-master set things up or just playing with and modifying the sample powers. For veteran role-players and system geeks, look over a few sample powers and then dive into the meat of this chapter.

What is a power?

Everything, nothing, and most of the stuff in between. Power is not about *exactly* what something does, but the *relative* advantage it gives you over everyone else in the situation. For instance, you might not think of a modern military rifle as a 'power'. It is lethal, powerful, and you certainly do *not* want to be on the wrong end of one, but there are millions and millions of them out there, so no army is at a disadvantage because they are too scarce.

On the other hand, take a squad loaded to the eyeballs with extra clips and dump them back at the Battle of Hastings (1066CE). That eight-man squad would decide the battle, changing the course of history. They might not have held back the Persians forever if they fought beside the Spartan 300, but they *would* have saved Custer at the Little Big Horn. The point is, the *rifles* remain the same. Only the *relative* power has changed. Or as Arthur C. Clarke said, 'any sufficiently advanced technology is indistinguishable from magic.'



This is what powers do. On the large scale, they tip the scales to those who have more of them. On the small scale, they can make individuals powerful enough that non-powered individuals cannot cope except in groups. *Godzilla has powers. Tokyo does not.*

One thing that is a measure of how much the powers available in a gameworld can tip the scales is the 'helicopter gunship' test, and is especially useful for fantasy worlds. *It is very simple: Can you make a wizard who can stop/deflect ranged attacks, fly and hurl fireballs?* If you can, then properly trained mages can ignore *all* mundane threats, and people on the ground can flee or get flamed, limited only by the mage's endurance. In a world like this, every army *must* have mages that can do this or stop this, and the side that runs out of mages first loses. Conan always ends up beating the wizard, but he never ran into a flying wizard who could deflect arrows...

Powers are like tech. It is not whether you have them or not, it is whether *yours* are better or more powerful than *theirs*.

Anything that only a minority of people have access to, either by birth or specialized training is in a way, a 'power'. If almost everyone is illiterate, simply knowing how to read could make people think you had magical powers (Sequoyah, the inventor of the Cherokee written language, was accused of witchcraft because of his invention). The same goes for real medicine in an era of superstition.

In a published gameworld, all the social and other ramifications of powers are *usually* taken into account. If you are inserting powers into a setting *you* have created, you need to do the same. Look at powers and how they affect things from *every* angle. *Because if you leave loopholes, you know the players are going to find them...*

Genre conventions

A power has to fit within the confines and expectations of the gameworld it is part of. One way a setting book or gamemaster can take it into account is with genre conventions. This is nothing more than a list of mandatory and forbidden power modifiers that give the powers in that particular setting their flavor.

i If you had a fantasy world where magic exists, but all powers had to be channeled through an object, then you could say that all magic had to have a gadget and that this gadget has to have certain usage requirements (wands have to be waved, scrolls have to be read, etc.).

For rule examples in this chapter, there will be few limits or mandatory modifiers, but as you read through you will see how they could be applied to different settings. *Remember that any sort of situational modifier for power design will have a value **relative** to the game setting.* 'Proximity to a large body of water' as a condition for casting a magic spell is a bigger modifier for a desert campaign than for one set on an island. If the area adventurers will wander has both, the modifier will be some intermediate value.

! You *can* design 'negative powers'. This is some thing that has a cost in P that *harms* you. This is a **Bane**, and reflects something that can or does mess with you in a way beyond your control. If you are a vampire, the gamemaster can design up a power called 'holy symbol' and you can take that as a Bane for its value in P. Or it could be a lich lord's hidden heart, or a fire elemental's vulnerability to water, and so on. So long as you remember that you can *never* have a power that defends you against that bane. If you try to design a Boon or Bane and the effect is not easily quantifiable, assume a +3 effect is a doubling or halving, and that each additional +3 doubles or halves it again. For instance, 'aging one-half as fast' might be a +3 effect that negates a specific penalty (being exposed to time).



Terminology

To keep things straight, **EABA** is going to use some specific terms to describe the various parts of a power. For instance, the words in green would be specific terms for this chapter:

A firebolt **power** is a collection of **modifiers** that determine its **base power level**, which costs 1P. Extra points spent on the power will increase this to get the **final power level**, which after applying any defenses the target might have, becomes the **residual power level** the target is affected by.

That is wordy, but all it means is "a power is made up of factors that determine how much 'bang for the buck' you get, the amount of points you spend increases this amount, and powers are usually affected by appropriate defenses like damage is affected by armor." So, the *actual* terms are:

- **power:** The collection of rule concepts that result from a combination of modifiers. A power is both a collection of modifiers *and* the subjective parts of its name and description. For instance, you would not expect a 'laser pistol' to extinguish fires, nor have a 'water cannon' set them.

i A gun is a power that affects the hits of a target, which uses a skill roll to hit, has a limited number of bullets and so on.

- **modifier:** Something that represents a specific aspect of a power's overall utility. Modifiers are generally conceptual and deal with what the power is supposed to do and the way the power is used. A power can have few or many modifiers.

i An armoring power might only protect part of your body. This would be a modifier on the power.

- **effect:** *One* thing that a power does. Powers must have at least one effect, but could have several. The effects of a power are modifiers.
- **base power level:** What you get after spending 1P on the power. It is simply the modifier total adjusted by the gameworld base.

- **final power level:** In most cases you can boost the base power level by +2 for each +1P spent. The gamemaster will decide if there are any limits on how many extra P can be spent. A power level can end up as a fixed value or a die roll, as appropriate.

i A gun that did +8 damage would have a power level of 2d+2. A +8 boost to Strength would have a power level of +8. A +8 boost to Strength of 7, being used in an arm-wrestling contest, would be a Strength roll of 5d+0 (each +3 is 1d+0).






- **gameworld base:** This is a two-part number, like 0/9. The first part is a freebie, an amount that adds to (or subtracts from) the final **power level**, *after everything else is done*. The second is an efficiency threshold. **If the sum of modifiers for your power exceeds this value, the excess is quartered, rounding down.** This makes it harder to increase the base power level past a certain point. Mundane gadgets have 'tech base' that does the same thing.

i If the gameworld base was 2/6 and the total for a power's modifiers was +10, this exceeds the '6' in the gameworld base by +4, which is quartered to +1, for a *total* benefit from the modifiers of +7. If this is it for the power, *then* you add the '2' for a final power level of +9.






- **mundane:** If a power has an item in its description referring to the 'mundane', it means it is related to the real world. Mundane powers are things that people without powers can create. Guns are usually mundane powers. A 'sleep spell' is paranormal, but a 'drugged sleep dart' is mundane.
- **paranormal:** References to the 'paranormal' mean that some aspect of the power involves things that cannot be duplicated without resorting to things outside the abilities of 'mundane' people. *This is gameworld-specific.* In today's world, a matter transporter beam would be 'paranormal'. In a science-fiction setting, it could be mundane.
- **esoteric:** Or unusual. Something that is rarer than normal within some other category. 'Rare earth magnets' might be an esoteric but mundane part of a gadget. 'Unicorn blood' might be an esoteric paranormal part of a magic spell.

Notes

The idea behind the power design system is three-fold. **First**, a large base power level requires a lot of positive modifiers, which tend to limit the power in some way. A powerful mundane cannon is probably heavy. A powerful magic spell is probably complicated. How complicated a power ends up is really up to you. This is a perfectly functional power:

 effect: artificial movement(flight)	+0
 range: aura	+2
 power duration: until stunned	-2
 special effect (antigravity)	+1
 drain: +1 per +9 power level	+4
base power level for 1P	+5
each +1P spent	+2

Translated into plain English, this is:

 I can fly	+0
 what I wear is protected from wind	+2
 I fall if I am stunned or knocked out	-2
 I say I am psionically negating gravity	+1
 I use 1 stamina per +9 in the power	+4
for 1P I move a distance of (5 + turn mod)	+5
each +1P I spend increases this by:	+2

So, that is a perfectly good 'flight power' made with a total of five modifiers, and for 5P the person would have a power level of +13. If you check the Universal Chart, it is a distance of 32 meters or about 115kph/72mph for a stamina cost of a normal person sprinting (2, since +13 is more than the '1 per +9' and this cost rounds up).

But, you could also say it was a magic spell that required reading aloud from scroll, which could add modifiers for:

- voice (reading it)
- gestures (holding the scroll)
- preparation time
- gadget (the scroll itself)
- skill roll (knowing the arcane language)
- minimum required Fate (magic potential)
- failure side effect (if you blow the roll)

This *would* make the power a *lot* more efficient in terms of the power you get for 1P, but you have also more than doubled the number of modifiers required to create the power! It is a tradeoff. A power *does not necessarily need a lot of modifiers to be useful, but there are a lot of modifiers to choose from*. There are some shortcuts that will be mentioned towards the end of the chapter, however.

Second, there needs to be a correspondence with science and real-world considerations *when necessary*. A modern body armor is better at stopping things than a primitive one. A magic spell that generates a certain amount of fire will do more damage to a single target than it will if you spread it over an area. So, the system needs modifiers or frameworks that will take this into account. The 'gameworld base' mentioned on the previous page will be very important as an overall consideration, while conditional modifiers like 'area effect' generate a huge difference in power level between things that affect one target and things that affect a lot of them.

Third is the idea that in the end, almost *everything* is a power. So, the system *should* let you create a plasma cannon, a teleportation spell or a laptop computer. The system *cannot* do *everything*. You cannot create a pair of jeans, a snowglobe or a box of paperclips as a power, but almost all the things useful to players as weapons, armor or tools *can* be created with the system and just about everything on the weapon, armor and gear list was designed up with a power cost just to give you a relative comparison of "how many P do I need to give a wizard to compensate for the assault rifles and body armor of the dimension-hopping mercenaries?".



Power intensity

Most powers are going to affect a target's attributes, stats or derived characteristics. On the **EABA** scale, this means that each ± 3 in *modifiers* generally means the power is twice as powerful and in general, twice as useful.

i Having +1d Strength over someone else means you can lift *twice* as much. Having +4d more means you can lift *sixteen times* as much.

Modifiers contribute to the final intensity of the power in different ways. A power with long range may have no more energy than one with a short range, but the long range is more useful and is a negative *modifier*, which will reduce the power level compared to an identical power with a shorter range. *The thing to remember about the EABA power design system is that you get the biggest bang for the buck from the first 1P.* Each +1P after that only gets you +2 to the power level.

So, how much power are you going to want? Knowing this ahead of time helps you plan. Look at the **Universal Chart** to see the power that equals a level of real-world damage, what movement is as fast as a jet, what Strength you need to lift a car, etc. Also keep in mind the nature of the gameworld and how powers interact with both other powers and the mundane world. If the best conventional armor a person can wear is about 2d+2 and powers are throwing around 5d+0 lethal attacks, then armor is not all that useful against powers. The gamemaster should be able to tell you what levels of power are probably too low to be useful or so high as to be unbalancing.

Scaling

One way to shape or model a particular setting or generate a power framework you want is to apply varying efficiencies. *All powers will have a gameworld base, or in the case of mundane gadgets, a tech base.* Adjusting these will adjust the base power level for any given design. Adjusting the gameworld or tech base for *specific* effects or modifier categories will do the same, but only for powers with high modifier totals in that category. Remember that the gameworld base is two values. The first part is a free addition (or subtraction) to final power level. **It is not a modifier, it is 'free power'.** So, if the gameworld base is 3/6 and your power had a final designed effect of +5, it would automatically become +8 because of that first value in the gameworld base. And the second value is an efficiency threshold. *Modifier* totals more than this amount are quartered, rounding down. Making the gameworld base different for different types of power changes the way they are designed.

i If you say that conventional attacks have a base of 0/6, mental powers have a -3/3 and defense effects are 6/12, then you have a defense-heavy world where mental effects are the least effective sort of powers. If guns get a 0/9 tech base and blasters are -3/18, then people will prefer blasters over guns when the modifier total gets high enough (guns would quarter modifier totals more than +9, while blasters do not do so until +18).

So, if you are using this to create powers for an existing gameworld or to recreate someone else's power system and the results are not coming out right, it might just be a matter of tweaking the fundamentals for a couple of the effects or power types.

In addition, each type of modifier for a power has its own symbol, and these are color-coded just like Traits. Green ones(↗) are fairly safe, blue ones(↘) should be watched and red ones(↙) should be used with gamemaster permission only.

POWER DESIGN



You do *not* buy powers from a list, like 'energy blast' or 'magic missile'. Rather, you have an effect you want to generate and a lot of other characteristics which you can apply to make the power as unique or common as you want. Powers can be very normal, like 'damage that is stopped by mundane barriers', or as very bizarre as the gamemaster lets you make them, like 'mind control that is resisted by shoe size'. While the system is very number-based (but simple), the absolute first thing you do is define the power with three *subjective* criteria:

- its name (e.g. 'laser eyes', 'mass charm', 'frag grenade', 'teleport belt'), usually at least two useful words.
- whether or not it is 'mundane' or 'paranormal', within the framework of the game setting it is meant for, *and* the primary effect of the power. A grenade might be 'mundane offense'.
- its concept (e.g. 'superpower', 'spell', 'gadget'), and at least one design-based keyword other than its effect. Note that it is possible to have paranormal powers generate mundane effects.










i Wand of fire: Step 1

We will do a running design example that we call a 'wand of fire'. So, right there we have the first item, the name. This also tells us a useful thing about the power (fire). It also leads us to the second item, which is that it is paranormal, (magic is not mundane). The concept is that it is some kind of magical gadget. This gives us:

name	type	concept
wand of fire	paranormal offense	lethal magic gadget







! The subjective description is quite important and cuts both ways. A power that shoots laser beams from your eyes is more specific than just a laser. There are ways to use this to your advantage, and ways it can be used against you.

After you have the subjective definition for a power, the modifier groupings for conceptual purposes are:

-  **effect:** what the power actually does
-  **framework:** groupings of separate powers
-  **range:** how far the power goes
-  **duration of:** how long the power lasts
-  **defense against:** what impedes the power
-  **contingencies:** things that affect power use
-  **flexibility:** how much you can change the power
-  **frequency:** how often you can use the power
-  **gadget:** a physical form for the power

Some of these are necessary for all powers, some are optional. All will be modifiers that can increase or decrease the level of effect. For instance, putting a power in a gadget is generally a positive modifier. You get a bonus for the risk of losing control of the power. A power that is hard to defend against is a negative modifier. A power you can only use once a day is a positive modifier. And so on.

Powers, regardless of their complexity and subtlety, usually boil down to doing one or more of the following six effects:

-  **mobility:** generating motion or its equivalent
-  **information:** collecting it, altering it, moving it
-  **offense:** cause harm or reduction to something
-  **defense:** preventing harm or reduction
-  **control:** taking control or giving orders
-  **alter:** game stat or a physical characteristic

The broad category a power falls into will be one of these, like 'a mobility power'. If a power is designed to do more than one thing at the same time, you just classify it accordingly, like 'a defense/mobility power'.

A particular game effect can often be created in more than one way. For instance, telekinesis might be an attribute effect (Strength) usable at range, but it might also be designed as the control effect, allowing you to animate objects and make them do your bidding or a morph that lets you stretch your arms.



Gameworld base

The first number-based part of design is the gameworld base. This can vary, but for the core rules the value is 0/9, just to make things easy to work with. Tech base defaults to the values below.

	tech base
Primitive Era (all up through Dark Ages)	-9/0
Basic Era (medieval to 18th century)	-6/3
Industrial Era (19th century to mid-20th)	-3/6
Atomic Era (WW2 to early 21st century)	0/9
Post-Atomic Era (mid-late 21st century?)	3/12
Interstellar Era	6/15
Advanced Era	9/18
each fraction of an era	±1/±1

For more details on tech eras, see the start of **chapter 7**. The gameworld or tech base is the starting point.

! We are in the latter part of the 'Atomic Era' right now, so if you used these rules to make up something like a modern firearm, 'tech base' would be a 1/10 (0/9 for the era, +1 on each part for the latter part of the era).

! Because of the way the efficiency system works, most Primitive Era gadgets should be designed as 'Late Primitive Era', with a tech base of -8/1.

The values for gameworld base and the difference between the two can be changed to suit both a gameworld or a particular tech or power. A low efficiency value (the second number) will make things like large gadgets less efficient (gadget size can be a very large positive modifier, which would be cramped by a low efficiency). So, if you say that 'weather magic is 0/18' and 'necromancy is 6/3', then you are making different *types* of modifiers more likely to be used for the two.

! At low power levels, little changes are significant, and this shows up most with mundane gadgets. A ±1 or ±2 difference can be significant for a power that only had a +6 effect to begin with. This means a bit of extra effort is needed if you try to recreate real-world gadgets in the system.

Effects

This is a very complex topic that we could parse so fine as to be unusably complex, but they generally fall into the six types listed on the previous page. If a single power does *multiple* effects, they usually share all non-effect modifiers.

Mobility

As a power, it either acts on it own or adds to some other form of mobility. Mobility is defined as a particular kind and method of movement as part of its subjective description. So, if you have an 'extra-dimensional' move, it might be 'teleportation', or it might be defined as an 'extradimensional doorway', but it is not both. The default power duration and effect duration of a mobility power is 'an action'. If a power can do multiple forms of movement at the same time, you use the lowest modifier and apply an extra -2 for each additional mobility type.

mobility	modifier
⚡ primary natural	-4
⚡ secondary natural	-2
⚡ tertiary natural	+0
⚡ artificial	+0
⚡ paranormal	-4
⚡ extra-dimensional	-6
⚡ more than one mobility	-2 extra

The final power level for a mobility power is either a distance that you can move in one second (time level of +0) or an amount that adds to the level of some *other* movement, depending on the actual power effect. For some specialized movements, a negative power level can still be useful, since negative distance levels are merely distances of less than one meter, and when combined with extra time spent, can slowly move a useful distance.

i If you had a mobility power that let you move through stone at a residual power level of -6, this still means that you could move through a one meter thick stone wall (distance of +3) in a time level of +9 (23 seconds). If that one meter of stone was the wall of a treasure vault...jackpot!



✓ **primary natural(-4):** This would be running for a person, swimming for a fish and flying for a bird. Whatever form their walk distance takes is their primary natural movement. A power with this effect adds its final power level to the Walk, Run and Sprint values of the target.

✓ **secondary natural(-2):** This would be swimming for a person or running for a bird, something you can do, just not as well as your primary natural movement. A power with this effect adds its final power level to the Walk, Run and Sprint values of the target for that mode of movement. The nature of what you are moving through may further adjust this.

✓ **tertiary natural(+0):** This would any form of movement the target could *theoretically* do unaided, just very poorly. A person digging through dirt with their hands would be an example.

All the natural mobility powers imply use and movement of the body and cannot take extra modifiers for this use unless it is a special case.

i Wolfman has a mobility power to give him extra natural running speed. You cannot normally take a modifier for 'gestures' for a power like this, but Wolfman has to go from running on two feet to running on all fours to use the power, so the gamemaster allows him to take a modifier that makes him use both hands for the power, which means he cannot hold weapons or other items in his hands when using the extra movement.

✓ **artificial(+0):** This is a type of movement that is possible by natural means, but the special effect used by the power is not natural. People cannot fly, so a rocket pack or typical 'superhero flight' would be a good example. **Artificial movement does not add to natural movement.** It is a separate quantity and has no Run or Sprint equivalents. Any level of the power use counts as whatever type of action is specified by other modifiers (usually a minor action).

✓ **paranormal(-4):** This is a form of movement that is generally not possible for the target, but whose special effect or definition does not exceed mundane limits. Being able to turn to mist and pass through barred windows would be a paranormal movement. You could not do this as a real person (which makes it paranormal), but the mist is constrained by the mundane features of the gameworld (a genie cannot mist his way out of a stoppered bottle). *Other aspects of the target are unchanged unless this is part of the power.* A person who has turned to mist to move through a set of jail bars can still be punched or stabbed or shot as normal, unless they had some sort of defensive power linked to their 'body of mist'.

The power level of a paranormal movement is the distance level that can be moved. This effect *may* have a 'defense against' modifier to reflect the limits of the movement, and these limits can reduce the distance moved.

i A 'body of mist' power at +12 might move a distance level of +12, but if it had to go through a narrow set of bars that the gamemaster said was an 8 point barrier, you could go through the bars and then only move a distance level of +4.

✓ **extradimensional(-6):** This is movement capable of ignoring most mundane obstacles. Teleportation would be a good example. The movement normally proceeds as discrete jumps (a time level of +0), but the special effect may allow for longer durations in which a traveller effectively does not exist in the game setting and merely reappears at the destination after an interval (like travelling through electric wires instead of teleporting).

! For game balance, you might require that all extradimensional movement have a 'defense against' modifier with a *total* value of at least +4. This allows people who have the wealth, knowledge or resources to block this sort of movement into or out of an area. Without this, teleportation is an amazingly unbalanced power.



Information

Information can be transmitted, received, jammed and stored. One or more of these is what the effect does. You can think of information in a lot of ways. The contents of a DVD are information. So is memory or surface thoughts, or the bending of blades of grass that tell you someone walked this way half an hour ago. So, information as a power is defined as what it does and its subjective description. A power that reads DVD's does not read minds, and vice-versa. An information power has a base power level of the lowest value item from the following list, with an additional -2 for each additional item from the list. The normal power and effect duration for an information power is one action.

information	modifier
store	+0
recieve	-2
jam	-3
transmit	-4
more than one information effect	-2 extra

i A gadget that can receive wireless signals and store the information has a modifier of -4 (the -2 for receive and -2 for the addition of being able to store the received information).

! Information as a power effect works fine by itself. However, trying to make it work as modifiers for creation of gadgets is doomed to failure if the gadgets themselves are mutating at a rapid pace. For instance, vinyl phonograph records were the dominant form of music storage from 1948CE up to the 1990's. The 150 gram vinyl LP was made obsolete by the 15 gram CD. In 1995CE the DVD had eight times the capacity of a CD, in 2002CE the Blu-Ray DVD had eight times the capacity of a normal DVD, and in 2012CE you could get a .25 gram micro SD card with the same capacity as a Blu-Ray disk. So, in about 20 years the amount of mass needed to store music (or any other type form of information) has shrunk, on average, by a factor of 2000. **Each** year. It is *really* hard to model that in game terms...

The *amount* of information that a power can process is *always* going to be dependent on a game setting. You would not expect a steam-punk telegraph to be able to transmit high-res video, while this would be the norm for a modern videophone. For most game purposes, digital information should require a higher tech base than analog, which makes gadgets for the same level of information smaller, images are worth at least +10 the level for words and video is worth +16.

i If a 'word' is an information level of +0, then a still picture is an information level of at least +10 and mediocre quality video is at least a +16.

For purely power-based effects like magic or superheroes, the power level after any defenses is the *approximate* quantity value of 'words' of information you get or seconds of a person's memory. A bit of memory would be what you are perceiving and experiencing at that time. For instance, one second of 'reading a book' is *not* the page they are looking at, it is the words they are reading *at that time* plus some awareness of their surroundings.

i A time level of 15 minutes is a time level of +20. So, to use a magic spell to extract 15 minutes worth of someone's conversation or memories in 1 second of power use would require an adjusted power level of +20. The power level represents the speed at which you receive the information. Reading thoughts as they happen would only required an adjusted power level (after defenses) for the 'speech' rate.

information rate or storage	level
telegraph (~15 words per minute)	-4
memory of events	+time
speech (~120 words per minute)	+2
reading text (~500 words per minute)	+6
music	+10
single low-res image	+10
single high-res image	+14
low-res video	+16
high-res video	+22



✦ **store(+0):** The effect of the power is to hold and retrieve information. Obviously, this means that information is transmitted and received by the power, but this is *not* the same as the transmit or receive effects. For instance, writing information to a flash drive does not tell *you* what that information is. The effect is simply a means to put information into a 'container' so that it can be recalled later in the exact same form that it was stored. Being able to store and recall it avoids any problems with forgetting it. At a high power level, this could be used for 'photographic memory' The power level represents a quantity of 'words' that are stored, as described earlier. You cannot store a skill. You *can* store reference information for a skill that would give you a bonus when you have time to utilize it.

✦ **receive(-2):** The power is like a radio or television receiver, allowing you to accept and translate a transmission into a form you can understand. This is a real-time process and does not store the information. This means that anyone who receives the information later has to make some sort of Awareness roll to recall particular details, based on the quantity of information received and the time spent trying to recall it, while if they had the information stored they could go through it at leisure to find the exact bit they were looking for.

i If you had 15 minutes of 'received information' and you were trying to recall a specific piece of it after having only seen the information once, this would be a difficulty of +20 to do (the time level of that much information). If you spent a minute thinking about it (a time level of +12), then the difficulty would only be +8.

A receive effect is going to have a range if it is any sort of wireless receiver or ranged mental power, and the range of powers in gadgets is the *greater* of the transmit and receive ranges (a powerful transmitter can compensate for a weak receiver, and vice versa).

✦ **jam(-3):** The power disrupts information. This can be by any of several means, depending on the gameworld and the special effect of the power. A radio transmission can be jammed so that it does not go through. Information that is jammed is rendered unusable for the **effect duration** on the power. The level in the power either messes up a particular quantity of information *or* reduces the rate of information transfer for any information power in its range that would be affected. A computer virus will not affect your personal memories, a radio jammer will not erase books, and so on.

Altering information would be a function of the 'alter' effect. A person who has had memories 'jammed' knows that there is a chunk of their memories gone. A person who has had them altered might not realize it.

✦ **transmit(-4):** The power is like a television or radio transmitter, pushing out information in real-time or from some source of stored information. The amount of information transmitted is the power level, and larger amounts of information simply take more time to transmit. Note that the rate of information transfer is based on the lower of a transmitter and receiver. If a receiver has no value as a power (like pushing thoughts into someone's head), use their Awareness if the target has it, or the transmitter value if they do not.

i If you had an information content of +26 to transmit and only had a transmitter with a power of +10, it would take you a time level of +16 to send it all.

! Because so much of role-playing is about the solving of mysteries, powers that can get info out of people's heads (or computers) can be unbalancing. The gamemaster should look very closely at the possible ramifications of not just this sort of power, but what other modifiers should be required to keep the power from being a disruption to having fun.



Offense

This is a big and very broad type of effect and will have more detail than the simple ones you have seen so far. Offense is any effect which is designed to *harm* something. This is usually different than most of the 'alter' effects. Reducing a quantity like Strength is subtly different than harming it. For the most part, an 'alter:reduce' effect on powers will have the same modifier as an equivalent 'offense' effect, but for simply doing damage to someone or something's hits, 'offense' is the best choice.

Anything that can cause harm is an offense of some sort. Dying of starvation is an 'offense' of some kind, albeit a very low-level one that will take a long time to kill you. All forms of offense have a particular description that defines them, a gun, a knife, a mental blast, a force-field negator, whatever. This is part of the subjective description you did as the first part of the power design. Whether or not an offensive power destroys, negates or reduces something is really a function of its duration. The default power and effect duration for an offense is an action. Note that most of the offense effects will want to have a different effect duration than the default. For instance, you normally want the effects of lethal damage to last longer than 'an action'.












The base effect for an offense power depends on how it works or what real-world effect it mimics while it is operational. Use any of the below that apply, and if more than one applies, use the one with the lowest value and apply an extra -2 for each additional item.


Attribute-based offense


One of the offense effects allows you to generate a type of damage that adds to strike damage, like a melee attack. You may also use this modifier to generate any power whose level is related to an Attribute, like saying 'mages use this modifier and Fate'. So, the more Fate you have, the more powerful your magery. You may need to adjust the gameworld base if you use this option.


offense


modifier

	acts like lethal damage	+0
	acts like half-lethal damage	+2
	acts like non-lethal damage	+4
	acts like lethal melee damage	+2
	acts like half-lethal melee damage	+4
	acts like non-lethal melee damage	+6
	affects a very broad power category	-10
	affects a broad power category	-6
	affects an average power category	-4
	affects a narrow power category	-2
	more than one offense	-2 extra


 A power that does lethal damage(+0) *and* harms an average category of powers(-4) would have a modifier total of -6. If the final power level was +9, the power would act like a 3d+0 lethal attack *and* a 3d+0 attack against the level of the powers that could be affected by the 'power category' definition.

 **lethal damage(+0):** The power marks off hits from the target in the same way that lethal damage does, and the power interacts with defenses like lethal damage does.

 **half-lethal damage(+2):** The power marks off hits from the target in the same way half-lethal damage does, and the power interacts with defenses like half-lethal damage does.

 **non-lethal damage(+3):** The power marks off hits from the target in the same way that non-lethal damage does, and the power interacts with defenses like non-lethal damage does. Note that inanimate objects do *not* take non-lethal hits and ignore that part of damage.

In general, damage to hits is hierarchical. A defense power that protects you from lethal damage *also* protects you from half-lethal and non-lethal damage.

 **acts like melee damage(+varies):** The power level adds to strike damage and acts as damage from a melee weapon. **As gadgets, melee weapons generally have a tech base of between -8/1 and -6/3.**



! These effects are not exactly the same as the damage type...yet. Later on, you define how long the effects last. So, to be 'lethal damage' it has to affect lethal hits *and* last as long as lethal hits do. You *could* have a power that does lethal hits but recovers as fast as non-lethal ones, or vice versa.

✦ **power category(-varies):** The power harms a different power or group of powers by its power level or optionally, an appropriate die roll for the level (e.g. a power level of +9 could damage a power by 9 points or by 3d+0). The broadness of effect is defined by the **subjective definition** of the power. The 'items' below are words in that part of the description. **The definition also holds for other modifiers using these terms.** This is a slightly tricky modifier, but it adds a lot of flavor and role-playing possibilities.

- ✦ **very broad:** second & third items
- ✦ **broad:** first & second, or first & third items
- ✦ **average:** first, second & third items
- ✦ **narrow:** all of first, second & third items

i The first item used in the samples of subjective power description was 'laser eyes'. This is:

name	type	concept
laser	paranormal	lethal
eyes	offense	superpower

If you wanted a power that could harm the above description, it could be defined as offense against any of the following 'power categories':

- paranormal² lethal³ powers(very broad)(-10)
- offense² superpowers³(very broad)(-10)
- paranormal² laser¹ powers(broad)(-6)
- eye-based¹ superpowers³(broad)(-6)
- lethal³ eye¹ paranormal² powers(average)(-4)
- paranormal² laser¹ superpowers³(average)(-4)
- paranormal² lethal³ laser¹ eye¹ offense² superpowers³(narrow)(-2)

The more narrowly focused the attack, the less negative the modifier, and the less likely it is that the gamemaster will disallow it for being too broad and potentially abusive.

The way in which your power works or appears to others is based on the how the offense is described. A power that harms eye-based powers could do so by blocking the target's eyes, while a power that harms laser-based powers could be a cloud of thick smoke. A power that affects paranormal lasers might be a psionic jammer, while a power that affects mundane lasers might be an EMP device.

An important distinction to make is whether you are targeting your offense against the *effect* of the power or the *source* of the power. If you are merely trying to reduce the effect, you are really looking for the 'defense' effect instead of the 'offense' effect. If you are trying to reduce what is *generating* the effect, this *is* an offense and *does* require a 'defense against' modifier.

i An offensive power that harms bullets in flight is really just a form of defense. You are not harming what is *generating* the power, merely the effect. If you had an offensive power that harmed guns, then this power would be an offense and *would* need a 'defense against' modifier, since you are preventing the *power* from being used.

i **Wand of fire: Step 2**

The effect of our wand definitely falls into the offense category. We want it to shoot lethal little balls of fire at people. So, the wand is:

name	type	concept
wand	paranormal	lethal
of fire	offense	magic
		gadget

gameworld base: 0/9 **modifier**
 ✦ effect: offense(lethal damage) +0

! Just a reminder that any offense power used against a target that does not or cannot consent *must* have a 'defense against' modifier, which is not the same as the 'defense' effect that follows.



Defense

Defense is any power designed to reduce some other effect on a target. Like an offense, a defense is a specific power that affects a specific attack type. Defenses can have a range of things they protect against.

i A 'laser' and a 'gun' are two different attacks, but you could buy *one* defense power that worked against *both*.

How you design and subjectively define a defense power makes a lot of difference when determining if it counts as a 'defense against' an offense or offensively used power.

defense	modifier
⚡ affects a very broad power category	-4
⚡ affects a broad power category	+0
⚡ affects an average power category	+2
⚡ affects a narrow power category	+4
⚡ protects vs. lethal and below	-4
⚡ protects vs. half-lethal and below	-2
⚡ protects vs. non-lethal only	+0
⚡ protects vs. attacks on power category	+0
⚡ protects like armor (no blunt trauma)	+0
⚡ protects like rigid armor	+2
⚡ protects like flexible armor	+4

⚡ **threat type(±varies):** The broadness of a type of defense is gameworld dependent, but the notes under the 'offense effect' are the best guide. Not coincidentally, the 'very broad' category matches the 'lethal damage' type, much like it would for something whose description had 'mundane' and 'lethal' in the second and third subjective terms.

i A 'mental shield' power is going to apply against *any* offensively used power that involves an attack against a person's mind. Looking at how you would want to classify such a defense and what it would work against, look at possible word combinations, like 'mental paranormal' or 'mind control' (first and second terms), or 'mind magic' (first and third terms). This seems to indicate that this defense effect would probably count as a 'broad' type.

! Remember that defenses are conceptual. You do not normally disallow something as a defense because of trivial semantic variations. A 'mental defense' should work just fine against a 'mind blast'.

If you want a power whose only effect is to be armor on one of your other powers, that would be a 'narrow' power category. If you had a group of powers you wanted to protect, the modifier would depend on how closely aligned those powers were.

⚡ **damage type(-varies):** The defense protects against threats to hits of that type. Normally you will choose for this defense to be either mundane or paranormal, just like you were creating a 'very broad' defense type. The 'mundane' and 'paranormal' dichotomy for defense is best illustrated by an example:

i Armor that protects you from mundane lethal damage like a sword offers no protection from the lethally cold hands of a ghost. An amulet that protects you from the paranormal lethal threat of ghosts does nothing to block a mundane sword. A single magical armor that did both would have two 'very broad' defense types. Or, you could design up an armor and amulet and give them a **physical dependency** (welded to each other).

A special note would be how a 'half-lethal' defense works against lethal attacks. You just use the same concept as half-lethal damage. Take half the power level and round down. This is the extent to which a half-lethal defense stops a purely lethal attack.

! The **contingency** modifiers are later on, and will let you further adjust this if the listed threat types are not fully suitable. For instance, you might have a defense that works against mundane lethal attacks, but works at reduced effect against such attacks that are electrical in nature.



✔ **protects like armor(+varies):** The default is that a defense simply subtracts its value from an offense like armor does, and *no* blunt trauma is figured just for simplicity's sake. The defense acts like a wall between you and the attacking effect. If you want a defense to transmit blunt trauma like either rigid or flexible armor, you would use one of these modifiers. This modifier may not be applied to a defense if an attack it works against has no conceptual means of delivering a blunt trauma-like result.

If you are designing armor as a mundane gadget, the maximum allowed extra P that can be spent are based on the mass of a full body suit at that level of protection.

i If a full body armor had a mass of 8 kilograms (size modifier of +9), you could spend +3P on it (1P per +3 in the mass modifier). If you bought a *just* a helmet, the protection and mundane cost could be as if you spent +3P on it, even if though it masses less than 8 kilograms. In general, the gadget modifiers are such that altering the mass and coverage of a piece of mundane armor balance out (the positive modifier for reduced coverage is offset by the reduced modifier for lower weight). Odd breakpoints go in *your* favor.

Designing mundane armor as a gadget is about generating a power level to match what you want for the setting. You can always tack on modifiers to make a defensive power *extremely* effective, and historical recreations are no exception. If player wishes to design their own armor for something like a medieval or fantasy setting, the gamemaster needs to make sure that some modifiers are mandatory, others are forbidden and that the tech base is appropriate for the 'science' of the setting. For instance, if 'cybernetics' is not a well-developed science, then the tech base for strength augmentation on powered armor will be less than that for the armor itself. If metal-working technology is poor, you might say that you cannot spend the maximum secondary P on upgrading an armor.

Control

Control as an effect means that you are asserting control over something. This could be a person, a thing or even an abstract like a concept or the weather, if you have a sufficiently powerful effect. The base level of a control effect depends on what you are trying to control, and whether that control is objective or subjective.

Objective control is like puppetry, you are choosing each and every action or possibility by will alone. If you do not will it to happen, it does not. This is precise, but takes effort. You can model the degree of effort with other modifiers in the **Contingency** section.

Subjective control is more like 'giving orders'. You set a course of action in motion and the thing you are controlling acts according to guidelines within the limits of its ability, which is really a projected aspect of your judgement on the matter.

i If you control a statue and tell it to 'bludgeon that guy to death', the statue will bludgeon the guy until he *appears* to be dead and then stop. It is *your* skill at determining 'does that guy look dead?' that tells the statue to stop. You are not actually there making the decision, it is just that the statue has no ability beyond your normal senses. If you *really* wanted to be sure the guy was not going to 'play dead' on you, you would order the statue to 'bludgeon that guy into bloody paste'.

Control effects have a default power duration and effect duration of an action. Control over anything is resisted and *must* have a 'defended against' modifier. After all, it is not an 'ask nicely' effect, it is a 'control' effect. The level of effect you have after any defenses is the maximum value you can force when doing objective control, or the maximum number that can be used by a target that is under subjective control. The level of control you have represents the degree to which you have overcome any resistance.



i If you have objective control a statue and the resisted level of effect is only +3, then the statue swings its fists with an Agility of 3, hits with a Strength of 3 and moves like it had a Health of 3. If you had subjective control of a person and the resisted level of effect was only 3, they would follow your orders, but do so in such a miserable fashion that regardless of their skill, they are counted as never using an Attribute at more than a level of +3 or a skill at a level of more than +3 (or +1d).

If the level of control you have meets or exceeds that of the quantity being controlled, it is assumed that you have *total* control. This really just means that if a target *is* actively resisting, they can no longer do independent actions that might go counter to your wishes. If the level of control is not this high, then the target may act outside the parameters of the control at a level of the *difference*.

i If someone controlled you and commanded you to attack your friends and the resisted power level was only +3, then if your Agility was 9, you *would* have to attack your friends (poorly), but you could also use your Agility and skills at a level of up to +6 against anyone else you wanted to attack. The fact that you are only attacking with an effective Agility of 3 could be because one of your hands is throwing off the aim of the other one! However, if the control was at a level of +9 or more, the person giving you the order has exerted a level of control that prevents you from doing anything except what was ordered.

Anything that is not prohibited by the nature of the control is allowed, and control can be total in some aspects and incomplete in others.

i Take the previous example. If the level of control was +10 and you had a Will of 11, then you might be under total control as far as your Agility is concerned, but even if the order was 'be silent and attack your friends', the incomplete control over your *Will* would mean you *could* croak out a warning.

Like other powers, control is a specific type with a specific type or class of targets. Use all modifiers that apply.

control	modifier
✓ control is objective	+0
✓ control is subjective	+3
✓ control over animate object only	+2
✓ control over inanimate object only	+0
✓ control over sentient object only	-2
✓ control over an abstract only(subjective)	+3
✓ control over broad type	+0
✓ control over single type	+2
✓ control over unique subtype	+4

i If you wanted to be able to 'control plants' and manipulate them with conscious control, this could be:

✓ objective control:	+0
✓ inanimate object:	+0
✓ broad type(plants):	+0

If you wanted to be able to give orders to granite rocks (and have those rocks gain the ability to move and carrying them out), this would be:

✓ subjective control:	+3
✓ inanimate object:	+0
✓ single type(of rock):	+2

If you wanted to coerce the demon Abraxiz to follow your orders (as it interprets them!):

✓ subjective control	+3
✓ animate object	+2
✓ sentient object	-2
✓ unique subtype(of demons)	+4

Control might be resisted or defended against by a certain trait, but control is a totality. If you have control at a +10, it means you can control *anything* on the target that can be manipulated, at a level of up to +10. You can tell them what to say, what to do, whatever.



✓ **objective(+0):** The control is based on real-time commands by the user of the power. Each command to the controlled item counts as a minor action for the controller, and a 'command' is more or less any group of movements or behaviors that could be an adventurer's major or minor action. Any part of control that is incomplete means the target can act independently in that aspect of the control. Any part of the control that is total means the target may do absolutely nothing that is not a specific action initiated by the controller. Note that because of the puppet-like control, any attributes or skills of the target are irrelevant. **The target of the power acts with the skills of the user of the power, up to the limits of the control.** The target can act with Attributes up to the level of *control*, even if they do not have Attributes that high.

i If you were controlling a statue with a power level of +9, then your objective control would act like you were the statue, so you would not need to be able to see the statue in order to intelligently direct it. As long as the power is in operation, part of your awareness *is* the statue.

✓ **subjective(+3):** Control is in the form of general or specific commands that are followed to the best of the target's ability (and the level of control), as long as the effect of the power continues. This can be as detailed or vague as the controller wishes, noting that a target who has a choice in the matter may try to do the commands as poorly as possible.

i If you have a gun in one hand and a feather pillow in the other, and you are commanded to 'attack your friend', then even if you are under total control you are free to yell "I am being mind controlled!" and attack them with the pillow. However, if you are ordered to 'be silent and shoot your friend', then if you are under total control you *will* be silent and you *will* use the gun to shoot your friend. The archetypical notion of demons and genies doing their best to subvert the intent of those trying to control them would be a perfect example of this concept in action.

✓ **animate(+2):** The target of the power is something 'animate', usually with an inherent or prior capability for motion. A person is animate. A zombie is animate. A corpse is animate. Weather is animate.

✓ **inanimate(+0):** The target is 'inanimate', one that you do not normally associate with a current or prior ability to move. A tree or a vine is inanimate. A statue is inanimate. A computer is inanimate.

✓ **sentient(-2):** The target is capable of independent thought and/or action. It does not have to be 'intelligent' but it does have to be capable of making choices at more than an automaton level. A person is sentient, an animal is sentient, a vampire is sentient. Say that anything capable of deliberate deception is sentient.

Virtually all items with a physical manifestation will have some combination of these three modifiers. For instance:

- a tree:** inanimate
- a zombie:** animate
- a vampire:** animate, sentient
- an AI:** inanimate, sentient
- mundane weather:** animate
- storm spirits:** animate, sentient

✓ **abstract(+3):** The control is over something that has no physical form, but is merely some characteristic or concept. Color is an abstract. Love is an abstract. Any power that controls an emotional abstract can alter the level or expression of that abstract down to zero or up to double its normal amount, but may not change its type (this would be the 'alter' effect). In fact, you are not *actually* changing the level of that abstract, you are just acting like it in order to see what 'control' you have, and this control can *only* be of a subjective type. Normally, the level in that abstract adds to any defense against the power. Reducing an abstract to zero generally gives an automatic success to any competing aspect in a situation.



i If someone 'hates orcs-2', then a 'control hate' power could raise this to +4 or lower it to +0. You are not actually changing the person, you are simply using the different value to see what sort of social response is more appropriate. A person with 'hates orcs-4' is more likely to be loud, obnoxious or violent about it than someone with 'hates orcs-2'. You are controlling the emotion and personality by removing or adding to inhibitions, but the exact response is going to be situational, and is *not* 'I make him hate orcs so much he punches the nearest one'.

i A normal person has 'self-preservation-10'. If you controlled this up to 'self-preservation-20', a threat to this person's life would be more important than friends, family, spouse, children, money or anything else. On the other hand, if someone was 'greedy-2' and you reduced their self-preservation instinct to zero, they would risk their life to try and lug a heavy bag of gold out of a burning building. You are not giving them an order, you are just controlling the priorities they assign to things and letting nature take its course. The same could be said for reducing an enemy's loyalty to zero in a fight. Their self-preservation takes over and they flee the battle.

You can see that this is a modifier with a bit of complexity, which is why it is rated as 'gamemaster permission only'. The positive value of the modifier reflects that you have very limited options for your control. Telling someone to 'hate that group of orcs more' does not give you any control over how that hate is going to be expressed. The person *could* draw a sword and start swinging, or just bribe the bartender to piss in their beer. On the other hand, reducing loyalty over a big area during a battle has easily predictable effects and could be insanely powerful.

An abstract has a size of the area over which you want to control it. So, if you want to stir up 'hate' in a crowd, you either need to be able to fill the area or target that many people.

✓ broad type(+0): A broad type means that you can use the power to control something which would match the second *and* third subjective criteria defining it.

i A normal person would be a 'mundane human', while a vampire or zombie could be a 'paranormal human'. Things like 'plants', 'rocks' or 'undead' would be broad types.

✓ single type:(+2) This is a sub-category within a broad type. 'Vines' or 'trees' would be single types in the broad category 'plants'. 'Liches' or 'vampires' would be single types in the broad category 'undead'. 'Monotheists' or 'polytheists' would be single types within the broader category 'religions'. 'Marble' is a single type of 'rock'. 'Statues' (of *any* type of rock) could also be a single type of 'rock'.

✓ unique subtype(+4): This is a unique name or type of item within a single type. So, a *particular* demon would be a unique subtype of 'demons'. 'Grapevines' is a unique subtype of 'vines'. 'Statues' could be a unique subtype of 'marble', and 'marble' could be a unique subtype of 'statues'.

! If appropriate for a gameworld or a power, the broad, single and unique modifiers can also be used to limit the type of control that can be done. Only being able to control one Attribute would be a 'single type'. Only being able to control a single emotion would be a 'unique subtype'.

Control effects are like any other power, mundane or paranormal. Most of the time they will be paranormal, but you can imagine things like computer viruses, hypnotism or truth serums that have control effects which are generated in a mundane fashion.

Alter

This means a power that affects some real-world aspect of the target that can be seen, felt, heard or otherwise measured. Game attributes, size, shape, color, weight, that sort of thing. An alter effect is what you use to become ten stories tall, turn someone into an armadillo (leprosy optional), let yourself hear radio waves or make someone's assault rifle shoot gummy bears. Some of these are absurd examples, but they are all alterations.

Alterations take one or more target quantities and restore, increase, reduce, limit, expand or change them. Alter effects almost always have a 'defense against' modifier unless they are being applied to the person using the power.

i An alter effect could change your mass without changing your size, alter your looks, lengthen your arms, make a foe weaker or heal a friend.

If you want a power to have multiple effects within this category, you take the one with the lowest value and apply a -2 for each additional effect that happens at the same time at the same level. You cannot have inverse effects on the same target (e.g. you cannot increase and decrease someone's size at the same time). Attribute effects have a default power duration and effect duration of an action.

It will be mentioned elsewhere, but it is worth repeating that *any* power or effect other than damage which could be applied multiple times, has a maximum cumulative effect of the level of the largest power. So, if you have a power that increases your Health by +3 and a friend has one that increases it by +6, the maximum is +6, not +9. If you have a 'transfer' power at +15 that moves energy from incoming bullets to your Strength, once you have boosted your Strength by +15, you stop transferring energy from the bullets!

alter targets

alter targets	modifier
⚡ a physical characteristic	-2
⚡ a mental characteristic	-3
⚡ a spiritual characteristic	-4
⚡ a Forte only(plus the characteristic)	+2
⚡ derived characteristic(see text)	-6
⚡ affects a very broad power category	-10
⚡ affects a broad power category	-6
⚡ affects an average power category	-4
⚡ affects a narrow power category	-2
⚡ multiple alter targets	-2

alter effects

alter effects	modifier
⚡ restore	-6
⚡ increase	-1
⚡ reduce	+0
⚡ expand	+0
⚡ limit	+2
⚡ morph	+0
⚡ transfer	-6
⚡ indirect transfer	-2
⚡ multiple alter effects	-2

i A power that both restored *and* increased your Strength would have a -10 modifier. This is -6 for 'restore', -2 more for an additional alter effect, and -2 for the 'one physical characteristic'.

Like any other power, alter powers can be mundane or paranormal, which makes a big difference when it comes to external armors or defenses that might apply. Alter powers that are mundane should have **contingency** modifiers to limit their maximum effect, but the extent of these limits is gameworld-dependent and may involve other modifiers.

i A futuristic gameworld could have mundane 'regeneration tanks' to heal people in, or bionic eyes that let you see in the dark, both of which are a form of alter (restoring hits and expanding a mental characteristic, respectively). So, the gamemaster will have to define what is and is not 'mundane' and what limits a mundane 'alter' power will have.



The targets an 'alter' effect can have are as follows. If the power affects more than one item in a category (like Strength and Health are both 'physical characteristics', you can usually split the adjusted effect by a defined proportion or count them as multiple targets to get the adjusted power level for *each* category.

i If you have +9 power level and increase Strength and Agility (both physical), you take a -2 modifier for 'physical characteristic' and usually have to split the +9 between them. If you have a +9 power level and increase Strength (physical) and Will (mental), you usually get +9 to both. This would be a total modifier of -5, -3 for the mental characteristic, and -2 more for an additional target.

✓ **a physical characteristic(-2):** This is usually one of Strength, Agility, Health, size, weight. The gamemaster may allow the power level to be split among these in a particular proportion to handle effects like increased size (see note on **page 6.22**).

✓ **a mental characteristic(-3):** This is usually one of Awareness or Will.

✓ **a spiritual characteristic(-4):** This is usually one of Fate or personality traits. Note that for personality traits, they *can* be reduced to below zero, in which case they start becoming positive values in the *opposite* of that trait.

i If you did something like a 'reduce hate' on someone who had 'hates orcs-4' and ended up with a +5 effect on them, you would turn it into 'loves orcs-1'.

This particular effect would be almost identical to a subjective control effect on an abstract target. *There is no taboo in the EABA rules about being able to do the same thing in different ways.*

✓ **a Forte only(+2):** This is *in addition to* one of the above and means the effect is only on a specific sub-aspect of an Attribute, as listed on **page 3.32**. This is *not* a separate target, just a narrowing of an existing one.

! Each of the six primary attributes falls in the range of a 'narrow' to 'average' power effect. For instance, Strength is fairly narrow, while Fate is conceptually broader. Counting only a Forte makes the effect narrower still.

✓ **derived characteristic(-6):** This is usually one of Walk, Dodge, Toughness or Hits. If you want to affect *all* characteristics that are derived from something, in the same way they are normally generated, this is just an additional -2 modifier on that alter target.

i If you increase your Health, it does not affect your Walk distance, and would be a -2 modifier. If you increase your Walk distance, it would not affect your Health and would be a -6 modifier. If you wanted your Walk to increase with Health in the same way it normally does (Health dice + 2), this would be increasing your Health, but with an *extra* -2, making the modifier -4. In this case, each +3 to Health gives you +1 to Walk.

✓ **power category(-varies):** This just uses the guidelines on **page 6.13** for any target that does not fit into one of the previous types.

i You want a power to 'expand' the capabilities of your Wierd West six-shooter so you can perforate ghosts and make them feel it. Since you are only trying affect your gun, this is pretty clearly a 'narrow' power category that is being altered. On the other hand, if you want to throw a hex to gum up any form of magical motion, this would be something like the terms 'magic mobility', which looks like the second and third terms, making it a 'very broad' power category.



An alter effect on a power category is is *not* a substitute for **flexibility** modifiers, and the type of alteration that you can make to a power is limited. The power category modifiers are mostly meant for cases where you need to restore or repair a power, or need an ability to suppress a power, like magic shackles to keep wizards from escaping.

✚ **restore(-6)**: This aspect of alteration means that you can take a target that has been reduced in some way and bring it back towards its normal or natural level. This is what you would use for healing or repair powers. A restore effect cannot improve a reduced target to more than its natural or intact level. This effect normally has its 'duration of effect' bought as 'semi-permanent' (you have to pay for this modifier). This just means the restore lasts until something breaks the item again. A healed person stays healed, but can be re-injured. Restore effects require a 'defense against' unless the target of the effect can and does consent to the power.

Restore effects are coded red because of the potential for 'I can restore my hits faster than you can hurt me' powers, which may be fine for supervillains and big scary monsters, but not so much for adventurers.

✚ **increase(-1)**: An increase is just that. The target of the power is raised by the adjusted level of the power. This would be a good example of the difference between a mundane and a paranormal power. A *mundane* power that increases Strength would be something like a cybernetic enhancement or something that gave you enormous muscles, both of which might take contingency modifiers that limit them to the mundane strength of your skeleton. On the other hand, someone who looks like a ninety-year old grandmother could have a *paranormal* increase in Strength and be able to pick up a locomotive without looking any different or breaking like a rotten twig.

✚ **reduce(+0)**: The opposite of increase. Values can be reduced in level by the adjusted power level. Some targets can be reduced to a level of less than zero, others can only go to zero. For instance, negative levels in mass are simply objects lighter than about 13 kilograms. On the other hand, a negative Agility would be meaningless. A value of zero means you cannot use any Agility-based skill and all Agility rolls automatically fail.

Increase and reduce are alterations that can have bizarre consequences, and this is both deliberate *and* something the gamemaster may have to interpret or prevent if it is not appropriate to the gameworld. You also have to determine who or what is targeted. For instance, if you were targeted by a power that 'increased distance'...how would that work? It would *not* make you become physically further away from the user of the power, but for purposes of interacting with that person you would *seem* to be further away. It would take you longer to run to them, attacks would count as being at an increased range, and so on. It would be a local warping of reality that only affected the two of you. It is interesting and cool and really, really weird, but it is also something the gamemaster might just say "I do *not* want to deal with that" and disallow it.

Or, take a power that 'decreases cost'. The object does not actually get a different price tag, so how would that work? Would it make you more likely to buy it, would it make the seller ask you for less money because they thought it was a lesser item, or would it make your copper pieces look like gold pieces when you tried to pay for it? Does it fool a computer when you run a scanner over the bar code?

There are all kinds of possibilities with the various alter categories and it is up to the gamemaster to arbitrate and decide which possibilities are allowable. It is common for some alter effects that several things are affected at the same time, especially for the increase and reduce effects.



If they are in different categories (like physical and mental), you can simply apply a new modifier for the extra category. If they are in the same category, you can either take the modifier for that category again and get each characteristic adjusted by the full amount, or take the adjusted power level and split it between the characteristics.

A specific and common use of increase and reduce in some genres is a change in physical size. This change could be reflected by appropriate changes in other characteristics, or it could stand alone. A realistic change that would more or less correspond to mundane biology would be one power that did all of the following (with a -4 modifier for 'physical + derived').

each ±1 in size (adjusted power level of +8)

- ±1 to be hit in combat or to be spotted
- ±1 to walk, run and sprint
- ±1 to reach in melee
- ±3 to each of Strength, mass and hits

each +2 in size (adjusted power level of +18)

- +1 hex of reach in melee
- +1 hex of space taken up on a map

Paranormal changes in size do not have these constraints. You could become small and stay the same weight and strength, or become huge but get no heavier or stronger.

i If you wanted to grow into a giant 16 meters tall, this is a height (distance) level of +11, or +6 more than your normal height level of +5. To be in realistic proportions of weight, Strength and so on would require a power level of +48, which is *quite* a lot. However, what you get for this is +18 Strength, +18 hits, +12 to mass, +6 melee reach and +6 to your walk, run and sprint. This would give an average person a mass of 5 tons, 30 hits, a lift of 3.2 tons, a sprint of 160kph and kick damage of 8d+0 half-lethal, which is enough to outright kill an average person.

✓ expand(+0): This effect does not change the definition of a target, it merely expands the range over which the target does its thing. An 'expanded' range of hearing might let you hear radio signals as well as sound. An 'expanded' Strength might let you punch ghosts. The adjusted power level is the maximum value you can get from use of the expanded target. Remember that since you are just increasing the range of an existing target, any power level more than the target is wasted. The gamemaster can waive this limit if they want.

i If you had 'expanded vision' to let you see in the dark with a power level of +4, then if you are making Awareness rolls in the dark, the highest your roll will count as is a 1d+1. If you had it to act like a telescope, you would be able to reduce the effective range to what you were looking at by 4. If you had a power level of +12 and your Awareness was 8, you would only be able to get +8 effect unless the gamemaster said otherwise.

The effects of an 'expand' can mimic other powers, especially in the case of the senses. You could buy a 'receive information' effect to let you see heat signatures, or you could just expand your normal vision. You could create a mobility power to let you skim at high speed over the surface of a lake, or you could expand your running to let you walk on water.

An expand is always very specific in the way it works, even if the target the expand works on is broad. If you have expanded Awareness that lets you see in the dark, it does not let you see radio waves. However, if your power has a **flexibility** modifier, it is possible that you could have an 'expanded vision' power that you could adjust to see any one part of the spectrum you wanted. So, you might be able to see in the dark *or* see radio waves, just not both at the same time. Of course, you could also just buy two separate expand effects.



✦ **limit(+2):** This is an uncommon effect and can be used offensively, defensively and otherwise. A limit fixes the nature of the target so that it cannot change. You could use it to prevent a grenade from going off, a mage from casting a spell or a computer from deleting a file. A limit is usually on no more than a 'broad' power effect. Normally, the power level is a die roll to add a little drama, but the gamemaster can choose to treat it as fixed.

The residual power level is usually a *total* block on what is being targeted unless that item exceeds the power level of the limit.

i If you hit someone with a 'teleport disruptor' and had an adjusted effect of +12, you would roll 4d+0 for the value of +12 and the teleport would roll dice for its power level. If the teleport disruptor wins, the teleport fails. If the teleport wins, it gets its *full* distance. If you have an 'explosion suppression field' for 4d+0, it would roll against guns or grenades or dynamite in the same way.

A limit effect has to be defined as to what can overcome it. This is quite often what it is limiting if the target is an active quantity like the aforementioned teleport. But if the target of the limit is a passive quantity, then usually any active effect that could adjust it can work towards overcoming the limit.

A limit does not act like armor. Rather, a limit is an all-or-nothing affair. Either the limit stops the change, or the change is unimpeded. It would be like the sword in the stone. You pull it free or you do not. *None of the claimants tugging on it got it halfway out of the stone.*

A limit does *not* hold things in abeyance. If an effect is thwarted by the limit, it simply has no effect. A grenade that is prevented from going off is a dud, it does not go off when the limit is turned off. Usually, if something is prevented from happening and has a side effect that is associated with failure, that side effect *does* happen.

✦ **morph(+0):** A morph effect would be used to alter shape, composition, or appearance. The effect can be used offensively, defensively, socially and probably several other ways, noting that if it is used on anything other than yourself it probably has to have a 'defense against' modifier. The adjusted power level in a morph is usually *one* of the following. If you want to take more than one of the below, each additional is a -2 modifier. *Morph is generally less efficient than a power dedicated to a particular effect, it just has more flexibility.*

- **adjust function** - does not alter the fundamental capabilities like an 'expand' but can alter any modifiers for tool use. For instance, turning fingernails into screwdrivers or a fist into a socket wrench. The power level cannot exceed the default effect for proper tool use, and the function available is based on the nature of the target. The effect can offset increased difficulty for not having tools to begin with. This is a power, you can be creative with it, like tasting blood for a medical diagnosis or measuring voltage with a fingertip.
- **add range** - part of the target changes in one dimension, giving extended range or reach. This could be used for powers that mimic stretching or with some modifier combinations, as a form of telekinesis.
- **adjust appearance** - becomes a target number instead of Will for social comparisons, or adjusts Will up or down, or is a bonus to any skill that involves changes in appearance, like disguise, seduction or even stealth.
- ◆ **adjust composition** - for purposes of subjective description, the target can be changed. For instance, flesh could be turned to stone. This does not affect *function*, merely special effects. If the adjusted power level equals the target's hits and for each doubling, one feature can be changed.
- **adjust skill** - act as a bonus to a skill which is based on appearance. This could be personal, like a power that disguises you as someone else or camouflage to hide you, or it could be external, like assisting your ability to paint a picture or sculpt a statue. In general, the maximum benefit is equal to the governing Attribute for that skill or ability.



If a morph effect would by its nature generate a different power effect (giving you claws to do damage, wings to fly, a body tough enough to be armor, etc.), then the effect you get in that ability counts as a modifier total based on your power level but with the new effect modifiers added in, applied to the gameworld base.

i A power level of +10 that turns your fist into a socket wrench merely removes a penalty and falls under the normal morph effects. Turning your fist into a spiked club to hit someone with would be a power level of +10, plus 'acts like lethal melee damage(+2)', and 'melee range(-1)' for a total of +11 on the power level. However, melee weapons generally have a gameworld base of -6/3, so this +11 would end up as a *lower* power level than the normal morph. Because this can be fairly complicated, such morphs should be figured out in advance if they are going to be regularly used.

⚡transfer(-2 or -6): A transfer takes something from one target and gives it to another. The thing being transferred *from* is the target of the effect. What is being transferred *to* is an **additional** target modifier that counts as the difference between the two. Transferring to something with a more positive modifier is a bonus, while transferring to something with a more negative modifier is a penalty.

i Transferring 'lethal melee damage(+2)' to 'protects vs. lethal damage(-4)' is an additional -6 modifier on the power. So, a power that transfers someone else's sword blow into your armored skin would be a total modifier of -8.

An 'indirect transfer' means a transfer from the *results* of a power rather than the power itself. A gun is a power. The bullets fired at you from the gun are the *results* of that power.

The actual 'transfer' happens before what is being transferred does its thing, though it may have to roll for an effect to see how much is transferred. Also, the maximum cumulative effect of a transfer is its power level. Once the maximum transfer has taken place, no new transfer happens until some of the old one has expired.

i Let's say you have the power from the previous example, at a level of +8. You are hit by a sword and it rolls 6 damage. So, before that damage would hit you, it becomes a 2d+0 armor (+6 effect). The damage is gone. It was completely converted to armor and none of it actually counts as damage to you. Then someone bigger and meaner hits you with a battle axe for 11 points. Your transfer power still has 2 points unused (+6 used out of +8 power level), so it can drop the damage done to +9 and increase your armor to 2d+2. The remaining damage from the axe is +9 or 3d+0, so that hits you and gets 1 point through your armor.

Any 'transferred to' target other than yourself is going to have the potential to resist the effect (a 'defense against' modifier on the power). What this defense is will vary, and because this is a ⚡ power, the gamemaster should probably approve of the defense as well.

Whatever it is you transfer has to make sense within the context of the power and the gameworld. What is taken from one target recovers at the normal rate for that characteristic if it has a natural recovery rate, otherwise it is gone for the 'duration of effect'. Things lost to an indirect transfer are simply gone (bullets become inert and fall to the ground, etc.). Similarly, the amount gained by a target lasts only until the 'duration of effect' ends.



FRAMEWORKS



What you have at this point is what your power does and looks like in the most basic sense. Our 'wand of fire' has certain subjective characteristics and we know it does lethal damage. *Everything else is still up in the air.* The next thing to determine is the framework. We only list one framework type (suites), but you can create more.

suites: These are groups of powers that can only be used one at a time. For instance, if you have a magic ring with multiple functions, you might be able to use it to levitate *or* to deflect arrows, but not both at the same time. This would be a suite of two powers. You get a positive modifier for having a suite, since you are giving up the ability to use those powers at the same time. A suite is often in a gadget (like the magic ring) but does not have to be. You might have to devote all your effort to a psionic talent, and be unable to use a second talent at the same time. The modifier for a power suite applies to *each* power in the suite. Each power in the suite is designed separately.

power suite	modifier
🌍 one power (default)	+0
🌍 two powers	+1
🌍 three powers	+2
🌍 four powers	+3
🌍 five powers	+4
🌍 six powers	+5

i Wand of fire: Step 3

If we wanted to have a wand with multiple functions, this is where we would do it, but we just want a single effect. So, this gives us:

name	type	concept
wand of fire	paranormal offense	lethal magic gadget

gameworld base = 0/9	modifier
⚡ effect: offense(lethal damage)	+0
🌍 suite: single power	+0

RANGE

All powers have a range. Even something that simply boosts your Strength has a range, which would be 'self'. Very restrictive ranges are a positive modifier, and the more useful or long a range is, the more negative the modifier gets.

range	modifier
🌍 self only	+4
🌍 aura	+2
🌍 touch	+0
🌍 melee	-1
🌍 thrown	-1
🌍 very short(6 meters, distance of +8)	-1
🌍 short(23 meters, distance of +12)	-3
🌍 medium(90 meters, distance of +16)	-5
🌍 long(350 meters, distance of +20)	-7
🌍 very long(1.4km, distance of +24)	-9
🌍 extended range	-2
🌍 declining range	-1
🌍 minimum range	+1
🌍 +4 non-combat range	-1
🌍 subjective benefit	-4
🌍 indirect range	-2
🌍 unconventional range	-4

Range is 'how far from you the power effect can be made to happen'. Things like flight or teleportation do not have a range of more than 'aura' unless you are trying to fly or teleport *someone else*. This is also the difference between something that affects another power and something that merely affects the results of that power.

i If you want to affect a gun a few hundred meters away, you need a power with that range. If you just want to affect the bullets fired from that gun at you, then you can have a power with a range of 'self' or 'aura' or whatever range you want to start affecting the bullets at.

You can have multiple ranges *if appropriate*, like a melee weapon that you can also throw. If you have a power with two ranges that apply at the same time, you use the average of the modifiers and round towards zero.



i A power lets you copy the form of anything within very short range. This is range of 'self/very short (+1)', for what the power affects (self) and the range at which the ability can target (very short).

⊕ self only(+4): Basically, your naked body and what is inside it. If you turn into a werewolf, you are still wearing clothes. The modifier can also apply to a power that only affects itself (like a teleporting message capsule). If the effect of the power generates its own range level (like teleportation), then the range modifier represents how far the effect can travel from the user. Gadgets that are flexible body armor usually have this range.

⊕ aura(+2): You plus what you are carrying or wearing as long as no item included is more than a -1 penalty from encumbrance. Your stuff shifts position, transforms, is protected, comes with you or whatever is appropriate for the nature of the power. Gadgets that are rigid body armors usually have this range.

! If you are of *inherently* altered size (like a giant or dwarf), add your size level to the self, aura, touch or melee range modifiers on your powers.

⊕ touch(+0): The power affects anything you can touch, as long as you can lift that object *in your current state*. You may choose *not* to affect things within your 'aura', so you could have flaming hands that ignite *other* objects, *without* burning holes in your gloves.

⊕ melee(-1): The power extends onto anything you can use as a melee weapon and affects anything you strike with that weapon. Like a range of touch, you can choose to not affect the item used as a weapon. So, a 'flaming sword' does not melt the sword, but it *does* do flame damage to what you hit with it.

⊕ thrown(-1): The power acts like a thrown weapon with a mass level of +0. It might not *actually* be thrown, but it has characteristics of a thrown object. For instance, you can toss it over walls, bounce it around corners, etc.

⊕ very short(-1): The power has a range of 6 meters. The other ranges are the modifiers listed. This is the *maximum* range of the power. 'Extended' range simply means you continue the scale, quadrupling the maximum range for each extra -2. This allows for *very* long ranges with gamemaster permission.

i Wand of fire: Step 4

We want the wand to have a range of about 90 meters, so we buy a range of 'medium' with no other tweaks. So:

name	type	concept
wand of fire	paranormal offense	lethal magic gadget

gameworld base = 0/9	modifier
↗ effect: offense(lethal damage)	+0
🌍 suite: single power	+0
⊕ range: medium (90 meters)	-5

⊕ declining(-1): This is taken *in addition* to one of the ranges listed in meters. It represents a power that fades in effect after a certain range rather than stopping all at once. The bullet from a gun might be an example. A bullet can harm a target that is too far away to aim at. The effect of the power drops by -3 or 1d for each 2 range levels past its bought range.

i A power with short, declining range and damage of 3d+1 would do 3d+1 at a range level of +12 (23 meters), drops to 2d+1 from there out to a range level of +14 (45 meters), then to 1d+1 out to a range level of +16 (90 meters), then to 0d+1 out to a range level of +18 (175 meters) and nothing past that.

This modifier is coded blue because of the extra step of figuring the effect at range, and the gamemaster can disallow it if they think it will slow things down. Note that gadget-based powers like explosive charges will *not* have a declining range, as they do full damage to whatever they hit at any range.



⊕ minimum range(+1): This is often used with gadgets, and means there is a minimum range in addition to the maximum range. The power cannot be used on targets inside the minimum range. This is usually 8 range levels less than the maximum range and the normal range of the power has to be at least 'short'.

i A power with medium range (range level of +16, or 90 meters) would have a minimum range level of +8, or 6 meters.

⊕ +4 non-combat range(-1): This means that if the power is used in a non-combat situation (including getting into or out of combat), a range of 'very short' or more is increased by +4 distance. This can usually only be taken once, but the gamemaster can allow multiple uses. It is useful for extending range for things like teleportation or scrying or reading an object to find its history (extending range in time levels instead of distance).


⊕ subjective(-4): The power affects any targets that interact with the source of the power. The prime example is invisibility, where anyone who looks at you has 'you' subtracted from their Awareness, regardless of the range. If you look at (interact with) a medusa, you get turned to stone. See also **effect duration:range-limited**.

⊕ indirect(-2): The power can be bounced off things or lobbed over obstacles much like a thrown object. An indirect, subjective power can affect things one level removed, like a gorgon that could turn you to stone even if you were only looking at it through a mirror.












⊕ unconventional(-4): The range of the power is measured in something other than distance, but which still has levels. This modifier is taken in addition to the level equivalent for a range in meters.









i Short range is 23 meters, a distance level of +12. A power with 'short unconventional range' would be a total modifier of -6, and could operate out to a level of +12 in something other than distance.

DURATION OF

All powers will have two inherent durations. The first is the 'power duration', which is 'how long is the power under my active control?'. The other is 'effect duration', which is 'how long do the consequences of the power continue after I am done controlling it?'.


The difference is simple. The bullet from a gun is only under your control for an instant, but the effects of the bullet can be very long indeed (dead is forever...). So, a power will have 'power duration' and 'effect duration' as two *separate* modifiers.

duration of power	modifier
 an instant	+2
 an action	+0
 until stunned	-2
 until knocked out	-4
 continuous	-4
 always on	-2
 time level	-time/4
 declining	-1
 time delay	+2
 triggered	-2
 triggered gadget	-2

duration of effect	modifier
 until power duration ends	+0
 as stamina recovery	-2
 as non-lethal hits recovery	-3
 as half-lethal hits recovery	-4
 as lethal hits recovery	-5
 time level	-time/6
 semi-permanent	-6
 severable	-1



Power duration

Power durations of more than 'an action' are tricky as combat powers. For instance, in a 15 second turn (turn 5) you activate a power that lasts for a minute. *Exactly when does it turn off (which is sometime during turn 7)?* Due to the way the turn scale works, there is no ultra-simple way to figure this out. So, there are two options if this comes up. First, you can just wing it, which we recommend. Guestimate the approximate point in a turn when the power turns off and let the player know. Or, if the player is so inclined, let them work it out as precisely as they want.

Or, approximate it. Each turn has a certain amount of 'turn mod' in it and you know how long the turn is. So, if turn 5 is 15 seconds long and has +8 turn mod, then each +2 of turn mod is about 4 seconds. If your power has a duration of 4 seconds, then on that turn it lasts from when you activate it until you do something (active or passive) that uses up +2 turn mod or its equivalent in time (like aiming or reloading).

When it comes to what an offensive power with duration does, once you have hit someone with an attack, they normally stay 'hit'. If the power lasts more than an action, then each +1 in time level the power is maintained increases the initial effect by +1, usually up to a maximum of +6 (you cannot cut into a battle tank with a pocket torch, no matter how long you hold it in one spot).

i If you had a sustainable damage power that did hits to someone through their armor, then if you did *not* get through their armor, each +1 of elapsed time you can maintain the power is +1 to your power level to see if you *can* get through the armor, with a maximum benefit of +6. And if you finally get through the armor each +1 of total elapsed time after the penetration, they will take +1 hit of damage, for however long the **power** duration is, up to a maximum of +6 hits.

⌚ an instant(+2): The effect lasts exactly long enough to do its thing as an action or reaction, but does not exist any longer than that. Most attacks will have this power duration. Guns, arrows, blades and such are usually a power duration of an instant. A defense that lasts an instant only works against attacks with a power duration of an instant.

⌚ an action(+0): The power comes into being as a result of your action or someone else's action, and your control ends right before the start of your next action. This is probably the minimum practical level for a defensive power and is much more convenient for combat bookkeeping than something like a duration of a few seconds. It is a better modifier value than these in order to encourage its use.

i You have triggered force field to stop bullets. If you are shot six times between your chances to act, the force field would activate six times if it lasted for an *instant*, or one time if it lasted for an *action*. Note that if you were hit six times by *one* attack (like an autofire attack), then the force field would only need to activate once, as either an *instant* or an *action*. That is, if the attack was bought as a power duration of an *instant*, the defense only has to last an *instant*.

⌚ until stunned(-2): Once turned on, the power lasts until you turn it off or you are **stunned**. We recommend that powers with this modifier also have an **operational effect** of 'any power that is on like this is a -1 to all other skill rolls because it requires part of your concentration'. Think of it as a constant minor action penalty. Deliberately turning the power off is usually a minor action.

⌚ until knocked out(-4): Once turned on, the power lasts until you turn it off or you are rendered unconscious or fall asleep. Otherwise it acts like 'until stunned' and should probably have the operational effect mentioned.



⌚ continuous(-4): Once turned on, the power stays on until a particular condition is met. The condition must be quantifiable in game terms, like 'until I say the magic word', 'until I have only 1 stamina left', and so on. This duration does *not* count as a separate modifier, but note that the power is *not* turned off at will. It *only* turns off *when* the condition is met. The gamemaster should make sure this modifier is used in the spirit of its nature.

i If your power lasts 'until sunset', it lasts until sunset whether you want to turn it off or not. If you are wearing a magic amulet as a continuous duration power, it can still be *forcibly* removed.

⌚ always on(-2): This is a 'permanent' power. The power cannot have any **drain** and *cannot* be turned off. A fixed effect in a gadget (like a suit of armor) is 'always on'. You may not always be wearing it (it has gadget modifiers), but it is always 'being armor'. A gun is *not* always on. While it is always a gun, it is not always doing what a gun does. Always on means 'whatever the power's effect is, it is always happening'. Unless you take a modifier limiting the power to full power use, you *may* 'turn the power down' to a minimum level of +3 or the final power level, whichever is lower. If 'turned off' by some other power, it will turn back on when that power's 'duration of effect' ends.

! For simplicity's sake, 'always on' is convenient for designing some types of gadget. To be more accurate, things like armor might be 'always on' to represent that it is always being a suit of armor, but 'continuous' to represent that you *can* take it off and not be armored, and 'preparation time' to reflect that it takes time to put the armor on in an crisis situation. But you can usually just assume the 'continuous' and 'preparation' modifiers cancel out and only worry about it in play if absolutely necessary.

⌚ time level(-level/4): Once turned on, the power runs unattended for the listed time level. A time level *modifier* of -15 is presumed to be 'forever', but in many cases you would probably just use the 'always on' modifier. Time levels round up. You do not have to *use* the maximum time level for a given modifier, but you do have to take the full modifier.

i If you want a time level of +5 as effect duration, you have to take a -2 modifier.

! Continuous, time level and some other long duration modifiers *might* be used with discrete units of power like 'charges'. This just means that you have a 'charge' that once activated, lasts for a certain amount of time, or an 'always on' power with 1 charge, which if disrupted, is gone and does not come back.

⌚ declining(-1): This means that when some other defined duration runs out, the effect slowly wears off, at the rate of 1 point or 0d+1 of effect per time level after that duration. This is coded blue because of the extra book-keeping it requires.

i If you had a power at +6 that lasted until you were stunned, then at a time level of +1 after you were stunned it would drop to +5, at a time level of +2 it would drop to +4, and so on.

⌚ time delay(+2): This is usually combined with *two* other durations. The first is the duration the time delay lasts, and the second is how long the power lasts once the delay ends.

i If you have a power go off for 'an action' after a 1 hour delay (time level of +24), then the total modifier would be -4 (+2 for time delay, +0 for 'one action', -6 for a delay of a time level of +24).



⌚ triggered(-2): The power has a specific trigger condition that is usually based on the senses or powers available to the power user at the time the power was put in place. Triggered powers 'go back in time' and *can* undo the effects of what triggered them.

If you have a force field that is triggered by 'taking damage', then the force field activates when you *would* have taken damage, but it might also prevent you from taking that damage. A triggered power that heals you gives you back lost hits, while a triggered power that armors you prevents you from losing those hits to begin with.

Until the trigger goes off, the power is counted as 'in use', so you cannot use it again (or any other power in the same suite) until you deactivate the trigger (a minor action).

⌚ triggered gadget(-2): This is much the same as a normal triggered power. The difference from a normal trigger is that you usually have to be at the gadget in order to deactivate it and if it is a *mundane* gadget you may have more than one active at the same time (you can buy a crate of land mines and put *all* of them in play).

Triggers of either type need to be thought out. An invisible person will still set off land mines, but an intangible person might not set off a motion sensor. The subjective descriptions on the triggered power and what might trigger it are the best guide.

Effect durations

Effect durations are trickier. While most powers will work sensibly with power durations of an instant or an action, it would be odd for the effect duration of getting hit with a lethal attack to be 'an action'. But, this *is* the default for most effects. So, you need to make sure the effect duration of your power matches the actual effect. You *can* de-link them. You *could* cause lethal damage that wears off as fast as bruising damage, or non-lethal damage that lasts until you are stunned, or whatever. You may use most of the values for power duration for effect duration as well, but not necessarily the other way around.

effect duration modifiers	modifier
⌚ until power duration ends	+0
⌚ an instant	+2
⌚ an action	+0
⌚ as stamina recovery	-2
⌚ as non-lethal hits recovery	-3
⌚ as half-lethal hits recovery	-4
⌚ as lethal hits recovery	-5
⌚ time level	-time/6
⌚ semi-permanent	-6
⌚ breakable	+special
⌚ severable	-1
⌚ range-limited	+2

📌 Wand of fire: Step 5

We want the power duration for our wand's effect to be an instant, just long enough to make a skill roll on the attack, and for the effect duration to match the nature of the attack, which would be 'as lethal hits recovery'. So:

name	type	concept
wand	paranormal	lethal
of fire	offense	magic
		gadget

gameworld base = 0/9	modifier
🗡️ effect: offense(lethal damage)	+0
🌍 suite: single power	+0
⊕ range: medium (90 meters)	-5
⌚ duration of power: instant	+2
⌚ duration of effect: as lethal hit rec.	-5



! If you match up the 'offense' effects with their appropriate natural durations, you end up with:

damage	modifier
lethal damage and recovery	-5
half-lethal damage and recovery	-1
non-lethal damage and recovery	+1

All other things being equal, a non-lethal attack has a +6 advantage (or +2d) over a lethal one, more if you add in using Toughness as an additive layer with armor vs. non-lethal attacks.

⌚ until power duration ends(+0): This just means that the effects end when the power duration does. If you have a power that gives you +6 strength and the 'power duration' is 1 minute, then when the 1 minute is up, the 'effect duration' ends. If the power duration is affecting an area, this means the effect ends when you leave the area.

⌚ as recovery(-varies): The power effects of wear off or are reduced in exactly the same way as damage heals on that type of target.

i If you have a power that does non-lethal damage and you want it to wear off quicker, change the the effect duration to 'as stamina recovery', which would be a -2 modifier instead of the -3 for 'as non-lethal hits recovery'.

There is no such thing as 'half-lethal hits'. You just use this modifier for half-lethal damage effects to represent that some of the hits recover as non-lethal and some as lethal. Stamina recovery means you get back *all* the damage after *one* non-lethal recovery period.

⌚ time level(-level/6): The effects of the power completely wear off or end after the time level. For this effect duration on a damaging power, *all* the effects of the damage would just vanish at the end of duration. However, *consequences* of the damage will remain. A damaged book will have missing content. A killed person will still be dead, but if they had not been dead long, their now-intact body might be revivable.

Since a time level of +36 is a modifier of -6, the same as 'semi-permanent', you are better off making a 'breakable semi-permanent' duration for anything longer than this.

⌚ severable(-1): This means that you can turn off the *effect* duration as a minor action. So, you could have a power that does lethal damage and then say you want the lethal hits you did to go away...*and they do!*

⌚ semi-permanent(-6): This just means the effect becomes the default state for the target. If you light a fire, it stays lit until it runs out of fuel. If you are healed, you stay healed until you are injured again. This is the preferred duration for any 'alter:recover' effect. Another way to judge the duration would be to say it lasts 'until the situation is opposed, completed or negated'. For instance, a *geas* might end once you have completed it.

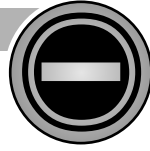
⌚ breakable(+special): A breakable duration of effect means that the target of the effect or an outside force can cause the effect to end before some other duration has happened. For instance, a magical pentagram can be 'broken' by erasing part of its outer edge. The value of this modifier is a circumstance modifier based on how easy or likely it is for the power *to stay in operation*.

If we say that the magic of a desert shaman lasts either until it rains, we could say the power is very likely to stay operating for a while. This could be an effect duration of 'semi-permanent (-6)' but 'breakable(+1)', because 'extremely common' (staying in operation) as a circumstance modifier is only a +1 modifier.

⌚ range-limited(+2): This just means the effect wears off if the target gets further away from the source of the power than its range, even if the power duration has ended. Those affected by subjective range stop being affected if they stop interacting with the power.

i The *geas* on you to 'go away' wears off once you get far enough away.

DEFENSE AGAINST



Any power that can be used on a target against their will *must* have a 'defense against' modifier. Targets that cannot consent (like rocks) are considered to be acted on against their will. Powers used on the expression of a power effect do not *need* a defense against the power, but *may* have one, or the gamemaster may decide that the power needs a defense regardless of the target and the effect.

Defense against a power takes several forms. The normal one is that the defense acts just like armor and in many cases is armor. A suit of combat armor defends against bullets. This is an active defense, and would be a power with the effect of 'defense' designed to stop a particular 'offense' or group of 'offense' effects. The broader the defense against your power, the more favorable the modifier.

Another sort of defense is situational. If the target *cannot* have the defense, it is often considered to be transparent or infinitely resistant to the power, as appropriate. If your power is resisted by Strength, then a rock which has no Strength attribute is considered to have an infinite Strength for resisting your power. A power that makes you invisible to sight has no effect on a blind person. Air is effectively non-existent for purposes of conventional attacks.

The last sort of defense is absolute. You define the power so that a particular defense at *any* level completely stops the power. This would be something like 'an evil spirit's ability to move through walls is completely blocked if they have not been invited into an area.' It would not matter if the walls were a bank vault or made of tissue paper. A defense with a certain *quality* completely blocks the power.

If a power can be defended against by multiple things, you use the average, rounding towards zero, and you *must* have one of the layering modifiers.

defense against	modifier
⊖ is a very broad type	+4
⊕ is a broad type	+0
⊖ is an average type	-2
⊕ is a narrow type	-4
⊖ is esoteric	-4
⊕ works as decreasing layers	+0
⊖ adds together	+4
⊕ only uses highest value	-1
⊖ requires specific coverage	+varies
⊕ protects absolutely	+4
⊖ can be improvised	+2

⊖ **type(+varies):** The broadness of a defense against your power is gameworld dependent, but should be the same as the guidelines on **page 6.13**. Note that the color coding is *reversed* from normal. Giving your power a defense that is difficult to acquire is more likely to require gamemaster approval or scrutiny.

Note that for paranormal 'defense against' modifiers to have the same value as mundane ones, they have to be as common in the game setting, otherwise you would make them one level narrower or add 'esoteric'. The last item in parentheses on the examples below show which subjective items make up that defense.

example defenses	modifier
⊖ 'defense on lethal hits'(2,3)	+4
⊖ 'mundane armor'(2,3)	+4
⊖ 'mobility gadget'(2,3)	+4
⊕ 'mental defense'(1,2)	+0
⊖ 'mundane forcefield'(1,2)	+0
⊕ 'forcefield spell'(1,3)	+0
⊕ 'Strength attribute'(1,2)	+0
⊖ 'mass characteristic'(1,2)	+0
⊖ 'mundane radiation defense'(1,2,3)	-2
⊖ 'paranormal Awareness attribute'(1,2,3)	-2
⊖ 'Dodge derived attribute'(1,2,3)	-2
⊕ 'pentagram, paranormal defense magic ritual'(all of 1,2,3)	-4
⊕ 'mundane anti-missile laser defense gadget'(all of 1,2,3)	-4

You can see the hierarchy, the more specific a defense is, the more negative the modifier.

Note that attributes/physical characteristics fall into the 'alter' set of effects for definition as a defense. In general, conventional armor effects are +4, attributes or characteristics that are not a fraction of something else (like hits) are +0, derived characteristics that are a fraction of something else (like dodge) are -2 and exact, specific defenses are -4.

So, while you can make a power that very few people are likely to have a strong defense against, you are giving up +8 in potential power level (going from a +4 modifier to a -4 modifier) to do it compared to something more easily defended against.

Esoteric(-4): The defense is of a particular type, but has some quality or rarity that makes it harder to acquire than normal or is a limited subset of the available defenses. The gamemaster can adjust the value of this modifier based on degree of 'esoteric-ness'.

i If we wanted the wand of fire to have an average, esoteric 'defense against' it, we might say that only metals and minerals can withstand the searing heat of the lethal firebolts. So, soft body armors would be of no use, hiding behind a wooden table would be no protection, and so on.

'Esoteric' could also be reflected by some of the 'contingency' modifiers. You might say that instead of having an esoteric defense, the firebolts were armor-piercing. This would have a similar but not identical effect.

Decreasing layers(+0): In terms of 'real-world' systems and the **EABA** rules, armor is not cumulative. Twenty sheets of 1d+0 armor will not stop a 20d+0 attack. Instead, you count the best layer, and each layer after that is halved, rounding down. This is a cumulative process, so three 4d+0 armors would be 4d+2d+1d=7d. Amounts with fractional dice convert the same way. 1d+1 would be halved to 0d+2, and 1d+0 would be halved to 0d+1.

adds together(+4): It may be appropriate for some attacks to allow all appropriate defenses to add together. For instance, your Toughness usually adds to non-lethal defenses.

only uses highest(-1): This means that no matter how many useful defenses a target has, you only count the highest value.

! These three modifiers are only allowed if they are relevant. For instance, if you define the power so a specific defense stops an entire effect (tin foil hats stop mind control rays of *any* intensity), then none of the layering modifiers would apply. Similarly, the modifiers are mutually exclusive. A power should not have more than one of them.

i Wand of fire: Step 6

We want the damage from our wand to act like mundane fire (the power is paranormal, but the fire it makes has no special characteristics), which would be a 'very broad' type of defense.

name	type	concept
wand	paranormal	lethal
of fire	offense	magic
		gadget

gameworld base = 0/9	modifier
⚡ effect: offense(lethal damage)	+0
🌍 suite: single power	+0
⊕ range: medium (90 meters)	-5
🕒 duration of power: instant	+2
🕒 duration of effect: as lethal hit rec.	-5
🛡️ defense against: very broad type	+4
🛡️ defense against: in decreasing layers	+0

coverage(+varies): This just means that a proper defense must also protect a *specific* part of the target. The value of this modifier is half (round up) of any contingency modifier for the location. This usually means you have to hit *that* body part with your power.

i If your mental power is blocked by 'armor on the head', this is a +4 modifier (since the modifier for head armor is +7). But if your power does not hit their head somehow, the power does nothing.



☹️ **protects absolutely(+4):** If the proper defense exists, it stops the entire effect, regardless of its level. For instance, saying that a metal armor stops an electrical attack like a taser. It does not matter if it is a suit of powered armor or a layer of tinfoil, if it is metal and covers the target, it stops the effect.

☹️ **can be improvised(+2):** This means that if a power can be seen (and understood), that someone can spend turn mod to generate a defense equal to half the turn mod used, and this defense lasts for the duration of the encounter. If an improvised defense can 'protect absolutely', the gamemaster needs to assign a difficulty to improvise the defense in the current situation, and turn mod can apply to rolls to reach this difficulty.

Improvised defenses generally have negative side effects associated with the nature of the defense.

📌 You give a harpy a 'magical screech' ability that is an area effect that causes non-lethal damage, with a defense of 'armor protection on your head', assuming that ear covering provides you some protection against it. If you say the defense can be improvised, someone could spend +8 turn mod to stuff their ears full of mud and get a +4 defense against the power for the remainder of the encounter. This +4 defense also makes any mundane hearing tasks take a +4 difficulty, since you have stuffed your ears with mud.

In general, you do *not* use this modifier on broad or very broad defense types. For instance, just because you can dive behind a rock to hide from arrows or bullets or firebolts, that does not make for an improvised defense. An improvised defense implies that you can take the defense with you, move about and engage in combat while using it. While you might be able to hide behind a slow moving car, things like this are situational rather than a function of the power.

CONTINGENCIES



This is a *big* category, because it is composed almost entirely of special cases, which fortunately can be lumped into a fairly small number of groups. Rather than making them very broad and subjective, we are going to give them a bit of detail because these modifiers also give a power a *lot* of personality. Plus, they are a way to rack up a lot of positive modifiers to boost the base power level...

Contingencies are things that affect the active use or situational use of a power. If a power 'only works during the full moon', that is a contingency. If you need 'both hands free' to use the power, that is a contingency. If a power is 'armor-piercing', that is a contingency.

The general nature of contingency modifiers tends to be one of the following:

- ☯️ **visibility:** how well people can see the power
- ☯️ **circumstance:** things outside the power
- ☯️ **probability:** the chance the power fails to work
- ☯️ **side effects:** things that happen when you use it
- ☯️ **enhancements:** benefits other than power level
- ☯️ **linkages:** connecting the power to other things
- ☯️ **usage:** how you make the power happen

Each of these will have its own subsection and list of modifiers. Unless otherwise specified, each of these modifiers is cumulative with all the others. Modifiers in **red** on a table are the default condition for powers unless otherwise specified.








Visibility


The default for a power, especially for a power that uses energy or has a range, is that it is readily visible and/or audible. An appropriate Awareness roll can detect where the power originates from, often what it is aimed at, and if you have technological or cultural familiarity with that type of power, also what the power does. The difficulty of spotting the power is reduced by -1 per +3 (or 1d) in the power, rounding the power level down.

i A 4d+1 rifle is -4 difficulty to be heard. *Bang!* A 4d+1 body armor is -4 difficulty to be spotted.


The exception is powers whose nature is to *not* be visible, like 'invisibility' or passive powers that are *physically* concealed. If you *could* 'see magic', a person with 4d+1 magical invisibility would be a bright magical beacon, but that does *not* mean you could identify the person the magic is hiding (just a person-shaped magic aura trying to be sneaky). Powers can have different levels of visibility. The sample powers are mostly using the default visibility of 'obvious'. The available levels are:

visibility	modifier
 power is very obvious	+1
 power is obvious	+0
 power is subtle	-1
 power is hidden	-3
 power is undetectable	-5


Most powers are obvious in their effect if you have an altered sense or a receive information power appropriate to the nature of the power. The altered sense or receive information power needed becomes more and more specific as the power decreases in visibility.

 very obvious(+1): The power *cannot* be hidden from view, its source, destination and path are readily determined, as is the nature of the power.


i A rifle is obvious. A flamethrower is very obvious.

 subtle(-1): The power is not immediately obvious, but can be detected with mundane senses if you know what to look for or where to look. The difficulty of spotting the power is reduced by -1 per +12 (or 4d) in the power, rounding down. Most silenced firearms and bulky/noisy flexible armors are subtle.

i A 4d+1 silenced rifle is -1 difficulty to be heard. A 2d+2 subtle body armor is +0 difficulty to spot. It might not be obvious, but you *can* spot it.

 hidden(-3): The power can be used in such a way that usually cannot be detected without a power or gadget that can operate outside of normal sight and sound. Close range, touch, clever or skilled observation may be able to discern that the power is operating as for a subtle power. Easily concealed flexible body armors may fall into this category.

i A normally hidden laser beam might be detected if you know where to scatter dust or smoke to show the beam. An arrow from a bow can be virtually silent, but can be heard at close range.

 undetectable(-5): The power cannot be detected in use without a *specific* power (which may be a gadget), but can otherwise only be inferred or guessed at. Undetectability can be mundane or paranormal. Magic could easily be invisible to people, but radiation poisoning might as well be evil magic to someone who does not understand it.

i A magical curse that causes someone to have a heart attack looks like 'death by natural causes'. A nanotech disruption of cardiac function might be just as undetectable.

Many mundane tech gadgets will have this modifier. *After all, you do not see radio waves coming out of an eavesdropping bug...*



This modifier can be much more unbalancing than it seems at first glance and should be looked at very carefully for player-controlled powers. It is very useful for gamemaster-controlled plots and villains, however.









Circumstance






This is for things that are usually outside your control, but which affect whether or not the power works or how well. For instance, your 'invisible in shadows' spell requires some shadows. Or, your solar-powered flight speed is proportional to how much sun is available.

ceiling modifier










 limited to \pm half value or $\pm 2d/\pm 6$	+2
 limited to $\pm 1d/\pm 3$	+4

circumstance modifier










 works $\frac{3}{4}$ of the time(extr. common)	+1
 works $\frac{2}{3}$ of the time(very common)	+2
 works $\frac{1}{2}$ of the time(common)	+3
 works $\frac{1}{3}$ of the time(uncommon)	+4
 works $\frac{1}{4}$ of the time(very uncommon)	+6
 works $\frac{1}{8}$ of the time(rare)	+9


 reduced to $\frac{3}{4}$ eff.(-1d)	-3
 reduced to $\frac{1}{2}$ eff.(-2d)	-2
 reduced to $\frac{1}{4}$ eff.(-3d)	-1
 reduced to zero effect	+0
 reduced proportionally	-1


coverage modifier

 head & neck except face (locations 5-6)	+8
 head & neck(locations 3-6)	+7
 chest & abdomen(locations 10-11)	+5
 chest, abdomen & head (locs 10-11,5-6)	+4
 full torso(locations 9-12)	+3
 full torso & head	+2
 arms(locations 7-8)	+6
 upper legs(locations 13-14)	+5
 full legs(locations 13-18)	+4


success on 3d modifier


 6 or less (or fails on 14 or less)	+9
 7 or less (or fails on 13 or less)	+8
 8 or less (or fails on 12 or less)	+6
 9 or less (or fails on 11 or less)	+4
 10 or less (or fails on 10 or less)	+3
 11 or less (or fails on 9 or less)	+2
 13 or less (or fails on 7 or less)	+1
 ablative chance	+1
 secondary ablative chance	-1


 **ceiling(+varies):** Powers whose effect would or could allow them to be 'stacked' generally have a ceiling on the cumulative effect of the power level of the effect.

 If you have a power that gives you +3 Strength, you cannot use it twice to get +6 Strength. Two mind controls at +8 do not equal one at +16.

A power *can* have a lower ceiling than this. A lower ceiling means that the maximum combined effect from the power is half the value of the target, or $\pm 2d$, whichever is smaller, or $\pm 1d$, whichever is smaller.

 If you have a power that gives someone else -10 Strength and it has a limit of half the value of the target, using it on someone with a Strength of 8 could lower it to no lower than a 4. If the power *raised* Strength, on this Strength 8 person it could raise it to no more than 12.

 **circumstance(+varies):** This is 'of all the circumstances in which the power *could be useful, in how many of them does it actually work at full effect?'* modifier. For instance, if a power 'only works at night', this is about half the time, so it is worth a +3 modifier. This is *not* a die roll. If something works 'half the time' you do not flip a coin. Rather, it is a gamemaster call. *Is it day or night?* You cannot take a modifier for a power that works less than an eighth of the time, but you can have a set of very uncommon circumstances that add up to the one-eighth modifier.

 You could not have a modifier for 'only works on the day of the full moon', since this is only 1 day out of each 28. However, you could say 'only works within a day of the full moon', which is 3 days out of 28. This is about one-ninth instead of one-eighth. Close enough for gaming purposes.

'Opposing a power' as a circumstance is most likely a 'common' thing, for a +3. So a power that does something at reduced effect if it is being actively opposed would count as +3. So, a healing spell that was 'reduced to zero if the target resisted' would be a +3 circumstance.



Circumstance is a two-part modifier. The first part is one of the top six items on the list and the second is one of the bottom five. The first part lists the circumstances in which the power is fully effective, and the bottom five list the degree of impairment. This is either a fraction of the original power, or a subtraction, which ever is *larger*.

i If you had a power that worked at full effect 3/4 of the time, and in the other circumstances it only worked at 1/4 effect, this would be a net modifier of +0. If the power normally worked at full effect 1/2 of the time, and in the other circumstances did not work at all, this would be a net modifier of +3.

This is the modifier pair you would use if the 'very broad' through 'narrow' modifiers some effects have are insufficient. It is what you would use if you wanted an armor that could stop bullets but did not work as well against blades, or laser that went to reduced power if there was fog or smoke in the air, or a holy flame spell that only burned the undead ('reduced to zero effect against the living').

The 'proportional' modifier may be taken by itself or in combination with the others. This modifier means that the effect is in proportion to something in the environment. If you have a power that channels fire, you need a fire to channel from. If your superpowers work in proportion to the light available, then indoors might be brightly lit and outside might be dark. This requires work on the part of the gamemaster and requires permission to use.

! With gamemaster permission, the reduction in a power could be applied to things *other* than the power level. For instance, the power level might remain the same, but the range or duration might be cut by 2, 4 or 6 levels. Or the power level might be the same, but an energy cost to use the power might be doubled, tripled or quadrupled, or the power level might remain the same but the chance of a critical failure might be a roll of 7, 11 or 15 or less.

☯ coverage(+varies): This is more or less a circumstance of 'only works if an offense hits you in a protected spot'. This usually applies to mundane gadgets, but the gamemaster can say that things like magic have their own tech era equivalents.

☯ random on 3d(+varies): This is like the coverage modifier, but without a real-world equivalent. Sometimes the power just fails to work and you do not know why. Perhaps it is a gadget with an inherent unreliability, perhaps it is a magic spell and the spirits are fickle.

☯ ablative(+1): The 'ablative' modifier means that each time the power *could* activate after the first time, the success chance drops by 1.

i A random chance of 13 or less with the ablative chance is a total modifier of +2. The first time you use the power, it works on a roll of 13 or less. The second time, it works on a 12 or less, and so on.

The probability generally refreshes to its full amount at the end of an encounter, but the gamemaster can require use of some aspect of **flexibility** or **energy replacement** to refresh the chance to full. With gamemaster permission, the ablative modifier may be taken multiple times, and would adjust the chance of success by 2 or more per use after the first. The second use of an ablative power cannot have a chance of less than '3' on a 3d+0 roll.

i A random chance of 13 or less with the ablative chance taken twice is a modifier of +4. This means the first use of the power is a roll of 13 or less, the second use is 11 or less, the third is 9 or less and so on.



☯ secondary ablative(-1): This means that the power works the first time, but the second and later uses are ablative based on some other 3d probability.

i A power that is guaranteed to work the first time you use it, but which drops to a 10 or less the second time, then a 9 and so on, would be a +2 modifier (+3 for the '10 or less', -1 for the 'secondary ablative'.

You could use this for resisted powers that have a chance of failing after repeated efforts that would not normally overcome them. For instance, a stable force wall with a limited amount of energy. Each hit on it does not weaken its armor, but does generate an increasing chance the barrier just collapses. Or, you could use it for an entangling web that immediately slows someone down, but which they will *eventually* break free from.

If you *really* want to have rules for things like armor degrading in combat, you can do something like an ablative chance combined with a 'reduced proportionally' in the circumstance 'if the ablative roll is failed'. This might look like:

degradable armor	modifier
☯ works 3/4 of the time(extr. common)	+1
☹ reduced proportionally	-1
☯ 13 or less (or fails on 7 or less)	+1
☯ ablative chance	+1
☯ secondary ablative chance	-1
total	+1

Side effects

These are things that happen in addition to the power, when you use the power, and sometimes even when you just try to use the power.

side effects	modifier
☯ operational effect	+1
☯ failure side effect	+2
☯ mandatory side effect	+4
☯ special effect	+1

☯ operational effect(+1): This is a negative effect on the user associated with the use or continued use of the power. It does not do damage, but it is disruptive in some way. An example would be that conventional firearms have recoil, which disrupts your aim, forcing you to spend time re-aiming between shots. An operational effect happens during the 'duration of power'.

We recommend that any power maintained or controlled for a long period have a operational effect of '-1 distraction'. This just means that each such power kept in operation is a -1 to all skill rolls because part of your concentration is being used on the power. If you are flying, it might be effortless, but you still have to keep an eye on where you are going, just like texting while driving (or vice versa) shows that you are not doing either at full efficiency.

☯ failure side effect(+2): The 'failure' side effect can be taken if the power has a chance of not working or is placed in conditions where it does not work (activation roll, skill roll, etc.). This is different than 'the power works, but you just missed your aim'. If you have a power modifier such that the power can fail to turn on, you take the side effect when you try to turn it on and fail to do so.

A side effect is always bad for you, you *cannot* defend against it, and it has an intensity of +1 per +3 in the final effect, rounding up. The default side effect is taking non-lethal hits, but the side effect must always be relevant to whatever or whoever is generating the power. For instance, a normal gun does not work underwater, but a muzzle-loading gun has to be reloaded, which takes time. You can take the modifier multiple times for increased non-lethal damage, or increase the type of damage for +2 on the modifier.

i A power with basic failure side effect would be a modifier of +2 for non-lethal damage, +4 for half-lethal and +6 for lethal damage. If you took double the normal effect, these amounts would be increased by +2.

! A lethal side effect is useful for making the evil priest burst into flames when the adventurers disrupt the ritual to resurrect his evil dead god...

mandatory side effect(+4): The same idea as the failure side effect, but it happens every time the power turns on *and* every time you try to turn the power on but fail. You can increase this modifier by +2 for each more severe damage type, just as for the failure side effect. You can also have a conditional mandatory side effect for -2 to the listed amount, which is a mandatory side effect that only happens if you *misuse* the power. A misuse might be a cleric using divine powers for personal gain, or using a rocket launcher with backblast inside an enclosed space.

i A power with a *conditional* mandatory side effect would be a modifier of +2 for non-lethal damage, +4 for half-lethal and +6 for lethal.

Neither of the side effect modifiers can be taken for powers which are always on or have a 'duration of effect' longer than a day. The side effect modifier has to *actually* be a risk *and* a limitation, and if you have a power that lasts a year once you turn it on, then a side effect for failing is not really a limit unless it has a very real chance of happening *and* is severe enough to kill you.

special effect(+1): This is an easy modifier. You can only have one special effect on a power. A special effect is a +1 modifier that gives you an automatic secondary effect that is either subjective or the equivalent of a similar power at -18 off the main effect or a 0d+1 effect, whichever is *greater*. The special effect always relates to the first two of a power's subjective characteristics.

i Use of your 'water blast' gets things soaking wet. Anything that is adversely affected by water is affected by having your power used on it. If your foes were using primitive firearms that had the limit 'unreliable when wet', then your special effect deactivates their weapons.

A special effect is not *required*. Some powers have none or have 'special effects' that are actually something else. Does your mail vest have a 'special effect'? *Probably not*. It might have an operational effect (it is a little noisy) and it might take a little time to put on, but unless the game setting gives you a bonus to resist magic for wearing a lot of iron, there is not much of a special effect.

You get a benefit from having a special effect for a few reasons. First, it adds to the flavor of the campaign. Second, other people might have powers that work better against *your* special effect. So, do not take the +1 modifier for a special effect unless you understand that it *can* have a downside. Most powers and gadgets listed in the rules assume a special effect modifier.

i Wand of fire: Step 7

Looking at the first three sorts of contingencies, we decide we want the firebolts to have normal visibility, we want the wand to work in every circumstance except when it is completely wet (*not* being completely wet would be 'extremely common') and it has a special effect of 'sets things on fire'. We would probably define this as 'readily flammable objects will eventually lose all their hits from this attack if their defense is penetrated.' So:

name	type	concept
wand	paranormal	lethal
of fire	offense	magic
		gadget

gameworld base = 0/9	modifier
✓ effect: offense(lethal damage)	+0
🌍 suite: single power	+0
⊕ range: medium (90 meters)	-5
⌚ duration of power: instant	+2
⌚ duration of effect: as lethal hit rec.	-5
⊖ defense against: very broad type	+4
⊖ defense against: in decreasing layers	+0
☯ contingency(visibility): obvious	+0
☯ contingency(circumstance): not wet	+1
☯ contingency(special effect): sets fires	+1



Enhancements

These are things that usually improve the quality of an attack or other power without directly affecting the power level or nature of what the power does. This is a list of the most common enhancements.

enhancement	modifier
+4 non-combat effect	-1
penetrating	-1
stopping power	-1
armor-piercing	-2
battering	-4
autofire	-2
autofire only	-1
autoburst	-1
shotgun effect	-2
variable spread	-1
accuracy, per +1	-1
hardened	-1
full power only	+1

+4 non-combat effect(-1): This means that if not in a combat or non-consensual situation, the power level you can use is +4 normal. With gamemaster approval this modifier can be taken multiple times (usually no more than -3). *This is not subject to rules-lawyering.* While you *might* be able to use a non-combat effect to escape or evade a combat, you should not be allowed to re-enter the scene if you do so.

penetrating, etc.(-varies): These first four modifiers are exclusive. If you have one, you cannot have the others. These simply make the power act like the special ammunition types listed on [page 5.31](#). The dice of effect would be labeled appropriately:

p - penetrating b - battering
s - stopping power g - shotgun
a - armor-piercing v - variable spread

A power with damage of $3d+1^{V9}$ would be a power with user-variable damage and the ability to use the shotgun modifier on that damage.

autofire, etc.(-varies): The power acts like a weapon with the characteristics listed on [page 5.11](#) and following. Autoburst powers have any drain multiplied by 3 and autofire powers multiplied by 10. If a power uses 'charges' (like bullets), then autoburst uses 3 charges and autofire uses 10. If a power would act like continuous fire, you simply use a 'duration of power' of 'an action' or longer, to represent that the power is active over the entire period.

variable spread(-1): *Before* rolling to hit with an attack, the user may drop the adjusted effect to increase their skill roll for melee or unarmed attacks *or* decrease the difficulty for range by 2 for ranged attacks. You get +1d skill *or* -2 difficulty per -3 to the power level. The nature of the power must allow it to be spread out to cover a wider area. The limit for variable spread is usually no more than +3d or -6 to difficulty for range. For increases to melee skill, variable spread does *not* count towards the maximum skill bonus allowed.

accuracy(-1): The default Accuracy of powers with at least **short range** is 1 per +6 in power level (round Accuracy down). Melee or thrown attacks have a base Accuracy of zero. Each time this modifier is taken, **aimed** Accuracy of ranged attacks is increased by +1. The modifier can be used on a power usable in melee (like a shield) to give +2 to the user's *defensive* skill roll or on a passive armor to give it +1 to the chance of randomly deflecting a blow. For such defensive uses there should be no more than a total of -3 in the modifier. You *can* decrease a power's *default* Accuracy. Making it 1 per +12 is a +1 modifier, and 1 per +18 is a +2 modifier (like for primitive cannon).










hardened(-1): This negates the effect of armor-piercing or penetrating powers on attacks against a defense. For *mundane* gadgets, it also requires that the defense be of at least the same tech era as the attack.

full power only(+1): This means the power is only usable at *full* intensity. You usually do *not* take this if a power has charges or no drain.



Linkages


These are ways to connect powers together, usually so that you can have one power have multiple, different effects as a single action. Linkages are also a means to connect the originator of the power with one or more targets. Linkages are usually going to be either dependencies or delegations.


delegation	modifier
 none(default)	+0
 exclusive	-1
 shared 2x	-2
 shared 4x	-4
 shared 8x	-6
 contagious	-3
 severable	-1
 at range	-level/4
 password	-1


dependency	modifier
 dependent effect	+1


Delegation

Delegation modifiers are for powers that you create but which can be used by others. A power can be delegated by contact (voluntary or involuntary) or possibly by using the power on the delegation target.


 You can hand a gun to a minion to delegate it to him, but you could not shoot them to delegate it to them. However, your 'replicating slime ray' could be shot at someone, and then anyone that person touches also gets slimed.


 **none(+0):** It is your power, no one else can use it. If the power is in the form of or linked to a gadget, your ability to use the power might be taken from you, but no one else can gain the use of your power unless they have a power that copies your power.


 You could have an inherent power like magic that requires a gadget like a wand, but the wand has no power of its own. It is merely something you have to possess to use the power.

 **exclusive delegation(-1):** You can give the power to someone else, but if you do, you lose all use of it. It becomes *their* power until they choose to give it up. *Mundane* gadgets are assumed to have this and may *not* take the modifier, since the inherent nature of mundane gadgets is that *anyone* can use them. Gadgets bought with *points* rather than cash do not need to have delegation. You may lose the power if you lose the gadget, but you may choose to design it so the gadget still only works for *you*.

A gadget that has this modifier or acts like this modifier usually means that the power is *in* the gadget and the person with the gadget merely controls it.

 The previous example had a magic wand that you simply had to possess, but which had no inherent power. If the wand had 'exclusive delegation', it would most likely mean that the wand was the *source* of the power, not just a conduit for it. This is a negative modifier because being able to give the power to someone else is an advantage.

 **shared delegation(-varies):** You can loan the power to someone else *and* retain use of it for yourself. You *each* have the power, but *they* do *not* get the 'shared' quality and cannot share it with someone else). This requires some common sense interpretation by the creator of the power. For instance, for most mundane gadgets, this modifier means that you have multiple copies of the gadget. You buy a crate of grenades and hand them out to the troops. Or it might be a necromancer granting his 'death touch' power to all his undead minions.

 **contagious(-3):** If you buy a power as shared, adding this modifier means the power is sharable *without consent*. Those you share it with can involuntarily share it with others, and the maximum number of people who can have the power is based on the amount of sharing you took a modifier for.



You would use this for a hostile power that you wanted to affect a large number of people with. The duration of any new exposure is like the power was just used on the new target. Contagion cannot spread back to either the original or secondary sources of the power.

! While it is possible to design a hugely contagious power, it is impractical in terms of the points it would require in most cases. The gamemaster should look closely at *any* contagious power.

☯severable(-1): The original source of the power can un-delegate it to any or all people it has been shared with as a minor action. Powers in mundane gadgets are usually exempted from this, but it is possible that the gadgets could be deactivated at range.

☯at range(-level/4): Powers can normally only be delegated by touch or at touch range (you hand your gun to someone). A power that can be delegated at range costs more. The exception is for powers in a gadget, which can be left somewhere to be picked up, or even thrown to someone or sent through the mail.

☯password(-1): In addition to some other form of delegation, there is some sort of test or skill or requirement for use of the power that is not covered by other modifiers like a minimum Strength, etc. Failing to pass this test means the power does not work, and at designer option, may trigger a side effect modifier. In general, bypassing the test is challenging(9) on either a skill or unskilled attribute use. Requiring special tools to bypass the test or increasing the difficulty by +4 is an additional -1 modifier, with a normal maximum for the modifier of -3.

i If your blaster rifle has a biometric trigger lock, this would be a -1 modifier. If you needed a set of electronic lockpicks to attempt the task at the normal difficulty, it would be a -2 modifier.

Dependencies

Dependency is one modifier, but you can take that modifier multiple times in different ways.

dependent effect(+1): The power requires some other effect be in place first or be in your possession, or both. Powers can be *mutually* dependent, and count as one power for purposes of turning them on and off. Powers can be dependent operationally, or if they are in gadgets, dependent physically. Each power that is dependent on another gets a +1 modifier for each power it is dependent on. The maximum you can gain from this modifier is a total of +3 on each power involved. You *can* have more dependencies than this, you just do not get any extra modifier value for it.

i You have a spacesuit with the power of armor *and* life support. The life support is dependent on the armor being complete and without holes in it, so the life support power gets a +1 modifier (if someone has your helmet, you cannot use the life support). The armor *can* operate without the life support being *operational*, so it does *not* get this modifier. However, the life support is integral to the armor, so someone cannot take one without also taking the other. So, you end up with life support getting +2 from dependency and the armor getting +1:

- ☯ armor *physically* dep. on life support +1
- ☯ life support *physically* dep. on armor +1
- ☯ life supp. *operationally* dep. on armor +1

In general, if a dependency condition is lost, the 'power duration' ends and may not be restarted until the dependency is restored. If someone takes away your space helmet while the life support is running, the life support stops. This requires common sense design of the powers. If the life support 'duration of effect' was not linked to actually having a space suit, then you have to explain how this would work.



i Wand of fire: Step 8

For enhancements and linkages we merely go with +2 Accuracy and the default delegation of none. So:

name	type	concept
wand	paranormal	lethal
of fire	offense	magic
		gadget

gameworld base = 0/9	modifier
⚡ effect: offense(lethal damage)	+0
🌐 suite: single power	+0
⊕ range: medium (90 meters)	-5
⌚ duration of power: instant	+2
⌚ duration of effect: as lethal hit rec.	-5
🛡 defense against: very broad type	+4
🛡 defense against: in decreasing layers	+0
☯ contingency(visibility): obvious	+0
☯ contingency(circumstance): not wet	+1
☯ contingency(special effect): sets fires	+1
☯ contingency(accuracy): +2	-1

! Dependencies can be creatively interpreted with gamemaster permission. For instance, use of a power might be physically dependent on a location rather than an object, like 'you have to be in a mana-rich zone to cast this spell'. Physical dependencies do not have to be the same object. A magic ritual might be cast anywhere, but require several separate items as part of the ritual, each of which is a +1 dependency.

! Dependencies also work well to make some types of tech gadgets practical. For instance, big attacks from small weapons often use the **disposable** modifier, but this is not appropriate if you can reuse the launcher. But, you can make a launcher whose power is to give a disposable warhead range, and then add dependencies. So, your RPG-7 rocket is a disposable weapon whose use is dependent on having a non-disposable launcher to fire it from. This also gives you the benefit of using the same launcher to fire several different types of disposable rockets.

Usage

Usage modifiers are the 'what do I need to do to make the power work?' modifiers. For instance, a power that is a gun requires that you make a skill roll to hit someone with it. This would be a usage modifier. You also need to be able to hold the gun and aim it, which is also a usage modifier.

The usage modifier for many powers is going to be 'none'. You simply will the power into being as a minor action. A superhero leaping into the air and taking flight is a good example of this.

In general, any power that is used or usable against an unwilling or non-consenting target has to have some sort of roll involved, usually either an opposed roll like a melee attack, or a roll against a varying target number like the range for a projectile weapon. When a power affects a target that can have a roll associated with it, an opposed roll is usually more appropriate for dramatic purposes.

usage	modifier
☯ no preparation needed	+0
☯ opposed combat skill roll	+4
☯ ranged combat skill roll	+2
☯ opposed non-combat skill roll	+2
☯ average(7) skill roll	+1
☯ hard(11) skill roll	+2
☯ heroic(15) skill roll	+3
☯ minimum Fate of 5	+1
☯ minimum Fate of 7	+2
☯ minimum Fate of 9	+3
☯ gestures	+1/+3
☯ voice	+1/+3
☯ concentration(prepare)	+2
☯ concentration(active)	+2
☯ preparation time	+level/4
☯ warmup(+3 per time level)	+1
☯ warmup(+2 per time level)	+2
☯ warmup(+1 per time level)	+3
☯ requires 2 users	+4
☯ each doubling	+4
☯ may use 2 assistants	+2
☯ each doubling	+2



no preparation needed(+0): The power can be activated as a minor action, deliberately or because it is triggered by something else. This is the default case for powers.

i If you have a flight power, using it could be as natural and easy as walking. Your armor might be a little more effective if you lace it up or buckle it on, but if you can just grab it and throw it over your head in an emergency, it does not require any preparation.

A power with 'no preparation needed' cannot force anyone or anything else to make a roll or apply a defense because of *your* action. You can however, have a power that does a hostile effect, triggered by *their* action, and if the power has the **triggered** modifier, it does not even require a minor action on your part.

i If you have a flaming force field that activates in response to you being hit, this *can* do damage, but does *not* need preparation.

opposed combat skill roll(+4): The power requires that you make an opposed combat roll against the target, as a major action if you are initiating it, or as a minor action if you are responding to someone else's combat roll. This is the modifier you would use for a power that acts like a melee or unarmed combat attack. The power can be blocked, parried or have anything done to it that a melee attack could. A power with this modifier can be used against targets incapable of making an opposed roll, if the effect of the power is appropriate.

i You can use your 'flame hands' against a door.

The modifier for opposed combat skill roll can also be used for opposed Attribute checks, like Strength vs. Strength or a contest of wills. If you win the opposed test, the effect of the power applies to the target. The target still gets to apply any defense they might have, and the opposed test is merely to see if the attack or effect hits.

Opposed combat rolls can happen at any range the power has, so a mental power could rely on an opposed Will task to hit someone a hundred meters away if your power had that range, but would *not* take range modifiers to hit. You should have to make an appropriate Awareness roll to spot the target, however. Similarly, you could have a melee whip with a range of a hundred meters, but your target could block or parry it like any other melee attack.

ranged combat skill roll(+2): The power requires that you make an unopposed combat roll against a difficulty based on the range. The power acts like a ranged attack and anything that could affect a ranged attack can affect the power, within the parameters of what the power does. The skill itself may either be a specialized one for this power, or a more conventional skill that matches the way the power is used.

i You could have an 'energy blast' skill, a 'sorcery' skill that applies to all aspects of a magical task, or a gadget that uses your 'projectile weapons' skill roll.

opposed skill roll(+2): The power requires that you make an opposed skill roll against the target, as a major action. This is *not* a combat skill roll, and the ways in which it can be used are fairly limited. An example might be you vying against someone else in order to affect a target that is neither of you.

i You are trying to make it rain, which requires a contest of skills with the sky spirits to see whose will prevails. Or you might have to play chess against the spectral guardian to open the magic portal.

average skill roll(+1): The power requires a skill roll to use it correctly, usually as a minor action. This is *not* for combat targeting, but more akin to driving a car or flying a plane. For each +4 difficulty on the roll the modifier can be increased by +1. You *can* 'take 2's' to make this roll.



! All skill rolls related to successful power use happen at the time the power 'turns on'. So, if you have a preparation time *and* a skill roll, you do not know if the preparation is going to be successful until the power is on the cusp of activation. Skill rolls related to power use generally assume that any costs, side effects or consumption of energy *do* happen, even if the power use is not successful. If you have a power that can only be used once a day and you blow the skill roll, that is it for the day.

🌀minimum Fate(+varies): The power requires a potential user to have a certain inherent magical or other potential, as measured by the level of their Fate attribute. The base level modifier is +1 for a Fate of 5, and the modifier goes up by +1 for each +2 Fate required. This is a 'setting' modifier, like saying 'all magic requires that a person have a certain innate magical potential'. People with insufficient Fate cannot learn that particular power or use a gadget that has this modifier. This could be tied to a Forte/Weakness on power projection. With gamemaster permission, a variation of this modifier could be applied to different attributes or even to characteristics, like 'only Kardathu can work the firing mechanism of Kardathu battle rifles' or 'you need a Strength of 13 to use the Osmium Sword'. This can be different than the 'password' modifier in that it can require certain physical characteristics to use the power rather than a test to be passed or bypassed. If you do not have the brain structure of a Drithi, then you *cannot* use a Drithi psi-helm, regardless of what fancy high-tech tools you might have access to.

🌀gestures(+1 or +3): The power requires unimpeded gestures with at least one hand. If *both* hands are required to be free of restrictions and are clearly part of the power use, you can take the larger value. This modifier can also be used on gadget-based powers or powers meant to mimic firearms or other weapons (pistols are +1, rifles are +3).

i A power that mimics a flaming sword could have 'requires an opposed skill roll' *and* 'gestures'. A rifle could have 'requires a ranged combat skill roll' *and* have the larger 'gestures' modifier (because you need *two* hands to use a rifle).

🌀vocalization(+1 or +3): The power requires an unobstructed voice to activate it, but this can be in the confines of a helmet or from behind a mask. If the voice needs to have no barrier in front of the face and for the voice to be loud and obvious, you can take the larger modifier.

🌀concentration(prepare)(+2): If a power takes more than an action to prepare, the power can be designed so the user must devote all their attention to the power. During a concentration period, the user of the power can take no major actions and cannot take any minor actions except to communicate and possibly walk. Having to make any roll not related to the power that cannot be succeeded at by 'taking 2's' will break the user's concentration.

i If you take 1 hit of damage and cross the -0d damage threshold, this requires a Will roll to avoid being stunned. Since a roll is *required*, your concentration *is* broken if you cannot make this roll by 'taking 2's'.

🌀concentration(active)(+2): If the 'power duration' is longer than an action, the power can be designed so that total concentration is required to keep the power going. This is the same as 'concentration(prepare)', but the user of the power may also make any rolls directly related to the use, manipulation of the power or resistance to the power. A power can have one of these modifiers or both, depending on the special effect desired.

i An objective control power normally only takes a minor action to manipulate the target. If you took an 'active concentration' modifier, it would take your full concentration for the task, leaving you vulnerable.



🕒 prep time(+time/4): The power requires a certain amount of time before it is ready to use. The modifier rounds towards zero, so time levels of less than +4 are worth no bonus.

i A power that takes 15 seconds from when you start activating it to when it finally turns on (a time level of +8) is worth a +2 modifier.

The default is that once you make the 'turn on the power' decision, you do not need to do anything else except wait. However, any limits that would cause the power to turn off will *also* be applicable during the waiting period and will keep the power from activating.

i A power that takes 15 seconds to activate and which has an power duration of 'until stunned' will not activate if you are stunned during that 15 seconds of waiting. It would have to be activated again and start a *new* 15 second preparation time.

The power is considered to be 'active' from the moment preparation starts, so you cannot use the same power again just because the first 'power duration' has not technically begun.

🌀 warmup(+varies): the power is ready to use almost immediately, but only at a low level. It starts at zero effect and increases by +3 (or +1d) each time level that elapses after this, up to a maximum of the designed power level. If the warmup is per +2 per time level the modifier is +2 and if the warmup is +1 per time level the modifier is +3. Steam engines and really large gadgets can often use this modifier to good effect. The modifier adds some bookkeeping and should be approved before use.

i A 6d+0 force field (effect of +18) with 'warmup' would start at +0 effect (or 0d+0) and increase by 1d each time level, reaching its full 6d+0 power at a time level of +6 (8 seconds). If it had 'warmup' of only +1 per time level it would have taken a time level of +18 (8 minutes) to reach full power.

In combat, a power that is 'warming up' and targeted by something else is assumed to have an elapsed time of the turn mod that has elapsed from the time it was activated.

i If you activate a power with this modifier and someone spends +6 turn mod on an attack against you, it is assumed to happen after your power has been on for a time level of +6.

🌀 requires 2 users(+4): The power *cannot* be activated by only one person. Enough people with the *identical* power must be available, (you can have more than you actually need). You may take this modifier multiple times, doubling the required people each time.

i A power that requires 8 people with the same power to activate it would be a +12 modifier.

One person uses and directs the power, but all are required for the power to work. If the power *can* operate with a *subset* of the full total, you get a +3 modifier instead of +4, but the effect is reduced if you have less than the full number. The power *cannot* be used solo. If any preparation limits like concentration are broken for any member, the preparation is broken for *all* members, which does include things like triggering of side effects.

i A power that requires 8 people has a +12 modifier but does not work at all if you only have 4 people to use it. A power can use *up to* 8 people has a +9 modifier. If only 6 people show up, you use it with a -3 to the power level (the difference between a +6 modifier for 4 people and the +9 for 8 people).

This modifier and the 'assistants' modifier are designed for powers of a ceremonial nature, and the assumption is that all the users are within touching range of at least one other user or assistant for the power. A gameworld might have a different efficiency value for 'ceremonial magic', making it the only way to generate really powerful effects for reasonable point costs.



🌀 may use 2 assistants(+2): The power *may* take advantage of skilled or semi-skilled assistants, up to the maximum number for the modifier. You may take the modifier multiple times, doubling the number of assistants each time. At least 2 assistants are always required.

i A power with 8 assistants has a +6 modifier and acts like a power with 3 extra users.

Lacking the required number for the modifier chosen means you reduce the power level. Assistants usually must have spent 1S or 1P to be useful. That is, they have *some* minor amount of power or skill to contribute.

i Wand of fire: Step 9

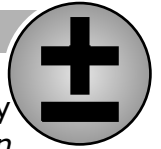
At this point we need to decide how the wand of fire is actually used. Conceptually, we have already decided it is a gadget, and since it is a ranged attack power we know a certain type of skill roll is required. We go with a ranged combat skill roll and gestures with one hand. So:

name	type	concept
wand of fire	paranormal offense	lethal magic gadget

gameworld base = 0/9	modifier
⚡ effect: offense(lethal damage)	+0
🌀 suite: single power	+0
⊕ range: medium (90 meters)	-5
🕒 duration of power: instant	+2
🕒 duration of effect: as lethal hit rec.	-5
🛡️ defense against: very broad type	+4
🛡️ defense against: in decreasing layers	+0
🌀 contingency(visibility): obvious	+0
🌀 contingency(circumstance): not wet	+1
🌀 contingency(special effect): sets fires	+1
🌀 contingency(accuracy): +2	-1
🌀 usage: ranged combat skill roll	+2
🌀 usage: gestures (one hand)	+1

The modifier total at this point is +1. To save space, we will just start with this subtotal from now on.

Flexibility



This is a set of conceptual modifiers that is amazingly important. Flexibility as a type of modifier means '*what can I do to adjust this power and make it do things differently?*'. Properly applied, this lets you turn one power into a group of powers. Flexibility can be 'wild magic', it can be a superhero doing something creative with a power, or a gadget-maker improvising something. It is most useful for *minor* changes. Major changes are often more efficient as a **suite** of powers.

Flexibility has two aspects, the *degree* of flexibility and the *ease* of flexibility. A wizard who can simply alter a few arcane syllables has an easier flexibility than a merc who has to go back to his armory to alter a weapon.

degree of flexibility	modifier
± no flexibility	+1
± each point of flexibility within a power	-3
± each point of flexibility within an effect	-2
± each point of flexibility within a detail	-2

ease of flexibility	modifier
± adjustable each action	-2
± adjustable each encounter	+1
± adjustable each game session	+2
± adjustable each adventure	+3
± adjustable each day	+1
± adjustable each week	+3
± reactive adjustment	-1
± location-based adjustment	+1
± one fixed option	+1
± usage modifiers	+special

omni-power	modifier
± omni-power	-12

targeting	modifier
± increased number of targets	-(lev.+1)
± increased area(radius)	-radius lev.
± explosion	-8
± line of hexagons(plus incr. area)	+6
± narrow cone(plus incr. area)	+4
± wide cone(plus incr. area)	+2
± boundary effect(plus incr. area)	+2
± slow power(-1 initiative)	+2



Degree of flexibility

The extent to which the normal effect can be stretched out or modified. Powers do not have to have any flexibility and the default is 'none'. If you want a power that can do anything, see the 'omni-power' modifier.

± no flexibility(+1): This is just a small bonus you can get if the power has zero ability to be adjusted during play. It means the only way to alter the power is to buy a different mundane gadget or increase the P spent on the power. This modifier for gadgets can be something sealed in epoxy so you cannot tinker with it, or a young technology where options simply have not been developed.

i If all primitive firearms use round lead balls, then you cannot make the weapons flexible enough to load things like armor-piercing or hollow-point bullets.


± adjust flexibility in a power(-3): The user of the power can, within the same power and other modifiers on that effect, change any of them to any other value or combination of values. A level of flexibility can:

- add a new modifier with a value of up to ± 1
- adjust an existing modifier by ± 1
- adjust the power level by +1

If you are not using the flexibility for any other purpose, assume it is increasing the power level. Remember to include this when figuring your final power level.

i If you have a flexibility of ± 1 you can:

- change an existing -1 modifier to a -2 modifier
- add a new +1, +0 or -1 modifier
- increase the designed power level by +1

If this power was something like a gun and the flexibility was on 'drain 

! You could in many cases simply have a multiple power suite that had a selection of similar powers with different modifiers and end up with a bonus for the suite instead of a penalty for flexibility. The difference is that *each* power in the suite costs P, while one power that is flexible only costs P for itself. You would use flexibility when you are short on points to spend.

i You have a power that has ± 2 flexibility and for sake of the example we will say that it is our wand of fire. With a flexibility of ± 2 we can change up to 2 modifiers and have a total change in the modifier total of ± 2 from the original configuration. We could give the power a range modifier that was 2 points different. We might increase the Accuracy instead. Or we might do something fancy like change the requirement for a ranged combat roll (a +2 modifier) to an opposed Will roll (a +4 modifier). Or, we could just look at the final power level for the wand and increase it by +2 (or -2, if you really wanted to).

± adjust flexibility in an effect(-2): This is just like the previous modifier, but you may only make alterations *within the effect* ~~chosen~~.

i Using the wand of fire again, its designed effect is 'offense(lethal damage)', which is a +0 modifier. As-is, we could leave the 2 points of flexibility in increased damage. Or, we could change the effect and say it does half-lethal damage instead, or say that instead of doing lethal damage, the power harms a narrow category of other powers. Both of these are -2 modifiers, which places them in the range available to 2 points of flexibility.

! Flexibility is supposed to be about creativity, not rule abuse. Some things are not appropriate to change, depending on genre and power. You could not turn the 'special effect' modifier of 'gun' into 'sword', for instance, even if the rules would *technically* allow it. The gamemaster always has final say on whether an alteration is allowable within the power, genre or gameworld.



± adjust flexibility in a detail(-2): This is just like the previous modifier, but you may only make alterations within *one* of (choose one): range ⊕, duration ⌚, defense against ⊖, contingencies ⚙️, flexibility ±, drain 📱 and gadget 🛠️. Theoretically you could use this to adjust flexibility in a different way (2 points of detail flexibility could become 1 point of effect flexibility), but this is generally frowned upon.

i Detail is commonly used for guns. For instance, 1 point of detail flexibility lets you substitute 'penetrating(-1)' for 'stopping power(-1)' with no change in damage done. You are loading a new type of bullets. Or, you drop damage by 1 to add +1 Accuracy to represent match grade ammunition. All of these are 'contingencies', so it would be 'flexibility: contingencies-1', with a modifier value of -2.

Ease of flexibility

This is how frequently you can use flexibility in a power and how easy it is to make changes. Changing something 'as an action' may still take significant time, depending on other modifiers. Changing a tire is 'an action', it just happens to be complex, time consuming action. If you have a power that can be adjusted as an action, then as a player you should be *required* to have pre-designed your common power tweaks so that you do not slow down the game. The gamemaster is free to penalize you for dithering over changes in the middle of an action-packed scene.

± each action(-2): You may as a minor action, adjust the flexibility within the limits you have set.

± each encounter(+1): Once between each combat or other turn-based encounter, you may as a major action adjust the flexibility within the limits you have set.

± each session(+2): Once between each session of play, you may adjust the flexibility within the limits you have set.

± each adventure(+3): Once between each adventure, you may adjust the flexibility within the limits you have set.

± each day(+1): Once each day, you may as a major action adjust the flexibility within the limits you have set.

± each week(+3): Once each week, you may as a major action adjust the flexibility within the limits you have set.

± location-based(+1): This modifier is taken *in addition to* another ease of flexibility modifier. The points of flexibility may *only* be applied at that location. A 'location' is fairly subjective as a definition and should be a fairly small area appropriate to the nature of the power. A mercenary might be able to change up his or her weapons at their armory room, while a mechanic might adjust a car in their garage and a wizard might only be able to adjust spells in their contemplation chamber.

± usage modifiers(+special): This means that changing the flexibility is subject to a set of restrictions like those used to turn the power on. The amount you get for these restrictions is half the total for usage modifiers needed to use the flexibility, rounding down. You normally only get *one* attempt to change the flexibility in the listed interval.

i If altering the flexibility in your power requires both hands (the 'gestures' modifier for +3), then you get a +1 modifier for it.

Usage modifiers may not be used unless they are actually a restriction within the timeframe of changing the flexibility. Having to use both hands to change a power is no real penalty if you can only do it once per adventure and have all the time in the world to do it. On the other hand, a preparation time of an hour is significant if you can change the power once per encounter or once per day. Since this is subjective, the gamemaster decides if there is any question.



± reactive(-1): The overall frequency with which the flexibility can be used is unchanged, but you can do it at *any* point in that interval. This is most useful with something like 'each encounter', so while you can still only change it once, you can do so in the middle of an encounter to reflect changing conditions.

± one fixed option(+1): You cannot take this modifier unless you have at least a -1 modifier in some other aspect of flexibility. All this means is that your power is doing something like having increased targets or area, this is the *only* way in which it differs from a normal power and you do not have any need to change it.

i Your power is 'forked lightning', which *always* has the option of hitting two separate targets. This would be the modifier 'increased targets(2)' for a -3 modifier, and 'one fixed option' for a +1 modifier and a total modifier of -2.

± omni-power(-12): This is a special case of flexibility. You design a power simply by taking the gameworld base, this modifier and any other modifiers that are *mandatory* or otherwise cannot be made more *positive*. After you apply the gameworld base, omni-power modifier and other modifiers, the total must be at least +0. Your final result is a power level to which you can apply *any* effect or modifier, giving you a power at the resulting level.

i If you had a modifier total for your omni-power of +10 and *then* said it had *these* characteristics of the wand of fire for your action:

⚡ offense: damage to lethal hits	+0
🌍 suite: single power	+0
⊕ range: medium (90 meters)	-5
⌚ duration of power: instant	+2
⌚ duration of effect: as lethal hit rec.	-5
🛡️ defense against: average type	+2
🌀 contingency(visibility): obvious	+0

the result would be a power level of +4 (the +10 from your other modifiers, plus the list above). The benefit of the omni-power is that if you could change it every action and your target was just a few meters away, you could drop the range to 'very short' (a -1), and get +4 to your power level. Or, if you knew your foe had no bronze armor, you could make the defense 'bronze armor' and thus render their defenses useless.

You can change the omni-power anytime you can alter the flexibility with 'ease of flexibility' modifiers you have set.

The note about some other modifiers being mandatory is this: If you take a limit on the omni-power, it is a function of the omni-power. If it is in the form of a ring that has 3 wishes (in game terms, 3 charges), then you cannot use a wish to give the ring more wishes. If the omni-power can only be used during the full moon, you cannot adjust the modifier to allow you to use it at any other time. You probably have to take *some* positive modifiers to get the overall total up to +0 or more.

Outside of the *permanent* features of your omni-power (like being a green ring you have to recharge from the light of a special lantern), an omni-power can do *anything*, hence the huge negative modifier. You have to either compensate for this with limits like the aforementioned ring, or spend a lot of points to bump the power level up.



Targeting

This is modifiers related to area effects or hitting more than one target at the same time.

± increased targets(-varies): This means that instead of hitting one target, you may hit multiple targets of the same type. The *negative* modifier would be the *level* associated with the maximum quantity of targets, plus 1.

i A quantity of x11 is a quantity level of +7. So, a power that could hit 11 targets at once would have a modifier of -8 (the negative value of the (modifier plus 1)).

This modifier means that the power acts in a way that can hit multiple targets, and does so *without* filling an area. Something like a bolt of lightning that arcs through a group of foes, for instance. Normally, you would pick one target and roll whatever you needed to hit them. Each 2 points you make this roll by chains the effect to the next target, which is usually whichever one is closest to the original target. If a followup target has different modifiers associated with hitting it, you may apply these as though they altered the die roll. Once you miss a target, all subsequent targets are also missed.

i If the second target is one range level further away than the first target, you need to make roll by 3 to hit it. If it is one range level closer to you, then you only need to make the roll by 1 to hit the second target.

± increased area(-varies): This means that instead of hitting a specific target, you are filling an area and everything in the area is hit. You may still have additional targeting modifiers. So, you might fill an area with a mental blast and then everyone in that area has to oppose your Will roll in order to take any effect. Or, it might be like a fireball where simply being in the area applies the effect directly to any defenses.

The negative modifier for an increased area as a radius is the distance *level* of that radius.

i A distance of 4 meters is a distance level of +7, so a power that fills a circle with a 4 meter *radius* has a modifier of -7.

This modifier can also be used to generate any *one* shape that can fit inside this radius. Changing the shape would require 1 point of flexibility in 'flexibility', which would be an additional -2 modifier.

Areas are assumed to be half as high as they are wide if on the ground, and as tall as they are wide if in the air. So, a circular area on the ground appears as a hemisphere, but would be a full sphere in the air. And if it matters while on the ground, it would also be a full sphere, it is just that half of it is underground.

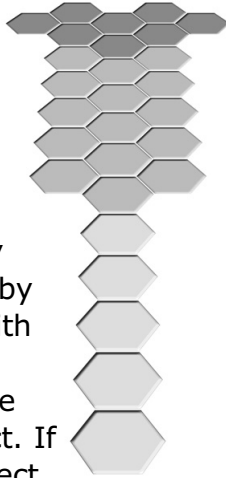
Offense effects usually have to penetrate any appropriate barrier or defense in the area. So, a circular area on the ground does not melt rock under your feet, nor does a fireball appear inside a closed container just because the container was in the area. It might break the container and *then* damage what was inside it.

A target's Dodge does not apply vs. any effect that fills an area, since you are not targeting the person, just the area they are in. You may get out of the area before the attack lands if you have initiative or a held action and your Walk distance or any move you can do as a minor action is sufficient to exit the area, or you choose to use a desperation action to dive clear.

± explosion(-8): The effect of the power is full at the center of the effect and in adjacent hexes, and drops by -6 (or -2d) for each 2 distance levels past this. See the advanced rules for explosions for details ([page 5.30](#)).



± cone(+varies): The effect of the power extends in a 15° or 30° arc from the source of the power, which means it spreads one hex to each side for each 5 or 10 hexes of range. A narrow cone effect reduces the difficulty for range by 3 and a wide cone by 6. If the area has hexes filled with effect on all sides, a potential target does not get to use Dodge as they are fully within the effect. If they are on the edges of the effect, they can use Dodge. If you are not using a map, a target can be fully enclosed in a cone if they are far enough away that it has spread at least one hex to either side.



The cone, line and boundary effect modifiers can only be used in combination with an explosion or radius modifier to generate the other dimensions of the area.

i If you had a radius effect of 4 meters and a wide cone modifier, then you would make a wide cone that was 4 hexes long. The range of the power would be the furthest point you could put the narrow end of the cone at. If the range was 'self', then the cone starts at you. If it was '90 meters', then the point of the cone could be that far away.

± line(+6): A line effect is an area one hex wide, extending from the source of the power. It reduces the difficulty for range by 2. Targets with Dodge can use it to help avoid the beam, but static targets are likely to be hit. Because you can only draw a straight line on a hex map in six directions, just use common sense and give the player the benefit of the doubt if trying to put multiple targets in a line of fire. A slight zigging and zagging is permitted, especially if there is an adjustable flexibility in the power or its details.

i A previous example gave a -7 modifier for an area effect with a radius of 4 meters. If this were instead just a line of hexes 4 meters long, the total modifier would be -1.

± boundary effect(+2): This will usually only apply to powers that also have a cone, radius or shape effects. It means the area affected is a border, wall or fringe. It only affects targets that it passes over or which try to cross it. A 'force wall' or 'wall of fire' would be an example.

Any power with a boundary effect is assumed to be a separate layer from any other defense for purposes of being compared to attacks. So, armor and a force wall would layer like two layers of worn armor. Any defensive power with an area or boundary effect transmits zero blunt trauma. There is enough separation between the defense and you that you feel no adverse effects from anything that hits it. So, you should not normally take the 'acts as rigid armor' or 'acts as flexible armor' modifiers.

± slow power(+2): This modifier means that if you use this power, it acts with an initiative of 1 point less than what you declared. This sort of means that you have to declare use of this power as part of your initiative if it going to be your first action, and the effect on initiative has to be considered if you use it as a second or third action in a turn. Slow powers will automatically lose initiative ties in case of equal results.

i If you had a slow power and declared an initiative of 1, you would act at initiative 0, and do so after everyone who declared an initiative of 0.

You may only take this modifier on powers which can be turned on or off no slower than a major action. So, if you have a power that takes a minute of preparation time, you cannot also say it is a 'slow power'. With gamemaster permission, this modifier can be taken up to three times. This modifier may be used for making slow projectile weapons or unwieldy melee weapons. This lets you do things like define arrows as 'slow' powers so you can have an ability to deflect arrows (slow attacks) but not bullets, by saying the power has an 'only works against slow attacks' **contingency**.



i Wand of fire: Step 10

Just to demonstrate the flexibility modifiers, we decide that a skilled user of the wand can make occasional slight adjustments to the effects. We decide to give it 1 point of flexibility in one detail, which can be changed between game sessions if the user makes a hard(11) skill roll. Remember that usage modifiers applied to flexibility only count half, so the skill roll modifier will only be +1 instead of +2. So:

	modifier
previous total	+1
± flexibility: 1 point of details	-2
± flexibility: change between sessions	+2
± flexibility: hard(11) skill roll to change +1	+1
subtotal	+2

If we do *not* use the flexibility, the default is that it adds to the power level, so we would have an effective power level of +3. As an example of the things we could do with the details, we could adjust the range modifier by 1, extending it from 90 meters to 350 meters. We could change the 'defense against' modifier to something a little harder to protect against, or change the visibility from 'obvious' to 'subtle'. You could even turn it into a distress beacon by turning the visibility up to 'very obvious'. Just remember that you have to choose *which* detail is flexible when you design the power.

! If you look at the flexibility modifiers you will see that you can get 1 point of different types of flexibility that you can change each game session or adventure as a +0 modifier or even a small positive modifier. This is deliberate and meant to encourage players to have and use flexibility, reminding you again that flexibility that is not applied just counts towards the power level.

Frequency

















This is a set of conceptual modifiers that is also important and meant to integrate into the sliding turn scale for **EABA** combat. Frequency relates to the macro scale of how often you can use a power on the long scale, like 'once per day', and *also* on the small scale, like 'my gun has a fifteen round clip and I have two extra clips' or 'using this power is physically exhausting'.

Frequency has two major subdivisions, which are 'drain' and 'stored power'. Because of the number of permutations, these will be split into two tables.

Drain

The default for a power is that it costs you nothing but time to use. A power with a drain modifier costs you something from a personal reserve. Most of the time, we assume this is just like regular exertion and is handled using the stamina rules at the start of chapter 5. The reason you would take drain as a modifier is that you want or need a boost to your power level because of a bunch of negative modifiers you have taken, and drain is an easy and fairly realistic way to do it. The other reason is that your gamemaster has mandated some level of drain for all powers in a particular game setting just to keep you from overusing them or leaving them on all the time.

drain	modifier
 +2 per +3 power level	+9
 +1 per +3 power level	+7
 +1 per +6 power level	+5
 +1 per +9 power level	+4
 +1 per +12 power level	+3
 +1 per +15 power level	+2
 +1 per +18 power level	+1
 no drain(default)	+0
 zero drain	-1
 drain is non-lethal hits	+2
 drain is lethal hits	+4
 drain is an attribute	+4
 steady drain	-level/4
 pushable	-1

📖 drain per power level(±varies): Powers are an expenditure of energy. You can say that the energy has to come from *somewhere*. To make design easier, the default is that powers can just happen with no more effort than willing it to happen. If a power has drain, the default is that it comes from the user of the power, and costs 1 **stamina** per some amount of final effect (rounding stamina use *up*). The amount power use causes stamina loss is called 'drain'.

More severe drains give a positive modifier, less severe drains are a negative modifier. *Remember that in combat, the drain for using a power is counts the portion of the turn you are using the power, even if you are **not** using turn mod on actions, and it applies to **each** power used in this way.* For powers that are on all the time (like a force field), this can add up. *Remember that if a power has **no** drain or a drain of +0, the turn mod you apply to it is irrelevant!*

i If the available turn mod is +8 and you are flying *and* maintaining a force field for the whole turn and each has drain of +1, then you are spending +16 towards stamina use (+8 each) for the time, even if you are applying no turn mod to the use of those powers.

If you have a power with a separate energy reserve, it calculates things the same way. An energy reserve is measured in points that are the equivalent of stamina. If the drain of a power is something other than stamina (like draining your hits), you would calculate its drain completely separately.

i If you have a +15 (or 5d+0) power, a drain of +1 per +12 means it would be +2 drain, while +1 per +15 means it would only be +1 drain.

If it matters, drain happens after the power activates (or fails to activate), so any penalties the drain might cause do not apply to actions involving that power.

! A power with 'no drain' and 'always on' is usually some sort of permanent characteristic. If in the form of a gadget, it might be something like a piece of armor. If not in physical form it could be something like the ability to see in the dark, a medusa's ability to petrify things or even a curse like King Midas' touch. The important things to look at are the subjective definition and any 'special effect' modifier.

📖 zero drain(-1): This is different than 'no drain'. What it means is that you have a drain based on a power level, but that amount is less than 1 and rounds to zero. This is a special case modifier in case you need a power that actually does consume energy or has an energy source that can be disrupted, and for which the 'always on' and 'no drain' modifiers are not quite appropriate. Potential for modifier abuse exists, so gamemaster permission is required. An example of how you might use this would be a flight power whose 'hover' drain was zero, but which did have drain if you were flying above a certain speed.

📖 drain is non-lethal hits(+2): Instead of being applied towards use of stamina, all use of the power is calculated like stamina but the result applied to non-lethal hits. This is treated like non-lethal damage for all game purposes, with the note that effects of the damage happen *after* any power that activates at the same time. This to ensure that you do not stun or knock yourself out until *after* the power has a chance to work.

i You have a power with +18 effect and a drain of +1 per +9. This would count as +2 towards stamina use. If you only used this power with a turn mod of +0 and nothing else applied, this would cost 2 stamina. So, if this power drained non-lethal hits, this use would cost you 2 hits. On the other hand, if you used the power with a turn mod of +8, this would be a total drain of 10 non-lethal hits (power is +2, +8 for turn mod).

This modifier is uncommonly used, and is here just in case you need it for something in a plot rather than as something practical.

📄 drain is lethal hits(+4): Instead of rolling over onto non-lethal hits, once the stamina track is full, a lethal hit is taken, but is otherwise like normal drain.

📄 drain is an attribute(+4): Instead of rolling over onto non-lethal hits, once the stamina track is full, a point is lost on an attribute. This heals like the default for attribute damage (same as non-lethal hits), but is otherwise like drain of non-lethal hits. A point of damage to an attribute drops its effective roll.

📄 steady drain(-time/4): This just means that the power does not have its energy or stamina use tracked like individual activations. You instead determine what drain per amount of effect you want, then say that you use this amount of *stamina* or stored power in the time interval for *this* modifier. A power cannot have a 'steady drain' unless it actually has a drain.

i You have a power with +18 effect and a drain of +1 per +9. If part of the power design was a 'constant drain' modifier of -5 for a time level of +20 (or 15 minutes), then the power costs 2 stamina (1 per +9) per 15 minutes of use. This cost of 2 stamina could also be a cost of 2 energy from an energy reserve for that power. In terms of actual modifiers, it would look like:

📄 frequency: drain of +1 per +9	+4
📄 frequency: constant drain, +20 time	-5
total	-1

You can see that once you get to a certain point, it is easier to just take a drain of zero and the 'always on' modifier.

This modifier is generally *not* for stamina-costing offensive powers, but is instead good for long-duration gadget uses like vehicle fuel tanks, flashlight batteries and such. It is also useful for force field gadgets or other powers that have an **energy reserve**. It is also a way to assign a long power duration. The power operates until the energy reserve runs dry.

! A power that is just a 'battery' is a gadget using the 'independent reserve' modifier (in the next section).

📄 pushable(-1): This means that if a power has a drain or an energy reserve of some kind, you can get more power than normal at a cost of drastically increased energy use. You can increase your power level by +1 for 1 stamina, up to a maximum bonus of +3 for mundane powers and +6 for paranormal ones. If the drain is in the form of something other than stamina, the extra cost is paid in that form.

i If using a power costs you non-lethal hits, then 'pushing' the power costs you non-lethal hits.

If a power is something that can be sustained, then the time level it is used over adds to the extra cost paid.

i If you have a force field with a duration of 'an action' and the current turn has a duration of +4 time, then pushing the forcefield by +3 for the entire turn would cost you 7 stamina instead of +3.







This modifier is coded red because of the potential for abuse. For purely mundane game settings, you can make them a little more heroic by saying that anyone can 'push' their Strength at the cost of 1 non-lethal hit per +1 Strength, up to a maximum of +3.






























Stored power

A power can use energy, but use it from some sort of storage. A flashlight has batteries, a gun has bullets. This stored power is not part of the adventurer's stats, but is tied to the power. This means that the power can in some cases operate independent of the the adventurer (anyone can use a gun).


















Stored power modifiers relate to the type, the quantity and how you can replace, replenish or recharge the supply. Because this is detail that has a lot of importance for gadgets, there are a lot of modifiers in this group.


stored power	modifier
 charges	-2
 energy reserve	+0
 communal reserve	+1
 independent reserve	-9
 reserve discharge rate	+time/4
 linked to stamina	+1


quantity of power	modifier
 1	+7
 2	+6
 3	+5
 4	+4
 6	+3
 8	+2
 11	+1
 15	+0
 23	-1
 32	-2
 45	-3
 65	-4
 90	-5
 125	-6
 180	-7
 250	-8
 400	-9
 700	-10
 1000	-11
 each +1 quantity level	-1

power subdivision	modifier
 quantity in 1 set	+0
 quantity in 2 sets	+1
 quantity in 3 sets	+2
 quantity in 4 sets	+3
 quantity in 6 sets	+4
 quantity in 8 sets	+5
 quantity in 11 sets	+6

It is important to note that the default for stored power is that it is non-renewable. If you want an energy supply to be reusable or rechargeable, you will *also* need one or more of the following modifiers.

energy replacement	modifier
 replace as an action	+0
 replace as time level	+time/4
 incremental time level	+2
 average(7) skill roll	+1
 hard(11) skill roll	+2
 heroic(15) skill roll	+3
 extra hands to repl.	+special
 special equip. to repl.	+1
 set compatibility	-1
 energy size/weight	±special
 disposable (see rules)	+6 tech
 replenish from stamina	+2
 mundanely replaced	-1
 grid power	+1
 full replacement only	+1
 set replacement	+level/4
 contingencies (☯)	+half(d)

 **charges(-2):** 'Charges' are discrete units of energy. Bullets would be the 'charges' for a gun. The wishes in a wishing ring would be 'charges'. *A power with charges automatically has no drain and must take a +0 modifier for that category.* When the power runs out of charges, you cannot use it until you replace them. This modifier is often used in a tech context, but it can also apply to magic. For instance, a 'wishing ring' might be really powerful but only have one 'charge'.

 A magic wand (or gun) with 8 charges would have a 'number of charges' modifier of +2.

A charge runs at the level of power specified in the power, cannot be adjusted and is assumed to already have the 'full power only' modifier.

i You cannot fire a bullet at less than full damage.

A charge *can* have a duration. An illumination flare might be one charge, but it lasts long enough to light an area for a while.

energy reserve(+0): An 'energy reserve' is more like a battery. It holds an amount of stamina or its equivalent (electricity, mana, etc.), and this can be used for a power just as stamina would be. Charges are usually something that is used up and replaced, while an energy reserve is like a battery that is depleted and then recharged in the same way that stamina is used.

The different between the two is that charges are most often used for powers with a *power* duration of 'an action' or 'an instant', while an energy reserve is usually more appropriate for power durations of more than an action. You *can* have something like a force field that runs off of charges, but this means that each time the force field turns on, it uses up a charge.

A power running from an energy reserve can be adjusted up or down to alter the energy consumption. Bear in mind for both charges and energy reserves that *power* duration is *not* affected. If you have a power duration of 'until stunned' and the power runs off charges, then *one* charge lasts until you are stunned. This could be very appropriate for things like magic spells. If you are stunned, then the magic is dispelled and the charge is used up.

linked to stamina(+1): This *only* applies to energy reserves, and means that if the energy reserve runs dry, the power will automatically start draining the user's stamina at whatever the drain rate is for that power. Otherwise, when the energy reserve runs out, the power can no longer be used.

communal reserve(+1): This only applies to power suites of at least two powers. The energy available is shared between the powers, and you get a +1 modifier on *each* power in the suite and *each* power in the suite must have the same energy reserve and *each* power has the same modifiers for that reserve.

i If you have a magic wand with three powers and fifteen charges in a communal reserve, then *each* power gets this modifier for +1, each power has the modifier for 15 charges, and using any of the three powers uses one of the charges. There are a total of 15 charges, *not* 15 per power.












With gamemaster permission, a communal reserve can apply across multiple power suites, so you can have several powers that operate at the same time, drawing from a common energy pool that is separate from stamina.

! Stored power generally has the same subjective characteristics as the power it is used in. It may have its own unique sub-characteristic. A gun might take '9mm pistol bullets' and a flashlight might use 'AA batteries'. This is only important if the stored power has characteristics allowing it to be transferred from one power to another.

independent reserve(-9): This is a special modifier on an energy reserve that you would use to create a floating pool of energy that is separate from both your own stamina and any particular power. You apply the gameworld or tech base, this modifier and any frequency or gadget or usage modifiers that are appropriate (and modifiers outside this with gamemaster permission). You do this such that the 'quantity of power' modifier and the second value in the tech base give a final power level of +0. The independent reserve has to have a subjective description just like a power, and this defines its nature. It can be used to power or recharge *any* power that uses *that* sort of energy. With gamemaster permission, an independent reserve can take a modifier so it can be 'pushed', counting each point of energy like it was stamina.

discharge rate(+time/4): A mandatory feature of an independent energy reserve is a 'discharge rate'. The default is that the entire reserve can be discharged in an instant (or 1 second), but combined with the large negative modifier for an independent reserve, it makes a reserve that can be used up that fast very inefficient. Especially for gadgets like batteries, you can have a much slower rate. The time level/4 is the *minimum* time in which you can use **1** energy from the reserve. This makes it ideal for powers with the 'constant drain' modifier, you simply make an energy reserve with the *same* rate of energy output as the power needs. Most technological batteries will have a 'discharge rate' modifier of +4 or +5, good for anything except weapons, which generally have the default of +0 or possibly a +1 for weapons with a 4 second cycle time. Note that you can get around this somewhat by using multiple batteries, so the gamemaster needs to be aware of the possibility for abuse.

i An Atomic Era 'battery' (tech base of 0/9) for small devices might look something like this:

tech base = 0/9	modifier
 frequency: energy reserve	+0
 frequency: independent reserve	-9
 frequency: discharge 1 per 4 min	+4
 frequency: x8 energy	+2
 frequency: replace energy in 15 min	+5
 frequency: incremental replacement	+1
 frequency: special equipment	+1
 gadget: obvious	+2
 gadget: carried	+2
 gadget: mundane	+1
 gadget: .1 kilogram	-9
total	+0

We picked a value for the quantity of power that made the power level +0. This battery has 8 'energy' that can be used to run any power with a compatible subjective description. In this case it could be something like a 'D cell' and have 'D cell battery' as part of its description. The battery needs a charger to get its energy back, and can recharge 1 energy per 15 minutes.

Energy replacement

Powers with energy supplies can use modifiers related to how energy is distributed, replaced, and recovered. These are mostly to help recreate weapons and certain tech gadgets.

If a power simply has a drain and uses stamina, then the user gets back that energy naturally. A power that uses bullets or a battery pack or a mana gem does not, and these powers *must* have modifiers to represent how, when and sometimes where this energy can be replaced or replenished.

multiple sets(+special): If the total energy is in separate packages, you get a +1 modifier for each quantity level of sets *past* x1. So if your gun has 32 shots in two 16-shot clips, you get a +1 modifier (level for x2 quantity is +1 past the level x1 quantity). If it were four 8-shot clips you would get a +3 modifier (level for x8 quantity is +3 past the level for x1 quantity). This modifier is only necessary as a game balance feature for powers bought with P. For powers bought with cash it is normally not part of the design.

replace as an action(+0): This is the default and just means that swapping out one set of energy for another takes one major action with a default time level of +0.

replace as time level(+level/4): It takes longer as the default time level to replace or swap out the energy supply. It still counts as one action, and if the process is disrupted it has to be restarted from scratch.

incremental time-dependent(+2): This means that when energy replenishment starts, it has a time-dependent interval, but you only get 1 energy each time this interval passes. You cannot take this unless there is more than 1 energy to be replaced.

i If you get back the first charge or unit of energy after a time level of +8, you get the next one +8 time after that, then one more at +8 after that, and so on.



skill roll(+varies): In addition to the action, it requires a skill roll to successfully replace the energy. This roll is usually done at the end of the time interval to see if it was successful, and the skill roll is normally the same one required to target the power, or an Agility roll if there is no skill roll needed.

extra hands(+varies): It normally takes one free hand to exchange energy. The quantity level of hands needed is a bonus.

i A quantity of x6 is a quantity level of +5. So, a gadget that required '6 hands' (i.e. 3 people) to replace its energy would get a +5 modifier.

You would normally use this modifier if the energy was very bulky or heavy.

special equipment(+1): This just means the power cannot be replaced or recharged without some sort of tools or other gear. This could be the ammo crane for a battleship gun, a special electrical connector for a gadget, or something as simple as a screwdriver to get at the battery compartment. Any skill roll done to replace the energy *without* the equipment is at +10 difficulty. If the replacement does not have a skill roll, then it is impossible without the special equipment.

This goes well with a 'power replenishment' modifier on a battery ('independent reserve'), and the special equipment is just a battery charger, giving you to have a net +0 modifier for the combination charging rate and charger.

set compatibility(±1): The default for a gadget is that the supplies it uses only work in that 'model' of gadget. A -1 compatibility modifier it means you can use supplies from *more* capable models of the same type (e.g. '9mm Glock magazines') or from anything with the same defined type of compatibility (e.g. 'uses AK-47 magazines'). A +1 compatibility modifier means the gadget uses supplies for that specific gadget (e.g. 'my custom gun uses a unique bullet that I designed myself').

contingencies(±half): If 'reloading' a power requires special conditions in addition to time and skill, this would use half (round down) of a contingency(☯) modifier, like "my magic ring renews its charges at dawn".

! The 'powercells' on the gear list are designed with these modifiers and are about the equivalent of a 'D cell' in real-world terms. They design out as more expensive in mundane cost, but at that minor level of expense should not be breaking the bank account of most adventurers. Actual consumer batteries have the following masses (for NiMH batteries) and modifiers. The 'energy' value is the levels of energy difference between this battery and the **EABA**-standard powercell.

	mass	modifier
AAA cell(energy-11)	≈.01kg	-20
AA cell(energy-6)	≈.03kg	-15
C cell(energy-2)	≈.08kg	-11
default powercell(energy+0)	≈.10kg	-9
D cell(energy+1)	≈.17kg	-8
9v battery(energy-4)	≈.05kg	-13

i If you *really* needed to know the energy in a AA AA battery in the Atomic Era, you would look up the Atomic Era powercell, see that it had x8 energy (a level of +6), then subtract 6 for the reduced size of the AA cell for a level of +0 and thus a quantity of x1 energy. Note that any sort of powercell rules are subject to the vagaries of tech or cost. Higher-price 'lithium batteries' might give you +1 level of energy, or 'Late Atomic Era' batteries as compared to 'Atomic Era' ones. Cheap batteries might have -1 level of energy.

! Designing genre-plausible future or near-future energy weapons is going to require appropriate modifiers to reflect *that* particular reality. For instance, if you set up the tech base so that plasma weapons were 3/18 and lasers were 0/9, but plasma weapons had a required drain of 2 per +3 power while lasers were 1 per +6, then you are skewing plasma weapons to be favored for big weapons with very few shots and lasers for smaller weapons with lots of shots. Rules for powercells can contribute to this as well.



size/weight(±special): This modifier can only be taken if the power is in the form of a gadget with a listed mass. There is a general assumption that the energy for a power is about one-eighth the mass of the gadget (or -9 off the gadget's mass level). This is part of the gadget mass, *not* an addition to it. This ratio is for the energy that is usable by the gadget. So, if you have 32 charges for a gun in four 8-round clips, *each* of the clips has the mass of one-eighth of the gadget. While the one in the gun is assumed in the mass of the gun, the other three clips count towards your encumbrance.

i A gadget with a mass of 6 kilograms (mass level of -3) will have a default mass level of -12 (or .8 kilograms) for its energy supply. This could be the power gems in a magic staff or the bullets in a rifle.

If the energy supply for the gadget can be removed and replaced, you can change this ratio. Changing it by +3 is a +1 modifier and changing it by -3 is a -1 modifier (heavier reloads are positive, lighter ones are negative). Obviously, you cannot make reloads bigger than the gadget, so the maximum positive value of the modifier is +3.

i If you wanted a rocket launcher to have bulky reloads, you would change the ratio one way (heavier reloads) and if you had a single-shot rifle you would change it the other way (lighter ones).

This modifier is really only for versimilitude when trying to recreate certain weapons. In general:

	modifier
reloadable rocket launchers	+3
crew-served machineguns	+1
high-capacity plastic frame pistols	+1
assault rifles with ≈30 round clip	+0
submachinegun with ≈30 round clip	+0
most semi-auto pistols	+0
revolvers	-1
hunting rifles or hunting shotguns	-2
muzzle-loading weapons	-2

disposable(+6 tech): This is a special case for powers that are 'used up' (like grenades). All the energy must be in one set that is in the power, so you cannot use any of the reloading or energy size and weight modifiers. You *can* have more than 1 energy or charge, you just cannot reload it. ***Disposable powers get +6 to both parts of their tech or gameworld base, as appropriate.*** This is *not* a modifier, just an adjustment to the tech base. The mundane cost of the power as a gadget would be -6 from normal, and a disposable power bought with P would *lose* any P invested after its use. The latter case would be appropriate for gameworlds where magic items were rare and required an investment of lifeforce (someone's character points!) to be created.

i An Atomic Era gadget has a tech base of 0/9. A disposable Atomic Era grenade has a tech base of 6/15.

replenish from stamina(+2): This means you recharge the energy from your personal stamina on a 1-to-1 basis. The rate at which stamina is used for this is decided when you create the power and is usually an *additional* time-dependent modifier. After using stamina to replenish the power, *your* stamina recovers normally. You may usually start and stop the replenishment at will, choosing when and how much stamina to use, noting that you do have to do it in increments of at least 1 stamina.

i You could say replenishment was time-dependent, draining 1 point of your stamina every 4 minutes (time level of +16) until the power is recharged.

mundane replacement(-1): This just means that there should be little difficulty in obtaining replacement charges or energy in any area in which the gadget can be acquired in the first place. Places that sell guns also have places that sell bullets. Places that sell flashlights also have places that sell flashlight batteries. This is mostly a conceptual modifier rather than a game balance one. Your gun might only have one magazine, but you can have a hundred rounds of loose ammunition.



grid power(+1): This means that the power gets its energy from a fixed source and is usually tethered to that source. This could be a power outlet in the wall, a waterwheel in a river or whatever. The power must have *some* energy storage, but this can be as little as 1 energy. The energy automatically replenishes to full at a rate of 1 per second if connected to the source of power.

full set(+1): This just means that you get back all the energy at once. This only works for time-dependent replacement and only for more than 1 unit of energy or charge.

i You have a magic wand with 8 charges that gets back 1 charge per hour (time level of +24). So, every 8 hours the wand refills itself to the full 8 charges, whether it was empty or almost full, and it *only* gets charges back once per 8 hours.

i Wand of fire: Step 11
So, how to power the wand? The easiest thing would be to say it has no drain at all and you just use it. But, the gamemaster has said that all magical gadgets have to run off of charges. So, we add some frequency modifiers:

	modifier
previous total	+2
frequency: charges	-2
frequency: 8 charges	+2
frequency: replenishment	+7
time level of +12(one minute)(+3)	
incremental replacement(+2)	
hard(11) skill roll(+2)	
frequency: replenish from stamina	+2
subtotal	+11

What these modifiers mean is:

- the power has 8 non-removable charges
- by making a hard(11) skill roll over the course of 1 minute, you can recover 1 charge
- each charge replenished costs you 1 stamina

Gadgets

Many real-world effects are simply a power effect in a mundane gadget. However, a gadget *can* be inherently paranormal, like a magic wand. Most powers can be embodied in gadget form.



Gadgets are going to be either 'paranormal' or 'mundane'. A paranormal gadget uses the 'gameworld base', while a mundane gadget uses a 'tech base'. Paranormal gadgets are usually bought with P, but a mundane gadget is *designed* with a cost in P, and converted to a mundane cost in Credits ([page 6.64](#)).

tech base

Primitive Era	-9/0
Basic Era	-6/3
Industrial Era	-3/6
Atomic Era	0/9
Post-Atomic Era	3/12
Interstellar Era	6/15
Advanced Era	9/18
each fraction of an era	±1/±1

gadget

modifier

obvious	+2
subtle	+1
hidden	+0
carried	+2
worn	+1
embedded	+0
immobile	+4
mundane	+1
mundane cost: cheap (-2 to cost)	-2
mundane cost: expensive (+2 to cost)	+1
mundane size	±varies

Gadgets can be a liability. They can be taken from you, destroyed and it is often obvious that you have the gadget and what it does. A *wizard who can cast spells at will is harder to disarm than one who relies on a magic wand to cast their spells*. A 'real-world' gadget can only do things appropriate to the technology base of the game setting, both in nature and in power level, and it probably has a tech era. However, you can buy it with cash instead of points.

Items on the gear list have their equivalent cost in P just as a reference. If you wish magical or paranormal gadgets to have power levels appropriate to their physical size, you may use this modifier for them as well.

Gadgets do not have to be mundane. A magic ring is a *magic* ring. A *tech* era implies that there is developed 'science' around the making of the gadget and 'mundane' means that no paranormal powers are needed to create the item. Whether or not a tech gadget counts as 'paranormal' is setting-dependent. An assault rifle *today* is clearly mundane. A disintegrator pistol in today's world would be paranormal, as would an assault rifle at the Battle of Hastings in 1066CE. In general, if it requires two or more two or more industrial or technological leaps to duplicate the gadget, it is paranormal.

i An assault rifle at Custer's Last Stand would be *mundane*. They had machine tools, they had autofire, cartridge-based, magazine-fed weapons, so the assault rifle is just a refinement of the concept using better propellants that people *could* have made at that time. On the other hand, an assault rifle at the Battle of Hastings is *paranormal*. They did not have gunpowder, much less modern propellant. They lacked both high-quality steel, machine tools and a bunch of other things needed. There is no way they could take it apart, figure out what made it work and duplicate it, making it 'paranormal' by *their* standards.

🔪 tech base(special): Any gadget can have a **tech era**, the level of mastery that the society or maker of the gadget has with that particular science. A muzzle-loading flintlock and a modern machine pistol might weigh the same and operate on the same principles, but one has a different tech base, giving you more damage for the same modifier total.

In real-world terms, consider that World War 2 was fought with Late Industrial Era tech and we are now at Late Atomic Era tech, one full tech era of difference. *How well would an World War 2 army fare against a modern one?*

Because this is an equivalent to gameworld base, you should look at it in the context of your gameworld and specific technologies. It is not like a rare spell that 'only works during the full moon', but instead is '*this affects each weapon and bit of armor used by a mundane soldier*'. For the future, the tech base assumes that things get better and more efficient, but just like the crossbow in the 'tech mixing' note below, at some point things like our guns will become archaic and start using the concept.

🎲 Tech mixing

If you make a gadget that crosses tech eras, like a high-tech crossbow, you have two possibilities. The first is that the 'method' is static. A modern sword still uses old fashioned muscles. In this case, tech improvement is usually in the form of modifiers or subjective features that the older tech could not apply. For instance, the modern sword would have a higher armor value, or is able to use a penetrating or armor-piercing modifier. Consider this advantage to be worth +1 as a modifier for each 2 fractions of a tech era (tech eras are early/middle/late). The second case is that the new item is an improvement on the old, but is not as good as a brand new tech, like a modern crossbow or a pistol built in 2010CE firing ammunition designed in 1910CE. In this case you use the new tech base and give X a -1 for each two fractions of a tech era the original tech is less advanced (round down).

i A good quality medieval sword would have a tech base of -6/3 (Basic Era). If you made that sword out of Atomic Era materials (6 fractions of an era forward), you would get a +3 modifier for free, which could be used for slightly better damage, or to offset new negative modifiers like penetrating or being slightly lighter. A Late Atomic Era pistol would be designed with a tech base of 1/10, but if it was a weapon built around a much older cartridge (the .45 dates to Middle Industrial Era), then the difference of four fractional eras makes the actual tech base -1/10. Similarly, an Atomic Era crossbow would have a tech base of 0/9, but its Basic Era principles are six fractions of an era behind, so it drops to -3/9.



🔪 **obvious(+2):** Anyone who looks at you can see the gadget. A suit of armor or a blaster rifle is obvious. Whether a primitive alien knows what a blaster rifle *is*, is another matter. Whatever the largest modifiers on the power are should be visible or readily deducible.

📌 If the biggest modifiers on your gadget are '16 kilogram gadget (+12)', and '1 charge (+7)', then anyone who can see the gadget can tell it is big and you can probably only use it once. The latter determination is something that may be skill or culture-dependent.

⚠️ The visibility of the gadget is different than the visibility of its effect. A laser pistol might be an obvious *gadget* with a silent and invisible *effect*. A force field belt might be a subtle gadget but one with obvious effects (bright flashes as bullets are stopped in mid-air).

🔪 **subtle(+1):** You have to take at least a minor action to appraise the situation to see the gadget or associate it with any visible power effect. A concealed bulletproof vest or hidden camera is usually subtle. A skill roll appropriate to the nature of the gadget may be substituted for an Awareness roll to **spot** it.

📌 Your skills as a bodyguard help you spot *other* people who are wearing concealed body armor.

🔪 **hidden(+0):** Even if the power generated by the gadget is obvious, the gadget itself is hidden from casual view and has no obvious connection to the power even when it is doing whatever it is it does.

🔪 **carried(+2):** The gadget is held in one or both hands, and can be dropped, grabbed, set down or confiscated.

🔪 **worn(+1):** The gadget is worn or otherwise attached in a way that prevents it from being removed unless you are incapacitated under duress ('take it off or we shoot you').

🔪 **embedded(+0):** The gadget is not usually removable without a lot of work, though its effects can be negated under the conditions a worn gadget can be taken from you. Your eye laser can be covered with an armored patch, your claws can be locked in armored mittens.

🔪 **immobile(+4):** The gadget is considered non-portable. While it might be movable, it cannot be *used* except as a stationary, prepared item. It is large, heavy, delicate or a combination of the above. It can still be obvious, hidden or subtle. You may take a 'concentration' modifier to *use* the gadget if you have to be immobile as well (like seated at a control console). A wire-guided anti-tank missile would be an example of an immobile gadget that requires preparation time and concentration to both prepare and use it.

🔪 **mundane(+1):** This is just a +1 modifier as a consolation prize for not having a paranormal gadget.

🔪 **mundane cost(±varies):** Mundane gadgets are designed with points, but paid for with money. You can take a modifier that does nothing but affect the mundane cost. You would usually take either one no more than twice (and not take both at the same time).

🔪 **mundane size(±varies):** A mundane gadget has to have a size *and* is limited in power. A gadget of 1kg or less can have no more than +1P in secondary cost. Each doubling after this (rounding up) means you can spend an additional +1P. Paranormal gadgets may have a size as well but are *not* limited in P that can be spent. They *are* paranormal, after all.



gadget size/weight	max +P	modifier
🔪 ≤.1 kilogram gadget	1	-9
🔪 .25 kilogram gadget(knife)	1	-6
🔪 .5 kilogram gadget	1	-3
🔪 1 kilogram gadget(pistol)	1	+0
🔪 2 kilogram gadget	2	+3
🔪 4 kilogram gadget(rifle)	3	+6
🔪 8 kilogram gadget	4	+9
🔪 16 kilogram gadget	5	+12
🔪 32 kilogram gadget(lmg)	6	+15
🔪 64 kilogram gadget	7	+18
🔪 125 kilogram gadget	8	+21
🔪 250 kilogram gadget	9	+24
🔪 500 kilogram gadget	10	+27
🔪 1 ton gadget(cannon)	11	+30
🔪 each ±1 mass level(±25% weight)		±1

i A 5 kilogram *mundane* gadget (modifier of +7) can spend up to +4P over the base power cost (because you round the mass up).

This modifier is both hugely important for gadgets and also the most likely to be affected by a gameworld or tech base.

i Because anything exceeding the tech base is quartered, rounding down, an 8 kilogram gadget (+9 modifier) at the Primitive Era (tech base of -9/0) only gets a +2 bonus, while an Atomic Era one gets a +9 bonus, a difference of 2d+1 if these gadgets were weapons or armor, *plus* all the benefits that would occur in *other* categories.

A gadget that is not mundane does *not* have this limit on extra P spent, and has double the armor and hits (at least +1 hit) of a mundane gadget, but it also can only be bought with P, while mundane gadgets can be bought with cash. *At least in game terms.* Paranormal gadgets can *presumably* be bought with cash or favors or whatever within the normal economy of a gameworld, but for play balance we set up an artificial difference between mundane and paranormal gadgets.

Mundane gadgets have a mundane cost.

You buy them with money instead of points, so anyone with sufficient wealth can own one. The default cost level of a mundane gadget is:

- the level for the power quantity (count as +0 if less than +1)
- plus the *total* cost in P
- plus **one-quarter** (round up) of: the size *modifier* plus the *second* value in the tech base
- +1 for each power in a suite after the first
- minus *half* (round towards zero) of any modifier for coverage of the gadget (items that cover less, cost less)
- then subtract 12 (subtract 18 if **disposable**)

The first step is the tricky one. Turn the power level into a quantity and find the equivalent quantity *level*. So, a power level of x11 is +7.








i A 4d+2 assault armor is designed with a tech base of 0/9. It has a power level of +14, covers the torso (a +3 modifier), has a gadget size modifier of +9 (8 kilograms) and we will say it costs 2P to get it to that power level (1P for the base and +1P secondary cost). So:

- +7 for a power level whose quantity is x14
- +2 for 2P in the power
- +5 for one-quarter of (tech base(9) + size(9))
- 1 for half its coverage(3), round towards zero
- 12 as a final step

equals a final cost level of +1, or 1400 Credits.

! Having a 'standard' set of modifiers for a type of real-world gadget is very useful if you are trying to recreate modern firearms.

tech base(varies)

	effect: offense(lethal damage)	+0
	suite: single power	+0
	range: short to very long	-varies
	range: declining damage	-1
	duration of power: instant	+2
	duration of effect: as lethal hit rec.	-5
	defense against: very broad type	+4
	defense against: in decreasing layers	+0
	visibility: obvious	+0
	conditional: zero effect underwater	+1
	operational effect: recoil	+1
	special effect: looks/acts like a gun	+1
	enhancement: autofire, etc.	-varies
	enhancement: accuracy	-varies
	usage: ranged combat skill roll	+2
	usage: gestures	+1 or +3
	flexibility: 1 pt contingency per enc.	-1
	drain: charges	-2
	drain: number of charges	±varies
	drain: replace charges in time level	±varies
	drain: replace w/average skill roll	+1
	drain: charges mundanely replaced	-1
	gadget: obvious	+2
	gadget: carried	+2
	gadget: mundane	+1
	gadget: weight	±varies
	gadget: cost variation	±varies





Ranged weapons in the gear list were created using these guidelines, with minor adjustments. For instance, crossbows are quieter than guns, etc. Archaic weapons may lack flexibility and have more severe conditional modifiers.

! As a design point, the range of modern firearms underwater is so short compared to their normal range that they effectively have zero effect in game terms, though they *technically* still function.







Power/gadget templates

If you have made it this far, your eyes may be glazing over, especially after the note to the left where it takes a column of modifiers to make a pistol. That makes this as good a point as any to bring up the simplification of powers we hinted at near the start of the chapter. *For any given game setting, some things about powers and tech will be constants.* Every power or gadget of that type will have a bunch of modifiers in common. If you take a look at the example to the left and apply it to pistols, they likely have 'short range(-3)'. All the bold modifiers are common to *all* pistols, and total up to +5. This makes *any* pistol design start as 'short range pistol(+5)'. This makes designing a modern pistol with a 15 round magazine:

	short range pistol	+5
	drain: 15 charges	+0
	gadget: 1kg	+0
	gadget: expensive	+1
	total	+6

If you wanted a heavy revolver instead:

	short range pistol	+5
	drain: 6 charges	+3
	gadget: 1.3kg	+1
	gadget: expensive	+1
	total	+10

Much simpler! Keep in mind that if you had a **tech base** of 0/9, the revolver loses a point of modifier to rounding and only is +9 effect.

Or, say you have a magic system where you need a Fate of ≥ 7 to be a wizard(+2), scrolls are obvious(+2), carried(+2), use gestures(+1), clearly speaking the words(+3), making a difficulty 7 arcane skill roll(+1) and take at least 4 seconds(+1) of concentration(+2) to use. This adds up to +14, for a template of 'magic scroll (+14)'. Anything *you* make up as a scroll saves eight lines of modifiers, and anything a *player* makes up has a standardized starting point that you do not need to worry about approving.

So if you are going to be designing a lot of a particular sort of power, save yourself some effort and figure out a template for it in advance.






Armor and hits

The quick guide is that a strictly mundane gadget has 1d+0 of armor and zero hits at a mass of 1 kilogram and gets +1 armor and +1 hit each time this is doubled. A paranormal gadget with mass gets +3 armor and +1 hit, so a 2 kilogram paranormal gadget has an armor of 2d+1 and 2 hits. Items defined as 'durable' (a subjective measure) get +2 armor. Items that can realistically take damage and still work have +2 hits, regardless of their size.

Wand of fire: Step 12

At the very start we defined the wand as a gadget, so we have to add the modifiers. We go with some obvious modifiers.


	modifier
previous total	+11
 obvious	+2
 carried	+2
 mass of .5 kilogram	-3
final modifier total	+12

If we had a power base of 0/9, the amount of modifier *more* than +9 would be quartered, round down (to +0), for a power level of +9, or 3d+0. Since we *do* have 1 point of flexibility in the design, if we are not using it on something it will default to extra effect for a damage of 3d+1. Each +1P we spend will give us an extra 0d+2 of damage, and since the gadget is paranormal we can do this as much as we want. If the gamemaster said that magic items were limited like tech items we would be able to add no more than +1P, which would give a damage of either 3d+2 or 4d+0, depending on how the flexibility was allocated. For damaging the wand, as a .5kg *paranormal* item it has an armor of 2d+0 and 1 hit. If it takes 1 hit in damage, it is probably destroyed beyond repair, but if it was paid for with an adventurer's points, they can probably replace it. If we costed the wand like it was a mundane item it would end up as a cost level of -3, so if it could be bought for cash, this is the value to compare to other magical items. It may end up costing differently on the open market, but relative to other items you can use the value of -3 as the starting point.

Power listing

This is a set of a common, useful powers that overlap in a lot of genres and gameworlds. Each is listed with a description that uses keywords from the design rules, a base power level and some suggested variations. To make the description as clear as possible, terms in that are modifiers will be in single quotes, like range of 'aura', or a duration of 'until stunned'. This will let you find the baseline value for that modifier in case you want to change it to something else. *All* powers include a 'special effect' modifier of +1 in their design. Modifiers that are relevant but not listed are assumed to be at their +0 or default values.

All the sample powers show you key modifiers on the power, and also some variants of the power. The number at the top right of the power description is its modifier total, which will be the power level for 1P if this amount is equal or less than the efficiency.

 If a power is listed with a modifier total of +8, then if the efficiency is 8 or more it has a power level of 8 for 1P. If the efficiency was 4, this power would only have a power level of 5 for 1P (the +4 that is *over* the efficiency is quartered).

It is expected that players will want to adjust the powers, but this means you have to dig in to learn what the modifiers mean. Similarly, particular gameworlds or gamemasters may require or ban certain modifiers to alter the 'feel' of powers for a setting.

The starting description for a power is meant to be usable, but is certainly not optimal. There are few preparation times, side effects, gadgets, conditional modifiers and all the other things you normally use to boost the base power level and maximize the points you have to put towards powers.

The basic list is meant to give you enough information to get you started on your own customization. *Quite often the customizing ends up more interesting than the power itself!*

● Absorption +0

This power takes mundane lethal damage that hits you (range of 'aura') and adds it to the power level of one specific other power you have. The maximum cumulative benefit you can get is your power level. This effect can take place before or after the damage, as appropriate. For instance, you could absorb the damage and then turn it into armor to stop any damage that exceeded the power. In any event, until the maximum benefit is gained, the energy transferred from the attack is diverted and does not affect the target in its usual fashion. The special effect is that whatever you transfer the power to is visibly changed for the duration of the effect.

The ability to *absorb* power lasts until you are stunned, and the *effects* last 15 seconds from when they started, and slowly wear off after that. The power has a drain of +1 per +6 in the final power level. Note that the low starting modifier simply means you need to apply more modifiers to get an effect from 1P or that you need to spend extra P to get the final power level into positive territory.

gameworld base: 0/9

⚡ effect: indirect transfer	-2
⚡ from: average power (mundane lethal)	-4
⚡ to: narrow power	+2
⊕ range: aura	+2
⌚ duration of power: until stunned	-2
⌚ duration of effect: 15 seconds	-2
⌚ duration of effect: declining duration	-1
☯ operational effect (-1 distraction in use)	+1
☯ special effect (visible increase)	+1
📄 drain: +1 drain per +6	+5
total	+0

altered versions of power:

- **dervish:** Damage done is transferred to your Dodge or movement, which would be an additional -2 modifier.
- **hits boost:** Damage done is added to your hits total, which is an additional -2 modifier. Any damage you take comes off the extra hits first, and vanishes when the extra hits wear off.

● Armor +4

Armor protects your hits from *any* effect or real-world circumstance that would mark off non-lethal or lethal hits. The modifier total is based on a 'self only' effect like an armored skin that is 'always on', acts like flexible armor and has no drain.

gameworld base: 0/9

⚡ effect: protect vs. lethal damage	-4
⚡ effect: protect as flexible armor	+4
⊕ range: self only	+4
⌚ duration of power: always on	-2
⌚ duration of effect: as duration	+0
☯ special effect (rough and raspy skin)	+1
☯ full power only	+1
total	+4

This power stops all *mundane* lethal damage effects. If you did not want it to apply to a *particular* mundane lethal attack type, you would want to add contingency modifiers like 'zero effect vs. that attack' with a value based on how common that sort of attacks were.

altered versions of power:

- **force field:** protects you out to aura range and costs stamina or other energy to use.
- **force wall:** Apply the power with a range, an area effect and a boundary limit on the area.
- **deflection:** Requires an opposed combat skill roll against the attacker in order for it to activate, possibly with gestures or a gadget modifier (like a shield or bracers).
- **limited coverage:** Protects only certain hit locations or has a random activation roll.
- **mental shield:** Say the power *only* protects vs. rare attack types (e.g. mental damage).
- **suit of armor:** Armor as gadget of some kind.
- **realistic armor:** Is a mundane gadget with appropriate weight and mundane cost.

i Just to give you a feel for what a full one of these powers looks like as a start to finish list of modifiers, the deflection bracer is:

name	type	concept
deflection bracer	paranormal defense	armor gadget

gameworld base: 0/9 **modifier**

⚡ effect: defense vs. lethal damage	-4
⚡ effect: protect as armor	+0
🌐 framework: single power only	+0
⊕ range: self only	+4
🕒 duration of power: an instant	+2
🕒 duration of effect: as duration	+0
☯ zero effect vs. non-physical attacks	+2
☯ special effect (adamantine bracers)	+1
☯ full power only	+1
☯ requires opposed skill roll	+4
☯ requires gestures (both hands free)	+3
🔫 gadget: obvious	+2
🔫 gadget: worn	+1
total	+16
adjusted for efficiency	+10

The power is designed to be used against normal attacks ('mundane offense'), and the 'zero effect' conditional means that you cannot use them against things like toxic gases or lasers (your reflexes are not faster than the speed of light).

Right now the power has a fairly inefficient total in modifiers. If it were +17 we would get an extra point of power level, and we could drop it +13 and not affect the power level at all. So, we could drop the 'gestures' to +1 (one hand) to make the total modifier +14, or maybe add in a drain modifier to reflect the effort in the power to bring the modifier total to +17 and increase the power level to +11.

Since this is a paranormal gadget, we can spend as many extra P on it as we want. If we wanted a warrior who could deflect 3d+0 arrows, 1P would suffice. If you wanted to deflect 4d+2 assault rifle bullets, you would need +3P. If it was a mundane gadget, the extra P we could spend would be limited by its mundane mass modifier.

● Energy blast **+2**

This is a lethal beam of energy, like a high-powered laser or a firebolt, a single pulse of damage to lethal hits that is blocked by armor. It has a drain cost of +1 per 2d of final effect (round drain up), a default Accuracy of 1 per 2d of final effect and 'long range' (350 meters).

gameworld base: 0/9

⚡ effect: acts like lethal damage	+0
⊕ range: long (350 meters)	-7
🕒 duration of power: an instant	+2
🕒 duration of effect: as lethal hits	-5
🛡 defense against: very broad type	+4
🛡 defense against: acts as layers	+0
☯ usage: ranged combat skill roll	+2
☯ special effect (for attack type)	+1
📄 drain: +1 drain per +6	+5
total	+2










altered versions of power:

- **sniper blast:** Longer range, more accuracy.
- **bruising blast:** Non-lethal damage instead of lethal damage, defense includes Toughness
- **frag blast:** Add the explosion modifier.
- **mental blast 1:** Change the defense to a mental attribute or armor with a 'rare attack' modifier, change damage to non-lethal.
- **mental blast 2:** Say that the power has range but uses an opposed combat skill roll like your Will against theirs.
- **bypass blast:** Change the defense to the value of lethal hits rather than a defense for lethal hits, so it is the *bulk* of a target rather than its hardness that blocks it (meaning that it ignores non-material barriers like force fields).
- **sensory blast:** Targets Awareness, defended against by armor protecting that attribute or a circumstantial defense or partial effect modifier (looking away, welding goggles, etc.).
- **weapon 1:** Put the power in a gadget using an energy reserve or charges of some kind to mimic a gun.
- **weapon 2:** Adjust gameworld base, put the power in a gadget using strike-based damage, melee range and an opposed combat roll to mimic a melee weapon.

● Flight +2

This is 'superhero flight', where you fly about by will alone. It requires a minor action to activate, but once on it can be set to autopilot and has a power duration of 'until stunned'. The drain cost is +1 per +12 in movement, and the power can optionally be used 'non-combat' at +4 distance, at the drain cost for the move *without* this bonus. The power has a range of 'aura' to protect the user's gear.

gameworld base: 0/9

	effect: artificial movement	+0
	effect: +4 non-combat effect	-1
	range: aura	+2
	duration of power: until stunned	-2
	duration of effect: as power duration	+0
	usage: no preparation needed	+0
	operational effect (-1 distraction in use)	+1
	special effect (for flight type)	+1
	drain: +1 drain per +12	+3
	total	+2

Remember that the average person has a Walk distance level of +4, so any movement power needs to be at a good power level to be fast (an average car can go +14, Mach 1 is about +20 and orbital velocity is about +29).

altered versions of power:

- **enhanced running:** Add a modifier for 'zero effect unless next to a surface' (lets you run up the side of a building or over water).
- **rocket boots:** Power as a worn gadget with an energy reserve and steady drain, possibly with a skill roll.
- **wings:** Require gestures with both hands (wings as arms) or add conditional modifiers requiring freedom to move the wings.
- **gliding:** Remove non-combat bonus, require a skill roll to gain altitude.
- **swinging:** Add conditional modifiers to require an anchor at least as high as flight altitude, within the maximum movement distance and in the direction you want to 'fly' (circumstantial or partial effect modifier).
- **leaping:** Power duration is one action, and can only be activated when standing on a surface.

● Growth +5

Makes you bigger. Each +8 in power level increases your size level by +1 and each +18 by +2, with the following effects:

each ±1 in size (adjusted power level of +8)











- ±1 to be hit in combat or to be spotted
- ±1 to walk, run and sprint
- ±1 to reach in melee
- ±3 to each of Strength, mass and hits

each +2 in size (adjusted power level of +18)

- +1 hex of reach in melee
- +1 hex of space taken up on a map

The growth takes place at the rate of +1 size level per +1 time after activation, and lasts 'until stunned'. The power has a range of 'aura', so your clothing and gear adjusts in size (but not in capability). The power has a drain of +1 per +9 in the final effect.

gameworld base: 0/9

	effect: alter(increase)	-1
	effect target: size (natural split of effect)	-2
	range: aura	+2
	duration of power: until stunned	-2
	duration of effect: as duration	+0
	usage: no preparation needed	+0
	usage: warmup time (+3)	+1
	operational effect (-1 distraction in use)	+1
	special effect (based on growth type)	+1
	drain: +1 drain per +9	+4
	total	+4

altered versions of power:

- **shrinking:** Reduces your size instead of increasing it.
- **densification:** Only increases mass and Strength (split power level between the two).
- **extended reach:** Growth that only applies to one body part. You can use a modifier like the hit location conditionals, so being able to extend just your arms would be a +6 modifier (one body part of a pair would be +1 more). The power level needed for each +1 in partial size would be (8 minus body part modifier), so for 'stretchy arms' each +2 in power level would give you +1 size.



● Healing

-1

This power lets you heal lost lethal hits on yourself or others. It requires a hard(11) skill roll with laying on of hands, a willing target (so no defense is needed), and the power level is the damage healed. If used outside of combat, the effect is +4 normal, but at the drain cost before the bonus is applied. Using the power takes an action, it has a range of 'touch' and has a drain of +2 for each +3 in the power level. Note that the *total* amount this power can heal on an person is its level, regardless of how many times the power is used.

gameworld base: 0/9

⚡ effect: alter(restore)	-6
⚡ effect target: lethal hits	-6
⚡ effect: +4 non-combat effect	-1
⊕ range: touch	+0
⌚ duration of power: an action	+0
⌚ duration of effect: semi-permanent	-6
☯ circumstance: zero effect on non-living	+3
☯ usage: gestures	+3
☯ usage: hard skill roll	+2
☯ special effect (based on healing type)	+1
📄 drain: +2 drain per +3	+9
total	-1

Healing, regeneration or repair powers are *insanely* useful, even at low levels, which is why the negative modifiers are so high. Most fights are about incapacitating your foe, and if they can recover damage as fast as you can deal it, this can be difficult.

altered versions of power:

- **regeneration:** Range of self only, triggered by taking damage.
- **regeneration tank:** Immobile tech gadget that requires physician supervision and extra time.
- **lesser healing:** Applies to non-lethal hits or stamina, or with a 1d upper limit on healing.
- **physician-assisted:** Requires a skill roll *and* preparation time to first diagnose the injury.
- **empathic healing:** Add conditional side effect where there must be an emotional connection to the person healed or alter the drain so the healer takes more damage from the process.

■ Intangibility

+6

This power allows you to change yourself and your gear (range of 'aura') into a form that can pass through solid objects without a trace. The defense against the power is the solidity of the barrier (a 'mundane attribute') which is the armor *plus* the hits of one hex of material, which in general is:

material	armor+hits per hex
water	6
sand or dirt	12
soft rock	15
hard rock	18
soft metal	21
hard metal	24

The residual power level is the maximum movement level you are capable of. The power *also* grants a flexible armor equivalent of the power level minus the user's hits. The power has a drain of +1 per +6 power level, plus whatever time level it is maintained over.

gameworld base: 0/9

⚡ effect: extradimensional mobility	-6
⚡ effect: protect vs. lethal damage	-4
⚡ effect: protect as flexible armor	+4
⊕ range: aura	+2
⌚ duration of power: until stunned	-2
⌚ duration of effect: as power duration	+0
⊖ defense against: armor & hits per hex	+0
⊖ defense against: adds together	+4
☯ zero effect vs. anything > than level	+1
☯ operational effect (-1 distraction in use)	+1
☯ special effect (leaves traces in objects)	+1
📄 drain: +1 drain per +6	+5
total	+6

Note that the power does *not* allow movement through anything with a defense higher than the power level.

altered versions of power:

- **pseudo-intangibility:** A form of the power using 'paranormal' mobility, limiting it to passing through barriers that have an opening in them, like a 'mistform' power.

Invisibility +4

You are invisible to normal sight. The effect is reduced by the Awareness of a viewer, so in order to have *any* effect, your power level has to exceed their Awareness. Anyone trying to see *you* has sight Awareness dropped by the residual power level for purposes of seeing what is within the normal range of the power (within your aura). *That is, it subtracts 'you' from what they see.* The power has a range of 'aura', so people cannot see you by splashing paint on you (but you may leave paint-smear footprints). The power *is* reduced by intangible visual obstructions (you leave a person-shaped hole in smoke or fog). Using the power is a drain of +1 per +9 in the power level and it takes you 4 seconds (time level of +4) to fade out. Once activated, it lasts 'until stunned'.

gameworld base: 0/9

⚡ effect: alter(reduce)	-2
⚡ target: Awareness	-3
⚡ target: Forte only(sight)	+2
⊕ range: aura	+2
⊕ range: subjective benefit	-4
⌚ duration of power: until stunned	-2
⌚ duration of effect: as power duration	+0
⊖ defense against: Awareness	+0
⊖ defense against: layers	+0
☯ conditional: 1/2 effect in visual cover	+1
☯ usage: 4 seconds to prepare	+1
☯ enhancement: full power only	+1
☯ operational effect (-1 distraction in use)	+1
☯ special effect (animals are uneasy)	+1
📄 drain: +1 drain per +9	+4
total	+4

altered versions of power:

- **shadow-walking:** Like 'only works in shadow', 'requires a stealth skill roll against a particular difficulty', and so on.
- **psychic invisibility:** Is defended against by Will, does not work against things that have Awareness but no Will (like security cameras).
- **total invisibility:** Affects all forms of sensory Awareness (the whole attribute). You would not register to the sense of touch, but would still be a barrier to touch.

Mimic +7

This power allows you to change your body (range of 'self') into the form of anything you can touch and understand by making an 'opposed skill roll' with a skill for this power against the *hits* of what you are copying. The power level is the equivalent Will roll for social interactions or the target number for people to penetrate the disguise, whether by sight, hearing or things like asking questions the person being copied should know.

The power lasts until you are stunned and has +1 drain per +9 in the power level. Note that the power does not change composition, only shape (which *can* include color and texture). The power also lets you adjust size as part of the shape change. Powers that are useful for long durations, like Mimic and Invisibility, are best with very low drain or no drain at all, but we are using drain just as an example.

gameworld base: 0/9

⚡ effect: alter(morph): appearance	+0
⚡ target: physical characteristic(size)	-2
⊕ range: self/touch	+2
⌚ duration of power: until stunned	-2
⌚ duration of effect: as duration	+0
⊖ defense against: hits	+0
⊖ defense against: layers	+0
☯ conditional: opposed non-combat roll	+2
☯ usage: 4 seconds to prepare	+1
☯ operational effect (-1 distraction in use)	+1
☯ special effect (for nature of morph)	+1
📄 drain: +1 drain per +9	+4
total	+7

altered versions of power:

- **limited mimic:** You can only mimic a particular trait, like voice, appearance or scent.
- **full mimic:** You can also adjust composition, so instead of looking like a rock but being soft as flesh, you can also be hard as rock.
- **destructive mimic:** You can only mimic things if the original is destroyed or killed in the process and the power also does damage.
- **mutation:** You can adversely affect the physical form of *others*, decreasing their attribute rolls in some way.

Mind control +2

This power allows you to overcome the will of a target within short range and make them do your bidding. The power is defended against with Will (normally a power roll vs. a Will roll), and note that the normal defense against this sort of thing is to buy one or more points of a superhuman Forte in the aspect of Will that resists such effects. The power has 'short range', a drain of +1 per +9 power level, and you are counted as using it for whatever time level you are controlling someone.

The power duration and effect duration are 'until stunned', which means the target will act unsupervised according to your command for the duration, but you can also change the commands during this duration. While in operation the residual power level can be used up to the level of the target's Attributes, either as raw Attribute use or as a skilled task. It takes a minor action to alter the commands given, and if this would change the resistance, the level of effect may change.

gameworld base: 0/9

⚡ effect: control(subjective)	+3
⚡ target: animate	+2
⚡ target: sentient	-2
⊕ range: short	-3
⌚ duration of power: until stunned	-2
⌚ duration of effect: as power duration	+0
🛡️ defense against: Will	+0
🛡️ defense against: layers	+0
☯️ visibility: hidden	-3
🌀 operational effect (-1 distraction in use)	+1
🌀 special effect (as for nature of power)	+1
📄 drain: +1 drain per +9	+4
total	+2

altered versions of power:

- **command:** Make it objective control, the *power* duration is only an action (give a command) and the *effect* duration is made into a time level (how long the compulsion lasts).
- **hypnotize:** Add gestures, voice, prep time, a skill roll and make the range very short.

Remote viewing +0

Allows you to see great distances and through solid objects, within limits. The power level is a sight Awareness that negates 4 range levels (in addition to Accuracy from the power level) and whose perceptive roll is blocked only by the hits of intervening obstacles. If viewing in a non-combat situation (no opposition to your spying) you get +8 to the power level. The power is 'hidden', lasts until you are stunned, and has +1 drain per +6 in the power level *before* any non-combat bonus. As designed, for 1P it lets you use your Awareness-2 for this task, plus the potential non-combat bonus.

gameworld base: 0/9

⚡ effect: alter(increase)	-1
⚡ target: Awareness	-3
⚡ target: Forte only(sight)	+2
⊕ range: self only	+4
⌚ duration of power: until stunned	-2
⌚ duration of effect: as duration	+0
🛡️ defense against: intervening hits	-2
🛡️ defense against: layers	+0
☯️ visibility: power is hidden	-3
🌀 enhancement: +4 Accuracy	-2
☯️ enhancement: +8 non-combat effect	-2
🌀 operational effect (-1 distraction in use)	+1
🌀 usage: concentration(in use)	+2
🌀 special effect (your eyes glow)	+1
📄 drain: +1 drain per +6	+5
total	+0

altered versions of power:

- ◆ **remote sensing:** Add full sensory Awareness (remove the Forte), so you can sense what is as though you were actually there.
- ◆ **danger sense:** Give the power a range of 'self/unconventional range' to let you see threats to yourself into a certain time level of the future rather than distance. Add an additional effect to do something like boost your Dodge (a linkage), that only works if you successfully spot a threat.
- **bugging:** Make the power a gadget that has to be placed at the location to be sensed, and which has a range to which it can transmit. This might also be done as an information effect.

● **Telekinesis** -4

Allows you to use your normal Strength at up to 'medium' range, either as a melee attack or for skilled non-combat tasks. The power acts like your Strength, so you have a sense of touch, but doing things that require sight perception might take distance penalties on the difficulty, especially for fine work. The power has a drain of +1 per +6 in the final effect.

gameworld base: 0/9

⚡ effect: alter(expand)	-2
⚡ target: Strength	-2
⊕ range: medium (90 meters)	-5
⌚ duration of power: until stunned	-2
⌚ duration of effect: as duration	+0
☯ operational effect (-1 distraction in use)	+1
☯ special effect (nearby objects quiver)	+1
📄 drain: +1 drain per +6	+5
total	-4

Remember that the maximum level you can use in an 'expanded' characteristic is the power level. So for 1P, this would let you use up to a Strength of -4 at range. If you spent +6P on the power as designed you could use up to a Strength of +8 in this way, or your own Strength, whichever was *less* ('expand' effects never exceed the level of what they are expanding the capability of).

altered versions of power:

- **stretching:** Reduce the range, add conditional modifiers so that intervening objects block the effect. You could also do this as a morph effect.
- **web:** Make the power use a ranged skill roll, a 'duration of power' of an instant and a long 'duration of effect'. Those who are hit by it are 'grabbed' by the Strength and held there without you having to focus on the power. Other circumstance modifiers can be used to represent special effects of different types of immobilization. For instance, a 'breakable' duration, an 'ablative' activation chance that decreases with repeated escape attempts, etc.

■ **Telepathy** +2

Telepathy lets you peer into someone's mind and rummage around for information. The power requires laying hands on the person to be scanned (range of 'touch'), and this can be done in combat. The power level is like a damage roll that is resisted by the quantity of information to be sifted through *plus* the Will of the target. Information is from the most recent memories and going backwards. Success at penetrating this defense yields a quantity of information (your answer) equal to the residual power level (e.g. 'yes' or 'no' is a quantity of x1). The power has +1 drain per +6 in the power level.

gameworld base: 0/9

⚡ effect: information(receive)	-2
⊕ range: touch	+0
⌚ duration of power: an action	+0
⌚ duration of effect: as duration	+0
🛡 defense against: level of information	+2
🛡 defense against: Will	+0
🛡 defenses: only use highest	-1
☯ special effect(grabs random extra info)	+1
🌐 visibility: power is hidden	-3
📄 drain: +1 drain per +6	+5
total	+2

altered versions of power:

- **mind scan:** Covers an area centered on you (a 'radius' modifier and lets you seek a mind that contains a particular piece of information. Is defended against the same as the base power.
- **mind link:** Opens a one-way communication channel. Uses 'transmit' instead of 'receive', using non-combat range modifier *and* non-combat power level, so that only willing targets can be communicated with.

Teleportation +9

This is an extradimensional movement that lets you travel between points without visibly crossing the intervening distance. The power costs +1 drain per +6 distance moved. Your movement distance is reduced by the *armor* of any object you have to teleport through, and if this is not sufficient to get you through that object, you materialize again next to that barrier and take non-lethal hits equal to +1 per +3 in distance level you *tried* to move.

⚡	effect: extra-dimensional movement	-6
⊕	range: aura	+2
⌚	duration of power: an instant	+2
⌚	duration of effect: as duration	+0
🛡️	defense against: very broad type	+4
🛡️	defense against: layers	+0
🌀	enhancement: +4 non-combat distance	-1
🌀	side effect: failure side effect	+2
🌀	special effect (for teleport type)	+1
💧	drain: +1 drain per +6	+5
	total	+9

Remember that for long distance teleports, the efficiency part of the gameworld base is going to make it more and more difficult to get the effect for 1P up to a high level.

altered versions of power:

- **mass-limited:** The defense is based on the hits of a barrier rather than its armor, allowing for easy teleportation through force fields.
- **wiring:** You can only 'teleport' through a particular type of conduit, like wires, plumbing, shadows, etc., reappearing at an outlet for that conduit. This would be a 'zero effect' circumstance based on the commonality of the conduit.
- **teleportals:** Immobile gadgets with multiple non-combat additions to distance, possibly with grid-based energy usage and preparation time.
- ◆ **displacement beam:** Teleportation usable against others, defended against by their mass level, requires a ranged combat skill roll to hit them and a range for the power at which you can hit them.

Putting it all together

We could have devoted an entire book about the size of the **EABA v2** rulebook to *just* the subject of powers. It is *that* complex a topic. Even so, this chapter is a quarter of the entire rules. But you now have the tools behind the sample powers and the ability to make as many new ones as you want. Here are some last notes:

Do not let the low power levels of the pre-designed powers fool you into thinking they are uselessly underpowered. They are merely the descriptions of the essentials for that power.

i Take a sample power with a designed effect of +0 power level. Now, say that it requires an average skill roll, a quick gesture and a power word. That's +3. Say that you can only activate the power four times a day. That's +4 more. Then say it is in an inconspicuous power ring. That's +2. So, you have just boosted the effect from +0 for 1P to +9 for 1P.

Power design includes an inherent gameworld or tech base. modifier. Adjusting either value in this base up or down dramatically changes the nature of powers in the gameworld.

Changing the first value lets you tweak how much power level you can get for 1P. Make the value negative enough and no power can be useful for 1P.

Changing the second value adjusts how efficient it is to keep adding positive modifiers to a power. Make it very high, and powers can conceivably be *very* useful for low cost. Make it zero, and all positive modifier totals are quartered. *Why would you do that?* If you had a gameworld where magic was designed to be very difficult for combat, then people could still design powers with the '+4 non-combat effect' to get around having a low power level. This would allow for powerful healing or movement spells despite the low efficiency, but make it hard to do combat effects unless you put a lot of secondary P into the spell.



You can also adjust the starting modifier in specific ways. You could say that powers are elemental and that whichever element you choose has a 6/12 base for powers, the opposite element has a -6/0 base and neutral elements have a 0/6 base. So, if you are a fire mage, you are *really* good at powers which can use fire or are thematically associated with fire (like anger), but have great difficulty with any power that involves water. If you want ceremonial magic to be really powerful but take a lot of effort, give it a gameworld base of something like -6/36. That lets you pile on modifiers for big ceremonial altars, lots of worshippers adding a bonus and time spent chanting, but the -6 to power level makes it hard for fast and easy ceremonies to get much of a power level.

You can also add flavor to a gameworld by requiring or forbidding modifiers. A world with magic might require that all magic use magic wands, an obvious, carried gadget. *Take away the wizard's wand and they are powerless.* Or you do the opposite and say that magic can *never* be in gadgets. Or say that *all* magic requires chanting and gestures, or that *all* psionics requires a drain in non-lethal hits, or that all powers must have a drain of +1 per +3 power level.

If you are doing a bunch of gadgets and they are not *quite* working out, just 'house rule' the tech base for a particular tech. Maybe guns are 2/11 and lasers are 0/13. *It's your call.*

If you are setting up a power system and framework for a setting of your own design, remember that the world has had time to adapt to the presence of these powers and adventurers are *not* the only clever people out there. If you overlooked something obvious that causes problems because players take advantage of it...*go back and change it.* If the problem would alter the way you want the gameworld to work in a social, political or economic sense, retcon the power parameters so that it puts things back on track. The idea of paranormal powers is that they are *not* normal. They may follow certain rules, but that does not mean they are rules that are readily understood. For instance, vampires are not supposed to be able to cross running water. *Why not?* People in the gameworld may have no idea, but it is still a 'rule' that you can implement as a power modifier.

A game setting that introduces a very small number or amount of powers where none existed before is asking for chaos. Movies and books and legends have been based on worlds where *one* person with a power or a gadget does amazing (and sometimes horrible) things. The Invisible Man, the One Ring, Excalibur, etc. *One* power is unbalancing. Lots of powers means they will probably balance out in the end.

The rules of an rpg define how reality operates in a given game setting. Rules for paranormal powers are part of 'reality' in many settings, but are far from our everyday experience, so we tend to look at them in a different way.

To make powers real and believable is more than just adding up modifiers and generating efficiencies. To a person who lives in a world with these powers, they are an everyday part of life. Either you have these powers and use them, or you do not have them and take them into account.



For instance, in the world where you are reading this, many pray but few actually expect immediate results that violate the laws of physics as we currently understand them. That leads to certain attitudes and beliefs on prayer, god (or gods) and one's relationship with that deity or deities. Say you had a game setting where magic or a form of paranormal power came from beseeching divine beings. If you asked for a god to smite your enemies with a lightning bolt...and it *might* happen... then attitudes about religion, faith and taking a god's name in vain would be a *lot* different.

Or, think of the world we live in, but consider guns to be 'magic items' that only the 'King's Elite' may carry. There is a certain power and respect accorded to these trusted individuals, and fear and/or propaganda about those outlaws who carry them despite the King's edict. People are split between those who applaud the King for his wisdom in controlling these dangerous magics and keeping the people safe, and those who call him a tyrant and coward for hiding behind defenses he denies to others. Now, that *is* a bit of hyperbole, but given the level of force disparity between those who have and those for whom it is illegal to have, we might as well be talking about 'magic death wands'.

Every game setting is going to generate its own unique spin on this. The commonality of power, the intensity of power compared to mundane technology, the source or *perceived* source of power ("*magic is consorting with the devil and witches should be burned!*"), how it is acquired, what training is needed to use it, cultural, national, religious, gender, age or experience-based differences in power, all of these will affect the society which has these powers as part of it, and just as importantly, this will reflect on the adventurers who have those powers, and they will reflect back on the people they encounter and use these powers on. *Even here in the early 21st century there are still people who would (and do) burn witches if they can get away with it.*

Most published game settings that incorporate powers will already take all this into account in the description of the setting, but it is worth reminding the gamemaster and players. Remember that the author has *hopefully* thought through all of the ramifications and side effects of powers in that setting, and that people (including the adventurers) live and believe and do things in a certain way in that setting not just because the author was being arbitrary, but because all the various bits work together to generate what people as a whole think and believe and how they act and respond when dealing with powers.

Similarly, if you are using **EABA** for a setting of your own or adapting it to some piece of existing fiction you like, remember that you are translating not just rule mechanics but *attitudes*, and to the extent that attitudes and aspects of society can be mirrored in game mechanics, you should use them. If you have to pray to a deity for a magical effect, then this requires time, which is a straightforward power modifier. But it *also* requires piety and humility and need. One must be loyal to that deity, one *beseeches* a higher power rather than *commanding* it, and does *not* do so for trivial reasons. These also can be mirrored in game mechanics, like requiring a personality trait to do the magic (piety), having conditional effects based on actual need, skill rolls to represent your eloquence in beseeching the deity, and negative side effects if you fail in your attempt (god aims the 'smite' ray at your self-serving ass). These are more subjective and harder to adjudicate in play, but are quite important to both frame the magic and put players in the proper frame of mind when their adventurers try to use it.



Combined modifier table:

Just to have it one place, here are *all* power modifiers. Those in **bold** are 'defaults', so if a power does not list it, assume this is the case.

campaign base	value
free/efficiency	varies

effect: mobility	modifier
primary natural	-4
secondary natural	-2
tertiary natural	+0
artificial	+0
paranormal	-4
extra-dimensional	-6
each extra mobility	-2

effect: information	modifier
store	+0
receive	-2
jam	-3
transmit	-4
each extra information	-2

effect: offense	modifier
acts as lethal dmg	+0
acts as half-lethal dmg	+2
acts as non-lethal dmg	+4
acts as lethal melee	+2
acts as half-lethal melee	+4
acts as non-lethal melee	+6
affect v. broad power	-10
affect broad power	-6
affects average power	-4
affects narrow power	-2
each extra offense	-2 extra

effect: defense	modifier
affect v. broad power	-4
affect broad power	+0
affect average power	+2
affect narrow power	+4
protect vs. lethal	-4
protect vs. half-lethal	-2
protect vs. non-lethal	+0
protect vs. a power cat.	+0
protects as armor	+0
protects as rigid armor	+2
protects as flex. armor	+4

effect: control	modifier
control is objective	+0
control is subjective	+3

control targets	modifier
control over animate	+2
control over inanimate	+0
control over sentient	-2
control over an abstract	+3
control over broad type	+0
control over single type	+2
control over unique	+4

effect: alter	modifier
restore	-6
increase	-1
reduce	+0
expand	+0
limit	+2
morph	+0
transfer	-6
indirect transfer	-2
multiple alter effects	-2

alter targets	modifier
a physical characteristic	-2
a mental characteristic	-3
a spiritual characteristic	-4
a Forte only(plus other)	+2
derived characteristic	-6
affect v. broad power	-10
affect broad power	-6
affect average power	-4
affect narrow power	-2
multiple alter targets	-2

framework: suites	modifier
single power only	+0
two power suite	+1
three power suite	+2
four power suite	+3
five power suite	+4
six power suite	+5

range	modifier
self only	+4
aura	+2
touch	+0
melee	-1
thrown	-1
very short(6 meters)	-1
short(23 meters)	-3
medium(90 meters)	-5
long(350 meters)	-7
very long(1.4km)	-9
extended range	-2
declining range	-1
minimum range	+1
+4 non-combat range	-1
subjective benefit	-4
indirect range	-2
unconventional range	-4

duration of power	modifier
an instant	+2
an action	+0
until stunned	-2
until knocked out	-4
continuous	-4
always on	-2
time level	-time/4
declining	-1
time delay	+2
triggered	-2

duration of effect	modifier
until power dur. ends	+0
as stamina recovery	-2
as non-lethal hits rec.	-3
as half-lethal hits rec.	-4
as lethal hits rec.	-5
time level	-time/6
semi-permanent	-6
severable	-1
range-limited	+2



defense against modifier

☯ is a very broad type	+4
☯ is a broad type	+0
☯ is an average type	-2
☹ is a narrow type	-4
☯ is esoteric	-4
☯ works as decr. layers	+0
☯ adds together	+4
☯ only use highest value	-1
☯ requires specific cov.	+varies
☯ protects absolutely	+4
☯ can be improvised	+2

visibility modifier

☯ power is very obvious	+1
☯ power is obvious	+0
☯ power is subtle	-1
☯ power is hidden	-3
☹ power is undetectable	-5

ceiling modifier

☯ ±half value or ±2d	+2
☯ limited to ±1d	+4

circumstance modifier

☯ works 3/4 of the time	+1
☯ works 2/3 of the time	+2
☯ works 1/2 of the time	+3
☯ works 1/3 of the time	+4
☯ works 1/4 of the time	+6
☹ works 1/8 of the time	+9

☯ reduced to 3/4 eff.(-1d)	-3
☯ reduced to 1/2 eff.(-2d)	-2
☯ reduced to 1/4 eff.(-3d)	-1
☯ reduced to zero effect	+0
☹ reduced proportionally	-1

coverage modifier

☯ head & neck (loc. 5-6)	+8
☯ head & neck(loc. 3-6)	+7
☯ chest & abd.(loc. 10-11)	+5
☯ chest, abd. & head	+4
☯ full torso(loc. 9-12)	+3
☯ full torso & head	+2
☯ arms(locations 7-8)	+6
☯ upper legs(loc. 13-14)	+5
☯ full legs(loc. 13-18)	+4

success on 3d modifier

☯ ≤6 (or fails on ≤14)	+9
☯ ≤7 (or fails on ≤13)	+8
☯ ≤8 (or fails on ≤12)	+6
☯ ≤9 (or fails on ≤11)	+4
☯ ≤10 (or fails on ≤10)	+3
☯ ≤11 (or fails on ≤9)	+2
☯ ≤13 (or fails on ≤7)	+1
☯ ablative chance	+1
☯ secondary abl. chance	-1

side effects modifier

☯ operational effect	+1
☯ failure side effect	+2
☯ mandatory side effect	+4
☯ special effect	+1

enhancements modifier

☯ +4 non-combat effect	-1
☯ penetrating	-1
☯ stopping power	-1
☯ armor-piercing	-2
☯ battering	-4
☯ autofire	-2
☯ autofire only	-1
☯ autoburst	-1
☯ shotgun effect	-2
☯ variable spread	-1
☯ accuracy, per +1	-1
☯ hardened	-1

delegation modifier

☯ none(default)	+0
☯ exclusive	-1
☯ shared 2x	-2
☯ shared 4x	-4
☯ shared 8x	-6
☹ contagious	-3
☯ severable	-1
☯ at range	-level/4
☯ password	-1

dependency modifier

☯ dependent effect	+1
--------------------	----

usage modifier

☯ no preparation needed	+0
☯ opposed combat roll	+4
☯ ranged combat roll	+2
☯ opp. non-combat roll	+2
☯ average(7) skill roll	+1
☯ hard(11) skill roll	+2
☯ heroic(15) skill roll	+3
☯ minimum Fate of 5	+1
☯ minimum Fate of 7	+2
☯ minimum Fate of 9	+3
☯ gestures	+1/+3
☯ voice	+1/+3
☯ concentration(prepare)	+2
☯ concentration(active)	+2
☯ preparation time	+level/4
☯ warmup(+3 per time)	+1
☯ warmup(+2 per time)	+2
☯ warmup(+1 per time)	+3
☯ requires x2 users	+4
☯ may use x2 assistants	+2

degree of flexibility modifier

☹ 1pt of flexibility in power	-3
☯ 1pt of flexibility in effect	-2
☯ 1pt of flexibility in detail	-2
☹ omni-power	-12

ease of flexibility modifier

☯ no flexibility at all	+1
☹ adjust each action	-2
☯ adjust each encounter	+1
☯ adjust each session	+2
☯ adjust each adventure	+3
☯ adjust each day	+1
☯ adjust each week	+3
☹ reactive adjustment	-1
☯ location-based adjust.	+1
☯ usage modifiers	+special

special targeting modifier

☯ increased targets	-(lev.+1)
☯ area(radius)	-rad. lev.
☯ explosion	-8
☯ line(plus area)	+6
☯ narrow cone(plus area)	+4
☯ wide cone(plus area)	+2
☯ boundary(plus area)	+2
☹ slow(-1 initiative)	+2



drain modifier

+2 per +3 power level	+9
+1 per +3 power level	+7
+1 per +6 power level	+5
+1 per +9 power level	+4
+1 per +12 power level	+3
+1 per +15 power level	+2
+1 per +18 power level	+1
no drain	+0
zero drain	-1
drain is non-lethal hits	+2
drain is lethal hits	+4
drain is an attribute	+4
steady drain	-level/4
pushable	-1

stored power modifier

charges	-2
energy reserve	+0
communal reserve	+1
independent reserve	-9
reserve use rate	+time/4
linked to stamina	+1

power quantity modifier

1	+7
2	+6
3	+5
4	+4
6	+3
8	+2
11	+1
15	+0
23	-1
32	-2
45	-3
65	-4
90	-5
125	-6
180	-7
250	-8
400	-9
700	-10
1000	-11
each +1 quantity level	-1

power subdivision modifier

quantity in 1 set	+0
quantity in 2 sets	+1
quantity in 3 sets	+2
quantity in 4 sets	+3
quantity in 6 sets	+4
quantity in 8 sets	+5
quantity in 11 sets	+6

power replacement modifier

replace as an action	+0
replace as time level	+time/4
incremental time level	+2
average(7) skill roll	+1
hard(11) skill roll	+2
heroic(15) skill roll	+3
extra hands to repl.	+special
special equip. to repl.	+1
set compatibility	±1
energy size/weight	±special
disposable (see rules)	+6 tech
replenish from stamina	+2
mundanely replaced	-1
grid power	+1
full replacement only	+1
set replacement	+level/4
contingencies (☯)	+half(d)

tech base value

Primitive Era	-9/0
Basic Era	-6/3
Industrial Era	-3/6
Atomic Era	0/9
Post-Atomic Era	3/12
Interstellar Era	6/15
Advanced Era	9/18
each fractional era	±1/±1

gadget type modifier

obvious	+2
subtle	+1
hidden	+0
carried	+2
worn	+1
embedded	+0
immobile	+4
mundane	+1
cheap(-2 cost)	-2
expensive (+2 cost)	+1

mass +P modifier

≤.1kg	1	-9
.25kg(knife)	1	-6
.5kg	1	-3
1kg(pistol)	1	+0
2kg	2	+3
4kg(rifle)	3	+6
8kg	4	+9
16kg	5	+12
32kg(lmg)	6	+15
64kg	7	+18
125kg	8	+21
250kg	9	+24
500kg	10	+27
1 ton(cannon)	11	+30
each ±1 mass		±1

mundane gadget cost

- level for the power quantity
- + *total* cost in P
- + 1/4 (u) of (size *modifier* plus *second* value in the tech base)
- +1 for each extra power
- - *half* (round towards zero) of any modifier for coverage
- then -12 (-18 if **disposable**)

vehicle-specific modifier

rail movement	+0
on-road movement only	-2
off-road movement	-4
walking movement	-6
flight/vertical flight	-4/-7
gliding	-4
water movement	-11
mundane acceleration	+1
mundane handling	+2
altered mobility size	±1

weapon arcs modifier

half-sphere	+3
quarter-sphere	+6
sixth-sphere	+7
eighth-sphere	+9
fixed facing	+12
slightly limited	+1
elevation-limited	+2
slow	+time/4
unprotected	+3





The more comfortable you become with any game system the more you will want it to do. As adventures become more detailed and the adventurers more bold, situations will come up that just aren't adequately handled by "make a hard(11) Agility roll". Many of these situations will only come up in very specific game worlds, and just aren't needed as part of the basic rules. We present these as a 'starter package', by no means exhaustive, but enough to give you an idea of how to expand things on your own.

INTRODUCTION

Most of what a gamemaster or adventurer should need for an **EABA** game session will be on the adventurer sheet or the universal chart. *But not quite everything.* Every genre has unique features and every gamemaster has their own set of things they want to have happen in a campaign, things that they do not want to just arbitrarily decide. Others are pervasive features of the world, like technology, or background details like the weather or taxi fares. This chapter just covers a bunch of these sorts of things. Odds are you can just skim over and come back to it later if you need it.



TECH ERAS

Most of the time a gameworld will operate under one consistent set of scientific possibilities. For instance, in a fantasy gameworld, one would not expect to find anti-tank missiles, nor is medieval armor common in a science fiction setting.



In **EABA**, the broad grouping of available items, ways of thinking and the general understanding of the cosmos are called 'eras'. A world can have multiple eras in place at the same time. Areas can be backward or more advanced than the average. Within each era there is an early, middle and late period if the gamemaster desires or needs to break it down.

i For instance, the French Revolution was Late Basic Era, while World War 2 started in the Late Industrial Era.

From that example, you see that a lot *can* happen in an era, but not so much that the world is no longer understandable to a person born during that era. This understanding is part of your free 'native culture' skill. What follows is a short breakdown of the eight eras that will apply to ninety-nine percent of all gameworlds.

Segmented Tech Eras

Tech Eras are presented as sort of a monolithic block of achievements, but in reality, some techs are ahead or behind the curve, and some regions are ahead of or behind their neighbors. If you need to break it down by category, try:

information tech	transport tech
materials tech	energy tech
military tech(offensive)	medical/biology tech
military tech(defensive)	

You only need to note the techs that are different than the overall tech era. So, if the gameworld is *Early Basic Era*, but there is one place in the world capable of making better quality steel ('Damascus steel'), then you say that *this* location's materials tech is *Middle Basic Era*, with whatever benefit that might give in game terms.

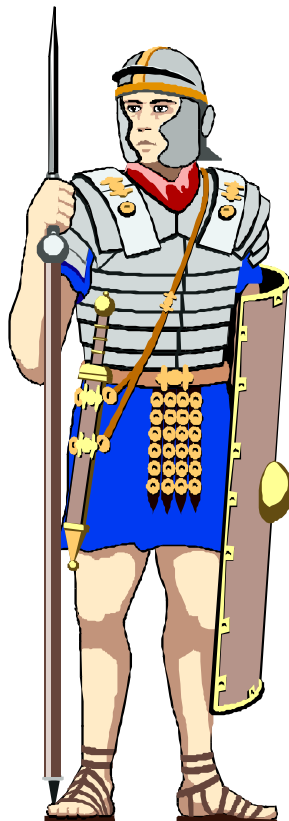


Primitive Era: Technology varies from stone tools up to primitive iron working. There are no complex machines, or controlled energy more advanced than a blacksmith's forge or a water wheel. The physical nature of the world is largely misunderstood and the average person is in awe of unknowable forces, usually portrayed as deities. While some visionaries glimpse the mathematics of basic science, they are largely ignored. Knowledge is generally gained by trial and error and applied with 'rule of thumb' level of accuracy. Misconceptions are common, true innovations are few and far between. Standardization is impossible since everything is made by hand. The most advanced hand-held weapons are crossbows and the most advanced personal armor is interlocked links of metal (chain mail) or metal plates on a flexible backing (scale armor or lorica segmenta). Earth anywhere between the building of the Pyramids and the end of the Dark Ages would be Primitive Era.

! For best results in gadget design, use a tech base of -3/3 for Primitive Era bows, -3/1 for crossbows and -8/1 for archaic body armor.

Primitive Era techs

- writing(early era)
- wheels(early era)
- stone tools(early era)
- copper tools(early era)
- bows(early era)
- windmills(middle era)
- bronze tools(middle era)
- plumbing(middle era)
- sawmill(middle era)
- heliograph(middle era)
- block & tackle(middle era)
- iron tools(middle era)
- sundial(middle era)
- glass(middle era)
- waterwheels(middle era)
- catapult(middle era)
- crossbow(late era)
- stirrup(late era)
- compass(late era)



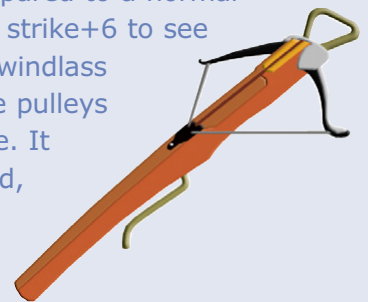
The Primitive Era is cash-poor, goods-poor and labor-intensive. In terms of an adventurer's lifestyle and savings, the cost of *manufactured* items from the gear list (or their Primitive Era equivalent) is going to be about +9 cost levels. However, money spent on non-manufactured items or raw materials is generally at normal rates.

i Say that according to the rules you have a starting lifestyle of -5 and savings of +12. A knife has a normal cost level of -9, well within your weekly expense limit...for a Late Atomic Era adventurer. For a Primitive Era adventurer, the cost of the knife is +9 over normal. This makes its price tag a cost level of +0. This is +5 over your lifestyle, so it sets you back 5 savings boxes. On the other hand, money spent on vegetables, grain and such goes as far as it would for a modern adventurer.

! As you read through the eras, keep in mind that you could also have 'magic eras', or 'cultural eras'. The 'eras' are just ways to denote the norm for a particular set of things, whether those things are the quality of steel or the quality of incantations.

🎲 Crossbows

Crossbows (Late Primitive Era) act like bows, except the energy required to draw them back can be stored, allowing the weapon to be carried in a ready state or aimed for a prolonged period without fatiguing the user. A crossbow can be cocked by anyone whose strike+3 damage meets or exceeds the crossbow's damage, unlike bows which use strike damage to see if the bow can be drawn. A cranequin is a gear arrangement that multiplies strength for drawing back exceptionally strong crossbows. A cranequin crossbow takes +4 time to reload compared to a normal crossbow, but you use strike+6 to see if you can reload it. A windlass crossbow uses multiple pulleys for even more leverage. It takes +8 time to reload, but you use strike+9 to see if you can reload it.



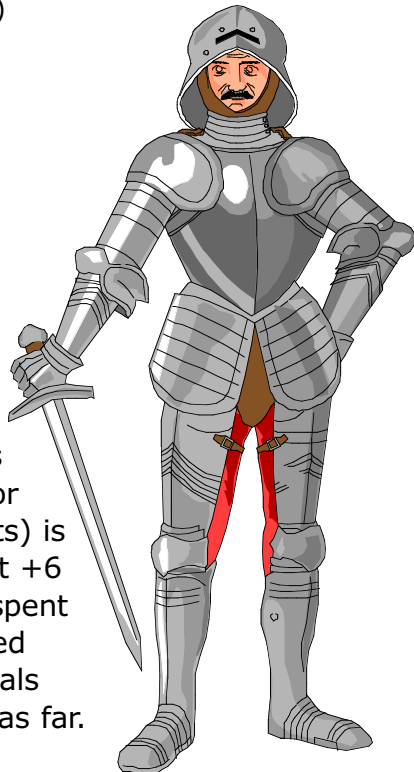


Basic Era: Machinery exists, sometimes of great complexity, but it is still almost always hand-made and completely non-standardized. Iron-working is common and can be of very high quality. Gunpowder weapons exist, but are primitive and unreliable. Rational thought and the invention of ways to produce books in quantity spread knowledge, but entrenched groups may resist new knowledge and often have the backing of whoever is in power. Superstition is still the rule rather than the exception. The most advanced handheld weapons are fairly inaccurate flintlocks and the most advanced personal armor is metal plates, articulated and contoured to match the wearer (plate armor). Earth from the end of the Dark Ages to the end of the eighteenth century would be Basic Era technology.

Basic Era techs

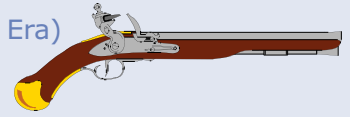
- | | |
|-------------------------|--------------------------|
| grenade(early era) | printing pr.(middle era) |
| eyeglasses(early era) | mech. clock(middle era) |
| universities(early era) | vaccines(middle era) |
| buttons(early era) | flintlock(middle era) |
| loom(early era) | airguns(late era) |
| distillation(early era) | telescope(late era) |
| soap(early era) | microscope(late era) |
| plate armor(early era) | |
| steel tools(early era) | |
| matchlock(early era) | |
| firearms(early era) | |
| rockets(early era) | |
| paper(early era) | |
| clockwork(early era) | |

The Basic Era is still cash-poor, goods-poor and labor-intensive. Cost of manufactured items from the gear list (or Basic Era equivalents) is going to be at about +6 cost levels. Money spent on non-manufactured items or raw materials generally goes just as far.



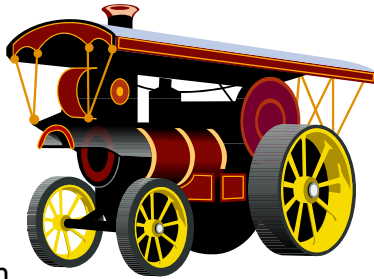
Gunpowder

Gunpowder (Early Basic Era) sounds the death knell for personal armor and fortifications in the Primitive and Basic Eras, though practical or widespread use does not happen until the middle of the Basic Era and heavy armor continues to see limited use through the end of the era. In addition to gunpowder weapons treating most Primitive and Basic armors as inappropriate (armor gets -1d to value), it is in some ways easier to outfit an entire army with gunpowder weapons than it is to outfit and train them with bows or crossbows. Cannon become more portable and battle-worthy than a Primitive Era catapult, and are capable of battering down the walls of any castle. However, Basic Era gunpowder weapons are crude. With only a few exceptions they require an average(7) task to reload a single shot in a minute, and even a skilled person cannot load one in less than a quarter this amount of time. They are also unreliable, a term which means that in any sort of adverse conditions the weapon will fail to fire if the user fails to succeed at an average(7) task on their skill roll to hit. This will jam up the weapon and often requires the weapon be unloaded and reloaded again. An Early Basic firearm would be very unreliable, which means they would fail to ignite on a hard(11) task in adverse conditions. Adverse conditions means if roughly handled, in excessive damp, heavy wind or light rain, or if untended for more than a day while loaded. Anything worse than this would make them even more likely to fail. As a modifier on paranormal powers, the conditional reliability of matchlocks (Early Basic Era) would be a +2 modifier, and flintlocks (Middle Basic Era) would be a +1 modifier.



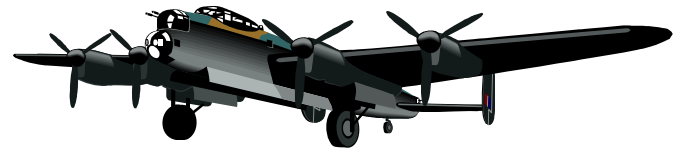
! For gadget design, melee weapons reach tech maturity in the Late Basic Era, and most are actually just Basic Era (tech base of -6/3). Melee weapons built in modern times count as Basic Era unless they are made with techniques and materials that are *only* available in that later era *and* these are things which improve the capability of the weapon. So, chromium-molybdenum steel might help, but chrome plating would not.

Industrial Era: Craft, science and art combine to allow projection of force far beyond that of earlier eras. Mass production is introduced on a large scale, resulting in standardization and the ability to create *extremely* large machines like battleships. Scientific thought comes into its own and results in rapid progress, starting with steam engines and ending with jets and atomic bombs. Superstition largely falls by the wayside except for the most entrenched ideas. Reliable transport leads to contact between groups once separated by distance, and this contact leads to colonialism, conquest and war. Rapid-fire firearms and portable rockets become the most advanced handheld weapons, and personal armor largely falls by the wayside as it becomes more and more unable to cope with the power of these weapons. Melee weapons are all but abandoned as tools of organized warfare (rifles still come equipped with bayonets). The most advanced handheld weapons are anti-tank rockets and the most advanced personal armor is early synthetic materials and hardened steel plates, typically called a 'flak vest'. Earth from the start of the nineteenth century through the early parts of World War 2 would be Industrial Era tech.



Industrial Era techs

balloon(early era)	light bulb(middle era)
electric battery(early era)	plastics(middle era)
dirigible(middle era)	radio(middle era)
steam engine(middle era)	airplane(middle era)
X-rays(middle era)	railroad(middle era)
automobile(middle era)	telegraph(middle era)
gene theory(middle era)	nerve gas(late era)
scuba gear(late era)	elec. computer(late era)
submarine(middle era)	jet engine(late era)
machinegun(middle era)	photovoltaics(late era)
pocket watch(middle era)	atomic theory(late era)
torpedo(middle era)	antibiotics(late era)
germ theory(middle era)	television(late era)
sewing machine(middle era)	
cartridge ammo(middle era)	
mechanical computer(middle era)	
internal combustion engine(middle era)	



The Industrial Era is the first one where standardized, mass-produced consumer goods exist, along with the infrastructure to support them (electricity, telephone lines, gas stations, etc.), at least in the more developed regions. Income and starting cash for purchase of manufactured items from the gear list (or their Primitive Era equivalents) is going to be about -3 cost levels. However, money spent on non-manufactured items or raw materials generally goes twice as far.


! Historically speaking, the Industrial Era is the first one with several major conceptual and practical changes happening in a single human lifetime. You could have been born in the light of an oil lantern in a horse and buggy town, and died in an era of electric lights, radios and airplanes. The rapid technological advances over this era are a parallel to the generational differences between those born in the latter half of the 20th century.



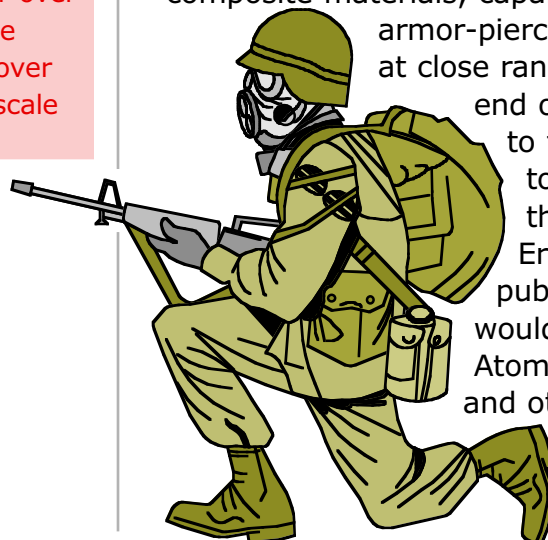
 **Cartridge ammunition**

Metal-cased cartridges (Middle Industrial Era) for gunpowder weapons make warfare even deadlier than before. A single unit of ammunition is now standardized, water proof and strong enough to be fed through a weapon mechanically, leading first to semi-automatic (fires and reloads one shot each time the trigger is pulled) and then to full auto weapons (fires and reloads *several* times each time the trigger is pulled). In addition, invention of high explosives leads to 'smokeless' powder, which leaves less residue in the weapon and gives greater power to the bullets. Armies whose rate of fire used to be measured in shots fired per minute are now measured in shots fired per second. Advances in armor that were just catching up to Basic Era gunpowder are left behind by the power of Industrial Era weapons, and the only armor typically worn is a helmet to stop low velocity fragments and nearly-spent bullets. In terms of paranormal power design, cartridges are reliable enough to have no conditional limitations, however, early autofire weapons might have a +1 modifier for a failure on an average(7) skill roll.



 **Mass-production and standardization can actually decrease the rate of innovation. Businesses based on one tech are going to resist changes that would be expensive to implement. And when they do implement them, everyone wants to have their standard be the standard. The light socket regular bulbs screw into has been in use for over a century. The .45 automatic pistol cartridge likewise. Only for tech that has a high turnover rate can major changes be profitable on a scale of years rather than decades.**

Atomic Era: The basic scientific underpinnings of the universe are, if not understood, at least given educated guesses about. Uncontrolled atomic power (bombs) is developed first, and controlled atomic power (power plants) become widespread, culminating with the development of controlled fusion power at the end of the Late Atomic Era. Early space travel occurs in this era, though the cost and risk precludes widespread use. The first electronic computers are developed in the middle of this era, and will be ubiquitous by its end, possibly with the first quasi-artificial intelligences developed as research projects. Advanced materials allow personal armor capable of stopping many modern weapons, and medical technology allows survival of injuries or conditions that would have been uniformly fatal in a previous era. The most advanced personal weapons are still firearms and rockets, whose power has not significantly increased from the Industrial Era, but whose efficiency, accuracy or range has increased, in some cases due to embedded computers. Enough power groups may have access to enough nuclear weaponry to drop civilization back to an early or mid-Industrial level. The most advanced hand-held weapons are bulky homing rockets for anti-aircraft or anti-tank use, or autofire rifles augmented with sensors and electronic sighting aids. The most advanced personal armor is body armor or helmets made from sophisticated ceramics or composite materials, capable of stopping armor-piercing projectiles even at close range.

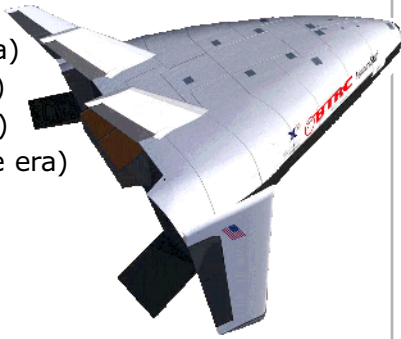


Earth from the end of World War 2 to the present and to some decades in the future is Atomic Era technology. The publication of **EABA** would be during the Late Atomic Era. Income, gear and other costs in the **EABA** rules assume the Atomic Era.



Atomic Era techs

- lasers(early era)
- contr. fission(early era)
- uncontr. fusion(early era)
- organ transplant(early era)
- semiconductor electronics(early era)
- integrated circuit(middle era)
- space travel(middle era)
- ballistic fabric(middle era)
- genetic therapy(late era)
- global networks(late era)
- advanced composite(late era)
- bionic limbs(late era)
- port. computer(late era)
- cell phone(late era)

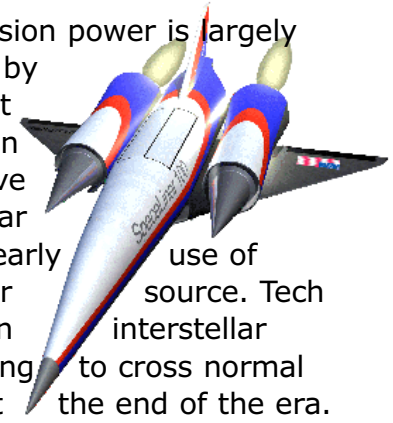


! The extremely rapid advances in electronics blow any simple rule-based progression in capability out the window for this tech. The capabilities of a futuristic *Star Trek* communicator (as envisioned in 1966CE) are inferior to many early 21st century cell phones (circa 2010CE), and a tablet computer and some peripherals can do just about anything a tricorder can. *And compare Lt. Uhura's massive earphone to a modern Bluetooth rig...* Computers that filled warehouses at the start of the Atomic Era now fit on your wrist. A Late Atomic Era pocket flashlight is brighter than an Early Atomic Era car headlight, and a video camera that would have massed several hundred kilograms is now the size of a thumbnail. There is no way to predict if or when the increase in capability will slow down. On the other hand, *Buck Rogers* (circa 1929CE) had handheld ray guns, but we are nowhere close to that yet. So, the parameters you set for making gizmos and their capability will need a *lot* of attention to have any chance of matching actual tech in terms of size and capability.

Exotic materials

Superstrong exotic materials (Late Atomic Era) change the way things are built and protected. Synthetic materials (plastics) are first developed by the Late Industrial Era, but a plethora are created in the Atomic Era. Whether synthesized from petroleum or made of advanced ceramics or composites of exotic materials, by the Late Atomic Era they are stronger than steel in many respects. This allows their use in weapons to make them lighter, and in personal armor capable of stopping or blunting the impact of Atomic Era firearms. By the end of the Atomic Era, most armies and police forces will be equipped with armor for head and body capable of transforming an otherwise lethal hit into just a severe bruise.

Post-atomic Era: Fission power is largely abandoned, replaced by cleaner, more efficient fusion reactors. Fusion power allows extensive exploration of the solar system, followed by early use of antimatter as a power source. Tech capable of bridging an interstellar distance without having to cross normal space is developed at the end of the era. Artificial intelligence, universally embedded and networked computers, cloned body parts, space colonies and a jump in average lifespan *should* occur in this era. The ability of small groups of even individuals to cause havoc by use of biological, chemical, or nuclear weapons is greater than in previous eras. Biowarfare is capable of dropping a civilization back to a late Basic or early Industrial level, simply by killing enough people that advanced machines can no longer be maintained, or knowledge to rebuild them is lost. The most advanced hand-held weapons are portable lasers or particle beam devices, and the most advanced personal armor is made of exotic materials. Full-body suits may include an artificial musculature that amplifies strength, allowing a wearer to carry bigger weapons and heavier armor. Earth from the development of sustainable fusion power to the development of the first interstellar drive is Post-Atomic Era technology.





Post-Atomic Era techs

controlled fusion(early era)
 hot superconductors(early era)
 artificial intelligence(middle era)
 hand-held energy weapon(early era)
 workable FTL theory(late era)
 military exoskeleton(early era)
 quantum computers(early era)
 synthetic organs(early era)
 practical nanotech(early era)
 medical regeneration(middle era)
 doubling average lifespan(early era)

The Post-Atomic Era is the first one where the ability to produce things is *easier* than it is to acquire the materials to make the goods. The cost of manufactured items from the gear list (or their Post-atomic Era equivalents) could be less than listed. However, the costs for non-manufactured items or raw materials could be higher. That is, advanced tech gets cheaper, but food, shelter and real estate gets more expensive. This cost adjustment is subjective, and really depends on how a particular Post-Atomic culture's resource and population situation has evolved over time.

i Inflation of prices could offset reductions you might see from automated manufacturing. Scarcity of particular elements or very high demand could do the same. Or, an expensive device might be sold at a low cost, and profit taken from an expensive subscription service to use it.

Hot superconductors

Aside from efficiency, one problem facing the designers of energy weapons is a compact means of storing the energy required and delivering it fast enough to be useful. Hot superconductors (Early Post-Atomic Era) capable of operating at ambient temperatures and in intense magnetic fields would make this possible. Superconductors of this type could also be used in a primitive form of magnetic shielding, or for high speed magnetically levitated transport systems.

! As an example of how technology affects the energy available to the average person, the following list is a *relative* ranking of the energy available in a given mass of that tech. This would be on an **EABA**-like scale where each 3 points of ranking is *double* the energy of the previous number, mostly because the *actual* values range from .0003 up to about 9,000,000,000! Items marked as 'theoretical' are the raw energy content, not the lower amount that can be extracted by a machine using that source.

item	relative	dice
Industrial Era clockwork	.0003	0d+1
Late Atomic Era supercapacitor	.02	6d+0
Early Atomic Era battery	.13	8d+2
Black powder	.3	9d+2
Nitrocellulose propellant	.4	10d+1
Middle Atomic Era battery	.4	10d+1
Late Atomic Era battery	.7	11d+1
TNT	4.6	14d+0
wood(theoretical)	15	15d+2
coal(theoretical)	31	16d+2
gasoline(theoretical)	45	17d+1
Fission(theoretical)	90,000,000	38d+0
Fusion(theoretical)	500,000,000	40d+2
Antimatter(theoretical)	9,000,000,000	45d+0

Yes, these numbers are correct. The difference between a chunk of wood and a chunk of TNT is that you can get the TNT to give up *all* its potential energy *at once*, making it *far* more useful in military applications. Similarly, the difference between a department store flashlight battery and nitrocellulose propellant is that we have not yet developed an efficient means of turning the battery's energy into combat-effective damage. The figures also put into perspective the relatively small amount of energy in the form of *magic* that you need to overwhelm a world that lacks energetic technologies like gunpowder.

Advanced Era: A new understanding of the universe opens new vistas, including reliable anti-matter power and interstellar travel. By the end of the era, limited access to alternate forms of space or reality such as mutable matter, hyperspace or disruptor beams are common. Nanotechnology or other forms of micromanufacturing allow for objects with limited self-repair capability. All degenerative conditions and diseases are preventable or curable, and any injury except destruction of the brain is repairable. By the end of the era, even personal knowledge can be stored and replaced if lost. The most advanced weapons and armor available are unknown, but will obviously be more advanced than those in the Post-Atomic era. Earth from the development of the first interstellar capability to points unknown is Advanced Era technology. The inability of us (circa 2000CE) to figure the details of what Advanced Era tech and society will be like means this is probably the last era suitable for most gameworlds. Early Advanced Era will allow for some interstellar travel, but the especially disruptive tech will not reach hand-held size until later in the era.




Advanced Era techs

- prenatal genetic programming(early era)
- controlled antimatter(early era)
- hyperspace FTL(early era)
- mutable matter(early era)
- disruptor weapons(early era)
- all diseases cured(early era)
- sophisticated nanotech(early era)
- mind backups(middle era)
- quadrupling average lifespan(early era)

Income and cost of goods in the Advanced Era and later are purely speculative and would have to be based on numerous gameworld considerations. When items can replicate themselves and automated mining facilities can utilize all the resources of a solar system, what people do to make a living and how an economy functions when supply is nearly infinite compared to demand is anyone's guess. You can use the price lists for any comparable items if desired, but that would only be the coarsest of guidelines.

 **Disruptors**

Disruptors (Early Advanced Era) are derived from breakthroughs occurring at the end of the Post-Atomic Era. Disruptors are energy beams that only interact with a particular type of matter. The weapons are initially large and difficult to tune, but by late in the era they are hand-held and can be programmed by sensors mounted on the weapon itself. Disruptor weapons completely ignore everything except the elemental or molecular structure it is keyed to, and re-enters real space upon encountering it. Tuned to 'bone', it would ignore armor and detonate in the body of the person wearing it. Tuned to 'diamond' it would ignore other forms of carbon like coal. Mutable matter allows 'flux armor' to be tuned to the same characteristics as that which it protects, but the weapon's effect upon earlier era military machines is as devastating as you would expect.

 In our opinion, the *Culture* series of novels by the late Iain Banks is probably a perfect example of not just an Advanced Era civilization, but of how you can make interesting, human-scale stories work in a campaign with that level of technology.

Interstellar Era: More forms of interstellar travel become possible, and advances in all the sciences make Advanced Era items more and more efficient. Further refinement of Advanced Era theories allows for incredible but energy-intensive processes such as the creation of pocket universes, teleporters and bidirectional matter-energy conversion. These are generally impractical because of their cost, but they are *possible*. The energy and time required to make new scientific advances means that few if any interstellar species will ever develop past this stage. Anything from the Late Advanced Era onwards is sophisticated enough as to be indistinguishable from magic to an Atomic Era person, and it is difficult for Atomic Era fiction writers to even convincingly generate stories that take place at the Interstellar Era or later. However, individual aspects of Interstellar Era tech might be a major feature of a civilization or gameworld that generally operates in the Advanced Era (like matter transporters and food replicators).

Advanced Era techs

matter replicators(early era)
virtual universes(early era)
teleportation(early era)
unlimited lifespan(early era)
pocket universes(middle era)
ringworlds(late era)

Jump torpedos

Interstellar Era cultures can make self-contained starship weapons that bypass normal space and reappear inside a mass at their destination. Technologies that defeat disruptors have no effect on jump torps. A variant of the technology to phase a target out of normal space is used as a defense against this or any other form of attack. Both of these technologies have portable variants by the end of the era.

Final Era: A species which reaches the end of this era has reached a complete understanding of the most fundamental structures of the universe, and with sufficient energy, is capable of manipulating time, space and dimension on an interstellar scale. It is different from the Interstellar Era mostly in the scale at which the technologies can be implemented. This era is not really suitable for role-playing (at least not for crunchy, rule-based game systems), but elements of it can be incorporated as fixed gameworld elements forever beyond the comprehension of its inhabitants (ancient alien ruins, etc.).

Final Era techs

time travel
stellar engineering
dyson spheres
dimensional travel
synthetic universes

The unknown

Any culture at the Final Era will have the ability to manipulate the fabric of spacetime far beyond the principles used for disruptors and jump torps. The ability to create spatial discontinuities, casually manipulate negative energy and alter the flow of time all have military possibilities in the realm of galactic-level extinction events. In game terms, at this point you are just making stuff up, because neither you nor the players will have any idea how you would *actually* do this sort of thing...



VEHICLES



In game terms, vehicles are really just big, multi-purpose gadgets built using some special applications of the paranormal power rules in chapter 6. **BTRC** has done elaborately complex vehicle design rules in the past, but **EABA** will break from that. A vehicle will either be an extension of the will and abilities of the adventurers, or a place where the adventures happen. A fighter plane or a car is an example of the first. An ocean liner or star cruiser would be an example of the latter.

Think of the difference this way: No matter how complex and amazing a vehicle location system is, if the enemy battleship happens to lob a 15 inch high explosive shell into the spot where all the adventurers are standing, the gamemaster *is* going to re-roll it and decide that all the adventurers were not blown to bits after all. This makes the 'adventure setting' vehicle very simple to design.

- step 1** draw a picture of any part of the vehicle players might need to visualize
- step 2** generate the relevant stats for any part of the vehicle adventurers need to interact with in a way that requires game stats.
- step 3** there is no step 3

i If the centerpiece of the adventure is a group of terrorists taking hostages in the main ballroom of the starliner and planting an antimatter bomb in the main life support bay, then all you need is the ballroom and the life support bay. You might need to make up a number for how tough the interior bulkheads are, but that is about it. You really do not care how much the starliner cost, how fast it goes or how long the emergency life support lasts. If something happens to the life support, either it will get fixed or help will arrive, or it will not. Similarly, if you are being fired on by pirates, either the ship can outrun them or it cannot. If the gamemaster has decided the adventurers *will* be fighting off boarding parties of space pirates, then the starliner *will* be slower than the pirates.

The other type is the the 'bulky superhero suit' type of vehicle. Your average car lets you run faster than any cheetah, protects you from moderate extremes of heat and cold, protects you a little from damage and lets you listen into on radio waves. And it is strong enough to carry you and your friends around. A tank is merely a *very* formidable upgrade of the concept.

So, with that in mind, personal vehicles are going to use the power system to deal with some basic concepts:

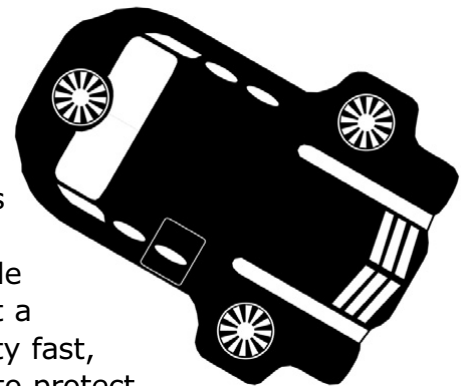
- armor:** A vehicle is going to have an armor gadget of a size sufficient to hold all its occupants and any other vehicle gadgets
- mobility:** A vehicle is going to have a mobility gadget with a power appropriate to the tech and type of mobility
- weapons:** A vehicle may have weapon gadgets, depending on the type of vehicle
- other:** any other gadgets for things a vehicle might have (radio, radar, etc.)

After that, we can deal with:

- cost:** How much it costs in mundane terms
- combat:** How vehicles and adventurers interact in combat and how vehicles take damage
- aftermath:** How you repair vehicles, how long it takes and how much it costs.

The aircar

We have a group of adventurers in a near-future setting that wants a vertical take-off and landing vehicle (VTOL) that is not a helicopter, is pretty fast, armored enough to protect them against small-arms fire, has a little bit of cargo space and room for a concealed vehicle weapon. How they would go about acquiring it or having it made is up to the gamemaster and the nature of the setting. *All we are going to do is design it.*





Armor

Every vehicle will have armor of a sort, even if it does not protect people using the vehicle (like on a motorcycle). For vehicle design, armor is a power that represents the structure of the vehicle as well as its surface. *You are paying for a volume to put other things in.* The easiest way to do this is the 'radius' modifier on a 'defense' effect. This will normally be some of the following:

🚩 defense: protects vs. lethal and below	-4
± increased area(radius)	-radius lev.
± boundary effect(plus incr. area)	+2
🌀 special effect	+1
🌀 reduced to 1/2 effect vs. weapons(-2d)	+1
🔧 gadget: obvious	+2
🔧 gadget: mundane size(its weight)	±varies
🔧 mundane gadget	+1

If we sort these into 'templates' by vehicle size, we can get the following modifier totals:

hexagons(lvl)	civilian	diplomatic	military
1(-1)	+2	+0	+1
2(-2)	+1	-1	+0
3-4(motorcycle)(-3)	+0	-2	-1
5-8(-4)	-1	-3	-2
9-16(avg. car)(-5)	-2	-4	-3
17-32(-6)	-3	-5	-4
33-64(APC/tank)(-7)	-4	-6	-5
65-125(-8)	-5	-7	-6
126-250(-9)	-6	-8	-7
each 2x	-1	-1	-1

civilian: Ordinary vehicle. Its 'armor' is going to be obvious, but takes a -2d vs. actual weapons as opposed to incidental attacks.

diplomatic: Its armor looks like a civilian vehicle, but under close inspection is actually the real thing (extra-thick windows and other tell-tale signs). It is still an obvious gadget ("Look, a car!"), but the power effect has the subtle(-1) modifier and lacks the reduced effect of a civilian vehicle.

military: The armor is real and obvious.

! There is not a lot of difference in the power modifiers, but there will be a *huge* difference in the mundane cost between civilian and military or diplomatic vehicles. And in eras before ships had metal hulls, all vehicle armor would probably be counted as 'civilian'.

i Our armored aircar is going to be 32 hexagons in size and have real armor that is not obvious, so the first line of the armor power will be:

🚩 diplomatic armor(17-32 hex vehicle) -5

The 'special effect' is normally just a useful description. *Steel armor?* Magnetic mines can stick to it. *Wooden hull?* It can burn. And so on. The hexagons of volume protected will depend on the radius, and the modifier for just the radius is after the hexagons on the previous table.

i An average car is 9-16 hexagons, corresponding with a distance level of 5 on the Universal Chart (becomes -5 as a power modifier).

The next thing of course, is that armor has a mass. You are required to have a sufficient 'gadget mass' modifier to get the vehicle armor up to the second value in the tech base. **You may not spend more than +1P over the base cost for vehicle armor.** Vehicle armor is about mass, and the +1P you can spend represents the best materials you can use for that tech era.

i An Atomic Era vehicle has a tech base of 0/9, so Atomic Era vehicles need a minimum armor of +9. Our aircar is Post-Atomic Era, so it will need an armor of at least +12. Keep in mind that these ratings are before any 'civilian vehicle' penalty.

The value you get is equal for *each* facing of the vehicle (front, rear, right, left, top, bottom), but you can reduce a facing by -2 to give a different facing +1, and if it is reasonable for a vehicle, you can do this all the way down to no armor on a facing (like an open-top vehicle).



i Our aircar is going to mass 8 tons and we will go with the default vehicle size of 4 hexagons per ton. For now:

Post-Atomic Era Aircar

loaded weight:	8 tons
tech base	3/12

We have already decided the aircar is going to have 4 tons of armor. We also want the armor to not be obvious, so we took the 'diplomatic armor' template to reflect that the armor is underneath a normal-looking exterior, and only a close-up examination will reveal the extra-thick windows. So, with a tech base of 3/12, the power looks something like this:

✓ diplomatic armor(32 hex vehicle)	-5
🔫 gadget: 4 tons	+36
total	+29
adjusted for tech base	+19
(+3 base, +12 efficiency, +(remainder/4))	

We spend the maximum extra of +1P on the power to make the final level +21, or 7d+0.

On the assumption that most hits will be at the front or underside of the aircar, we pull 2 points of armor off each of the top, rear and sides (a total of 8 points) to add 2 points to each of the bottom and front, so the aircar looks like this:

front:	7d+2	right:	6d+1	rear:	6d+1
bottom:	7d+2	left:	6d+1	top:	6d+1

i A 16 hexagon passenger car at the Atomic Era (tech base of 0/9) is designed with 250 kilograms of sheet metal. This would be:

✓ civilian armor(16 hex vehicle)	-2
🔫 gadget: 250 kilogram	+21
total	+19
adjusted for tech base	+11
(+0 base, +9 efficiency, +(remainder/4))	

This means the car has an armor of 3d+2 vs. the hazards of the road, but against *actual* attacks it only counts as 1d+2 (the -2d civilian penalty).

Special cases

Armor on a vehicle can have a few special cases, only some of which are modifiers on the power.

specialized armor: You may spend 1P and no more on an armor that only works against a average or narrow range of attacks and which layers on other armor (the smaller armor of the two layers is halved, rounding down).

i If we wanted to add a 125 kilogram layer of 'laser refractive paint' to our aircar, it might look like this:

✓ diplomatic armor(32 hex vehicle)	-5
✓ defense: narrow category	+4
✓ defense: layered	+0
🔫 gadget: 125 kilograms	+21
total	+20
adjusted for tech base	+17
(+3 base, +12 efficiency, +(remainder/4))	

Remember that because this layers with the main vehicle armor, so the net effect is only +8. The anti-laser layer would add +8 to the aircar's armor against laser fire, but nothing at all against any other kind of attack.

Specialized armors *may* be combined, but this is a gamemaster call. If the nature of a specialized armor is that it has to be the outermost layer, then clearly it cannot layer effectively with something else that *also* has to be the outermost layer.

ablative armor: A regular or specialized armor can have a decreasing activation roll to represent that the armor is blasted off, burned off or otherwise becomes less effective after repeated hits. You could also have layers with limited charges, slowly dropping armor as they slough off. An ablative armor can be **disposable**.



Because of the way layering works, you cannot get the proper results by shifting a layered armor from one facing to another. You would instead apply a circumstance modifier based on how likely a facing is to need the benefit and then assign the ablative armor to *that* facing:

circumstance	modifier
☯ works 3/4 of the time(extr. common)	+1
☯ works 2/3 of the time(very common)	+2
☯ works 1/2 of the time(common)	+3
☯ works 1/3 of the time(uncommon)	+4
☯ works 1/4 of the time(very uncommon)	+6
☯ works 1/8 of the time(rare)	+9

For instance, heat protection on the two re-entry facings of a spacecraft would be +1 (+6 on the others), the front armor of a tank would be +2, the side armor of a tank would be +3, and the other facings would be +4.

i If we wanted to add a 125 kilogram layer of 'reactive armor' to protect the front of a 64 hexagon Atomic Era tank from shaped charges, it might look like this:

⚡ military armor(64 hex vehicle)	-5
⚡ defense: narrow category	+4
⚡ defense: layers add	+0
☯ works 2/3 of the time(very common)	+2
🔋 drain: charges	-2
🔋 drain: 1 charge	+7
🔧 gadget: 125 kilograms	+21
total	+28
adjusted for tech base	+13
(+0 base, +9 efficiency, +(remainder/4))	

This would be 1 charge that protects the front of the tank. However, because armor layers, this is halved to +6, or an extra +2d protection against that sort of attack, once.

! Re-entry damage on a *proper* re-entry is a 7d+0 attack to the front and bottom of a vehicle and a 3d+0 attack elsewhere, which counts as an area effect if it penetrates.

Filling it up

As this point you have a shell, a form meant for a particular type of mobility, but nothing is in it. You have a size, a loaded vehicle weight and some amount of that weight devoted to armor. So now you need to apportion what is left so you can make the appropriate design decisions.

The amount of space taken up by one person or vehicle component is going to be as follows, with a description at the end of the list. The amount of space taken by some components can be modified, like getting a positive modifier on a mobility power for having a bulkier than normal mobility system.

component	hexagons
default size per ton of loaded mass	4
armor	0
weapons, per ton	2
mobility power, per ton	2
other gadget, per ton	2
one person, riding the vehicle	0
one person, riding/controlling the vehicle	0*
one person, seated or standing	1
one person, luxury or large seating	+5
one person, control or weapon station	+1
one person, minimal bunk space	16
one person, small room	32
one person, large room/double occupancy	64
one person, luxury room	125
lab facilities	2*
entertainment facilities	2*
cargo, per ton	varies

size: Vehicles will have a default size of 4 hexagons per ton of loaded weight. *You can alter this.* Each time you cut this size in half you decrease the **damage limit** of the vehicle by 1, and each time you double this size you increase the damage limit by 1.

i Our aircar masses 8 tons and is the default size, so it is 32 hexes of volume. If we made it more compact, vital bits would be more tightly packed, making it more likely that armor penetrations would hit something vital.



armor: The armor of a vehicle takes up no space. While not *entirely* true, it works for the most part.

weapons: Any weapon gadget will take up 1 hexagon of volume for each 2 tons of weapon or ammunition. Ammunition *in* the weapon counts as part of the weapon. Extra ammo not in the weapon takes up separate space.

mobility power: A mobility power includes all aspects of the vehicle *necessary for that mobility*. So on a car it is probably the engine, transmission, drive train and wheels. On a plane it includes the wings. On a ship it would include the structure unique to a streamlined watertight hull, and so on. This takes up one hexagon for each 2 tons of mobility power. As a reminder, you can increase the performance (speed and/or handling) of a mobility system by making it take more space, though its mass might be the same. For instance, an engine on a ship compared to an engine plus hydrofoils, or the wheels and suspension of a race car compared to a family car.

other gadget: Most other vehicle gadgets will take up 1 hexagon per 2 tons of gadget.

riders: Someone who is simply on a vehicle but cannot control or influence it takes up no space. A pilot, passenger, seating or lodging space is assumed to mass .1 ton per hexagon.

riders/drivers: This would be something like a motorcycle driver. They take up no space in the vehicle, but there are vehicle components that take up space because of them (like the controls).

passenger: This is just the space and weight for a person in a normal vehicle seat. A 'luxury' passenger simply has more space or a bigger seat, and this would also be used if the seating has to accommodate people in bulky outfits like armor or spacesuits. Any seat that can fold flat for a minimally useful sleeping space takes up +1 hex but no extra weight.

control/weapon station: Each person involved in the piloting, sensor operation or the operating, targeting or reloading of a weapon has extra space allotted for this task. This space has negligible mass compared to the overall vehicle and never takes up more than an eighth of the vehicle or the size of the weapon (round to nearest .1 hexagon).

i A 3 hexagon motorcycle would have three-eighths of a hexagon devoted to controls. This is .375 hexagons, so it rounds to .4.

minimal bunk: This is the absolute minimum space for a person to sleep and a little room in the vehicle to maneuver to get to it. Sleeping on top of the torpedoes in an old submarine, bunks stacked three or four high in the hull of a ship, etc. Unless under duress, civilians will not put up with this or pay for passage that only includes this sort of accommodation. The civilian crew of a ship might be stacked up like this, but they are getting paid for it. This and other accommodation volumes includes a share of hallway space, kitchen and dining facilities, etc. This separates them out from folding seats because they *can* be used as living quarters.

As a general note, a civilian passenger vessel with a normal mix of quarters (first, second and third class) will have about one-third of the passenger complement as crew to serve the passengers.

small room: A junior officer's stateroom on a military vessel or the minimum civilian quarters on a passenger ship.

large room: A senior officer's stateroom on a military vessel, a medium-quality single room on a passenger vessel or an average double occupancy room.


luxury room: The *minimum* volume for a luxury room, or the captain's quarters on a large military vessel.



Morale


Long trips wear you down, and the better the quality of your seating or quarters, the more acceptable the confinement. Adventurers and extras will chafe at cramped arrangements, and you should reflect this with cumulative penalties and Will rolls for groups confined without relief in cramped, boring or unhealthy conditions. Lacking escape or a means to blow off steam, you will *eventually* get a mutiny...


lab facilities: A lab is any vehicle space that is dedicated to a particular science, which does not actually have to be a 'laboratory'. It could be a library or an observatory dome. A lab lets you do tool-based tasks on that skill. The minimum lab is a +0 bonus, and each doubling is a +1 to your skill roll. The maximum bonus you can use is +1 per full 1d in your skill, or if the lab is specialized, a specialized skill.

 A 64 hexagon lab would be worth a +5, but if your skill roll was 4d+1 you would only get a +4 benefit.

entertainment facilities: This is whatever you want, whatever volume it needs to take. A casino, a swimming pool or just a small VR lounge on your cramped mining ship.

cargo: A cargo or luggage area takes up as much volume as you want it to. The important thing is that the loaded mass of the vehicle has to include the maximum amount of weight you are going to stuff into that cargo area. A suitcase full of clothes weighs a lot less than a crate of gold bars. You can overload a vehicle, but its designed performance assumes no more than its designed weight. An empty cargo area has no mass.

 Even if you are designing a rocket, vehicle design is *not* rocket science. You never need to be more than three digits of accurate. For instance, a 100 ton vehicle can round things to the nearest 1 ton.

 Our aircar is going to mass 8 tons and we decide it will have a volume of 32 hexagons and have 4 tons of armor. In this, we know it will have:


item	tons	hexes
armor	4	0
pilot & controls x 1	.1	2
luxury seating x 6	.6	9
weapon controls x 1	-	1
luggage(200kg capacity)	.2	2
total	4.9	14.0

This leaves us a total of 18 hexagons and 3.1 tons for the power plant and other gadgets (like weapons) we will want to add.

Exceptions

The vehicle design rules are designed to allow for exceptions and extrapolation. For instance, you would not want to use the minimum armor requirement if you were making a zeppelin. If you were making a dropship for powered armor troops, you would need bigger seats than normal. If you wanted an open-top vehicle with an armored engine compartment you would add circumstance modifiers that only applied to hits on the top armor.

We are not going into detailed rules for every possible vehicle contingency, but if you look at the concepts and the power modifiers you should be able to find a way to do just about anything.

 **Reminder:** Once you get past a vehicle of a thousand tons or so, you are getting out of the 'vehicle as gadget' range and into the 'vehicle as game setting' range, and this is often simpler to design since you are designing only the vehicle features that the adventurers will interact with.



Mobility

Mobility for a vehicle is almost always the 'artificial movement' effect. This will have a few standard modifiers, a few special ones and a lot of room for customization.

One very important note for vehicles is that **you only get +1 power level for each +1P spent over that for the base power level.** Allowing you to double the vehicle speed for +1P would be very unbalancing. You also *only* get to spend extra P in proportion to having your mobility system take up extra *volume*. Either you cram in more engine, or you occupy more of the vehicle with other mobility-related items (like wings).

A special modifier is vehicle size. It is harder to push a big or heavy vehicle, whether a very heavy tank or a very bulky zeppelin. The mobility power also has to encompass the area of the vehicle, but uses the 'artificial movement' effect. And unlike the armor, it does *not* get the boundary effect modifier (this would end up as the modifier on the [page 7.12](#) table with an extra +3).

🚀 mobility: artificial movement	+0
± increased area(radius)	-radius lev.
🔧 mundane gadget	+1
☯ special effect	+1
☯ physical dependence with armor	+1
🚀 mundane acceleration	+1
🚀 mundane handling	+2
🚀 mobility size	±1

In addition, you take a *negative* modifier equal to the one-third the mass modifier for the *loaded* vehicle, rounding towards zero. A given amount of power will push a lighter vehicle faster than it would a heavier vehicle. The 'mundane' modifiers just mean the vehicle is constrained by real-world acceleration and handling characteristics and 'mobility size' we have mentioned but will get into more detail on in a page or so.

i Adding all this up, our raw aircar mobility power would have the following modifiers:

🚀 mobility: artificial movement	+0
🚀 mass penalty(8 tons)	-13
± radius effect(3 meter)	-6
☯ special effect	+1
☯ physical dependence with armor	+1
🔧 mundane gadget	+1
🚀 mundane acceleration	+1
🚀 mundane handling	+2
total	-13

To keep from having to do that for *every* vehicle, we can make this into a one-line 'template' for as much as possible on mobility, and the results are below. Any intermediate mass counts as the next higher row.

mass	hexagons						each x2
	1	2	3-4	5-8	9-16	17-32	
125kg	-5	-6	-7	-8	-9	-10	-1
250kg	-6	-7	-8	-9	-10	-11	-1
500kg	-7	-8	-9	-10	-11	-12	-1
1 ton	-8	-9	-10	-11	-12	-13	-1
2 tons	-9	-10	-11	-12	-13	-14	-1
4 tons	-10	-11	-12	-13	-14	-15	-1
8 tons	-11	-12	-13	-14	-15	-16	-1
16 tons	-12	-13	-14	-15	-16	-17	-1
32 tons	-13	-14	-15	-16	-17	-18	-1
64 tons	-14	-15	-16	-17	-18	-19	-1
each 2x	-1	-1	-1	-1	-1	-1	-1
mundane +3	+3	+3	+3	+3	+3	+3	+3
size	±1	±1	±1	±1	±1	±1	±1

i Our aircar has a volume of 32 hexagons, a mass of 8 tons and has mundane handling, so we just find the intersection of 32 hexagons and 8 tons (-16) and then add +3 for mundane handling for a total of -13. This makes our raw mobility into:

🚀 mundane mobility, 32 hex/8 ton	-13
----------------------------------	-----



Mobility type

In addition, the artificial movement modifier will be *further* adjusted by the nature of the artificial movement. A train will use a different modifier than a walking mech, for instance.

artificial movement type	modifier
✓ rail movement	+0
✓ on-road movement only	-2
✓ off-road movement	-4
✓ walking movement	-6
✓ flight	-4
✓ vertical flight	-7
✓ gliding	-4
✓ water movement	-11

You can qualify these with special conditional modifiers. An ordinary speedboat and a racing hydrofoil might differ because one has:

☯ conditional 1/2 effect (imperfect water)	-2
☯ conditional effect: common	+3

Which gives the hydrofoil a +1 modifier over the normal speedboat.

✓ **rails(+0):** The vehicle is restricted to a special, pre-prepared path. This could be steel rails, an evacuated underground tube, a cable car or a hyperspace wormhole. The vehicle *cannot move at all* outside of that path and it effectively has an infinite handling penalty, since you always know *exactly* where it is going.

✓ **roads(-2):** The vehicle is limited to roads or other hard, flat surfaces. Leaving this controlled environment is possible but risky. You will *eventually* get stuck. The fast way to handle this is to just assign a difficulty to the terrain and roll 3d+0 against that difficulty after a certain time level and add +1 to the difficulty for each elapsed +2 time after that.

i If you say the difficulty is 7 and the base time is a minute, then after a minute you roll against a 7, after 2 minutes it is an 8, after 4 minutes it is a 9, after 8 minutes it is a 10 and so on. You will *eventually* run into something that *will* get you stuck.

✓ **off-road(-4):** The vehicle can operate on- or off-road, but is still limited to fairly regular terrain. Obstacles of certain sizes or types can still impede movement (swamps, boulders, etc.). Vehicles with off-road capability but only in certain types of off-road (like snowmobiles) would be a -3 modifier instead of a -4. Tracked vehicles are better off-road than wheeled ones and for any passable off-road condition would have +1 speed over a wheeled vehicle of otherwise identical performance. On roads, wheeled vehicles would have +1 performance over an equivalent tracked vehicle.

✓ **walking(-6):** The vehicle can go anywhere a person could by walking, limited by vehicle size and space between obstacles. *A walking vehicle 4 meters wide will have trouble going through a forest with trees 3 meters apart.*

✓ **flight(-4):** The vehicle can do normal flight, most likely with wings. It has to reach at least one-quarter of its top speed (its movement level minus 4) to become airborne, and until then counts as an 'on-road' vehicle. It can trade horizontal movement for vertical movement at a 4:1 ratio once it is airborne.

! As a practical matter, the limits of material science in a given tech era limit flight in an atmosphere to a top speed of +24 for the middle of the Atomic Era, ±2 for each fraction of an era before or after this. This still lets you make air vehicles faster than are historically known, but not terribly so, especially if you apply the advanced rule for **tech-limited power**.



✈ **vertical flight(-7):** The vehicle can fly, take off vertically and hover. The extra power required is the main reason for the extra negative modifier compared to normal flight. Levels in forward movement can be traded for vertical movement at a 4:1 ratio, but unlike regular flight, the vehicle does *not* have to be moving forward to do so. However, if it is a mundane vehicle, it might still have to 'warm up' until it has enough power that it could take off as a winged vehicle.

i You have a vertical flight vehicle with a top speed (distance level) of +24. It can take off vertically, but it needs to reach a 'speed' of +18 first (its distance level minus 6). Since it has 'mundane acceleration', it gets +3 per time level, so it takes a time level of +6 (8 seconds) to rev up enough for liftoff. With a maximum speed of +24, its maximum vertical movement rate is +6 (trading horizontal movement levels for vertical at a 4:1 ratio)

A helicopter or other vertical flight vehicle that has a propulsion system that needs a large volume to operate in would just use the notes for increased mobility system volume. Helicopters take up more volume than an equivalent VTOL jet.

! Some vehicles will have radically different loaded and unloaded weight. If the weight change is sufficient to be a different weight modifier, you may with gamemaster permission have a loaded and unloaded top speed. Similarly, you might be allowed to overload a vehicle by a weight level and take a speed penalty. You generally *cannot* overload flying vehicles, but if you do, the penalties should increase the takeoff speed and thus the necessary runway distance.

! The large negative modifiers for some forms of movement mean that it is almost necessary to use the 'increased mobility size' modifier and extra P to offset it. If you look at the average airplane, it *is* mostly wings and engine.

✈ **gliding(-4):** The vehicle can do winged flight but has no *actual* power plant. It has to rely on gravity, and generally drops a distance of its movement level minus 4, and an extra minus 1 each time mobility size level is increased. Skill rolls can decrease the rate of descent, based on conditions.

i You have a gliding vehicle with the normal chassis size for its weight and normal mobility size for its weight. If it is going a distance level of +16 (90 meters), it will drop a distance level of +12 (23 meters). Not much of a glide ratio, at 4:1. If you increased the size of the mobility system by 4 levels, you would change this drop to a distance level of +8 (6 meters), or a glide ratio of 15:1.

A glider usually cannot have more than +1P spent as a secondary cost, regardless of the size of the mobility system or tech era. Gravity is a fixed power source, so extra P spent is really just improvements in aerodynamics.

✈ **water(-11):** The vehicle operates on the surface of the water. The penalty is mostly because of the huge drag caused by the water. Because water has a huge amount of drag (it *is* 700 times as dense as air), water vehicles may use the submerged fraction of the hull to adjust the modifier for this movement. Assume the modifier of -11 is for a vehicle that is half in and half out of the water. This can be dropped as low as -8 for something like a hydrofoil or up to -13 for a fully loaded tanker. Note that a fully submerged vehicle would probably be a -10 modifier instead of -11, since you avoid the drag-inducing turbulence of the water-air interface.

! Water vehicles need to float, and submarines to have neutral bouyancy. A vehicle is the same density as water if its mass in tons is three-quarters of it volume in hexagons. Anything more than this and it sinks. Anything less is the fraction of its volume that is submerged. Vehicles that are not watertight will *eventually* count any non-watertight hexagon as weighing three-quarters of a ton extra.



✓ **mundane acceleration(+1):** acceleration would be handled using the minimum value of the **warmup** modifier. This just means that it takes time for the mobility to reach full speed, going up by +3 per time level. Very large or slow to accelerate vehicles could use the warmup(+2) or warmup(+1) modifiers, which would alter the template value listed earlier.

✓ **mundane handling(+2):** A default vehicle is assumed to be as maneuverable as an adventurer, which is *rarely* the actual case. *Unless you are used to requiring a several meter wide space just to turn yourself around.*

In an abstract sense, a vehicle will have a *default* handling penalty of its size level in hexagons on the *quantity* row of the **Universal Chart**, ±1 for each *full* era before or after the Atomic Era.

i Our aircar has a size of x32 hexagons, so it has a maneuvering penalty of +10, which drops by 1 to +9 because it is a Post-Atomic Era vehicle.

This just means that in any sort of critical maneuvering skill check the driver takes this number as an increased difficulty. In any sort of comparison between vehicles, you use the *difference* in the maneuvering capability of the vehicles as a penalty on any oppositional skill rolls by the vehicle with the higher value (higher value is less maneuverable). *You can drop this penalty by 2 for each 1 point of final power level you sacrifice as part of the permanent vehicle design.*

i If someone on a hoverbike were trying to avoid pursuit by our aircar and the hoverbike had a maneuvering penalty of +4, then the aircar pilot takes a -5 on their skill roll in any maneuvering contest between the two (the difference between the maneuvering value of the two vehicles).

! You *can* have a vehicle with maneuverability so poor that critical maneuvering is impossible. Such vehicles cannot do difficult maneuvers, but they *can* be compared in contests of maneuverability with similarly ungainly vehicles.

A person outside a vehicle would have a comparable 'handling' modifier of +0, less any Dodge that might apply. A vehicle trying to hit a person would get a *benefit* of its size (a bigger vehicle is harder to get out of the way of, even if it cannot maneuver that deftly). Circumstances like dodging to an area where the vehicle cannot get you have to be handled on a case-by-case basis.

✓ **mobility size(±1):** A mobility system has a default size of 2 hexagons per ton. If you make the mobility system bulkier, use a +1 modifier for each level of extra bulk. If you make the system more compact, you get a -1 modifier for making a mobility system .7 tons per hexagon and a -2 for making it 1 ton per hexagon instead of the normal 1 ton per 2 hexagons.

You cannot spend more extra P on the mobility power than half the value of this modifier, rounding down.

i If you increase the volume of your mobility by +5 levels (like from 2 hexagons to 11 hexagons), you cannot spend more than +2P past the base cost of 1P. You may spend less than +2P on improving the power level, but you cannot spend more.

i We are not done with the aircar mobility yet, but we can increment the design:






✓ mundane mobility, 32 hex/8 ton	-13
✓ vertical flight	-7
✎ gadget: 2 tons (4 hexagon default)	+33
✓ mobility: +4 size levels (15 hexagons)	+4
total(so far)	+17

You can see that the engine size plus adding some volume (+4 size on mobility) has more than offset the big negative modifier we started with.




Mobility and energy

Most mobility powers will require an energy source. This is usually handled with an energy reserve, a constant drain and some sort of modifiers related to replenishing the fuel supply (often the 'mundane replacement' modifier). For something like an average civilian vehicle, the most realistic combination is:

 energy reserve	+0
 15 energy	+0
 steady drain, 1 per 15 minutes	-5
 replace in 4 minutes (refill the gas tank)	+4
 mundanely replaced	-1
total	-2

This means that your vehicle can run at full power for about four hours before you need to refill the fuel tank. You can just call this group of modifiers:

 mundane fuel system(15 energy)	-2
--	----

It is reasonable to assume that you can run it longer at lesser power, each halving off the top speed giving you double the duration. You can also adjust the template as needed.

! Keep in mind that energy is a subjective measure here. You cannot refill an automobile fuel tank from a motorcycle, even if they both have '15 energy'. You would actually have to adjust things based on the difference in vehicle mass levels. So, if there were 8 levels of mass difference between the motorcycle and auto, you would reduce the motorcycle's x15 energy by 8 levels to x1 energy for the automobile.

You can model other engine types by playing with these modifiers. A nuclear submarine might only have a few energy in its reserve, but have a constant drain slow enough that this reserve will last for years. A rocket might go through its fuel very quickly. Both vehicles might require specialized equipment and long time periods and large crews to refuel them.

Other mobility modifiers

Most mobility powers are going to have a 'special effect' (already include in the template modifier set), and because of the definition of a special effect, this can be useful. The most common special effect on modern vehicles is 'provides auxiliary power'. That is, some fraction of the mobility system generates energy for the radio, headlights, heater, air conditioner, life support and so on. These other gadgets can simply have the operational dependence of 'requires functioning mobility system' for +1. Power-hungry energy weapons probably need a separate power source unless the mobility system is very powerful.

Much of the time a mobility system will require gestures, for either a +1 or +3 modifier. A typical civilian vehicle does not require a skill roll, but a specialized or military vehicle probably does require an average(7) skill roll for another +1 modifier.

Odds are pretty good that operating a vehicle will require some degree of concentration, so it is possible to take the +2 modifier for that. These gestures and concentration modifiers are not part of the default, because there can be a lot of difference across tech eras.

Archaic or very large vehicles may need a crew just to handle maneuvering tasks (adjusting the sails, etc.), so may take modifiers for that as needed. Odds are pretty good that modern vehicles of 250 hexes or less only require 1 person to do the actual maneuvering tasks.

Vehicles whose mobility power operates at multiple tech eras (like a high-tech sailboat) would act like high tech melee weapons, using the difference in tech for a modifier bonus (see **page 6.62**).



Tech-limited power levels

The refinement and tweaking of virtually any mundane technology is proportional to the time that has elapsed since its introduction. Super-powered dragsters or high-revving Formula 1 engines did not show up at the same time as the Model T. The ability to spend secondary P on a mobility power (or any mundane gadget, for that matter) depends on how long it has been since that technology had been introduced. To model this for a gadget, at its earliest introduction the maximum extra P you can spend on a mobility system of a given size is no more than +1P, regardless of how big the system is. Each fraction of an era after the tech's introduction lets you increase this by +1P, up to whatever limit is imposed by the size of the system. For instance, if 'airplanes' are an Industrial Era tech, then an airplane with +2 or more size on its mobility system could spend +1P on performance. A Late Industrial airplane with +4 or more size on its mobility system could spend +2P on performance, and an Early Atomic airplane with +6 or more size on its mobility system could spend +3P on performance. *The same could be applied to weapons or armor if you want.* Some of these things will be judgement calls. For instance, piston engines and jet turbines are both 'internal combustion engines'. *Is one an advancement of a concept pioneered by the other, or do you count them as two separate techs with different eras of introduction?*

Magical vehicles

Paranormal vehicles would be designed up just like mundane ones, except they would have a gameworld base for the sophistication of their magic and would be paid for with points rather than mundane cash. Magical vehicles have all sorts of potential for weird modifiers, like armor that only works against spirits, having to chant to keep the mobility spell running, being able to power the vehicle off a chained djinn, etc.

i We now have enough information to fully design the mobility power for our aircar. Our modifiers look something like this:

⚡	mundane mobility, 32 hex/8 ton	-13
⚡	vertical flight	-7
🔧	engine: 2 tons (4 hexagon default)	+33
⚡	mobility: +4 size levels (15 hexagons)	+4
📄	mundane fuel system(15 energy)	-2
☯	gestures (sophsticated VTOL controls)	+3
☯	concentration(when not on autopilot)	+2
	total	+20
	adjusted for tech base of 3/12	+17
	(+3 base, efficiency of +12, +(remainder/4))	

Now, what does all this mean? First, if you remember the mundane handling example on page 7.20, our aircar has a base handling penalty of +9. We want to drop this 4 points to +5, which means giving up 2 points of speed, making our base power level +15 instead of +17. Since this is a vehicle, we only get +1 power per +1P spent and we can only spend +1P per 2 levels that we increased the size of the mobility power (we increased it by 4 levels). So, we can spend +2P to get +2 speed, raising the final vehicle speed back up +17, which costs +2P. Keep in mind that '+2 speed' is *twice as fast*. This *does* mean a more sophisticated power plant and this will end up as an increased mundane cost when we get to that step. If we add in mobility to our volume calculations, we get:

item	tons	hexes
armor	4	0
pilot & controls x 1	.1	2
luxury seating x 6	.6	9
weapon controls x 1	-	1
luggage	.2	2
mobility	2	15
total (out of 8 tons/32 hexes)	6.9	29.0

This leaves us with 1.1 tons and 3 hexagons of space for everything else.

i We design the mobility for an Atomic Era motorcycle, a 3 hexagon vehicle with a 125 kilogram mobility system and weight of 320 kilograms:

✓ mundane mobility, 3 hex/.32 ton	-6
✓ on-road movement (street bike)	-2
✂ engine: .125 ton (.25 hexagon default)	+21
✓ mobility: +5 size levels (1.4 hexagon)	+5
📱 mundane fuel system	-2
☯ gestures (hands and feet)	+3
☯ concentration	+2
total	+21
adjusted for tech base of 0/9	+12
(+3 base, efficiency of +12, +(remainder/4))	

If we leave the handling penalty at its default of +3, then the motorcycle has a top speed of +12 for 1P, or 83kph. Since we have a +5 modifier for extra mobility system size, we can spend up to +2P more for extra performance, raising this to +14 or 162kph. If we made the mobility system a levels larger we could add +1P more, and with a few more modifiers or going to a tech base of 1/10 for Late Atomic Era, we could get performance up to +16, or 324kph.

Extreme handling

A vehicle can normally make one facing change each distance of (current speed level + handling). So our aircar at top speed of +17 and handling of +5 could make a facing change each distance of +22. In general, the g-force of a turn is:

spd(lvl)	handling						
	+2	+4	+6	+8	+10	+12	+2
+10	.5g	.3g	.1g	-	-	-	x ^{1/2}
+12	1.2g	.6g	.3g	.1g	-	-	x ^{1/2}
+14	2.3g	1.2g	.6g	.3g	.1g	-	x ^{1/2}
+16	4.6g	2.3g	1.1g	.6g	.3g	.1g	x ^{1/2}
+18	8.8g	4.4g	2.2g	1.1g	.6g	.3g	x ^{1/2}
+20	18g	8.8g	4.4g	2.2g	1.1g	.6g	x ^{1/2}
+22	35g	18g	8.8g	4.4g	2.2g	1.1g	x ^{1/2}
each +2	x2	x2	x2	x2	x2	x2	

So, a vehicle with handling of +6 in a maximum turn at a speed of +22 is pulling about 9g's. A sports car can pull about 1g. An average person can take 5g's of maneuvers without passing out.

Weapons

If a vehicle has weapons, they are a straightforward application of the gadget rules. If the weapons can *only* be used from and as part of the vehicle, they get the 'immobile' modifier for +4 and a 'physical dependence' modifier of +1. If using the weapon requires that the mobility power is operational (even if the vehicle is stationary or stuck), this would be an 'operational dependence' for another +1.

Most vehicle weapons will require something like a 'concentration' modifier for +2, to reflect that you are usually strapped into a control station and cannot do much else while using the weapon. If a weapon is aimed *manually*, you usually need a full hexagon for the 'control station'. You are not twitching a joystick, you are moving your body to move the weapon.

People trying to use handheld weapons from a moving vehicle will possibly have limited arcs of fire, take the relative movement penalty between them and their target, and depending on the vehicle, may take any dodging done by the driver or pilot as a penalty on skill rolls. A car, certainly. A battleship, probably not.

Vehicle weapons may also take conditional limitations for being in limited arcs, having slow traverse or long reload times. Here are some new modifiers you might use:

vehicle weapons	modifier
☯ full arc	+0
☯ half-sphere	+3
☯ quarter-sphere	+6
☯ sixth-sphere	+7
☯ eighth-sphere	+9
☯ fixed mount	+12
☯ slightly limited	+1
☯ elevation-limited	+2
☯ slow	+time/4
☯ unprotected	+3

! You can turn groups of these into templates, like:

☯ tank turret	+10
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☹️slightly limited(+1): This is a lot like an operational side effect, where you have some arc of fire, but with a few spots you cannot get at, like a machinegun on a tank that cannot depress enough to hit someone crouching next to the tank or hit someone on the weapon turret.

☹️elevation limited(+2): An 'elevation limited' weapon is one with some *other* arc, but which has little or no ability to hit aerial targets, or an anti-aircraft gun that cannot be depressed to hit ground targets.

☹️slow(+time/4): This is separate from a gadget with an Initiative penalty. A 'slow' vehicle weapon is one that requires the listed amount of time to change targets. You have to traverse the turret, adjust your windage and elevation, or otherwise take extra time separate from reloading and aiming (though someone else could be reloading while you are acquiring a new target).

☹️unprotected(+3): This just means the weapon is not protected by vehicle armor. If the weapon is hit, it only gets its inherent armor. A cannon on the deck of a ship or a pintle-mounted machinegun would be an example of this.

In addition to this, a vehicle weapon is going to require volume for a control station. In some cases a 'control station' is merely the hardware overhead for bolting the weapon down and installing a firing link to a different part of the vehicle.

i If we look at the notes on the previous page, we have 1.1 tons and 3 hexagons left. If we install a weapon of 1 hexagon, this will mass .5 tons and leave us with 2 hexagons and .6 tons left for other gadgets. We are not going to design up this weapon, but figure that the adventurers probably want something like a small machinegun turret with a 'hidden' modifier on the power to represent that it can be retracted and unseen when not in use.

Gadgets

If you design up other gadgets, important modifiers to keep in mind are:

- **power:** You can apply a physical dependency to the gadget so that the mobility system (engine) has to be running or functional for the gadget to operate. You could give the gadget a separate energy reserve that requires special equipment to recharge (the battery recharges only when the engine is running).
- **delegation:** If the gadget can be run by more than one person or from more than one spot in the vehicle, you need to take this into account. A manual gun turret has a gunner. A computerized one might be usable from *any* terminal in the vehicle. Each delegation requires space equal to a set of vehicle controls, but a computerized station might be a suite that could be dedicated to one function at a time.
- **skills:** gadgets often require specialized skills to use them.
- **visibility:** not all common vehicle gadgets are obvious when in use. A radar might be a big spinning dish, or it might be a flat panel or hidden under a dome.
- **tech:** effect modifiers for tech era apply to real-world gadgets, and many effects will require a certain level of sophistication to be done at all. *You cannot make a Basic Era radar dish.*
- **built-in:** Anything that is 'standard equipment' for a vehicle at a particular tech era *does not have to be bought as a power*. On a modern car, a radio, headlights, air conditioner, heater and airbags would be standard equipment.
- **separation:** If a gadget is not intrinsic to the vehicle, design and figure its mundane cost separately from the vehicle's cost. Using it still takes up space. A pintle-mounted light machinegun can be taken off the vehicle and used as an infantry weapon, but to use it while in the vehicle requires that you have room to move around.

For purposes of final vehicle cost, combining reasonable power effects into a single power will probably save you money. Vehicle cost is influenced by the total number of 'powers' in the vehicle, so combining similar effects into a single gadget or system saves money.



A full list of the various gadgets available across the tech eras would be a book all by itself, so we are going to assume if you want a particular vehicle gadget bad enough, you can design it up as a power and install it. As a reminder, if its actual stats are *not* needed for adventuring purposes, do not worry about it. *If you are not worried about fires, do not waste your time designing a vehicle fire suppression power.*

You can design whatever you want, but here are guidelines for common vehicle gadgets:

Modifiers

Powers that are vehicle gadgets are normal powers in normal gadgets. They get the modifier for whatever *their* size is, and this will limit the amount of extra P that can be spent on them if they are mundane gadgets.

area: Powers that affect part or all of the area of a vehicle need to have a 'radius' modifier on the power to match the appropriate sized area. If the power encompasses the vehicle it fills an area, while if it just acts as a boundary or wall it can use the 'boundary' modifier on the radius. A range of 'touch' means the power is at and within the skin of the vehicle, and a longer range means the power extends from the surface of the vehicle by that amount, and presumably can protect anything within that distance.

i A power that affects our entire aircar would have a modifier of -6 because that is the radius modifier we used to determine its size. Or, if it was just a boundary effect, a modifier of -4. The only power the aircar might have that would use this modifier would be a life support system, and we could design that to take care of a radius sufficient for the passenger compartment rather than the whole vehicle.

Defenses

We have covered armor, but powers mean there are more defenses than mundane armor. A vehicle can have force fields, more limited things like magnetic shielding, specialized defenses like protection against psionics, or active defenses like an anti-missile laser. All of these will take up space in the vehicle that inert mundane armor does not.

i Your space opera fusion tank has a gadget that protects against psionic mind control. Clearly, this only needs to cover the area the crew is sitting in, since no other part of the vehicle is vulnerable to this sort of attack. If it permeates the crew area (fills an area), it also blocks such attacks from *within* the vehicle, but if it is a boundary effect, it only blocks attacks cross that boundary.

Sensors

These are usually some version of an 'alter: increase' or 'alter: enhance' sight Awareness' power. That is, a person in the vehicle is looking at a screen that shows them something they could not normally see and/or see it better than they could see things normally. The power level is the amount of bonus to the user's sight (or in some cases, hearing) Awareness. The special effect is inherent to the sensor type (thermal vision, radar, etc.), and the range of the sensor would be an **Accuracy** modifier to represent how well you can pinpoint things.

Most of the special modifiers for weapons can also be applied to sensors. You can have a big radar in a half-sphere mount and have a smaller gun in a fixed mount attached to the radar. Or have an operational dependency of 'this radar is only used to target this weapon'.

Remember that a 'sensor' can also be things that let you use the MkI eyeball better. A searchlight is a sensor that enhances your ability to see at night, probably over a limited arc, and probably with a limited range. You should only spend time designing these if they are going to be regularly used in play.



Communications

These are usually some sort of an 'information' power. This will have various range limits and often requires some degree of compatibility, based on the special effect and the subjective description of the power. Your laser comm will not talk to a cell phone. The special effects and characteristics of different types of communications may use weapon modifiers as appropriate. Your laser communicator can be in a turret, for instance.

Automation

The degree to which this is possible is highly tech-dependent. It would be bought as a gadget which has an 'alter:increase' on a specific skill if it only does one thing (like an autopilot), or which has an overall Awareness and possibly Agility and then several increased skills (like an artificial intelligence). Any vehicle gadget which can operate in a skilled fashion without a person using it needs some form of inherent skill. Vehicle gadgets which do not require skill can simply have a triggered modifier of some kind (like an anti-theft alarm on your car). The 'ignition key' of a vehicle can just be a separate 1P gadget whose function is to be a 'physical dependency' modifier that is needed for the vehicle to be unlocked and operated, possibly with a 'password' modifier to reflect the sophistication of the security. But keeping with the 'inherent equipment' guidelines, a modern car would get such a key for free.

Most vehicles you design will have a 'crew' of one, the pilot or driver. If this person is going to pay full attention to what they are doing, then you need other crew to pay full attention to other tasks, like a tank has a driver, gunner, loader and commander. Really large vehicles may require an engine crew, which could use the 'power may use assistants' modifier to represent a boiler crew or rigging crew. Very large weapons might be automated, or require multiple people to load in heavy shells.

Life support

This is probably best designed as a 'defense' effect of some kind, narrowly tailored to offset a particular problem, which uses energy or supplies to do so. Really, if you just say 'I have spent 1P on a life support power against X', it is usually sufficient, assuming you have a reasonable amount of volume and mass left in the vehicle for that sort of protection.

Life support could in some cases be passive, like a specialized armor to stop radiation, but most of the time life support is assumed to use energy and/or consumables, thus giving it a limited duration and a need to replenish it.

The physical parameters of a vehicle are already covered by the **special effect** modifier (which is inherent to the chassis). Boats are watertight (below the waterline), spaceships are airtight, and so on.

In general, life support as a vehicle gadget is *not* an exact science. You should simply strive for something reasonable that has appropriate game effects and remember that there is usually room to make minor adjustments. If your spaceship is going to run out of air one hour before you reach safety, the players may have to resort to interesting measures, but odds are the gamemaster is not going to asphyxiate all of them just to stay within the *exact* bounds of the designed vehicle gadget.

Safety

Some environments or conditions are worse than penalties. *Being on fire, for instance.* Safety gadgets are often bought as specialized, possibly one-shot armor against a particular threat, with a power duration appropriate to the nature of the threat. Fire extinguishers are a good example. An ejection seat would be something that moved you away from a vehicle and got you safely to the ground. In extreme cases, a safety measure is its own vehicle, like a lifeboat. Remember that a given tech era's 'standard equipment' has no cost.



i At this time our aircar has 2 hexagons and .6 tons of unused capacity. What our remaining stuff does is not that big a deal at this point, only its cost in P and whether it fits. We are just going to say that we have:

protection against vacuum	1P
protection against lack of air (plus the free climate control)	1P
radar plus autopilot	1P

We can design all of these as gadgets later, but we can guess at certain things. The protection against vacuum is probably a boundary effect over the volume of the vehicle (airtight hull). The oxygen supply fills the passenger and luggage area, as does the climate control. The autopilot is a skill roll inherent to the vehicle, and the radar has reduced visibility as modifiers (you cannot see radar waves).

Vehicle cost

With a few adjustments, a vehicle's mundane cost can be figured out like it is one big gadget. A vehicle's total cost as one gadget is:

- X, where X is the *level* associated with the *quantity* of hexagons in the vehicle or tons of the vehicle, whichever is *larger*
- plus Y, where Y is the *level* associated with the *quantity* of powers (including armor and mobility)
- plus Z, where Z is the *level* associated with the *quantity* of secondary P spent on the vehicle (including armor)
- plus 2 if it is a high-performance vehicle
- plus 4 if it is an extreme performance vehicle
- plus 2 if it is a paramilitary vehicle
- plus 4 if it is a military vehicle
- plus 2 if it is a flying (atmosphere) vehicle
- plus 4 if it is a VTOL vehicle
- plus 6 if it is a space-capable vehicle
- (optional) ±3 for each era different than Atomic (earlier eras are cheaper)
- (optional) minus 2 for each of: low quality, large quantity produced or somewhat used
- (optional) minus 4 for each of: mass produced, very low quality or very used
- (optional) plus 4 for a prototype or custom job

high-performance: If a vehicle has *more than* half its volume *or* weight in mobility systems *or* has a handling penalty of *less than* half its default, it is a 'high performance' vehicle and will cost more. Only take the increased cost once, even if both apply. The maximum allowed P *does* count point limits imposed by technology.

i If you use the tech-limited power rules and a mobility system can have a maximum of 3P for its primary plus secondary cost, then spending 2P makes it a high-performance vehicle.

extreme performance: If a vehicle has *more than* three-quarter of its volume *or* weight in mobility systems, it is an 'extreme performance' vehicle and will cost more. If a vehicle is high *and* extreme performance, you count it as extreme performance.

! Because of the various technologies and modifiers on vehicles, a vehicle can be high- or extreme-performance and still not be all that fast.

paramilitary: If a vehicle has any of: *more than* one-eighth its mass in armor, does not have the 'reduced effectiveness vs. weapons' modifier on its armor, or *any* P spent on vehicle-mounted weapons, it will count as a paramilitary vehicle.

military: If a vehicle has *more than* half its mass in armor or more than 2P on vehicle-mounted weapons, it will count as a military vehicle.

! The 'paramilitary' and 'military' cost adjustments are mostly cultural and assume a separation between civilian and military gear, in terms of its manufacturing and procurement. If the distinction does not exist, you can ignore these two cost adjustments.



i Our aircar has the following cost calculation:

factor	amount
X= x32 hexagon/x8 ton vehicle	+10
Y= powers, quantity of x6	+5
1: armor(1P, +1P secondary)	
2: mobility(1P, +2P secondary)	
3: protection against vacuum(1P)	
4: protection against lack of oxygen (and climate control)(1P)	
5: radar plus autopilot(1P)	
6: weapon(1P)	
Z= secondary P, quantity of x3	+3
paramilitary (armed and armored)	+2
VTOL flying vehicle	+4
total cost level	+24

So, our aircar has a cost of +24, or 4,000,000 Credits. If we applied the optional tech era adjustments, it would rise to +27 or 11,000,000 Credits. This is pretty steep, but it *is* an armed and armored VTOL that can stop light machine gun fire and has a cruising range of a few thousand kilometers. You would trade in a modern corporate jet for one of these in a heartbeat and you know it...

i The motorcycle we designed the mobility for on page 7.23, spending +2P on mobility:

factor	amount
X= x3 hexagon/x.35 ton vehicle	+3
Y= powers, quantity of x2	+2
1: armor(1P)	
2: mobility(1P, +2P secondary)	
Z= secondary P, quantity of x2	+2
high performance	+2
mass produced	-4
total cost level	+5

So, the motorcycle has a cost level of +5, or 5,600 Credits.

Vehicles in combat

The point of a vehicle is that it does something for you that you want or need. Armor, mobility, weapons, extra senses, ability to carry lots of stuff and so on. And for these reasons, people who do not like you will try to get rid of your vehicle, often with you still in it.

At this point in the design process, you will know the following things about your vehicle:

- the number of hits it has
- its damage limit
- how hard it is to hit
- its size in hexagons
- its weight in tons
- the armor on each facing
- its top speed
- its handling penalty
- the size of all the components

All of these will be useful when it comes time to dismantle it by violent means. The first three are the only ones you do not know already.

mass	default size(hex)	to hit	hits	damage limit
.12 ton	.5	-2	7	7
.25 ton	1	-1	8	8
.5 ton	2	+0	9	9
1 ton	4	-1	10	10
2 ton	8	-2	11	11
4 ton	16	-3	12	12
8 ton	32	-4	13	13
16 ton	64	-5	14	14
32 ton	125	-6	15	15
64 ton	250	-7	16	16
125 ton	500	-8	17	17
250 ton	1000	-9	18	18
500 ton	2000	-10	19	19
1000 ton	4000	-11	20	20
each 2x	x2	-1	+1	21



hits: A vehicle will have a number of hits based on its loaded mass. Hits for a vehicle serve the same function as they do for adventurers, but generally accumulate more slowly. If they ran on the same scale as people, a car would have several *hundred* hits, and this would become tedious to deal with.

damage limit: A vehicle or any sufficiently large gadget will have a damage limit. This value reduces or eliminates the damage done by simple penetrating attacks on a vehicle. You can put a lot of bullets into a car, but if all they do is perforate sheet metal and break windows, you are not actually harming the *function* of the vehicle beyond superficial effects. These can be important, like letting water *into* a boat or air *out* of a spaceship, but they are not likely to be important in an immediate sense.

Damage limit works like this: For each hit that penetrates armor, roll $3d+0$, plus the full dice that got through armor. *Not the roll of those dice*, just the *number* of them. So, if $2d+0$ got through armor, you would roll $3d+2$. The amount of this roll that *exceeds* the damage limit of the vehicle is the number of hits you *actually* do. Results of zero or less do nothing, and on large vehicles, small arms fire is more or less useless.

Damage limit is normally the same value as hits, but vehicles that are not the default size for their weight have an adjusted damage limit. A vehicle that is smaller than the default gets -1 to its damage limit for each row it is shifted from the default, and a vehicle that is larger than normal gets +1 for each row it is larger.

i Our aircar was 8 tons, for a default size of 32 hexagons and a damage limit of 13.

Damage limit can be influenced by certain types of attack. Attacks with the 'battering' characteristic add +1 to the roll for each +2 in the battering effect.

i A battering attack that penetrated armor with $2d+6$ would add +5 to the roll against the vehicle's damage limit, +2 for the 2d and +3 more for the +6 battering.

Collisions between vehicles reduce each one's damage limit by the difference between the damage limits. Collisions between vehicles and immovable objects reduce the vehicle's damage limit to zero. A ship can be holed from running aground, even if it does so slowly.

i If a small car (damage limit of 10) ran into a tractor-trailer (damage limit of 14), the car's damage limit would drop to 6 and the tractor-trailer's to 10.

Explosions or area effects get double the dice that penetrate armor for determining how many hits are done to the vehicle.

i If a $4d+0$ grenade goes off next to a car which has an effective armor vs. weapons of $1d+0$, then the roll against damage limit is $3d+6$ (the 3d that got through armor are doubled).

hard to hit: A vehicle's size decreases the difficulty to hit it. This is based on the actual size in hexagons from the previous table.

i Our aircar was 8 tons, for a default size of 32 hexagons. This would be a -4 difficulty to hit.

Facings

If a vehicle is very asymmetrical, you can make it 1 point harder to hit on attacks against the small facing and 1 point easier to hit against the larger facing, like the difference between a bow shot and a broadside shot against a ship.



Basic hit locations

The default hit locations on a vehicle are a very simple roll of 1d, which is based on the fraction of volume taken up by the following:

- mobility(main & fuel)
- passengers & cargo
- gadgets(including weapons)
- structure

One location is always 'structure', so the rest is split between the other five numbers. Since some of these have more than one component a lot of the time, you may make a separate 1d roll to split these up, or just list them in the order you want them affected. If you do not want to make up a table for a vehicle, just use the following:

roll location

- 1 structure
- 2 mobility(main)
- 3 passengers
- 4 gadgets
- 5 cargo
- 6 mobility(fuel)

These are the approximate percentages of space taken by the components of an average car. *For a lot of uses, this will be sufficient.* What a hit to a particular vehicle part does will vary. One common effect of accumulated damage is that vehicles have a hits track just like adventurers, and it operates in the same way, including declining damage effects. Damage penalties generally apply to *specific* vehicle systems, but there can be exceptions.

If you cross a damage threshold, the vehicle has to make a roll of its hits against a difficulty of 11. This roll *is* adjusted by the damage penalty. If it fails this roll, something bad happens, usually related to the item that was hit when the roll was failed. When a vehicle loses all its hits, it stops working. It still exists, but it is a hunk of junk with no active abilities that can be used, and is probably not safe to remain inside of.

structure: Any hits done past the damage limit simply subtract from the hits of the vehicle. Structure is not destroying the fabric of the vehicle, but is accumulated damage to things that make the vehicle work. Do enough of them and the vehicle stops working. Each threshold means that *everything* on the vehicle takes a -1d to rolls or a -3 to its performance. Armor is not affected, but any *active* item is. Weapon targeting and damage, top speed, sensor acuity, maneuvering, etc.

mobility(main): Any hits done past the damage limit simply do hits unless the damage crosses a threshold. The vehicle has to make a roll with the damage penalty or the mobility power stops working. *One* attempt can be made to restart it as an hard(11) roll by the driver or pilot, with any damage penalty and using turn mod is allowed for this roll. If the mobility continues to work, it is at a 3 point penalty to either handling rolls *or* top speed (randomly decide).

mobility(fuel): Any hits done past the damage limit simply do hits unless the damage crosses a threshold. The vehicle has to make a roll with the damage penalty or the fuel use of the vehicle is increased by a factor of sixteen (8 time levels faster). Your fuel system has sprung a leak. If a vehicle does not have a fuel supply (like a glider or sailboat), then count this as a structure hit. If you do not want to count fuel as a separate item, roll 1d and assume that one-third of mobility hits are fuel hits (1-4:engine, 5-6:fuel).

passengers: Any hits done past the damage limit do hits to the vehicle *and* have a chance of hitting one or more passengers or crew. Divide the number of people on board by the number of hexagons of seating, accomodation, labs, etc. Roll 1d for this fraction, with a roll of '1' always counting as a bad day for someone on board. If the weapon is explosive or fills an area (including shaped charges, plasma weapons and such), a '1' or '2' is always a passenger hit.



This person counts their personal armor as a layer with the vehicle, which will usually halve it, and the damage that got through the vehicle hits them. If it is an explosive weapon, it affects everyone in the same compartment or part of the vehicle as that person.

i If a shaped charge penetrates a tank with 3d+0 to spare, then everyone in the tank takes a 3d+0 lethal attack. Any personal armor is halved, and if the armor does not cover their entire body, then you would use the rules for partial armor against explosions and area effects ([page 5.29](#)).

gadgets: Any hits done past the damage limit do hits to the vehicle, but *also* hit a random gadget or weapon, which can be determined as previously outlined. That gadget's defenses are counted as the vehicle's, so the hits harm the workings of the gadget and take it offline. The gadget can be made operational just like main mobility can, but it will operate at a penalty if it can be made to function again.

cargo: Any hits done past the damage limit do hits to the vehicle, but *also* hit a random item in cargo storage, if any. This is figured as for a passenger hit, with similar effects.

i We know the stats for our aircar, so if we wanted a custom hit location table, it would look like:

roll	main	roll	gadgets
1	gadgets	1	weapon
2	pilot	2	weapon
3	front passengers	3	air supply
4	rear passengers	4	climate control
5	structure	5	radar
6	mobility	6	autopilot

This is not perfect, but it is close enough. Any roll that would hit 'gadgets' rolls 1d on the second table to see what is hit. Any explosive weapon that hit pilot or passengers hits them all, but other weapons hit a specific area. Note that the protection against vacuum is not included, as anything penetrating the passenger area puts a hole in that protection.

i Let's say someone shoots a 9d+2 explosive rocket at our aircar, and the aircar has a full tank of fuel and three people on board (pilot and two passengers). We will say it hits the bottom armor, which has a value of 7d+2. Remember that the aircar has a damage limit of 13 and 13 hits. A damage of 2d+0 gets through armor and the weapon gets 3d+4 to beat damage limit (3d, then +4 because the 2d penetration is doubled for an explosion). We will assume that 5 points gets through on a roll of 18.

structure hit: This crosses the -1d damage threshold, so everything on the vehicle with a roll or stat takes a -1d or -3 (except for armor).

mobility(main): This crosses a -1d threshold, so the main power plant has to make a roll to keep operating, which would be 3d+1 vs. a hard(11) task (a roll of its hits(13) with a -1d penalty). The pilot would make the roll, and may use Fate on the task. If the roll is made, either top speed is reduced by 3 *or* the maneuver rating is made 3 points worse. If the -2d threshold was crossed later, you would randomly decide to see where the next -3 penalty went.

mobility(fuel): The -1d damage threshold is passed, so the vehicle has to make the 3d+1 roll vs. a difficulty of 11 to avoid a fuel leak. If it fails, the fuel consumption goes from 1 energy per 15 minutes to 1 energy per minute (8 time levels of difference).

passengers: Since the aircar is one compartment and an explosive weapon was used, *all* occupants take the effects of a lethal 2d+0 explosion, with their personal armor halved, plus any reduction for partial armor vs. an explosion.

cargo: Whatever was in the trunk gets trashed by a 2d+0 lethal explosion, but since this is separate from the passenger area, the passengers are unaffected.

gadgets: We have several gadgets, so we would roll to see which one is affected. It will get a 3d+1 roll vs. a difficulty of 11 to remain operational.



Vehicle combat rolls

In combat, vehicles will act like a lot like a big adventurer. They will have an initiative based on their driver or pilot, a movement rate that turn mod can be applied to, they can Dodge, they have a size modifier that affects difficulty to hit them, and so on. Anyone with a weapon or gadget they can use may do so on their own initiative, which is separate from that of the vehicle.

Vehicles operate in combat according to all the basic rules. They are going to have a speed that determines how far they can move, and more importantly, whether they can catch or outrun someone or how hard they are to hit, a handling penalty for comparing to other vehicles in the combat, and a size that adjusts how hard they are to hit.

How all of these interact depends on the situation. If it is a wide-open space, the faster vehicle can run away or close to minimum practical range. *That's all there is to it, it is just a matter of how long it takes.*

Because **EABA** tries to avoid mapping things out, there are a few special rules to handle common vehicle combat situations.

initiative: Having initiative in a vehicle combat means that your slower opponents have to commit to an action and you get to know what it is before you decide what to do, and if there is a firing decision to be made, *your* attack resolves first. If you start the turn in a position to make an attack and your gunner wins the initiative over the other vehicle's driver, they may fire *before* an opponent has a chance to maneuver out of the way.

If part of a vehicle combat involves opposed skill rolls, these usually count as major actions for all the involved vehicle operators, and each operator is assumed to be making this roll when it is their turn to act. The benefit of having initiative is that the winner gets to take advantage of any situational change first.

dogfights: Or any contest where two vehicles are jockeying for a superior position or a particular position compared to the other vehicle, like bringing a limited-arc weapon to bear, preferably on a facing where the other vehicle cannot shoot back. This situation implies that both sides want to fight or that the slower of the two has no choice because of terrain or situation (like fighter escorts defending a bomber formation). This could be possible from the very start of a combat for something like a close range car chase, or might only be possible once turn lengths are longer or ranges get close enough for the maneuvering to make sense for the vehicles in question (like a dogfight between jets).

This is a maneuvering contest each turn, with each side choosing to apply whatever turn mod they want, in order of initiative, and declaring their maneuvering intent as well. The winner of the roll succeeds and may attack (or have someone else attack) after this resolves. Note that no one can use more turn mod on a followup attack than remains in the turn.

i If you have +8 turn mod available and use +6 of it on maneuvering, then if you succeed at getting into position for a shot, then neither you nor your gunner can use more than +2 turn mod on the shot, because that is all that remains of that turn by the time you are *done* maneuvering.

It is a question of priorities and balance. If you spend less time maneuvering you have more time to make a shot, but a lower chance of being in position to take that shot.

multiple foes: If you have multiple threats that you have to deal with, then you have to make rolls against each, splitting up turn mod between them. Your vehicle's handling penalty applies in full to each roll, whether to your benefit or detriment.



terrain: Terrain and top speed are going to be the major factors in a vehicle combat. For any given turn the terrain for vehicles is going to favor top speed, better maneuvering, or be neutral. In the neutral case, both pilots make a skill roll at the start of the turn *without* the handling penalty of their vehicle. The winner gets to choose whether the terrain and the immediate situation for *that* turn favors speed or maneuverability.

i If you are being pursued over a canyon, you can try to outrun your pursuer (speed) or dive into the canyon to try to lose them (maneuvering). If you are pursuing, you can try to keep them from descending (speed) or try to make them descend (maneuvering). It depends on who ends up with the initiative for the turn.

closing range: The time level it takes to increase or decrease range by ± 1 level is:

- the current range level
- *minus* the higher speed level of the vehicles
- *minus* the speed level difference
- *plus* 2 to increase distance, *plus* 1 to decrease it

i A range of +20 (350 meters), a top speed of +15 (234kph/146mph) and speed difference between vehicles of +1 means it takes a time level of +6 (8 seconds) for the faster vehicle to *increase* the range from +20 to +21 (500 meters) or a time level of +5 (6 seconds) to decrease the range from +20 to +19 (250 meters).

Larger amounts of time increase the range by +1 per +2 extra time, or decrease the range by -1 per +1 extra time.

On the other hand, if it is a congested area that requires lots of maneuvering, a faster but less maneuverable vehicle might not be able to escape a slower but more agile one. You add in a contest of skills to the calculation, where the winning party gets to adjust the speed difference by +1, and another +1 for each 2 points the roll is made by.

i Our aircar has a top speed of +17 and a handling penalty of +5. Let's say it is chasing something through a crowded three-dimensional cityscape where maneuvering is more important than top speed and current range is 500 meters (distance level of +21). What they are chasing has a top speed of +20, a handling penalty of +9 and the turn mod is currently +8 (a 15 second turn). So, the aircar is slower, but more maneuverable. In a straight line chase the other vehicle would just outrun it, but here in the crowded traffic of the city, maneuvering will be more important. In fact, the gamemaster says that the maximum speed you can go is +16, no matter how reckless you are. This becomes the top speed of *both* vehicles, so it is purely a question of handling. *So, how would it play out on this turn?*

The pilot of the aircar and the pilot of the other vehicle roll their skills, but the other pilot has a -4 on their total because the aircar has better handling by 4. If the aircar wins the roll, it closes distance, even if the other vehicle is *technically* faster. Let's say they made the roll by 2, for a net bonus of +2 on effective speed, allowing them to close. So, the time it takes to close the distance by 1 range level is:

current range level of +21
 minus the higher speed (-16)
 minus the speed level difference (-2)
 plus 1 because you are decreasing the range

This adds up to a time level of +4. You get -1 to the distance for each +1 time, so over a time level of +8 we can decrease the range 5 levels (1 level for the +4 time, 4 more for the +4 time left over in the turn), from +21 (500 meters) to +16 (90 meters).

Note that this example presumes both pilots are spending the entire turn on their piloting tasks. If one had to spend part of their turn mod on something other than driving, the other driver would get a bonus on their roll equal to the difference in turn mod spent.



evasion: Vehicles do not *really* have a Dodge like adventurers. The chance to hit a vehicle is usually based on its size and speed. However, if you declare that you are evading, you can add to the +1 to the difficulty for one attacker to hit you per full die of Agility you have, or half this (round up) against all attackers. Like regular dodging, this cuts the distance you move in the turn by half. For vehicles large enough that they are piloted with Awareness (tactics) rather than Agility (reflexes), then you use Awareness in the same way, maneuvering to anticipate your enemy's fire rather than avoiding it. However, on vehicles this large this will only make a difference at extreme ranges. No matter how good a captain you are, a battleship is still a *very* large target. Manuever of a vehicle piloted with Awareness does not usually affect the actions of passengers.

i Our aircar has a top speed of +17. Let's say it is being chased in an open setting by a vehicle with a top speed of +20. If the aircar pilot has an Agility of 3d+0 and declares they are evading, then any shot taken from the other vehicle will be at +3 difficulty. However, the aircar's top speed will be counted as +15 instead of +17 (half the distance is a -2), as it is spending more time trying to be hard to hit and less time moving in a straight line.

positioning: Relative movement between combatants is very important at high speed. Head-on and tail shots count as a maximum movement penalty of +1. Side shots use relative speeds for determining any movement penalties on chance to hit.

cover: If you have custom hit locations, you can arrange them in a front-to-rear fashion, and declare that one location will protect one other location roll from a particular angle.

i We look at our aircar and say that the gadgets protect the pilot from the front, and that structure protects the rear passengers from the rear. So, a hit location roll of 4 on a hit from the rear will hit 'structure' instead of the 'rear passengers'.

Vehicle repair

If you have taken the time to design a vehicle, you have some emotion invested in it, so if (or when) it gets damaged, you will probably want to fix it. It may be that you need to repair it within the framework of an adventure, so the time and difficulty can be important. If your seaplane has a burned-out engine and the volcanic island you are stranded on is about to blow, the gamemaster is unlikely to blow up all your adventurers even if you fail, but being able to get to the other side of the island to rescue the missionaries and the orphans will require getting the repair done with a certain amount of time to spare...

In general, a vehicle is repaired system by system. Repairing each damaged item usually counts as 1 hit of repair, and after this is done, all other lost hits are repaired as 'structure'. The base difficulty of doing a repair is based on the mass of the vehicle and the size of what is being repaired. The base difficulty to repair 1 hit is the vehicle's hits plus the absolute modifier for the size in hexagons (this always adds), and the default time to roll against this difficulty is 1 hour (you get no time bonus unless you spend *more* than an hour). This difficulty is adjusted as follows:

item	modifier
each hit location for that item	+1
item is only a sub-location	-2
each 2 hits <i>currently</i> done to vehicle(d)	+1

i Our aircar has 13 hits, the mobility system takes up 1 hit location and the damage example had the vehicle taking 5 hits. This means the base difficulty for the repair is 22 (hits + 6 (for the size modifier) + 1 (hit location) + 2 (for half of 5 hits)).

This base difficulty is likely to be completely impossible, which is where other modifiers to the difficulty come in. The main reason the default difficulties are so high is that repair of vehicles, especially large ones, can take a very long time and require a lot of people and specialized equipment.



Things you can do to adjust the difficulty:

item	modifier
jury-rigged repair	-6
basic repair	-2
fully cosmetic repair	+0
improvised tools	+4
basic tools	+2
full tools	+0
dedicated facility	-4
replacement parts available	-6
each 2x people on repair	-2

jury-rigged repair: This is the minimal repair that restores function. This restores the component to working condition, but any damage to *any* part of the vehicle will take it offline again. In this case, you do get one attempt to restart or reactivate the item, just as if it had been damaged. You generally cannot do a jury-rigged repair to 'structure' damage.

basic repair: This restores 1 hit to the damaged system and makes it operational again, but does not repair cosmetic damage. A boat with a patched hull looks like a boat with a patched hull. Bullet holes, burn marks, dented bodywork and other signs of prior damage are clearly visible on the part that was repaired.

cosmetic repair: This restores the damage so that it looks like it never happened.

You can upgrade any repair by re-repairing the vehicle, turning one repair type into another, like doing a real repair after a jury-rigged one. The new repair gets an extra -2 modifier.

tools: Improvised tools are the absolute minimum that you could do the repair with, and this will vary by vehicle and vehicle size. Clearly the minimum set of tools to repair a star cruiser is more than that needed for a car. In general, the tools you can carry on a vehicle are probably no better than improvised tools for the repair.

facility: A facility dedicated to this type of repair. A garage would be such for cars, a spacedock would be such for a star cruiser. A facility that is dedicated but too small would be a -2 instead of a -4.

parts: If you have spare parts available, you just rip out the damaged ones and install brand new ones. Normally you cannot use spare parts for more than 1 hit of structure damage.

people: You can get a reduction in difficulty if you have multiple people working on the repair *and* the vehicle is big enough to support multiple people working on the repair. A vehicle of 8 hexagons can support two people on the repair, and each 4x size (+4 quantity level) lets you double the number of people on the repair. You use the average skill level of the better half of the repair crew.

If you are using a maximum repair crew, any time bonus that exceeds the quantity level of the crew will subtract from the difficulty.

i If the maximum a repair will support is 8 people and you are *using* 8 people, this is a quantity level of +6. Any time bonus of more than +6 *may* instead be applied to reducing the difficulty. So, since +6 time *over* one hour would be 8 hours, all repair time that exceeds 8 hours starts reducing the difficulty of the task.



i Let's say that our aircar was grounded after the missile hit with a fuel system problem. Getting back to civilization with the remaining fuel will require patching up the fuel system. We will say that part of the luggage space included sufficient wrenches and screwdrivers and such to dismantle the vehicle sufficient to get at the problem and repair it, and one of the adventurers has a 4d+2 skill roll to do the repair. If we do a jury-rigged repair, the difficulty looks like this:

base difficulty	22
jury-rigged repair	-6
improvised tools	+4
two people on repair	-2
total difficulty	18

This is not particularly easy with a 4d+2 roll (about a 13% chance), but remember that you can get a bonus to the roll by spending extra time. Spending 8 hours on the repair would be +6 time over the minimum, and this would be +6 to the skill roll, making it 6d+2 to match or beat an 18, which is about a 35% chance (better if you use Fate to reroll a die. Whether you would want to do this rather than several 4d+2 rolls depends on how many times the gamemaster says you can fail before you ruin what little repair supplies you have available.

i You have a battleship that comes back into dock with 1 hit of damage to be given a basic repair. The base difficulty is 45 (26 hits + 18 for the size modifier + 1 hit location + 0 for 1 hit of damage).

base difficulty	45
basic repair	-2
full tools	+0
dedicated facility	-4
250 people on repair	-16
parts replacement	-6
total difficulty	17

Repair cost

Repairing vehicles can be expensive, as you might know first-hand. The normal cost level to repair the total damage is the new cost level for the vehicle minus 16, plus 2 for each hit done to the vehicle. Jury-rigged repairs have no immediate cost, but you *did* use up some sort of supplies. Basic repairs are -2 to the cost, and cosmetic repairs are +0 to cost. Incremental repairs simply count the cost of (the number of hits repaired +1) rather than the full repair cost. Doing the repair piecemeal costs more than doing it all at once. If you want to, you can say that the yearly cost of simply maintaining a vehicle is like repairing 1 hit of damage, and that if you fail to pay this cost the vehicle takes 1 hit of damage.

i The basic cost level of our aircar was +24 and it took 5 hits. The cost to repair this is 24 (cost) +10 (2 per hit of damage), minus 16, for a repair cost of +18, or 500,000 Credits.

If you run through these rules, you will find that after a certain amount of damage it is cheaper to simply replace the vehicle than to repair it. The vehicle has been 'totaled'.

Adventure notes

Repairing (or damaging) *something* on a vehicle is often a dramatic element in plots. You need to get the warp drive fixed before the sun goes nova, fix a leak before too much air gets out or water gets in, repair life support before people suffocate and so on. It always seems to be a life-or-death matter, which means in game terms the adventurers will end up succeeding unless the gamemaster wants to kill them all. So, while a successful repair without too much *deus ex machina* is a good thing, the gamemaster needs to have something else contingent on it, or someone else's lives depending on it. Like saying "you can get the repair done in time, but you need to get it done with X much time to spare if you want to also do Y". Like getting the teleporter working to recover the science team before the sun goes nova. The adventurers will be fine in any case, but they need to save someone else...



COST OF LIVING

In **EABA**, a monetary unit known as a 'credit' represents a general cost of labor compared to what is required to buy the necessities of life in any situation where wages and supply are 'fair' and not manipulated for political purposes. However, as mentioned elsewhere, differences in availability of manufactured goods will make a difference in what you can buy with a given amount of labor (see **Tech-based Income**).



The equipment list in the back of the **EABA** rules has many of the goods adventurers will need, and while some things vary in capability and quality across time, they are still available in every era (like clothing). This list gives you some costs for *services* adventurers may need. Travel cost is per 100 kilometers of travel or to a destination (i.e. orbit), and other services are usually per day. For increased quantity, distance or duration, you adjust cost in Credits accordingly, or adjust the cost *level* by +2 for each doubling and +1 for lesser multiples.

i If you take a taxi eight times in a week, or take an airplane flight of 800 kilometers, the total cost level you have spent is +6 more than listed. If this is your biggest expense and it is equal or less than your Lifestyle rating, then it is a sustainable expense that costs you no Savings.

The 'availability' of a service is the earliest era in which that service is likely to be used. Costs are subject to availability and demand, as well as local or government restrictions. An airfare may cost more if bought at the last second, while a taxi fare may be standard, regardless of how many people need a ride. Apartments in a large city could be much more expensive than the equivalent in a small town. Or, elite military units may be paid on nearly the same scale as regular soldiers. If adventurers own the transport (no cost listed), travel costs are just for supplies and maintenance and possibly crew salaries, and would be about one-quarter (-4 cost level) on the listed amounts.

travel	availability	cost
walking, 3kph	Early Primitive	-
horse, 6kph	Early Primitive	-
sail ship, 12kph	Middle Primitive	-11(20Cr)
stagecoach, 12kph	Late Basic	-11(20Cr)
taxi, 6kph	Late Basic	-9(50Cr)
train, 50kph	Middle Industrial	-14(5Cr)
steamship, 10kph	Middle Industrial	-11(25Cr)
sail ship, 20kph	Middle Industrial	-11(20Cr)
steamship, 30kph	Late Industrial	-9(50Cr)
auto, 50kph	Late Industrial	-
mass transit, 20kph	Late Industrial	-14(5Cr)
taxi, 20kph	Late Industrial	-9(50Cr)
zeppelin, 100kph	Late Industrial	-9(40Cr)
airplane, 500kph	Late Industrial	-9(50Cr)
train, 100kph	Early Atomic	-14(5Cr)
auto, 100kph	Middle Atomic	-
taxi, 40kph	Late Atomic	-9(50Cr)
airplane, 1000kph	Late Atomic	-11(25Cr)
bullet train, 200kph	Late Atomic	-13(10Cr)
ground-to-orbit	Late Atomic	+11(50KCr)
ground-to-orbit	Post-Atomic	+2(2KCr)
interplanetary	Post-Atomic	+7(10KCr)
interstellar	Post-Atomic	+11(50KCr)
ground-to-orbit	Advanced	-7(100Cr)
interplanetary	Advanced	-2(500Cr)
interstellar	Advanced	+2(2KCr)

service(per day)	availability	cost
physician(+1 Rec.)	Middle Primitive	-4(250Cr)
hospital(+2 Rec.)	Early Industrial	-2(500Cr)
ICU(+3 Rec.)	Early Atomic	+2(2KCr)
regrowth(+4 Rec.)	Early Post-Atomic	+6(8KCr)
lodging	Middle Primitive	-7(100Cr)
lodging(per week)	Middle Primitive	-2(500Cr)
semi-skilled work(3d)	Early Primitive	-8(60Cr)
skilled work(5d)	Early Primitive	-5(180Cr)
elite work(7d)	Early Primitive	-2(450Cr)

in general	cost
low demand	-2(half)
average demand	+0(normal)
high demand	+2(times two)
very high demand	+4(times four)
low quality	-4(one quarter)
average quality	+0(normal)
high quality	+4(times four)
luxury quality	+8(times sixteen)



! Quality means as much the opulence the service is associated with as the items represented by the service. A first-class airline ticket does not get you there any faster, but you have better seats, better service and you get on and off the plane faster. Some think this is worth four times the normal ticket price. The food at a swanky restaurant is no more nutritious, but you're paying for atmosphere and the better skilled services of the chef.

Taxes: A sad reality of the cost of living is taxes. This money taken from wages before you see it, or added to the cost of goods and services. In the Primitive and Basic Eras, taxes are usually collected yearly as a lump sum, backed by significant force, and often as goods rather than money. For peasants, taxes might be in bushels of wheat. Actual taxes due are based on the class of person collected from, such as serf, freeman, knight, etc. Normally a person with authority collects taxes from those below them, and pays taxes to those above them. In the Atomic Era and later, taxes are usually paid incrementally, added to other costs, and balanced out at the end of each year by a further tax payment or refund. In the Industrial Era it may work either way, or transition from one to the other. The actual tax rate depends on what the government is doing with the money. Wars tend to increase the tax rate (paying for soldiers and equipment), and universal rights (housing, health care, etc.) will also raise them. Taxes will run from a low of maybe five percent to a high of perhaps seventy-five percent. In game terms, taxes are generally unseen, factored into everything the adventurers buy. If there are specific, excessive taxes, it might be reflected by a +1 to the cost of particular goods or services. Taxes and how they are applied and enforced will have a great deal of influence on social stability. That is, once you get to a certain level of inequity, corruption or inefficiency, it is worth the effort to try and change the government. At a certain level beyond this, it is worth the effort to try *violent* means of changing the government...

IMPRESSIONS



Emotional reactions to adventurers is quite important. How someone will respond to a first contact varies from individual to individual, their job, the day of the week and how well they slept last night. In all, it is hard to accurately quantify and the gamemaster is probably best off if they just play it by ear. This first impression is not a matter of the adventurer's skill, it just sets the stage for use of those skills. *Does the bouncer like your looks? Or do you remind him of that fellow who threw up on him last night?*

If you want to roll dice for the reaction to that first glance or those first few words, feel free. Roll dice appropriate to that person's Will or a social skill, adjusted for any character traits that might apply to the situation. An 'average' contact (someone with no preconceptions or attitude one way or the other) is going to be an average(7) task. Making the roll means at least a non-committal response. It may not be what the adventurer *wanted* to get, but at least it is not hostile. Any implied inducements or obvious blunders will alter the difficulty of the task, as will any prior commitments that might get in the way. And of course, you do not know the person's mood. They might have just been chewed out by their boss, had a fight with their significant other, or gotten a traffic ticket on the way to work. What you thought was going to be an 'average' task and a simple request might be harder than you think. The more complicated or intimate the implications of the first contact are, the more difficult it is.

Making the task by four or more generally means a quite favorable response. Failing it by four or more means a quite negative one. Favorable responses reduce the difficulty of any interpersonal tasks by two, and negative responses increase the difficulty by two. Bonuses or penalties will tend to stick, bad reactions being harder to lose than good ones. *They will remember you.* Sometimes, people just do not like you and you can never figure out why.

Extras (what **EABA** calls NPC's) are as vital or as trivial as the gamemaster wants to make them. They can be like a cutout in a computer game, someone for whom you provide an incentive and they give you what you need. Or, they can be a *lot* more. People are complex, contradictory beings with varied personalities and priorities. Either as groups or individuals we can do great things, or as history shows, are easily persuaded to act against our own best interests or commit the worst atrocities. For anyone important enough to be worth talking to in a scenario or as a permanent fixture in a campaign, consider the following:

What is the most important thing in their life? That is, take the three most important things from the following list, or something not on the list if applicable: honor, duty, country, wealth, power, family, friends, faith, id.

honor: A sense of *internal* adherence to a code, but usually one that can be recognized by others and thus any failings are also visible.

duty: What you are expected to do by others, which can be completely different than what you want to do or be.

country: Patriotism or loyalty to a real-world entity like a king, church or corporation.

faith: Mostly religious faith, a belief in a higher power or code personified *outside* of humanity.

wealth: The acquisition, possession or control of money. Basically, greed.

power: Secular, religious, familial or business influence or status, either directly or from behind the scenes. Can also be seen as an aversion to being under the power of someone else.

family: Your immediate family in whatever sense you have it. A cousin you see every day might be closer than a sibling you see twice a year.

friends: Your non-family companions. They could be co-workers, fellow soldiers, classmates, anyone you have a bond with.

id: A creature of the present, desiring satisfaction of its immediate needs over all else.

! Self-preservation is something *everyone* has and is a +10 modifier unless otherwise specified.

i An ambitious politician might have 'power', 'wealth' and 'duty' in varying order. A samurai might have 'duty', 'honor' and 'friends' and a holy warrior might have 'faith', 'duty' and 'honor'.

What is the depth of their belief? How strong are these things as motivators? Consider this like a personality trait and just give it a value from 1 (superficial) to 12 (life-defining). If the person cannot '**take 2's**' to reach that number with their Will, then they are prone to make snap judgements regarding these traits and can generally be considered judgemental or inflexible on that subject.

i If an extra has a Will of 2d+1 and faith-6, then 'faith' is something that is important enough that average daily tasks are done according to the dictates of faith, automatically and without thought. On the other hand, someone with faith-1 has only a superficial faith. They probably have to be *told* to think about whether or not something they are doing is according to their faith, and if it is not, their faith is only a -1 penalty on the task.

What is the nature of their belief? This is how they respond to threats or challenges to what they consider important. This can usually be broken down into: accepting, argumentative, exclusional.

accepting: An accepting person tolerates changes imposed on things they consider important, but does not change their belief or desires regarding that thing. They can live in harmony with those having opposing views.

argumentative: An argumentative person disputes changes or attempted changes and will act to preserve the situation as it was before the change. They tolerate those with opposing views.

exclusionary: The exclusionary person is like the argumentative one, but will instead act to remove the source of the change from their life, either removing it or themselves from the equation. They avoid and do not wish to deal with those who have opposing views.



i An officious bureaucrat in a single-party state might have a defining personality trait of power-3 (exclusionary). They will want to eliminate or marginalize any threat to their power, but only if it is brought to their attention. If challenged to act in a different way, they would be at +3 difficulty to their Will roll and if they fail or have a negative response to such attempts, their response will be of an exclusionary nature.

You can apply any sort of reaction you want to, like 'fearful', 'defensive', 'manipulative' or whatever, but odds are very high that this reaction will *manifest* as one of the previously listed reactions.

Any of these three motivators automatically trumps anything not listed, and also trumps anything listed but with a lower intensity.

i If you have faith-8(exclusionary) and family-5 (accepting), you will probably disown your own children if they leave your faith. On the other hand, if the values were reversed, you would accept it if a family member left the faith, but you would *not* deal with outsiders who have done so.

It is important to realize that these motivators are the *norm* for that person, what that person *expects* from those around them. The officious bureaucrat expects to deal with those from *their* political party and expects to be treated like *their* desire for power is what everyone should be working towards. So, being a 'yes man' who helps this person get more of what they want is merely a +0 to skill rolls or persuasion, *not* a bonus. You have to *exceed* what this person expects *as their due* to get a bonus to your roll. Finding out what an extra wants and how to use that to your advantage requires some thought, and preferably some role-playing, not just falling back on dice rolls for persuasive skills.

Dealing with these motivations can be part of an adventure, or can actually *be* an adventure. If the adventurers have to get some sort of official blessing to do something, they have to deal with some sort of official or authority figure. If this official cannot stand the thought of a woman leading a group and the group has a female leader, then the adventurers are doomed to failure, regardless of their skill levels or inducements. *Unless they did some research ahead of time, found this out and worked around it.* Or, the adventurers might have beliefs an official knows of *and* absolutely disapproves of. The adventurers could find their appointment or permit requests ignored or turned down for no apparent reason. And it might turn out that the *actual* adventure is finding a way to get around this roadblock in their path.

If as the gamemaster you intend to use a lot of extras with personality, make sure to make notes for any the adventurers have to deal with more than once. Hostilities, friendships, favors and other useful in-game things can result from especially good or bad encounters, and these can happen for better or worse even if the players spend or gain no points for them. Similarly, beneficial relationships players want to spend points on should require some actual in-game building of that relationship first.

i If you have a player who wants to buy a highly placed Friend in a some organization, they need to actually have an in-game experience with someone highly placed in that organizations, who by the adventurer's actions, is favorably inclined towards the adventurer and thus justifies the purchase of that trait.

! If you want to have a short but amusing delay of game, have all the players (and the gamemaster) describe themselves in terms of their top three priorities (honor, duty, etc.) and whether they are accepting, argumentative or exclusionary, *and* have every person write what they think the person to their left will say about themselves. *Then compare the two and be prepared for some lively discussion...*

HIDING THINGS

Sometimes adventurers need to hide things, sometimes things are hidden from them. This has been touched on in the large scale under perception in combat, or in the context of being able to more easily spot things you have a skill in. But what about the small scale? *Like noticing if that guy at the end of the bar has a pistol under his coat?*



First, trying to spot something that is obvious is...well...obvious. Second, an obvious object that is concealing something will be obvious to the trained eye of someone with at least +0d in a skill that would let them know where or how to look, or the person is doing the exact same 'obvious' thing themselves.

i If your adventurer carries a sword cane, you will recognize other sword canes. If your adventurer is a police officer, they are trained to notice such 'concealed' weapons.

Anything that is *not* obvious in either sense, you have to roll for. This is typically handled like ranged combat, but using extra modifiers to represent the quality of the concealment, the size and shape of the item and the context in which it is being concealed.

i If you have something hidden in a shoebox, the shoebox is pretty obvious, but it does an good job of hiding the nature of what is inside it. If you are wearing a swimsuit, the size and shape of what you can reasonably conceal is extremely limited. If you are wearing a jacket on a hot, humid day, you might readily be able to conceal something under it, but anyone with a gram of suspicion will be wondering why you are sweating inside a jacket rather than taking it off.

You get a sight Awareness roll to spot things that are not immediately obvious, using half the difficulty for range as the base. Usually, you have to take at least a minor action to look, it is *not* part of your general awareness. If you apply turn mod or a time level to it, you can get a bonus on the roll.

However, using turn mod means that you are clearly paying attention to what you are looking at, and someone looking at *you* might see this. You usually get *one* attempt to spot something. If you fail, you decide there is nothing to see until something makes you suspicious enough to check again. If you have at least +0d in a skill appropriate to what you are looking for *and* use the skill in that way, you get a normal Awareness roll, otherwise the gamemaster can say the roll is at -1d.

The difficulty of spotting that *something* is hidden is adjusted by the concealment quality and the size of the item. The item concealed has to be no larger than the *unmodified* value of the concealment. A manual or pat-down search has a starting difficulty of +0.

concealment	value	example
minimal	+0	bathing suit
very light	+3	shorts & t-shirt
light	+6	slacks & shirt
average	+9	slacks & jacket, suit
heavy	+12	formal attire, coat
very heavy	+15	trench coat

situation	modifier	example
concealment rig	+2	shoulder holster
two-hand access	+1	ankle holster
target is active	-2	running, fighting
target is stationary	+2	sitting, standing
hands-on search	-6	manual pat-down

item	size	example
very small	+0	small knife
small	-3	small pistol
medium	-6	large pistol
large	-9	submachinegun
very large	-12	shotgun, rifle
<i>in general</i>	-(15+mass lev.)	most metal items

i Someone wearing a pistol(-6) in a concealed holster(+2) under a jacket(+9) would be at +5 to the sight difficulty for range to have someone spot it. A range of 6 meters is a *sight* difficulty of 4, so it would be a difficulty of 9 to spot it, if you were looking for it. An unskilled roll of 1d+2 or less has no chance of spotting it.

MASS COMBAT



The normal combat rules are built around the idea that the adventurers are the main focus of the encounter, and what *they* do is going to determine the success or failure of whatever is going on. However, adventurers can get caught up in situations beyond their control, where their part is at best, only going to influence the outcome rather than be the deciding factor.

i Adventurers are in a city when local protests turn into a full-fledged riot. If the riot is something related to why the adventurers are in town, perhaps they want to get involved. Or maybe it is unrelated and the adventurers just want to exit the scene without getting caught up in things.

You can use adventurers as part of a larger encounter or battle using some simple guidelines and the **Universal Chart**.

outcomes: First, the gamemaster needs to determine what the likely outcomes of the mass encounter are. This could be simple or complex, there can be several of them, and the players do not necessarily know more than the superficial details (and even these might be wrong!). The players *do* need to know enough that their adventurers can make some sort of informed choice, even if that choice is "I do not want any part of this, get me out of here!".

The gamemaster needs to assign probabilities for each outcome, so that the entire spectrum of outcomes is on some combination of the results on a 3d+0 roll. The chance of a given result does *not* have to be equal to other chances. Some results can be very unlikely, battles can begin with unfavorable odds for one side.

This table allows you to plan ahead for certain scenarios or events, and you can have several pre-designed ones on hand. The five-result example table is a nice mix of probabilities for assigning a spectrum of results to.

i If there is a riot, the gamemaster might say the spectrum of outcomes is:

roll	result
3-4	rioters defeat authorities, run amok with burning and looting
5-9	rioters push back authorities with minor property damage, then disperse before reinforcements show up.
10-11	tense but peaceful standoff after some minimal rioting, rioters peacefully disperse
12-16	authorities forcibly disperse rioters, numerous arrests and minor injuries
17-18	authorities use excessive force, rioters are dispersed and arrested with numerous serious injuries or fatalities

The *players* simply need to be informed that the rioters have demands and are willing to use violence, and the authorities are prepared for a crackdown on the rioters, but the situation is currently in flux.

risk: Any course of action has a certain degree of risk. Adventurers need to choose a value between +3 and -3, where +3 is acting in a *very* risky way, and -3 is trying *very* hard to avoid risky actions. This is almost certainly correlated with their level of participation in the encounter, whether they are in the heat of things or trying to get out of the way. This value will affect an adventurer's personal results for the encounter, and *also* influence the overall result for the group of adventurers.

The level of risk for an adventurer will affect any personal consequences that result from their participation in the encounter.

i We are going to look at one adventurer in the group caught up in the situation, and the player says their adventurer goes for +2 risk. They are getting heavily involved, but are not *quite* on the front lines of the situation. In case things get *really* bad, they want someone else between them and the riot police.



scale: This is how big the situation is, and determines how much of an influence an adventurer or group can have on the chance of a particular outcome. Use the 'quantity' column on the **Universal Chart** to get a value for the number of participants who are acting to make a difference on whichever side of the encounter the adventurers are acting on. The bigger this value, the harder it is for an individual to make a difference. The minimum scale for a mass combat or encounter is +10.

i If the riot starts in the palace square and there are 2,000 angry citizens there, then this is a starting level of +22 (the quantity level for X2,000). Remember that this quantity is those *trying to make a difference*. In this case, 2,000 of the crowd is rioting. The *total* crowd might be 2,000 or 20,000.

time: A mass encounter is really just a one-round combat done in an abstract fashion. Adventurers in the encounter will burn stamina as part of the encounter. Take one-quarter the time level for the *total* length of the encounter, rounding nearest. Quite often this will just be the maximum of +6 (for one-quarter of the +22 time level of *elapsed* time in a ten turn combat). Then for each adventurer, adjust this by *double* the amount of risk they chose (the riskier your behavior, the more stamina you use). This is how much stamina the adventurer has used at the *end* of the encounter, with the overflow being taken off non-lethal hits as normal. One way or the other, they will get to recover lost stamina afterwards, so the important part is any overflow into non-lethal hits. If the encounter involves use of stamina from powers, add the amount for the time level for each draining power regularly used. So, if your part involves flying and force fields and energy bolts you will be using more stamina than a guy on the ground throwing rocks.

i If the riot takes half an hour (time level of +22) and an adventurer was at a +2 risk level, then at the end of the riot that adventurer will have burned 10 Stamina (+6 for one-quarter of the duration level, +4 for double their level of participation). This will almost certainly cost them some non-lethal hits from exhaustion.

competence: The last thing to determine is how good the adventurers are compared to the other participants. This is usually based on the number of points the adventurers are based on compared to the bulk of those involved in the encounter. Each level of 'ranking' is going to be worth +2 on the group's effect on how the encounter resolves.

i If the adventurers were 'heroic' and the majority of the rioters were 'low normal', then they would get a +4 on their effect.

Resolution

So, at this point you have situational factors, factors relevant to the group of adventurers, and factors for the individual adventurers.

Each player needs to decide the outcome they want their adventurer to work towards for the situation, *to the extent they understand it*.

i For our riot example, the *players* do not know all five possible outcomes the gamemaster has figured out, but they do know there are two extreme sides and a middle, so their choices can likely be assigned to a particular outcome.

The adventurer can use any Attribute as an unskilled task or any applicable skill roll they have, against a difficulty of the previously determined scale of the situation. This difficulty is adjusted in their favor by the competence of the adventurer, their personal level of risk and by 2 for each doubling of adventurers working towards the *same* goal. The player then rolls against this difficulty, determines if they succeed or not, and if they do succeed, by how much.



i Let's say there are four adventurers, and they *all* want to defuse the situation. The adventurer we are rolling for has a leadership skill roll of $3d+2$. The difficulty for scale is +22 (the number of rioters), dropped by 2 for the adventurer's risk, by 4 for their competence, and by 4 more for because all four adventurers are going for the same goal, for a final difficulty of 12. Which is not bad, considering it is one person (and three helpers) trying to influence a crowd of 2,000 people. They roll $3d+2$ and get a 14, succeeding and making the roll by 2.

Add the total amount each player rolling for a particular outcome succeeds by. Remember that adventurers might not all be working towards the same outcome. Any success is worth +1 (total, *not* per adventurer), and you get an additional +1 for making rolls by a total of 2 points and each time this is *doubled*.

i If after all the rolls are done, three adventurers succeeded and the *total* amount rolls were made by was 8, then the adventurers get to modify the situation by up to ± 4 (± 1 for success, ± 3 more for 2, 4 and 8 successes).

The gamemaster then rolls $3d+0$ on their outcome table and adjusts the result by the influence of the adventurers.

i If the gamemaster rolled an 8 on their table, this is 'rioters push back authorities with minor property damage, disperse before reinforcements show up.' However, the actions of the adventurers are enough to shift this by +2 to a result of 10, or 'tense but peaceful standoff after some minimal rioting, rioters peacefully disperse.' If the adventurers had been trying to encourage violence, they could have shifted the result from 8 to 4, or 'rioters defeat authorities, run amok with burning and looting.' Similarly, if they had wanted to shift things to the police, they *could* have shifted the result up from 8 up to 12, disrupting the rioters enough that the police felt confident about moving in to nab the ringleaders.

Aftermath

A mass combat or other encounter is going to have winners and losers, and adventurers are going to be on one side or the other. Rate the seriousness of the situation on a scale of 1 to 6, where '1' is 'negligible chance of serious harm' and '6' is 'war'. This will be the number of dice that will be rolled. Add or subtract an adventurer's risk, and if the outcome of the encounter was the one the adventurer was trying for, subtract 2. If an adventurer has armor or a defense that is better than any attack likely to be used against them, subtract 1 for any full die of difference.

Then roll a number of dice equal to this total. All individual dice *above* the encounter 'seriousness' are discarded. Of the remainder, the two highest die results are taken as non-lethal hits, and the rest are taken as lethal hits. Toughness applies to the *total* of non-lethal hits taken.

i The gamemaster said that this was an encounter with a seriousness of '4', so we start with a base of $4d$. The adventurer was doing a risk of +2, the adventurers got the result they wanted, which is -2, and they did not have any superior armor, for no adjustment and a final roll of $4d$. The roll is 5, 3, 2, 1. The '5' is higher than the seriousness of the situation and is discarded. The '3' and '2' add up to be a total of 5 non-lethal hits (less any Toughness), and the '1' is taken as a lethal hit. So, in addition to any stamina loss or non-lethal hits taken from excess stamina use, the adventurer also takes some non-lethal hits, then 1 lethal hit from cuts, scrapes and bruises acquired during the riot.

These situations can also have less numerical consequences. Others can notice the actions of the adventurers. Someone in the heat of the action might be remembered by the enemy, or might be noticed by a friendly commander. If you are a bystander caught up in a situation, no one will fault you for trying to stay out of the way, but if you are a soldier and seem to be avoiding the enemy, then that might be seen as cowardice.



options: As a subplot for big situations like this, the gamemaster can set up one or more groups of extras, each with their own agenda and dice rolls for trying to manipulate the situation. Players can be pitted against these groups in an abstract sense, or as a smaller, individual-scale combat whose small-scale outcome determines who gets to make rolls to affect the larger situation.

i Adventurers might see a group they recognize as pro-government, dressed up as rioters, trying to incite the mob to violence in order to justify a government crackdown. The adventurers could try to deal with these people on the regular encounter scale, and the outcome of *that* encounter determines who gets to try and influence the riot and by how much.

narrative: You do *not* use something like mass combat rules just because they are there. You use them because the situation is important to whatever plot the adventurers are in or about become eyeballs-deep in. It can make them noticeable players in a much larger situation, drawing the attention of or drawing them to the important people they might not otherwise have been able to find, meet or get the attention of.

i Perhaps our riot example is part of a larger 'overthrow the corrupt dictatorship' plot the gamemaster has brewing. By actively taking part in the riot in such a way as to resolve it with minimal loss of life and property, this could be their introduction to the 'government in exile', expatriates and dissidents who have returned from abroad to restore a legitimate government to their native land. Without the highly visible actions of the adventurers, any attempts they might have made on the street to get in contact with this community might have failed due to suspicion that the adventurers were working for the secret police. This suspicion might *still* exist, but it is now greatly reduced. *So, the resolution of the mass combat is integral to the future direction of the plot.*

DRUGS & DISEASES



Drugs and diseases have all sorts of odd effects on mind and body, but to be useful in the framework of game mechanics, they need to operate on things with numbers attached to them. So, they generally affect Attributes or hits, and sometimes have effects on traits, most often Personality.

The simplest case is that if you get something sufficient to impair your performance, it does enough hits to put you at the -1d threshold. If you are up but barely functional, hits up to the -2d threshold, and if it is an effort to just get out of bed, the -3d threshold. Whether non-lethal or lethal hits are taken is based on the nature of the ailment, and recovery of the damage only starts after your body has mounted a defense or purged the toxin.

Drugs are typically inhaled, ingested, injected or applied. The more potent or toxic the substance, the more likely it can use more than one route. Diseases will typically be inhaled or ingested, but almost certainly can be injected as well. Quite often, exposure to something is an accident of the environment. It is usually a special situation to deliberately poison or infect someone, and in a game context, is something that *should* have some role-playing involved. Both drugs and diseases will work the same way, the difference being in special effects and social effects associated with them (a disease might be contagious).

delay: After any sort of chemical or biological exposure, there will be an interval in which it spreads through the body but has not yet had any game effect, though there might be tell-tale symptoms to give the afflicted a hint of what is going on. If there is a treatment or antidote, it gives double the bonus against the effects if administered during this time.

effects: Almost all drug or disease effects have a die roll associated with their severity, and this will usually be compared to the Health of the target, possibly adjusted by treatments or antidotes.



If the drug or disease exceeds this, it has one or more effects. Hallucinogens or other psychoactive compounds may automatically have an effect, but dealing with these effects would be a roll compared to Will. The table gives an idea of the attribute level needed to resist a given severity fifty percent of the time. Doubling a dose of something usually increases its severity (and ease of detecting it) by +2.

severity	roll	50% resistance
light	1d+0	3
moderate	2d+0	7
heavy	3d+0	10
very heavy	4d+0	14

The *actual* effects can be just about anything desired. They can change over time, one result might only happen if a different result happens first, the effects might wear off if a particular result is resisted, and so on. If you are making something up, the sky is the limit. If you are trying to duplicate a real-world result, then look it up and do the best you can, and if you are merely trying to generate a particular game result, then do so and then make up window dressing for it afterwards.

i The gamemaster wants to make up a paralytic toxin to put on blowgun darts. It is clearly an injected toxin, so protection against the darts is the first line of defense. The toxin stings at first but the dart site quickly goes numb and this is a ten second delay. Pulling out the dart in this period removes some of the toxin, good for a +2 to Health. For effects, the gamemaster says the drug has a severity of 2d+2, and each +2 of turn mod (cumulative) that elapses after the delay is a roll against Health, and failing means losing a point of Strength and Agility, which are recovered like non-lethal hits. Rolls are only needed out to a time level of +16. So, a person struck by a dart has the drug roll 2d+2 against their Health roll at elapsed time levels of +2, +4, +6, +8, +10, +12, +14 and +16. If they quickly pulled the dart out, they would get +2 on their Health. If they had been shot with two darts, the severity of the effect would go from 2d+2 to 3d+1.

You need to be careful not to go overboard with drugs or diseases, but in certain game-worlds and certain situations they can add to the drama and keep players on their toes.

! As a matter of game balance, drugs in many rpgs have amazingly severe side effects. In reality, this does *not* seem to be the case. People can drink coffee or chew coca leaves for decades with no real side effects, and athletes have been using performance-enhancers with minimal (known) side effects. So it is *possible* a readily available substance *can* give a near-permanent minor boost, and the only side effect is if the supply is cut off. As drug and biotech improves, the ability to tailor drugs to boost natural function will probably become more precise and benign. How you as a gamemaster deal with this is up to you. If something is nearly universally available, the easiest thing to do is just assume that nearly everyone partakes (“would you like some coffee or soda?”), and assume no one has a benefit from it compared to anyone else.

Drug/disease effects: EABA does *not* provide a pre-designed list of toxins or diseases. If it is important enough for you, you will make up what you need according to the guidelines. To assist in that, here are some suggested effects:

generic illness/poison: Does non-lethal hits.

anesthetic: Reduces effect of hits lost for determining impairment, but has a negative effect on Awareness and Agility.

hallucinogen: Reduces Awareness but may increase the level of some Personality traits.

neurotoxin: Does half-lethal damage and damages Awareness and Agility.

hemotoxin: Does lethal damage.

paralytic: Does non-lethal damage and damages Strength, Agility and Health.

mood-altering: Reduces Will and reduces level of some Personality traits.

THE GREAT OUTDOORS

Many adventures will have times when nature itself is a problem. Burning heat, freezing cold, and a lack of food, water or sleep can all take their toll.



Scrounging

This skill ([page 3.22](#)) is a general foraging talent, and can be adapted to almost any 'skill at finding stuff' situation. Its overall use has already been covered, but if you want to add more detail for use in survival situations, keep reading.

Survival in a wilderness situation is all about shelter, water and food. Depending on the environment, the first items will alternate in priority, but water is always high on the list and food is almost always last, since you can go without it the longest if you have the other two. The difficulty for each is going to be as described under the skill. It is not something an untrained individual can easily do, and for such a person, any chance of success will probably require spending extra time.

shelter: This covers protection from the weather, and if needed, the ability to make a fire or adapt clothing or covering to protect you from local climate when you are out and about. In very hot areas you want shelter from the sun, in cold areas you need shelter from snow and wind (and a fire is nice), and in some areas you want a fire because it keeps the bugs away and available food is safer if cooked. Making a shelter or a fire has a base time level of +24 (1 hour), and this covers collecting the material needed as well as putting it together. Finding a natural shelter (if available) would take a similar amount of time. The time can be cut in half if multiple people are working on it. A basic shelter is sufficient for up to two people, and +2 to the difficulty each time this is doubled (or +2 to the time and keep the same difficulty). A fire task is good for half a day. Keeping the fire going simply requires that someone spend the time to tend it and keep gathering fuel.

A basic shelter task will offset one point of negative effect from extreme heat or cold. If you have a basic fire, this can offset another point of effect from cold, rain or snow. Larger groups may require a bigger fire, which really just means more people involved in collecting fuel for it. Improving a shelter is +2 time or +2 difficulty for each extra point of offset it can provide, and the maximum quality of an improvised shelter is up to the gamemaster.

i Unless you can find a cave or other permanent shade, there is only so much you can do to mitigate desert heat.

water: For survival needs it is highly variable and based on location and climate. If there are continuous supplies, the difficulty of the task and the time spent is about finding one in an area you are unfamiliar with, after which you are set and do not need to worry about it until you break camp and go somewhere else. If there are *not* reliable supplies, then the task is a daily one, where you have to find, harvest or extract moisture from ephemeral sources. This could be a solar still, collecting dew in the mornings, finding moisture-rich plants, small hidden pools, and so on. If water is ephemeral, then finding it is probably going to take about an hour (time level of +24), and success in a given climate should be sufficient for one person for one day under conditions of light exertion. Each 2 points the roll is made by doubles the amount. A roll for water may also include making or improvising some way of carrying at least a day's supply with you, or this could be a food-based scrounging task.

! If you are wondering why there are modifiers on the difficulty but no *actual* difficulties, remember that things like this are based on situation. As a gamemaster, you have to decide how hard it is to survive in a particular wilderness ahead of time. Also remember that survival skills are not a test of *player* knowledge. As long as the *players* are trying to do something sensible and not just saying "I use my skill", assume that the skilled *adventurers* are doing the actual 'right thing for the situation'.

food: This is a matter of knowing what is edible and how to acquire it. This will usually be some combination of hunting and foraging. For a given difficulty, foraging takes about an hour (time level of +24) and probably gives more consistent results. Success is sufficient for one person for one day, with each 2 points the roll is made by doubling this amount. However, the difficulty of the task may be high enough that two or four hours might be needed to have a reliable chance of success. Hunting is often a 'feast or famine' situation, you either get a lot or you get nothing. Set the difficulty for any success at +4 over that for foraging, but if you do succeed, count it as having made the roll by at least 4.

i So, if you make the hunting roll exactly, it means you get enough for four people for one day.

Success at acquiring food should also be worth at least a -1 to the difficulty of future tasks involving water and shelter. Hides can be turned into clothing, hollow plant stalks can be used to store water, sinews can be made into lashings, and so on. Or, being able to find game might mean finding where the game goes to find water. In this sense, successful scrounging tasks to stay alive could give you a slightly decreased difficulty at all the other aspects of that scrounging.

tools & supplies: Scrounging is about finding stuff. This *can* be aided by things you bring into the situation. Containers do not help you find water, but do help you transport and store it. A tent is ready-made shelter that you can then improve. Weapons or tools may help you acquire food. Decide on the difficulty modifiers that apply for useful things, but you only use the *best* item in each category, and only get an extra -1 to difficulty for doubling the usable quantity of that item.

i If the best scrounging tool you have for food gives a -2 to the difficulty, and you can use two of them, you get a -3 to difficulty.

Stamina

The use of stamina in a combat or other long encounter has already been covered. However, there are things that can modify stamina use, and exceptions for prolonged exertion, like marching.

climate: This is probably the most important factor. Sweating in your armor, being generally uncomfortable, getting tired, these are all part of the *normal* expenditure of stamina in an encounter. Climate plays a part when simply being exposed to it causes stamina to be expended. A really hot or humid day, or cold enough to make you shiver, that sort of thing, which is going to be adjusted by your gear and its quality. Obviously, cold is less of a problem if you are dressed for it.

Debilitatingly hot or cold weather that you are *improperly equipped for* will add to the total stamina loss in a turn, either +1 per +3 normally lost, 1 per +2 or +1 per +1 stamina lost, rounding down, in increasing severity of temperature. If you are only somewhat ill-equipped, your penalty is reduced one or more levels (note that it is easier to equip for cold weather, since there is only so much you can do about the heat).

i If the heat is at the +1 penalty per +3 stamina level and you use +2 in turn mod, then you take no extra drain. If you burned 3 stamina that turn mod, you would add +1 to the total and burn 4. Instead. Obviously, if turn length is short enough, there is not enough time to be affected by some degrees of heat or cold.

Outside of the turn structure for encounters, heat or cold is merely a constant drain on stamina, and would be handled like marching. Extraordinarily bad 'climate', like falling in an icy river, would normally count as forcing you to use maximum turn mod for purposes of stamina loss. And of course, you cannot make any recoveries until you get out of the situation that is causing the stamina loss.



i If you fall into an icy river and then scramble out and the turn mod is +8 (15 seconds), then you are counted like you were in a combat and used +8 turn mod. This would burn 8 stamina and probably cost you a non-lethal hit.

This is not a big deal on the scale of a few seconds, but can be *very* important when combined with the prior scrounging notes.

i If you fell into an icy river and then scrambled out, you are not going to freeze to death if the turn length is only 15 seconds. However, if the base time to build yourself a fire is an hour, then you could very easily burn through all your stamina, all your non-lethal hits, pass out and freeze to death before you get a fire lit. This is where having tools that decrease the difficulty of starting a fire come in very handy, as they allow you to increase the difficulty by taking less than an hour and offset this with your firestarting tools. So, if the gamemaster said it is pretty easy to get a roaring fire going in an hour (difficulty of 7), and you have a firestarter and dry tinder for a -2 to difficulty, then it is only a difficulty of 5 to get a fire going in an hour. Or, a difficulty of 7 to do it in half an hour, difficulty of 9 to do it in 15 minutes, and difficulty of 11 to do it in 8 minutes. You decide how much time you spend and what your skill roll will be at the *end* of this time, and make your plans accordingly.

marching: Or any sort of continuous effort that has the long-term effect of wearing you out. The stamina system is designed for hard work, and you can normally walk for any amount of time at no stamina cost (turn mod only adds to actions that have a non-zero stamina cost). The nature of long-term effort is that you are *not* pushing yourself, you are trying for a level of effort that you *can* sustain for long periods. However, it is often impractical to take a full stamina recovery break often enough to avoid taking non-lethal hits from overexertion.

To keep it simple, just say that an hour of manual labor or constant low-level effort costs 6 stamina, +1 for each -2 penalty from encumbrance, and +1, +2 or +3 from climate effects.

i You are marching on a *really* hot day while carrying enough to give you a -2 encumbrance penalty. At the end of the first hour, this costs you 9 stamina, 6 for the base, +1 for your encumbrance and +2 more because it is nasty hot, even if you have a nice hat and plenty of water. If you have to march four hours before taking a break, it will be a total of 36 stamina used, and you are *really* tired and certainly have taken a lot of non-lethal hits from fatigue. But, with a rest break for lunch you can get any used stamina and a point or two of non-lethal damage back, enough that you can slog on again until you are exhausted. Make camp, rest and recover the fatigue, and the next day you can do it all over again. This is a perfect example of the value of an **Experience**. Experience with hot weather could let you avoid some of the penalties for climate. Experience with carrying stuff could let you take less encumbrance penalty. These in turn mean that you suffer less stamina loss in a 'marching' situation and can do it better or longer.

The non-lethal hits from marching or other continuous work can really only be avoided by taking frequent enough recovery breaks that you can get back losses taken as fast as they accumulate (if you take the time for one non-lethal recovery before losing your *second* non-lethal hit, you stay fresh). But, if you *have* to get somewhere in a hurry, you cannot afford to take a long recovery break every hour or two.

! 'Marching' like this means your distance covered is your walk distance level plus the time level. So, if your Walk is +3 and you march for a time level of +24 (an hour), then you have marched a distance level of +27, or 4 kilometers. If the circumstances are too hostile for you to maintain this rate, you can decrease stamina use by 1 for each -1 to the distance (you are marching slower, taking frequent short breaks, or both).



Supplies

Basically, air, water and food. A lack of *any* of these is fatal, on timescales from immediate to agonizingly long.

air: You can hold your breath for a time level of +12, plus the current value of Recovery. Any stamina you expend while holding your breath or any stamina you are down from your maximum subtracts from your maximum time, down to a minimum time level of +4. If you hyperventilate first, you get +1 to the time.

i If you have a Recovery of +1, you can hold your breath for a time level of +13 (1.4 minutes). If you use 2 stamina while holding your breath, your maximum time level drops to +11 (45 seconds). If you started holding your breath while you had 4 stamina marked off, your maximum time level would be +9 (23 seconds).

If you need to breathe and cannot, you have until the next time level to fix the situation or you pass out. If you pass out, you take lethal hits up to the next dice penalty (including the -0d level) each subsequent time level until you die. If you need to breathe and the environment is harmful, toxic or non-existent, any lethal damage taken is counts as **crippling damage** (lung damage is very bad).

If air is merely limited rather than absent, like high altitudes or lower oxygen percentage, you simply say that all personal stamina is reduced by 1 or more points. The limit for any human activity is where a person's maximum Stamina is zero. *Any* use of stamina causes non-lethal hits at this point. Anything worse than this counts as using stamina even you are doing nothing, and you will eventually pass out and die.

i A very high mountain pass might be a -6 to effective Stamina. So, if you had a Stamina of 7, you would be counted as having a Stamina of 1 for seeing how quickly you would start taking non-lethal hits from exertion.

water: Sufficient water should be considered necessary for *any* form of recovery, whether stamina, non-lethal hits or lethal hits. You can do without water for a time level of +30, plus your Recovery, minus any 'marching' effects from heat. Each 2 stamina already expended or used during this period subtracts from the time level, with a minimum time level of +20. Drinking up and having a 'full tank' adds +1 to the time, and being 'dormant' (like sleep) adds +2 to the time. Sufficient water for this period is about a liter for a average human and proportional to body size for other creatures.

i If your Recovery is +0, then the base time is +30, or about 8 hours. If you used 10 stamina, the time would drop to +25, or about 1.4 hours. If it were hot enough for +1 stamina use while marching, the time would drop to +24, or an hour. You would need a liter of water to reset the clock on this. A 400 kilogram horse would need four or five liters for the same interval.

Not getting water by the end of this interval means you take non-lethal hits up to your next dice penalty (including the -0d level), each subsequent time level until you pass out, and rescuers have until the next time level after that to help you, otherwise you *die*. Going on reduced water rations simply stretches out the time involved. Lacking half your water needs would add +2 to the time, lacking a quarter of your needs would add +4 to the time.

i With a Recovery of +0, if you lack water, then you start taking non-lethal hits at an elapsed time level of +30, then at a time level of +31, and so on. If you were on half water rations, you would not suffer effects until a time level of +32.

When your body needs water, it *really* needs water. People die from dehydration remarkably quickly. Animals (or alien races) adapted to dry climates may have an Experience regarding water use, an adjusted time before which they start taking effects, built-in water storage which they can ration themselves on, or some combination of the above.



food: *Food is fuel.* You need it for repair, recovery and maintenance. If you have less than you need, all these functions suffer. Unlike air and water, you *can* get by on a permanent basis with less food. Your body just consumes itself until you are small enough to be sustained on the food you have available (within reason). The rules we will use do not take this into account and really just deal with acute starvation rather than dieting.

If you have *no* food, your Recovery drops by 1 each day (to a maximum of -10) *and* you take 1 lethal hit. Your stamina also drops by 1, down to a minimum of 1. You can recover the lethal damage as normal, but eventually your Recovery will drop to where the damage sticks around and accumulates. Going on partial rations simply stretches out the time involved.

i Three-quarter rations means you are effectively getting no food one day out of four, and half rations means you are effectively getting no food every other day.

Once your normal food ration is restored, Recovery increases towards its normal level at the rate of a point per day. Keep in mind that if you are working harder than normal you need more or better food than normal, so getting the same as before could count as only getting less than you need. Similarly, if you are in a very cold climate, you need a lot more calories to keep warm. This could be the same mass of food, just in forms with more energy, like fats.

! Fasting for a single day or its equivalent generally will *not* do any lethal hits and many cultures have full or partial fasts as part of important religious ceremonies.

! Not getting food also has a range of subjective effects which the gamemaster can toss out as needed. Bad judgement, irritability and lack of focus are very real and can affect die rolls. This is one reason sensible armies put a bit of effort into keeping their troops well-fed.

sleep: In game terms, sleep is merely several consecutive recoveries, usually of non-lethal hits, but for the sake of convenience, recovery of lethal hits is assumed to happen sometime while you are asleep as well.

Sleep is difficult to individualize, since people vary widely in the amount of sleep they seem to need. *In general*, if you do not get at least a time level of +28, *minus* your Recovery, in solid sleep, you will be feeling it the next day in a measureable way. If you do not get enough sleep, your Recovery is reduced by 1 on the following day and you start off the day with 1 non-lethal hit and possibly a few points of stamina loss. If you do not get *any* sleep, your Recovery is reduced by 1 *and* you take exactly enough non-lethal hits to put you at the -1d damage threshold. *You are tired and it shows.* This would also be a good way to describe a hangover. Missing more than one night's sleep would just compound the effects (go to -2d penalty, then -3d, etc.).

Staying awake when you would rather be asleep would be an average(7) task on Will (modified for any lack of sleep), which you really only need to roll if there is a situation where it would be important (someone is sneaking up on camp, the sargeant is checking to see if you are asleep on watch, etc.). The difficulty of the task is increased by 1 for each non-lethal hit you have at the start of the period you are supposed to be awake in, and reduced by 2 if you have some mentally stimulating activity or distraction to help you stay alert. Things like coffee or other sorts of innocuous stimulants are worth a +1 to Will, and the act of making and drinking it is also a light activity to reduce the difficulty by 1 if you have nothing else to keep you occupied.



i You are roused out of slumber to take the midnight watch for your camp. You still have 2 non-lethal hits of damage from marching earlier that day, so you have to make a Will roll against a difficulty of 9 to keep from nodding off at some point during your watch, something that would surely be noticed the next day, since you would *not* have woken up anyone to take the *next* shift. *Of course, your camp might also have been ambushed and everyone killed in their sleep because of you...*

! For the record, your endurance in game terms in various conditions, based on all Attributes being at the listed level and otherwise ideal conditions, is as follows. Note that these do not include overlapping contributing factors, so the 'work until you pass out' number assumes you have sufficient water for that level of effort. It also does not count 'pacing yourself', so the person with the Attributes at 12 is working a lot harder or marching faster than the person with Attributes at 6.

condition	attributes		
	6	9	12
thirst, to first penalty	6h	8h	16h
thirst, to unconsciousness	16h	2d	4d
thirst, to dehydration	1d	3d	6d
air, breath holding	45s	1m	2m
air, to unconsciousness	1m	1.4m	3m
air, to asphyxia	4m	11m	30m
food, to half hits lost	8d	11d	16d
food, to starvation	14d	20d	28d
work, to unconsciousness	10h	15h	20h
no sleep, to unconsciousness	3d	5d	6d

Being at the peak of human ability certainly helps, but you are still all too mortal. *These results are not perfect. EABA is not meant to be a biology simulation, but the results are sufficient for most gaming purposes.*

WEATHER



Weather is a complication to an adventure, *not* the adventure itself. The gamemaster will usually have some idea of what conditions will be like and that is the way they end up. If you *really* want to roll dice for weather, grab 3d, then choose a climate and season. If the roll succeeds against the difficulty, then rain/snow happens at least once in the one week period following the roll. The more the roll was made by, the more frequent the event. Every 2 points the roll is made by doubles the frequency.

i For a normal climate the chance of a precipitation event is hard(11). A roll of 15 would make this by 4, so it would be a wet week where it rained four times in that period.

Temperatures are assumed to be average for the region and season, but a 3d roll can be used to see if things are warmer or colder than normal. The deviance from an average of 10-11 gives a rough idea of the amount, perhaps 5°C per 2 points off. Nighttime temperatures are the same as daytime in very wet climates, and 5°C less than the daytime temperature per climate type drier than this.

On any result of 17 or more, a rare wet weather side effect occurs that week. This could be flood, hurricane, tornado, mudslides or avalanche. On a result of 4 or less, a rare dry weather side effect occurs that week. This could be brushfires, dust or sand storms.

! You could also apply these concepts to things like magical weather or other repeating but poorly predictable phenomena.



climate	precipitation chance
arid	heroic(15)
dry	formidable(13)
normal	hard(11)
wet	challenging(9)
very wet	average(7)
wet season	one level easier
dry season	one level harder

region	Jan	Apr	Aug	Nov
equatorial	30°C	30°C	30°C	30°C
tropical	20°C	25°C	30°C	25°C
subtropical	10°C	15°C	25°C	15°C
temperate	5°C	15°C	25°C	15°C
cold temperate	0°C	5°C	15°C	5°C
arctic	-5°C	0°C	10°C	0°C
high arctic	-10°C	-5°C	5°C	-5°C
coastal	no change			
inland	+5°C day/-5°C night			
far inland	+10°C day/-10°C night			

i Just because, the gamemaster rolls for weather in a desert area our adventurer is at. The roll is 13 for rain and 7 for the temperature. The roll is not high enough for rain in an arid area, but the temperature roll is well below normal. The gamemaster decides that it will be cloudy a few days in the next week, threatening rain but not delivering it. Temperatures will be 10°C lower than normal, down to 30°C during the day, almost comfortable. But, it gets down to 10°C during the night. Oddly enough, it might get even colder without the clouds to hold in the heat from the land.

! A potential use for these numbers would be a case of paranormal powers that can affect probability. To have the weather you want happen in an area affected by the power in the timeframe of the power is what you are looking to achieve.

Remember that atypical weather may temporarily affect the difficulty of scrounging tasks, particularly for water. If you are trying to find water in the desert and it happens to rain that day, then you are in good shape.

Climate

As a tool for worldbuilding and gamemastering, do not ignore climate. Not the immediacies of day-to-day weather, but more of the long term consequences on culture and daily life. We have touched on this indirectly, talking about things like wearing armor in hot climates, scrounging rolls and such, but if whether you are running a published gameworld or creating one of your own, consider how climate affects not just daily life, but the overall plot threads. Do your people have a 'siesta' in the middle of the day because it is too hot to work? Without a reliable source of hot water, bathing and clothes washing will be very uncommon in a cold climate. What are cultural attitudes towards water in a dry climate? How do people deal with a monsoon season? What if, like on Christmas Island, migrating crabs form a living carpet across your community for a few weeks each year? Or, in a more mundane sense, do you have harvest festivals, or in a modern society, the vestigial equivalent of a state fair? There are all kinds of seasonal and climate-based social details you can use to add some personality to a setting and get players more into thinking as adventurers would, rather than as disinterested observers just moving a piece around on a map.

And in the long term, look at how shifting climate and human activity affects things? Famines and plagues are often driven by short-term climate changes. Long-term changes can result in entire regions being abandoned, as when Greenland got too inhospitable for colonists during the Little Ice Age. Major volcanic eruptions can turn summer into winter, as happened in 1816CE. Even modern societies can be affected. Changes in sea level can flood coastal areas. Melting of sea ice can expose new resources that nations are willing to squabble over. Changes in solar weather can disrupt communications and electronics. Even the current climate change (or lack of it) is a political and ideological issue.

These details are beyond the scope of tables and die rolls, but they are important for long-term campaigns and geographical regions within that campaign.



Closing up

At a little more than fifty pages, this is a fairly long chapter in the game, but it will probably be the one you use the least. But it will also be the first one you turn to when the normal rules do not have the answer you need.

Remember that minutia and special topics like the ones that fill this chapter are there to *enhance* the game, the story you are trying to tell, the adventure and drama and tension and to some extent the frustration of a world that does not always run the way the player's plans would *like* it to run.

These topics are *not* supposed to be points where the game slows to a crawl while you look things up and people argue over what sort of modifier they should get for a particular roll. If you are digging out rules and having people make rolls for wilderness survival, there should be a reason for it *other than* the obvious one of simple survival. The rolls are, to be honest, often a secondary consideration, unless you actually *plan* to have all your adventurers die of thirst. *The rolls and rules and success and failure is about how the players and adventurers face the challenge.* Dealing with each other's foibles and flaws is easy when you have plenty of food and a warm bed to sleep in. The stress happens when you are cold and lost and hungry and you think, you *know* that *everyone* would be better off if they would just listen and do things *your way*...

A lot of situations these rules address are also team-builders. If there is a mass combat, can the players operate under one adventurer's leadership to work towards a common goal? Is a big vehicle involved in a fight just a bunch of individuals at control stations or an opportunity to turn yourselves into a *crew*?

Many of the situations addressed in this chapter are predictable ones. Using a vehicle, complications from weather, mass combat, social encounters with important extras, disease outbreaks, wilderness survival, long marches with overloaded packrat adventurers. All of these are things that the gamemaster *should* be able to see coming ahead of time as a reasonable probability for the plot and the setting. *Players, too.* So, if you think you are going to need something here, look it up ahead of time and make some notes. Save yourself and everyone else some time. As a player, being one step ahead of the game helps to inspire the gamemaster. And as a gamemaster, being able to deal with situations like this in a cool, competent manner certainly does not hurt your credibility and reputation.

But, very importantly for the gamemaster, do not feel you *have* to use something just because you spent some time preparing it. When you set up something you feel is really cool and you have spent a lot of time on it, the natural temptation is to herd the adventurers in its direction. Recognize this temptation and resist it (a challenging(9) Will task). Instead, work with and subtly guide the players and the plot. Having the players go "damn, we should have seen that coming!" is a lot more satisfying than "yep, that's about what we expected to happen."

And with this as a lead-in, the next chapter is all about gamemastering and playing. Not just for **EABA**, but for *any* rpg.





A lot of you are veteran players or gamemasters. You already know all the tips, tricks, pitfalls and slang. However, some of you are just getting into role-playing for the first time and aren't exactly sure about this whole adventuring nonsense, how to play, or what makes a good adventure. This section is meant for you, and delves into the good, bad and the ugly of playing and gamemastering, what to do, what not to do and problems you'll eventually encounter. Veterans might find a few useful tidbits in here as well.

INTRODUCTION

You have read the rules, you have a cool idea and some players, but you have never been a gamemaster before and have no idea what to do. Some of gamemastering you are just going to have to learn on your own, but we can give you as much help as possible.



"The rpg is a game that merges the creativity of the game's author with that of the participants. Thus, using the game as a vehicle, the gamemaster and players together create a tale of one or another sort. In combination, these participants, through enactment, devise and develop some sort of a story - after the fact. When played out, the tale might be a comedy, tragedy, epic adventure, melodrama, or simply a rather mundane but imaginary adventure. The enjoyment is gained from participating in the creation of the make-believe events, no matter what the nature of the tale, or its outcome."

- Gary Gygax, co-designer of **Dungeons & Dragons**

THINGS YOU SHOULD DO

If you are just getting into this whole gamemastering thing, mentally check off everything below if at all possible:



- ✓ **watch someone else:** If there are other gaming groups in your area, school, at the local store or whatever, just watch someone else play or gamemaster for a few hours. Even if they are not very good at it, you will see some of what we are talking about in action.
- ✓ **time and place:** The gamemaster is the one responsible for coordinating where and when everything happens. Obviously, it needs to work for everyone, but everyone also has to know when and where. If something comes up at the last minute to cancel play, everyone needs to be informed. It is often important that everyone be there every time. If your last game session ended in the middle of a fight with the Blathering Beast of Bogas, then having a player not show up when you are ready to finish the fight *could* be a problem.
- ✓ **no-show policy:** Sometimes a player just cannot be there. *Life happens*. Make sure everyone knows the policy for adventurers if a player cannot be there. Sometimes another player can run both adventurers, sometimes the gamemaster will. Effort should be made to *not* have a no-show's adventurer either die *or* be the hero.
- ✓ **coordinate style:** Different people will want different things out of a role-playing game. The gamemaster needs to make sure that their own style of gamemastering is compatible with the desires of the players. If the players want a fight every game session and the gamemaster would rather create puzzles and plots to be solved, both players and gamemaster will end up frustrated.



Similarly, your gamemastering style should be consistent. Players who know the gamemaster is big on drama may get an unhappy jolt if things become drastically realistic. Play style matches gamemastering style. Disturbing one will disturb the other.

✓ **ignore the rules:** There are more rules in this book than you need. *Use only what you need to and no more.* Unless you *enjoy* looking stuff up, digging through the rules is an inherent delay of game penalty.

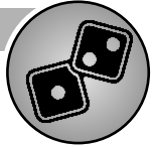
✓ **have fun!:** *The object is to have a good time.* If you watch an action movie, you do not want half an hour of action and two hours of boredom. If you read a book you do not want six dull chapters for each page-turner and if you buy an album, you do not want two good tracks and a bunch you never want to hear again. *Roleplaying is no different.* You do not want to cram half an hour of fun into four hours of role-playing. Part of this fun is up to the players, but a lot of it is up to you.

The rules you are reading are merely a means, not an end. If you have a few game sessions and everyone seems ambivalent, open yourself to suggestions or make some to the players. It is alright to make a sharp turn in the middle of an adventure, if everyone agrees it is needed because the fun quotient is going down.

"Don't be afraid to give a damn. Don't be afraid to take the game seriously. Don't be afraid to get emotionally invested. If you and your group enjoy a surface-only, lighthearted, no-big-deal game, that's great. I like those too. But I also dig squirming, uncomfortable, choose-between-losing-and-winning-by-atrocity stories. If you want to go deep and get messy, do it. Don't think you're too cool to care because it's only a game and just characters in a story. Caring too little wastes your time a lot more than caring a lot.."

- Greg Stolze, designer of **REIGN, A Dirty World and Dinosaurs...in Spaace!**

WHAT IS GAMEMASTERING?



Bluntly, being a gamemaster is playing God. The gamemaster is the eyes, ears and senses of all the adventurers. Anything they know, they know because one way or the other, the gamemaster told the players. If an adventurer starts asking questions in a seedy bar, the gamemaster plays the part of all the patrons, describes the atmosphere, figures out who knows what, who they are likely to tell, and how they feel about strangers coming in and being nosy. If there is a fight, the gamemaster has to make the combat decisions for anyone who gets involved, and keeps track of their injuries. All the people the adventurers will encounter are called 'extras'. They are like extras in a movie, necessary for atmosphere, but usually not a central part of the plot. They are also called non-player characters, or NPC's.

How do you do all this? *Practice.* You will always want to have *some* things written down, more when you are just starting, and less once you have a good feel for what you are doing. Things that are always useful to have are below. Pre-constructed settings or gameworlds often incorporate these, but if you are trying to make up your own gameworld, you will want to have them available as a framework to hang adventures off of.

✓ **location:** A central location in the gameworld where adventurers can initially meet and journey to and from. This is someplace where everyone knows the laws, where adventurers can buy stuff, rest, recover, get information and rumors and either get dragged into or plan their own adventures. A map is good, at least to the level of the main streets and types of region (palace district, slums, bazaar, etc.). Failing that, a description that lets players visualize it in a clear way is good ("it's like Cairo from *Radiers of the Lost Ark*"). Within this, use your imagination and come up with some interesting places and sketch a rough map of each, along with some notes on local atmosphere. **EABA** provides some blank map sheets so you have something to work with.



✓ **people:** Any adventure or location of any significance is going to have important people (or creatures). Who or what they are, their description and motivations should be at your fingertips. You only need to give numerical stats to the abilities the adventurers are likely to encounter. If adventurers get an audience before the king, all the king really needs is a personality. If he doesn't know something, he will have an expert find out for him, and unless someone can get through his guards, *his* fighting abilities are irrelevant. Also make up a dozen or so interchangeable extras to pull out as needed (thug, city guard or police, elite soldier, beggar child, bureaucrat, and so on). How competent friends and foes will be depends on the power level of the campaign. **EABA** includes some blank sheets for recording your own.

✓ **the big picture:** Every gameworld should start with something major happening, either obvious, behind the scenes, or even important-but-far-away. It is a long-term focus for the players and gamemaster. Demento the master supervillain is trying to take over the world. One of your nation's neighbors has invaded another of your neighbors. The corrupt and decadent Empire is rotting from within and civil war is imminent. The One Really True Ring has been found and evil overlords everywhere are scrambling to get a hold of it, become invisible and invade women's locker rooms (*campaigns and gameworlds do not **have** to be serious...*).

This focus can change because of what the adventurers do, and many times that *is* the point. The adventurers ultimately have to defeat Demento, find a way to make the collapse of the Empire as painless as possible for its citizens, or return the ring to the unholy pawn shop from whence it came.

Not every adventure has to center around this "big picture" plot, but the plot is always there. If it resolves, then the gamemaster can create a new one, and the show goes on.

✓ **the notebook:** Or laptop or tablet or iPad or any other book. *A central file where you keep all your gameworld stuff.* Whatever you are basing your gameworld on, have some kind of reference handy. If you made up everything yourself, start a notebook with your thoughts on the gameworld. If it is based off a novel, have the novel handy. If you use a lot of high-tech hardware, keep a reference book of some kind. Likewise for a flavor or particular type of magic.

This reference material helps you keep a gameworld consistent. Adventurers expect consistency in a gameworld, and usually need some explanation when things don't go the way they assume the world works. There is a certain amount of chaos in the world, but when you drop something you expect it to fall down, not up. If you do something ten times and the result is always the same, you expect it will be the same on the eleventh time as well. If this does *not* happen, there needs to be a reason why, even if the players do not know it and figuring it out is actually the meat of the adventure.

"Be flexible. The players will think of things that never would have occurred to you in a million years. When this happens, don't forbid them, try to help them. But do try to think out the ramifications first. One useful trick, when they come to you with a brilliant idea, is to figure out a reason why it can't be done right this instant. Then, while they're doing other things, you try to think out the problem."

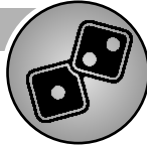
*"example: If a player comes to you and says he wants to force all the priests in his Temple to cast Sunblaze at the same time tomorrow to burn the town to the ground, you can say it's too cloudy right now, or that it will take time to gather the priests together. This gives you a few minutes of breathing time to figure out the possibilities. And just perhaps it **would** be a good thing to burn down the town."*

*- Sandy Petersen, designer of **Call of Cthulhu***



THE 36 PLOTS

The 36 Dramatic Situations, written by Georges Polti in 1913 is a guide to the underlying plot or plots behind dramatic works, and lists the name of the plot, the opposing force, the role of the characters, and any other parties involved. Below is an *extremely* condensed version of his findings.



plot	obstacle	adventurer	other
supplication	persecutor	suppliant	power in authority
deliverance	threatener	rescuer	unfortunates
revenge	criminal	avenger	victims
vengeance by family on family	guilty kin	avenging kin	relatives
pursuit	fugitive	pursuer	other plot
victim of cruelty or misfortune	master/fate	unfortunates	pre-game events
disaster	vanquished	victors	messenger
revolt	tyrant	conspirators	third parties
daring enterprise	adversary	adventurers	goal, bold leader
abduction	abductor	guardians	abducted
enigma	problem	seeker	interrogator
obtaining	foes	seekers	object
familial hatred	relative	relative	cause of hatred
adultery	betrayed	adulterer	adulterer
madness	madman	victim	cause of madness
imprudence	blackmailer	imprudent one	victim or lost object
crime of love	revealer	lover	beloved
kin kills kin	revealer	killer	victim
self-sacrifice	reason	hero	the sacrifice
rivalry	rival	rival	object of rivalry
crimes of love	lover	beloved	crime
discovery of dishonor	guilty one	discoverer	reason
obstacle to love	obstacle	lovers	circumstance
an enemy loved	enemy	lover	hater
ambition	adversary	ambitious one	coveted thing
conflict w/deity	immortal	mortal	reason
bad judgement	victims	mistaken one	restitution
remorse	interrogator	culprit	victim
recovery	seeker	seeker	lost thing

Most good plots incorporate several of these, intertwined and linked. Think of any movie you have seen or book you have read and you will see that several of these plots immediately come to mind. Some classic examples that could easily have been rpg plots:

movie	some of the subplots
<i>Star Wars</i>	pursuit, daring enterprise, revolt
<i>Casino Royale</i>	ambition, revenge, enigma
<i>Total Recall</i>	pursuit, revolt, obstacle to love
<i>Predator</i>	revenge, enigma, pursuit
<i>Alien</i>	deliverance, pursuit, bad judgement
<i>Stargate</i>	enigma, revolt, conflict with deity

Use the plot table to your advantage when you are stuck for ideas. Look at your cast of adventurers, their personalities and traits, the setting and their actions leading up to the current moment, and odds are that something will pop up that you can work with.

"If you haul out a map at the beginning of a fight scene and lay it on the table, you're causing your players to stop focusing on the action scene in their heads and instead directing them to a dead, lifeless piece of paper; now they're like a bunch of football players running a play on a chalkboard instead of a bunch of football players running like crazy and tackling like mad. It may be extremely useful to you to have a floor plan among your notes, so you can judge where all the combatants are. Just don't show it to the players!"

*- Robin D. Laws, designer of **Feng Shui***

GAMEMASTERING TRICKS

The way you run a gameworld will be as unique as you are, but the best gamemasters know and use the same tricks of the trade:



- ✓ **customize:** The rules will never be absolutely perfect for you. *If a rule bothers you, then change it!* Make up your own implementation of anything in the rules that gets on someone's nerves. Strict adherence to the rules is not the goal, having fun is the goal. So adjust the rules as needed to maximize your fun.
- ✓ **adjectives:** It is faster, easier and in some cases more informative to use words than diagrams. Maps are good, but the verbal descriptions add atmosphere. A map does not convey the grimy darkness of a back alley, shadows fading to pitch-black darkness, the sound of unseen things squishing underfoot and smells whose origin is best not thought about too much. *Does that say more to you than a pencil sketch of a rectangle three meters wide and ten meters long?* Describe things using as many of the senses as appropriate, and let the players fill in the blanks. *The more you talk, the less you have to write.*
- ✓ **the world turns:** Certain things in the gameworld stay the same, but many will change, and if you do not write them down you might forget. That would be a shame, because problems from the past can be a lot of fun in the present. The evil mastermind adventurers put away five years ago might get paroled...or escape. The magic trinket you gave them as a reward (and which they foolishly sold) might have been the key to a greater item and they now have to track it down before it falls into the wrong hands. Political events outside the adventurer's control on the other side of the world might have an effect on the gameworld years later. Having past mistakes come back to haunt the adventurers is fun, *and* it also saves you some work, since a plot element is just sitting there waiting to be used.

- ✓ **yank chains:** Adventurers generally have Traits for two reasons, to gain points to make the adventurer more powerful, and to give the gamemaster a hook to hang adventures from. If an adventurer has a Friend or Enemy, right there is a hook for an adventure! Most other traits do the same, especially those that give the adventurer significant points. Keep in mind that anyone in the gameworld that deals with the adventurers will eventually learn a bit about them, whether for good or ill. If an antagonist knows that an adventurer has a bad temper, they can use that knowledge to manipulate the adventurer. A Weakness can be exploited, or Secret used for blackmail.
- ✓ **listen:** Being a gamemaster is not about ultimate power over the players. The game is supposed to be a challenge and entertainment for all involved. The players have joined your game because it sounded interesting, but their expectations are going to evolve over time. As a gamemaster, you need to evolve the campaign accordingly. The things the players say to each other and the things adventurers do that is not directly tied to the current plot is a guide to steering the campaign and future plots in a direction that everyone will have a good time with.
- ✓ **use props:** A picture is worth a thousand words. So is an object. If something in the gameworld matches an object or picture you own or have access to, use it. If they are attacked by a pre-historic crocodile and you've got a picture with a human to show the scale of things, by all means dig it out and let the players see it. If a modern era game can use newspaper clippings, cut them out. If you have got the right paper and fonts, you can make royal writs for a fantasy campaign, dossiers for an espionage game or even little three-d models of buildings for combat purposes. If playing in a candlelit room and playing somber music helps set a sinister mood for your gameworld, by all means do it!



✓ **foreshadow:** Foreshadowing is like reading the newspaper. It will not tell you the future, but it gives trends. *Conflict in the Balkans?* That could mean air strikes, UN intervention, diplomatic saber-rattling or all or none of the above. Foreshadowing is information the adventurers will pick up as rumor, gossip or through their own personal sources. It gives players an idea of events that you the game-master consider important. If the adventurers are at a bar and the town guard rushes by the door in a hurry, that is foreshadowing. Maybe the adventurers cannot do anything about the events that caused the commotion, but you have let the *players* know that something *has* happened that they might want to take an interest in. Because you cannot be all the senses of all the adventurers, the fact that you are telling players something *automatically* gives it some importance. But if everything you tell them is *always* important, the players do not have to work all that hard. Make sure that some of your foreshadowing is blind leads, things that do not help solve the pressing problem, but which hopefully do not send the adventurers off in a completely wrong direction.

✓ **prepare:** There is a saying attributed to Louis Pasteur that "chance favors the prepared mind." A lot of roleplaying and scenarios are about how the adventurers deal with chance, and a lot of gamemastering is how you deal with players. On both sides, being prepared increases the chance things will turn out enjoyable for all involved.

Often, it is the little details that are more important than the big ones. Give the bouncer at the bar a name and he is more likely to be remembered. Even if he is a nobody, you will have the players wondering why you have identified him so uniquely. Making him *seem* important means the players have to treat him as though he might be important. And who knows, maybe the interplay will actually give him a role to play later on.

Have a list of personalities and appearances and names and typical stat blocks that you can toss out for various sorts of encounters outside the ones you expect the adventurers will have.

And make a list of everything that did not go right for you as a gamemaster in your first few play sessions and make an effort in your preparations to overcome these problems. *Learn from your mistakes.*

"Proper preparation is the key to successful gamemastering. I typically end up spending about two hours of prep time for every expected hour of play time, and most of the gamemasters I know whose games I enjoy the most say the same. Obviously you can't prepare for everything, and sometimes part of what makes gaming fun is the spontaneous way the story evolves when you run things 'off the cuff'. But in most situations things will go better if you plan ahead. A lot of the work you do will never be seen by the players because it is background work that lets you know your setting, but it still helps you do your job. Even just a few minutes' advance work thinking about the various possibilities can help you be calm, cool, collected, and ready for anything. In short, it'll make you look like the great GM you are."

*- Steve Long, designer of **Hero System, 6th edition***

✓ **socialize:** Extras are people too. What they do in the gameworld, they do for the same reasons as the adventurers: Survival, wealth, glory, respect and so on. If they are going to spend time talking to or working with the adventurers, think about what makes them tick. *What's in it for them?* And remember that even extras can have depth and subtlety. And if they are useful enough to be regular fixtures of the gameworld, they also have memory. They will remember who has helped them, and who has done them ill, just as adventurers do. If adventurers run into someone who says *"I recognize you, you're the one who killed my brother!"*, is this going to lead into *"Prepare to die!"* or *"I never did like that bullying bastard, let me buy you a drink."*



If the extra has long-term potential, give them their own little dossier, and write down their plans, how long they are likely to take, and how this may affect the adventurers.

- ✓ **improvise:** Despite the previous admonition to write things down, the gameworld is just too big to put *everything* down on paper or hard disk. When the players veer off the path of things that you know, you have got to make it up as you go. It is one of the most important talents a gamemaster has to develop, and one that the rules cannot teach you. The best tip is to have the fundamentals of the gameworld in mind from the very start and maybe a generic kind of subplot that can fit in just about anywhere and “hold the fort” until your brain can catch up with what the players are doing. If the gameworld is such that people respect titles and wealth, then a party of noble adventurers can expect deference from serfs or freemen wherever they go, and the adventurers should expect to show the same deference to anyone more highly ranked than themselves. Local or universal behaviors, beliefs or traits put certain improvisations on “autopilot”, allowing you to concentrate on how this alters the plot.

“Most entertainment is passive. The audience sits and watches, without taking part in the creative process. But in roleplaying, the “audience” joins in the creation. While the GM is the chief storyteller, the players are responsible for creating their own characters. And if they want something to happen in the story, they make it happen, because they’re in the story. So, while other types of media are mass-produced to please the widest possible audience, each roleplaying adventure is an individual gem, crafted by the people who take part in it. The GM (or the original adventure author) provides the raw material...but the final polish comes from the players themselves.”

- Steve Jackson, designer of GURPS

- ✓ **overact:** The *real* world is absolutely seething with subtle cues that we take for granted or use on a subconscious level. The adventurers do the same in their own particular game-world, but the only way the gamemaster can communicate this to players is through words and gestures. And if you are playing via chat, then you lack even the inflection of voice, making it *doubly* difficult. So, make what you describe strong enough to convey all the “feel” of the situation. If you have to use ALL CAPS to convey speaking loudly, bad accents (or deliberate mis-spellings or faulty translations), sweeping hand gestures or you have to get up and get into someone’s personal space, do it! It draws the players closer to the adventurer’s world and helps them make the adventure and the adventurer more real.
- ✓ **cheat:** *What?!* Yes, cheat. It’s not a formal rule, but sometimes a good story demands it. The main reason a gamemaster cheats is if terrible things happen to adventurers through no fault of their own. The terrorists blow up the adventurer’s private jet when it’s ten thousand meters up. *No joy there!* The gamemaster decides the bomb is a dud and the adventurers discover it when they land, using it to drive an adventure based on investigation of the incident. Cheating should be done rarely and impartially, and only when it is necessary for the game to be enjoyable. Yes, adventurers do die sometimes, and you should not *regularly* bend the rules to keep them alive (the Fate attribute puts a lot of the ‘cheating’ in the player’s hands). *Without the risk, the game is not as much fun.* But adventurers who perish should at least have the chance to do so gloriously, rather than getting hit by a bus because they did not look both ways before crossing the street.



✓ **details:** Skill rolls represent the sum of an ability, but convey no 'feeling'. Saying "you find pollen embedded in the illumination of the ancient manuscript, and with a lot of work you are able to ascertain the likely date and place where it was written" is a lot more *satisfying* than saying "you make your archaeology skill roll by 4". Even if the details are something you just made up, they add depth to the plot. But try not to add bogus details if a player knows more about the subject than *you* do...

✓ **pizza:** Pizza breaks are required for long game sessions. It gives players a chance to wind down and discuss things without worrying about boring the gamemaster. It also lets the gamemaster figure out what to do next when the players have poked holes in a carefully crafted plotline. If you are going to be playing for six hours, take a break in the middle. Give everyone, including the gamemaster, a chance to *literally* take a deep breath of fresh air and get the circulation going again...

*"The status of the heroes is defined by the status of the villains they overcome. The best action movies are defined by the quality of their villains. **Die Hard, Silence of the Lambs, and Star Wars** all had powerful villains. And all of the villains were introduced early in the movie. The audience had the whole movie to realize how smart and powerful the villains were. This made the triumph of the heroes much more valuable."*

"Learn from these movies. Introduce the villain early. Make the villain powerful, smart, and memorable. Give the villain status. Make sure the villain wins a battle early to establish credibility. Make the defeat of the villain a major challenge that requires a series of victories. The quality of the villain's challenge will determine the quality of the hero's victory."

- George MacDonald, co-designer of **Champions**

GAMEMASTERING FAULTS



For every good gamemaster there is a bad one (maybe several), and for every laudable trait there is a fault:

✗ **dicemeister:** *The dice are not your god.* Dice are a crutch, a game mechanic to let you arbitrate things that would normally be random or influenced by random chance. You should never let dice take the place of common sense, or engage in pointless dice rolling when using your brain can get the job done in a way that is more dramatic *and* more fun for all involved. If an adventurer wants to talk to an extra, you do not *have* to roll dice to see how they are going to react. Just take on the role of the extra and *let the conversation happen*. You *might* need to roll dice later, but you might not. Give your right hand a break and use your imagination.

✗ **too tough:** Adventures should be challenging to the adventurers. They should *not* all end up dead or crippled. *If they do, it means they are dumb or you are mean.* Adventurers *can* get in over their heads on occasion, and there will be challenges in the world that they are not and may *never* be able to face, but an adventure should be set at a level of difficulty and danger that the combined talents of the adventurers have a chance of overcoming. You may overdo things initially until you get a feel for a game-world or game system. Better to be a little lenient, as long as you do not give the players the impression that their adventurers are able to walk over any opposition.

"Secret or inner motivations for a character are really the soul of role-playing. They force characters to become more than a big pile of powers designed to destroy anything in their paths. The best comic books (and comic adventures) supply more than just slam-bang fights. They provide us with a feel for the characters, a reason to cheer the heroes on, a reason to boo the villains."

- Steve Peterson, co-designer of **Champions**



✗ scriptmeister: *The dicemeister's evil opposite.*

"Here is the plot, here are the roles you will play. Deviations are not permitted." Early on, most adventures will be 'linear'. The plot is straightforward and each step logically leads to the next and each step is required. *Escape city, rescue hostage heir, return to city, quash rebellion, install heir on throne, collect reward.* Many adventure modules you buy or find online will be the same, because you cannot take every possibility into account. But, the gameworld is often an infinitely large place, and adventurers do not always jump in the direction you expect them to. Every decision leads to several other decisions, and the end of the adventure that *you* expected is only one of them. It might be the best one, but it is not the *only* one. A scriptmeister variation is the 'determinist', a gamemaster who is so caught up in their world that they have made the adventurers into spectators, having forgotten it is the *players* who are supposed to be making things happen. The adventurers should not be penalized for taking things in a different direction, or for being clever enough to find away around pitfalls you place in their path.

✗ playing favorites: *Your gaming group is not a clique or a wolfpack.* Players should not have to vie for dominance or attention, and you should not make a particular player or adventurer the focus of the gameworld. Just because player X is your best friend is not an excuse for them to always get the best loot or the most experience. Odds are that if someone accuses you of favoritism and you deny it, they are right and you are wrong. *Do not get angry, do not be overly apologetic.* Playing favorites is a trait hardwired in some primitive part of our brains. You just have to realize it and get past it.

✗ tough love: Sometimes when a gamemaster and player are romantically involved, there is a tendency to overcompensate. Instead of playing favorites with the player, the gamemaster goes too far the *other* way and ends up being too harsh on that player. *A case of good intentions gone wrong.* If someone you are close too says you are being too harsh as a gamemaster, consider that they might be right...

✗ too generous: A gamemaster can be too lenient or generous, making the rewards of an adventure far outstrip the challenge. The original term for this is a 'Monty Haul' adventure. If zillions in treasure and magic items were only guarded by a handful of pathetic monsters, someone else would have cleaned the place out decades ago. If the secret identity of the evil mastermind could be found by a web search, someone else would have done it already. Adventuring is generally more profitable than a regular day job, but the gamemaster has to know where to draw the line. The biggest problem with being *too* generous is that it can increase the capabilities of the adventurers to where something that challenges them becomes difficult to ludicrous, and this can kill the campaign dead.

"A flexible character generation system is a Rorschach test. The players tell you what sort of game they want to play, even if they don't know they're doing so."

*- Jonathan Tweet, designer of **Over the Edge***



x too clever: The gamemaster knows more of what is going on in the gameworld than the players or adventurers ever will. It is easy to fall into the trap of assuming the players can figure things out because the clues are there to be found. But if the *players* have no idea that they have to go to an occult shop in the Spanish Quarter and ask for Madame Zelda to get a necessary clue, then their *adventurers* will not know and will not go. You can make things *too* difficult to figure out, and that is *not* fun, it is frustrating. Yes, there *will* be conundrums the adventurers do not have the answer to, but they should not be the focus of their current adventure. Who the secret masterminds are is important, but figuring out their identity can wait. Just give the adventurers some of the clues they need as foreshadowing for a future adventure and get on with the one at hand.

x too obvious: The gamemaster can make things *too* obvious. Players do not want to be frustrated by not knowing which direction to go, but can also be turned off by there only being one possible direction to go, clues lit up with flashing neon signs saying "go this way". This is different than scriptmeistering, in that the gamemaster is not forcing a course of action on the players, but are just making it painfully clear (and boring) which of the possible courses is the 'right' one.

All courses of action are the *right* course of action, *if* the result is everyone having a good time. *Making sure that the world is saved also helps.* What we are saying is that adventurers need the *opportunity* to fail, and players need to feel the satisfaction of having to *work* for their success. There is a fine line between 'too clever' and 'too obvious' and it is one of those things you will always have to keep an eye on.

PLAYER TYPES



Gamemasters can be defined by their style of gamemastering, usually by *bad* styles, like Scriptmeistering. Likewise, players can be categorized, and most of them have both good and bad aspects:

- ✓ **explorer:** An explorer wants to discover things.
- x *Really* enjoys learning about the gameworld, talking to people and so on, sometimes so much that it is difficult to get them involved in actual plots. But, if something needs to be found out, this player will come up with a clever way to do it. The explorer is usually comfortable with *any* set of rules. It is *playing* that matters to them, and they are usually good at it. Do not crimp their style as long as what they are doing is reasonable for their adventurer's abilities. Do not force them to learn rule minutia, but encourage them to know the fundamentals. Do try to have something in each adventure where their social skills can be useful.
- ✓ **combat god:** The combat god lives to fight.
- x Their adventurer is a lean, mean, fighting machine. Role-playing is sometimes just a creative way to get from one fight to another. They are usually straightforward and blunt, but this doesn't mean they are not good role-players, just that their adventurer's social skills have been sacrificed for martial ability. Don't force the adventurer to play the *bon vivant*. They will encounter situations that have to be finessed, but the skills of the group will help them through it. Do give them the chance to show what they are good at, even if not as often as they want. That is how *they* have fun in the game. The combat god is often a powergamer. Do not let them use rule minutia to get away with things that are simply not reasonable, or at the very least, make them cleverly narrate the rule use rather than just pointing at the rule that says they can do it.



✓ **mastermind:** Likes to make long-term plans and make them come together. Can build empires out of nothing if given half a chance, and even if their adventurer is not a combat god, they have a shrewd grasp of tactics and usually have something up their sleeve that no one is expecting. This player's adventurer is likely to be a generalist, not the world's best at anything, but pretty competent at a number of things, giving them a lot of flexibility. They could, however, be *really* good at something that will totally ruin the gameworld ("Hey, if I use the economic rules and have **this** level of skill, I can eventually own **everything!**") Do not give the mastermind too much, or they will start to shift the gameworld right out from under your feet. Do give the mastermind *some* of what they want, with some parts missing or flawed. No plan works perfectly, and there are plenty of *other* masterminds in the gameworld, whose plans are mutually incompatible with the player's. *For every Sherlock Holmes there is a Professor Moriarity...*

✗ **munchkin:** A munchkin is someone who plays for the sole purpose of gaining loot, powerful items and lots and lots of experience points. This is the kind of person who thinks a first-person shooter with character levels counts as role-playing. *It does not.* If everyone is a munchkin and the gamemaster likes to do nothing but combats separated by cut scenes, then you are fine. Otherwise, any players who want to adventure and learn and make a story get left out in the cold. Most of the cures for munchkinism are fairly harsh. If logic and reason fail to get through ("If you shoot up innocent people they lock you up and throw away the key."), then the consequences of their actions should bite them in the ass until they see that the non-munchkin players are better off. *Incurable munchkins should be left to play with their joysticks.*

✗ **powergamer:** A powergamer (also called a min-maxer) is a player who tries to wring every last drop of efficiency out of the game system, to make the absolutely most powerful adventurer with the minimum amount of points. Most munchkins are powergamers, but not all powergamers are munchkins. A powergamer might just have a very keen survival instinct. As long as the powergaming habits do not last past adventurer creation, it typically is not a problem for the gamemaster. If the player insists on looking up rules to gain obscure benefits on a constant basis, *then* they are disrupting play. If this happens, the gamemaster can just declare that adventurers must make quick decisions in crisis situations. If a player stops the game to look up a rule and annoys the gamemaster by doing so, the adventurer hesitates and loses their action. *Remember, an **adventurer's** actions are based on their perceptions of the gameworld, **not** the **player's** ability to use arbitrary game rules to their advantage.*

✓ **significant other:** Someone who is playing only because they are romantically attached to another player. The significant other is not likely to have a lot of initiative, might be intimidated by the other players or the size of the rules, or feel that not knowing the rules means they cannot do anything useful. With no encouragement, they will not last past a few game sessions. The gamemaster *and* players need to be helpful and encourage the significant other to join in the spirit of things. Explain if there are questions but do *not* patronize, *do* encourage the player to use the adventurer's abilities and cut them some slack. You did not know what you were doing the first time you started role-playing, either. If they *are* genuinely interested in role-playing, they will put up with you regardless. If they are not, then nothing you can do will get them to stay. *It is the ambiguous cases where your effort makes the difference between keeping and losing a new player.*



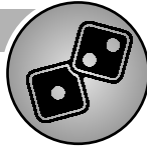
GENRE-BASED REALITY

Something that cannot be dealt with in the core rules of a generic system like **EABA** is 'genre reality'. A set of game rules is an owner's manual for 'game reality', how to adjudicate everything that is not intuitive or in shared agreement, like 'how likely is it that I can hit that guard at this range?'. Stuff like this is common to almost all gameworlds. Other things are specific to a *particular* gameworld or setting type. A published setting will describe these, but if you are making up your own, you will need to figure out the exceptions that give that setting its unique flavor.

A perfect example is 'superhero reality'. In superhero settings, you can have a power or weapon with no recoil for you, but which blasts whatever you hit across the street and through a wall. You can fly at supersonic speed without tearing your clothing or skin off (*eeuw!*), pick up a car and hold it at arm's length in defiance of where the center of gravity is, and so on.

A horror setting may have rules for being driven insane by the presence of eldritch monstrosities. A feudal Japan setting may have rules for honor and ceremony, and a time travel setting may have special rules for handling paradox.

Things like this are *not* in the basic **EABA** rules, but they *are* an important part of *that* specific setting, and you need to incorporate them. Just as importantly, you need to make sure the *players* know about them, understand them and how it affect the adventurer's perception of reality in that gameworld.



EXPERIENCE POINTS

Part of adventuring (and for that matter, most of life) is about gaining experience and learning new things or acquiring new qualities. In role-playing games, this is done by acquiring 'experience points' or sometimes 'XP'. In **EABA**, generic XP convert to normal points (A, S or P) at the rate of 20:1. For each 20XP, you get 1A, 1S or 1P. If you are accumulating XP towards adjusting a *specific* Trait, keep these XP separate, and *they* convert at the ratio of 10:1.



! This ratio is for a moderately realistic level of adventurer improvement. You can adjust this in general or for specific things if you want some types of points to be easier or harder to acquire. For instance, if you want to encourage skills, say it is 10:1 for skills and 20:1 for everything else.

The limits on how you can spend experience may be limited by the genre or gameworld. For instance, if a gameworld has no powers, then odds are you will not be able to turn your XP into points for powers.

There are two ways of improving your **EABA** adventurer: training and adventure experience.

training: Training usually happens *between* adventures, or possibly during intermissions like a long sea voyage from one part of a plot to another. Basically, one full week of practice towards *one* thing is worth 1XP. This takes somewhere around forty to fifty hours a week on the task. This is *possible* with a full-time job, provided you have a job that is flexible with the training, or training that is flexible with the job, which is dependent on the gameworld, the job and the training. Regardless, trying to do *both* means you will have no social life and little time at home or with friends.

i If you are a college student for forty weeks a year for four years, you get a total of 160XP, sufficient for 8 points towards your education. This is enough for one skill at +2d, one skill at +1d and two skills at +0d.



All this assumes you are getting *professional* training, *and* paying someone for it, one way or another. The cost of training will vary with the skill. Learning how to become a blacksmith costs less than learning how to become a brain surgeon. The important thing to remember is that it is an expense that is either within your lifestyle (if employed), or comes out of your savings if it is too high or you are unemployed.

! Realistically speaking, the cost in XP for raising an attribute should double for each *previous* time you have raised that attribute.

There are other training options. First is 'on the job training'. If you are doing what you get paid to do (between adventures), you can accumulate experience towards an attribute or skill (your choice) for that job at the normal rate. You can do this at the same time as you are getting training in your non-working time, but doubling up on training like this means you have little time in your life for anything else. The advantage to on-the-job training is that you are getting paid for it. In the case of something like an apprenticeship, odds are you are getting paid less than what your skill level is worth, perhaps even as little as room & board. For the gamemaster, getting experience for working means the adventurer is actively trying to improve and has the opportunity to do challenging things. This will be obvious to co-workers or anyone above the adventurer in whatever job they are doing. This could be a possible lead-in to another adventure.

Note that if you are getting on-the-job training it implies that you *have the job*. You are not likely to *keep* this job unless your adventuring *is* that job. Employers frown on employees taking unscheduled leave to go gallivanting off on adventures and your job will *not* be waiting for you when you get back.

Next is 'self-training'. If you are trying to learn a new skill or improve a skill you already have, you can gain experience for your self-training at half the normal rate.

This takes as much of your free time as any other training, it just costs less, probably -4 cost off paid training. You still have to pay for supplies and training materials, but you do not have to pay someone else for *their* time. You can usually self-train towards removing negative traits at the *normal* training rate (1 experience per 40-50 hours of work). This *may* require Will rolls to keep from slacking off.

i If you have a Weakness(2A) on your movement because you are overweight, you could spend 20 weeks in a self-imposed diet/exercise program to get 20XP towards buying off the trait.

Last is 'intensive training'. This is 'boot camp', every waking moment spent hammering a skill or a set of skills into you. It is *not* sustainable for a long period without burning you out, and it requires either coercion or a strong will to put up with it. This is worth 4XP per week, and you may do *nothing else* during this period. In the case of military basic training, you might get paid for this misery, but you will have little chance to spend it. Each week of intensive training has an average(7) Will roll, adjusted for motivating or coercive factors. If you fail, you drop out, with whatever consequences that has, and you usually do not get to try it again for several months. Extreme or elite forms of intensive training may have even higher Will rolls. Intensive training is usually towards a specific end and lasts either five or ten weeks, sufficient for 20XP or 40XP towards skills, attributes or powers. Military basic training (ten weeks) is either a single skill at +0 *and* a skill package or a skill package and +1 to one attribute, usually the lowest of Strength, Will or Health.

! In the real world, the benefits of basic training might be more than this, but we are keeping it low as a matter of game balance. Note that something like basic training *also* includes taking on certain personality traits associated with military discipline, points that *can* contribute to the cost of the physical and mental conditioning (strength, stamina, willpower) that are also part of this military training.



Adventure experience

This is what you get during play, for your actions as a player and the success of your adventurer. This takes a number of forms. For general adventuring:

item	experience
short adventure	+0
medium adventure	+1
long adventure	+3
very successful adventure	+3
successful adventure	+1
failed adventure	-1
epic fail of adventure	-3
acted out of character	-2
stayed in character	+0
increased depth of character	+2
'best of adventure' vote	+2
'epic win' vote	+2
'best supporting role' vote	+2

length: This is the 'being there' award, and covers how many individual play sessions and time the plot covered. A 'short' adventure would be one session, a 'medium' one would be two or three and a 'long' one would be four or more sessions. If an adventure or plot extends more than three sessions, experience for things other than adventure length can be handed out every three sessions based on the resolution up to that point, with the length bonus tacked on at the very end. An adventure cannot be 'medium' unless it lasts at least two weeks of in-game time, and a 'long' one is at least a month of in-game time.

success: How well the plot resolved from the standpoint of both what adventurers wanted to accomplish and what is good or preferable for the gameworld. Deciding that 'we will try to let the forces of evil only overrun *half* the world' might be something you can be 'very successful' at, but is not particularly good for the gameworld as a whole. So, consider this award to be an average of these two factors.

character: You get points for traits and the personality of your adventurer. If you take those points and then ignore what you got them for, you *lose* experience points. Simply being 'in character' is *expected*. You do not have to dress the part or use funny accents, but the actions of the adventurer, the dialog spoken *as* the adventurer and the reasons the adventurer is doing things are *supposed* to be according to the way the adventurer was designed. *If your adventurer is claustrophobic, then they should be exploring every option except climbing down the air shaft.* Increasing the adventurer's depth can be worth a bonus. This is things like cultivating relationships with extras, giving names and personalities to them, going above and beyond to 'be' the adventurer and to be honest, make life easier for the gamemaster by making the adventurer more interesting and giving the gamemaster more hooks to involve them in plots.

"Tests – especially failed tests – lead you from conflict to conflict. They are not meant to build roadblocks or walls. When a test is failed or even unexpectedly passed, think about how the story can twist around the characters."

*- Luke Crane, designer of **Burning Wheel** and **Mouse Guard***

votes: The previous items are all awards given by the gamemaster. The voting items are done by the players, with the gamemaster being the tiebreaker, and only apply if there are at least three adventurers in the party. The 'best of adventure' is the player who contributed the most to the adventure overall, even if it was a failure. 'Epic win' is for the one action that was the coolest, most jaw-dropping or funniest thing of the adventure. 'Best supporting role' is for the adventurer who might not have been the most dramatic, but whose actions did the most to help *others* be successful.

All 'adventure experience' is 'generic' XP, and would trade in at the 20:1 ratio, but can be combined with training or other directed experience to get what the player wants.



Spending experience

You can turn in accumulated experience at the ratios described earlier, but you can usually only do this between *adventures*, not between game sessions. If you dedicate experience as *it is earned* towards a *particular* goal, then you can apply it immediately to that goal once you get enough. *That is the reward for planning ahead.* You should also be working this incremental improvement into play if possible, taking time to practice, showing the gamemaster that your adventurer is acting in a way that matches your ongoing training. On the other hand, if you have just saved up generic 'experience' to spend, *each* 1A, 1S or 1P should require *at least* a month of in-game time after you decide what you are spending it on to justify the purchase. So you *cannot* just say 'I need to learn Spanish, so I'll just spend 20XP.' Similarly, anything that involves learning something brand new requires either a teacher or materials sufficient for self-study. *It is hard to teach yourself how to play piano if you do not have access to a piano...*

The other thing you can do with experience, both in general or as a specific goal, is to alter or remove certain traits. If you have a trait that you decide you would rather not keep, like an odious bit of personality, an Enemy that you have marginalized, a negative Status you have overcome, Wealth that you have gained or something like that, then with gamemaster permission, you can 'buy off' that limitation. Some things you *cannot* get rid of. *You cannot buy off being old.* Some things cannot be bought off unless you have done things in play to contribute towards that goal. If you have done nothing to decrease the power or enmity of an Enemy, you cannot buy off that trait, no matter how much experience you have accumulated. What traits you can and cannot buy off, and whether you can direct experience towards that task or have to use generic XP is up to the gamemaster.

Non-experience awards

Not everything that happens to an adventurer in a permanent or near-permanent fashion involves experience or training. Some things happen only because of specific in-game actions. Getting knighted is not something you buy with experience or gain through training, but it is nonetheless important. It would be an award of **Status** that you could get without spending any experience. You could also be owed a **Favor** by someone important. On the other hand, if you thwart the machinations of an evil organization that had, until that point, never heard of you, you have just acquired a new Enemy. You get all the painful parts of having an **Enemy**, but you get no points for it.

There are also rewards in the form of new opportunities. Maybe you have a mage who wants to learn a particular spell, and part of the reward for an adventure is that the only person around here who knows it will teach it to you. You *still* have to spend experience on it, but the ability to spend that experience would not have happened without the help of the person who knows it.

Other things you can get points for, or perhaps be given the option of getting points for. Perhaps your adventurer suffers a severe hand injury. The gamemaster says this may take several months to heal, or you could say that the hand needed to be amputated, which would be a penalty to certain tasks (probably a **Weakness** towards two-handed tasks) that you would gain regular points for, as well as likely getting an 'increased character depth' award for that adventure. Something not as crippling might be a duelling scar (distinctive **Looks**), or having a mystical encounter that gives you the **Unusual Background** you needed in order to acquire some other ability or skill. Or maybe the lost hand could end up being neutral. You get points for it, but then spend those points on a cybernetic hand to replace it. It might have more capabilities than a normal hand, but also have liabilities that a normal hand would not.

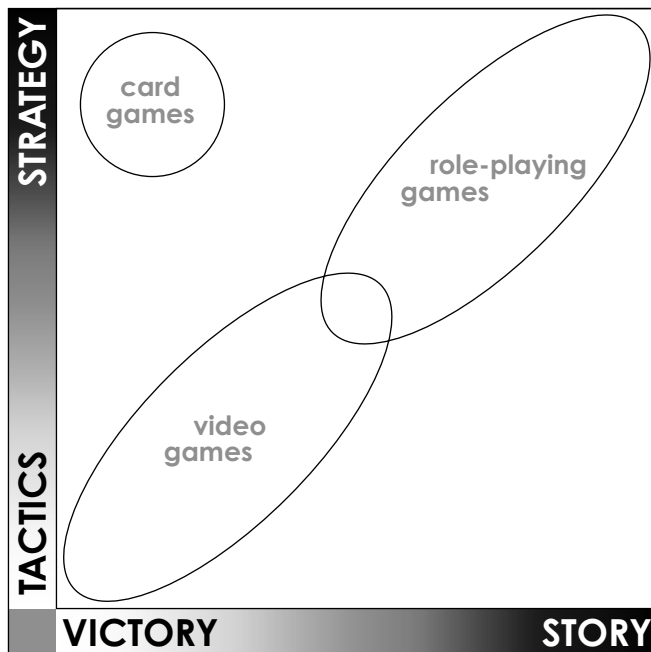


WHAT IS THIS GAME?



We described what a role-playing game is at the start of the rules. We will finish the rules with thoughts of what a role-playing game is *not*.

Most games are driven by 'winning'. Board games, card games and video games have a clear beginning and end. *Someone wins, someone loses*. Role-playing games have a beginning, but no real end. The only way you 'lose' is if your adventurer dies, but even then you can create a new adventurer and rejoin the game already in play. And, you never actually 'win' in a role-playing game. Your adventurer survives, overcomes the obstacles and villains, but there are always going to be new challenges. Instead of being driven by victory, role-players are driven by the story or plot. Shoot-em-up video games are almost entirely tactics, but as they become more sophisticated they have incorporated long term plots and storylines. Card games and board games are almost entirely strategy, but more and more of these are including story elements to give the game a longer-term appeal.



Video games do not require dice, role-playing games do not require hand-eye coordination, and card games do not necessarily require either.

The main thing that separates a role-playing game from any video game that says 'role-playing' is the intelligence and flexibility of the gamemaster. At the time of **EABA v1** (circa 2000CE), computer games just did not allow deviation from the plot, and you either won or you died. The capability to have several people form a group and have an adventure that did not revolve around killing things was virtually non-existent. Likewise, you could not just have an adventurer walk in a random direction and expect to do anything more sophisticated than a typed conversation with other players, trade items or bashing a few random monsters or aliens or whatever. As **EABA v2** is released, it is now 2013CE, and things have improved a bit, especially in the graphics and the quantity of people involved. But the number of possible endings is still small, and the ability to run long-term campaigns or do anything significant outside the pre-determined plot is *still* lacking.

A human gamemaster can think up new plots on the fly and can deal with social interactions that are orders of magnitude more complex than a computer-based game can. You can expect lines to blur, and the most successful items will probably use the best elements of every tool available. **EABA v2** is trying to do this, optimized for the iPad and with built-in software for gamemasters and players.

"There are no other games that combine the disciplines and arts that role-playing does. No other hobby provides as many creative outlets. You are a performer, designer, illustrator, tactician, and philosopher, while socializing with your friends. Role-playing is storytelling, theater, and strategy gaming. All of these can be found in no other art form."

*"It is what role-playing **is** that is exciting for the player. A group of friends sit around someone's living room, and, by merely speaking to one another, construct a fantasy which they all share - playing it in their heads like a film. What computer game can compete with that?"*

*- Dave Arneson, co-designer of **Dungeons & Dragons***





It is said that the love of money is the root of all evil. It is not the money, it's the neat stuff you can buy with the money. No role-playing game can list every item adventurers will want or need, though some make an encyclopedic effort. For the most part all you really need is a selection of weapons and armor for a handful of gameworld possibilities, and generic 'stuff' that can be plugged in or mutated as needed to fit the situation. And of course, you can always import items from other games.

INTRODUCTION

By now, almost every rule or idea you need in **EABA** should have been covered. These last few rules are just jargon or terminology or notes specific to equipment, usually weapons.



The first 'rule' is the most important: *Use only the information you need.* If the gamemaster does not worry about armor and hits for gear, do not bother writing it down. If an item's weight is never going to contribute to your encumbrance, ignore it. If you are wealthy enough that the cost is within your normal expenses, assume you can replace it with little effort anywhere it is available.

Use whatever detail is appropriate for your gameworld. Most items listed are from near the end of their tech era, and variations of some kind will be common. The **EABA** scale is coarse enough that minor differences in weapons often end up having the same game stats. Remember that a +1 difference in damage is about +25% more energy and a +1 difference in Accuracy is about +40% more accurate. Odds are that any variant in style or accuracy or damage is going to be no more than ± 1 on any stat.

i There are probably hundreds of models of 9mm pistol with a clip capacity of around 15 shots. By and large, all of them will have the same game stats, and choosing one brand or model over the other is purely a personal preference. In a system where the minimum possible roll is a .4% chance (a 3 on 3d+0), there is no in-game difference between a weapon with an average misfire rate of .1% and .2%. When the difference between a 3d+0 roll of 10 and 11 is 13%, a weapon that is 2% more accurate than its counterpart is *not* worth a special note.

! Another quick way of looking at it is to say that ± 1 in damage translates into $\pm 25\%$ capacity. A weapon with the same mass but +1 damage over one in the gear listing might have 25% less ammunition capacity. One with +2 damage might only have half the ammunition capacity.

It is easy for 'stat-chasing' to sneak up on a player, ending up as a time sink and goal rather than paying attention to the adventure at hand. People want the latest and the best, the fastest computer, the coolest, newest gun, a teleportation belt with ten percent extra range, a disintegrator ray with a 'clean up dog crap' setting, or whatever. Only in the case where the gear is so special that it is *worth* being the focus of an adventure should it reach the level of intruding into game play. Mostly because in this case the adventurers and their foes *are* obsessing over it, making the *player* actions entirely reasonable.



How gear works

As a game concept, gear just does one or more of the following:

- lets you do something you could not do without it
- alters difficulty of something you could do anyway
- changes game reality in some way

i A tire iron lets you do something. It is remarkably hard to change a tire without a tire iron or its equivalent. A telescopic sight on a rifle helps reduce the difficulty for range but does not fundamentally change the rifle itself, a bucket of paint changes the color of whatever you paint it on and a gun punches holes in things or otherwise ruins someone's day.

The first two are the most important in terms of the rules. While they will follow general guidelines, the specific details will be very gameworld and technology-dependent.

i A computer to give you a certain bonus to mathematical tasks in 1940CE might take up an entire building and cost a fortune. In 2012CE it is called a scientific calculator and most high school students have one. A set of tools a mechanic needs to alter the difficulty of a repair task by -2 is significantly different in size and cost than the tools a particle physicist needs to alter the difficulty of a research task by -2.

If a piece of gear is required for a task, it or its equivalent is well...required. If you *can* do the task without the gear, it is probably at +10 difficulty. You cannot take apart and reassemble a mechanical wristwatch with a butter knife. You cannot remove tightened lug nuts with your bare hands. Improvised tools or partial tools will reduce this increase in difficulty. For instance, a modern multi-tool would be far from ideal for taking apart a wristwatch or changing a tire, but it *would* be better than a butter knife or your bare hands.

If a piece of gear adjusts the difficulty of a task, it will have a minimum size and cost for the minimum effect. You can increase the effect by +1 by increasing the size *and* cost of the gear by +2, or by keeping the gear the same size and adding +4 to the cost. Gear can both be required *and* provide a bonus, in which case the mandatory level of gear simply provides a +0 bonus.

i A set of lockpicking tools is required for certain types of locks, and the gamemaster says this has a mass of -12 and a cost of -10. If a set of '+2 lockpicks' were available, they would be a set of tools of mass -8 and cost -6 (+4 to each), or they could be ultra-specialized compact tools of mass -12 and cost -2 (+8 to just cost). The same notion could apply to a chemistry lab, but the minimum required size and cost would be far different.

For the sake of expanding on the gear list, assume that any set of tools listed are the minimum required for a +0 modifier on use of the skill or task they apply to.

Gear stats

Stats for gear should be pretty obvious, but just in case, here is the full rundown.

name: The name of the item. The **EABA** rules just use generic terms, but gameworlds will probably have specific names or real-world or imagined brand names to add personality to the item. If an item has a '+' after the name, it is *only* available in the late part of that tech era, and if it has a '-', it is available during the early part of that era.

! And remember that you can just do minor stat tweaking before you put a gameworld-specific name to something. So, the generic 'semi-auto pistol' might be an 18-shot Glock 17 in 9mm at 2d+1 damage or a 12-shot H&K P2000 in .357 Sig at 2d+2 damage. And if all that does not mean anything to you, that just means this level of detail is not needed for you.



uses: The type of ammunition used in a ranged weapon. In general, weapons in the same class (pistols, rifles, shotguns, etc.) with the same type of ammunition can interchange it, so two pistols using '7mm bullet' probably use the same ammunition, but a rifle's '7mm bullet' would not work in a pistol and vice versa. The means of *storing* the ammunition might not be compatible (a clip from pistol A probably will not fit pistol B), but the *bullets* can be unloaded from A's clip and put in B's. The types of ammunition are usually one of the following:

ball: Multi-part ammunition like used in muzzle-loading weapons, separate projectile, powder and other components. See the reloading guidelines on [page 4.10](#).

arrow/bolt: An arrow or quarrel, as used in a bow or crossbow. These are not interchangeable.

bullet: A self-contained unit of ammunition, sealed. It is more reliable and easy to load.

needle: Used by 'gauss weapons', a weapon that magnetically accelerates a metal projectile to high velocity. Needles and the electrical storage to fire them are usually carried in the same clip. The thing to note is that the energy is useless without the projectile, and the projectile is useless without the energy.

electric: Electricity as an ammunition type just means the weapon turns electrical power directly into damage, like a laser beam. This energy is usually stored internal to the weapon or in a clip.

Acc: The Accuracy of a ranged weapon, which assumes the weapon is used properly (you cannot get a rifle's Accuracy if shooting it from the hip...). Ranged weapons with no Accuracy listed are assumed to have an Accuracy of 0. Remember that even with an Accuracy of 0, you still get the benefit of aiming, you just do not get an immediate reduction in difficulty because of weapon Accuracy.

covers: Used for armor. The area of the body and the 3d+0 values for a random chance of hitting that location.

damage: The normal damage of the weapon. In the case of muscle-powered weapons, this will be some addition to strike damage. The minimum Strength to reload a ranged weapon with strike damage will be listed under 'notes'. If a weapon's damage has a superscripted letter after it, like '2d+1^P', this means the damage has an advanced special effect (see [page 5.31](#) if you want to use these):

p - penetrating	b - battering
s - stopping power	c - continuous beam
a - armor-piercing	g - shotgun
v - variable damage	

It is worth noting that the a, s and p modifiers are sometimes a matter of ammunition type rather than a quality inherent to the weapon, and can often be purchased and substituted in as part of the flexibility that is factored into weapon design. There may be a question of cost, legality and availability, however. For instance, it might be illegal for civilians to possess armor-piercing ammunition.

damage type: For melee weapons, they will be listed as doing lethal, half-lethal or very rarely, non-lethal damage.

length: This is a relative ranking for melee weapons and is only used with the advanced rules for weapon length ([page 4.17](#)).

weight: The mass of the weapon or gear in kilograms, with its mass level in parentheses after it. If this value is low enough, it is usually ignored, but it does *not* mean you can just carry an unlimited amount. The weight of a reload for a weapon is generally 8 points less than the weapon for medium-capacity clip-fed weapons or for a quantity of reloads equal to perhaps 20 shots, but this can vary with tech and weapon type. A rocket launcher will have proportionately heavier reloads than a crossbow, for instance.



i The Atomic Era assault rifle has a listed weight of -4 (5 kilograms). This would mean an loaded extra clip for it probably has a weight of -12 (.8 kilograms). If you care about encumbrance, you just figure the weight level for the total of the reloads you are carrying (e.g. one extra clip is a weight of -12, two is -10, four is -8, etc.).

Armor is given weights as a whole and in many cases as sectional amounts, which do not add up to the same as the whole. Assume that when you have a complete set that there is a weight savings from removing parts that would otherwise be duplicated.

cost: The cost level of the weapon in Credits and cost level. Costs of -13 or less are usually insignificant unless there are some cultural or technological income adjustments in play (page 3.48). Cost can be very mutable in modern settings, when an item can be mass produced by the billions (like bullets), or made far away using very cheap labor and then shipped to a market with a higher standard of living. For instance, if a modern person wants to buy a suit of mail armor for costume or re-enactment purposes, the cheapest way to do it might be to buy one made by hand in India rather than paying first world labor rates to put it together. Or, a piece of consumer electronics is made by the millions *and* is made somewhere with low labor costs.

shots held: The ammunition capacity of a ranged weapon, and how they are held in the weapon:

clip: This is an imprecise term, but generally means a removable box, drum or tube that holds several units of ammunition and can be quickly replaced with a full one when empty. Replacing a clip normally takes a time level of +4 as an average(7) task on the skill used to operate the weapon. Reloading an *empty* clip normally takes a time level of +4 for the first shot it holds and +2 for each doubling of capacity (so an empty 8-shot clip would take a time level of +10, or about 30 seconds).

internal: Ammunition is held inside the weapon in some *non-removable* form of storage. This term would also be used for the single shots of a bow or crossbow. If a weapon has a value of more than 1 it means that multiple units of ammunition are stored. This could be an internal magazine like the internal storage on many bolt-action rifles, or it could mean a weapon with multiple firing mechanisms, like a double-barrel shotgun.

external: This would be something like a box or hopper of ammunition that is external to the weapon and is normally carried as a separate item. It would be more common on things like machineguns. Obviously, it is difficult to fire such a weapon if you are moving, though small amounts of ammunition can often be left hanging from the weapon to make it semi-useful when being moved from one spot to another. An advantage of this type of storage is that you can usually make the 'box' as big or small as you need or can carry. Reloading the weapon from a readied box is like replacing a clip, but it usually requires both hands and takes more time.

armor: If it matters whether or not the gear can withstand damage, this is its armor rating. Remember that gear and weapons generally ignore non-lethal damage. Also remember that even things that generally do non-lethal damage (like Strength) can leverage this into lethal damage by bashing the item into something hard. In general, gear will be:

mass	armor	hits
1kg	1d+0	0
2kg	1d+1	1
4kg	1d+2	2
8kg	2d+0	3
16kg	2d+1	4
32kg	2d+2	5
65kg	3d+0	6

There are two exceptions. If an item is tough enough that an average person cannot break it with their bare hands, it has an armor of at least 1d+2. And if an item can take real damage and still remain functional, it has at least 2 hits.



For items that *are* armor, the value in this slot is their protective ability, along with whether it is a **rigid** or **flexible** armor. It is worth noting that virtually all archaic armors will be worn with a padded cloth underlayer or **gambeson**, which will generally add 0d+1 to the armor total *and* add 1 to the Toughness of the wearer. Modern bulletproof vests or combat armors generally lack this. You might also see the advanced armor notes on **page 5.28**.

Individual armor pieces will not add up to the value of a whole-body armor. Assume that if you buy an entire set a piece at a time, the entire set counts as the whole-body stats.

Body armor is assumed to be for a being of human size. You would have to alter the modifier total of the power to compensate for altered body size.

I If you are +1 to normal human size, the modifier total that created your armor is 1 point smaller, so you should probably increase the mass modifier by +1 to compensate for this.

hits: How many hits the gear has. Damaged gear may work erratically or with complete loss of one or more functions, and lose value because of cosmetic damage. Generally, losing all its hits destroys it, but paranormal powers can often repair such damage. Gear that takes twice its hits, especially by means of pervasive processes like fire or acid, is usually destroyed beyond hope of recovery.

Any piece of gear whose nature and purpose is distributed over a large area generally takes *no* loss of hits from simple punctures. There will be cosmetic damage and *minor* loss of function, but on the coarse scale of hits, no damage. A gun with a dented barrel may be ruined, but a sleeping bag keeps you no less warm if it has a dozen bullet holes in it. Dealing with things like this is subjective and up to the gamemaster. Gear with this characteristic is usually noted as 'durable'.

! As a design note, most of archaic armors can be boosted by 0d+1 either by 'secret techniques' (i.e. a fractional tech era boost) or by *doubling* the weight *and* cost or by increasing the weight by one level and quadrupling the cost. So, a very strong or wealthy person can be better protected than average. Conversely, you can halve weight by dropping protection by 0d+2. So, a 10kg mail shirt that normally provides 2d+0 protection can be dropped to 1d+1 protection and 5kg.

P: The equivalent cost in P if the gear had been bought as a paranormal power in a gadget. This stat exists solely for comparison purposes, or if the gamemaster wants to allow adventurers to have a certain value of gear in points rather than credits, or is using points as a balancing factor or comparison between magic and tech. For non-disposable gear that uses consumables, the cost in P includes a full clip or at least 10 'shots' for the weapon, and as a rough guide, tripling the total amount of consumables is an extra 1P. But for *mundane* goods, extra supplies really just require extra cash.

! There is not room to list all the power creation modifiers that apply to each real-world gadget. We have done the best we could in costing them to match their actual capability, flexibility and limitations, but the point cost is a guide, *not* a commandment. For most ranged weapons, their design as a power includes a flexibility modifier, to reflect being able to change ammunition types. Other modifiers were chosen to give results closest to real-world equivalents, rather than trying to design the weapon as an optimized power. Using the power system to make mundane gadgets without the gamemaster imposing some real-world limits will *easily* exceed the real-world performance figures.



The cost in P is a better indication of the 'power' of the item in a given tech era than its monetary cost, so it is also a gamemaster tool. For instance, you could say "your adventurers cannot buy any starting gear that has a cost of more than 2P", or "you start the game with up to 20P in mundane gear." Items with a listed P cost of zero would count as one-tenth of a P for such purposes. Non-weapons/armor that cost 1P generally cost 1P because they grant an ability you would not normally have.

! Low-tech stuff costs more P than high tech stuff because the tech base for low-tech stuff will be lower, so you often have to spend extra P in order to get the same level of effect.

notes: Any shorthand about special capabilities like autofire or reliability. Gear is assumed to be reliable unless otherwise stated. Melee weapons will have a note as to whether they are balanced or unbalanced, which is an advanced rule ([page 5.20](#)) about the inherent Initiative of the weapons. A weapon noted as 2-handed (2h) obviously cannot be used with a shield or if one hand is incapacitated. If it *can* still be used with one hand, it takes a -3 to its strike damage and may take a -1d skill penalty to be used at all. See also the advanced Accuracy notes on [page 5.16](#).

Hidden stats

Things that factor into gear as part of a 'power design' may not show up in the stats you see. For instance, ranged weapons will have a 'range' as a modifier, and the advanced modifier 'declining range'. This just means the weapon has a useful range and any attacks *past* that distance lose 1 point of damage per extra range level. You do not see this in the stats because not everyone wants to put these extra steps in the middle of every combat. But the gamemaster *should* take things like this into account when their medieval player wants to take a 200 meter called shot with a blunderbuss (which happens to be designed with a range of 'very short'). Most of the shorter range firearms have a 'range' of 23 meters and longer range ones have 90 or possibly 350 meters.

Customizing

All the weapons were designed as 'powers', which means you can greatly expand on the list with a few simple adjustments. The damage of the weapon is based on its point cost. The power level is the damage for 1P, and +2 damage for each +1P in the cost. Odds are you can alter a weapon by adjusting its point cost or with minor changes to the modifiers.

i The Atomic Era submachinegun has a damage of 2d+2, a 32 round clip, uses both hands, has a mass of 2.5kg and costs 2P. So, if want to make it into a machine pistol we can use in one hand, this would change the 'gestures' modifier from +3 (both hands) to +1 (one hand), which is a modifier change of -2. We *could* leave the other stats unchanged, but this would likely reduce the power level. Or, we could drop the clip size from 32 to 15 to offset the -2 change in the gestures modifier and keep the damage the same. Or we could do something more complex, reducing the mass to 2kg (-1 change), reducing gestures to one handed use (-2 change), drop the clip size from 32 to 15 (+2 change), increase the cost (+1 change). This gives a one-handed weapon with the same modifier total (and the same damage, but lighter, more expensive, and with a smaller clip.

Tech maturity

One important thing you should do if designing gear as powers is consider when a tech 'levels off'. Once you get to steelmaking, the tech era for a melee weapon usually does not go up, and is probably limited to Basic Era, as are bows and crossbows. Conventional firearms probably hit final maturity in the Post-Atomic Era. Once a tech has reached its maturity, you would use the **tech mixing** optional rule. This leveling off allows new technologies to outstrip the old, even if they are limited at first (see **Tech-limited power**). Conversely, you can say that low quality gear or weapons are built at the equivalent of a lower tech era.



Gear tidbits

Adventuring tends to involve travel, and quite often this is away from the luxuries of home and hearth. Some guidelines for making in-game travel and use of gear follow

horses: Your average horse has a Strength of around 15, which means they take a -1 penalty at a weight level of +7(65kg), a -2 at a weight level of +9(100kg), and a -3 at a weight level of +11(200kg). So, a horse and rider with not much besides saddle is probably acting at a -1 penalty to physical actions, and one with some extra gear carried is probably at a -2. Keep in mind this will also add to any stamina the horse has to use, but a horse at a -2 penalty can walk all day as easily as a person at a -2 penalty.

Horses are not motorcycles. *You cannot just park them and come back to them the next day.* They require food, water and minimal maintenance, just like people. Food and water will be proportionate to their size, which is probably +7 mass more than a person. The time you need to spend on a horse you are using depends on conditions and how hard you are pushing it, but you are easily looking at a time level of +22 to +24 (half an hour to an hour) *per horse per day* (another reason people have servants in societies reliant on horses). *This is for horses in use.* Those that are pastured require much less. Maintaining several horses takes a little less time per horse, but many of the tasks *do* require individual attention. Getting insufficient maintenance can reduce the horse's Recovery and possibly contribute to injuries like saddle sores or lameness from things getting lodged in a hoof.

A horse as part of your lifestyle is going to be a weekly cost level of -8. This covers food and maintenance by you. If you are paying for someone else to do the maintenance (like keeping it in a commercial stable), then the weekly cost is -6.

Both costs are +2 for each doubling of horses (possible quantity discount). If you have a bigger horse or a meaner horse or both, expect to pay more. Bigger horses also eat more out of your lifestyle cost, as do fancy ones like racehorses, especially if you are also paying for a trainer. Ownership of a riding horse or especially a racing horse is a status marker in many cultures (and not *just* the medieval or fantasy cultures).

Whether or not you want to deal with the minutia of horse ownership in a role-playing sense depends on the gamemaster and the nature of the campaign.

armor: Personal armor has a rating, which is an average amount, and coverage, which is generalized. Armor will have weak spots like joints and seams, and primitive armor will have *actual* gaps like eyeslits in a helm. These can be vulnerable to detailed called shots, and are also readily expolitable if the owner of the armor is immobilized or incapaciated. If you have six guys pinning a knight to the ground, the seventh guy can lift up the faceplate of his helm and stab him in the eye. Similarly, someone wearing a suit of powered armor might be more vulnerable at the elbows or armpits, a tank is vulnerable at the gap between the turret and hull, and so on.

This is only important if an attacker does not have a weapon that would penetrate defenses, but does have sufficient skill or tactics to be able to put a shot in weak spot. If the gamemaster thinks this is going to be the case, they should determine what situation or level of called shot is necessary to target a weak spot, and the benefit that can be gained on a success. This is *not* a 'critical hit' system, where called shots or good rolls automatically generate increased armor penetration. It is usually dependent on the circumstances, the weapon, and the level of skill. That is, it is something you can get if you are good *and* roleplay the situation well.



breaking stuff: Gear is going to have armor and hits, and can be targeted by weapons or suffer collateral damage. This is usually handled by the guidelines on [page 5.30](#). Gear that has the notation 'durable' generally takes *no* hits from punctures, penetrations or attacks that cannot affect the entire item at once. If you get shot, your jacket gets a hole or two in it (and some *nasty* bloodstains), but it *still* does all things a jacket is supposed to do. Gear with the notation 'fragile' automatically breaks and loses function if it takes *any* damage at all. A ceramic urn might take several hits to be *completely* destroyed, but its ability to hold stuff is ruined if it takes anything other than superficial damage.

camping: Setting up and tearing down a camp can range from flopping down a bedroll and hoping it does not rain, to the full tent, latrine, fire pit, secure perimeter sort of thing. It really depends on the gear, the tech era and the manpower. Assume that any camp providing protection from weather for one or two people is going to take about a time level of +22 in labor (half an hour), +2 for double the people.

i Setting up a real campsite for sixteen people will take a time level of +25 (+22 base, +6 for three doublings past two people). This is about four hours, which can be split up between several people as needed.

A decent camp, and supplies appropriate to the tech era and possibly your status and lifestyle, are *required* if you are to get your optimum Recovery during the night. If you are used to sleeping on a cot, and you have to sleep on the ground, you will not sleep well. If your toiletry kit got washed away and you have to shave with a knife and wipe your butt with dried leaves, you will not be in a good mood. On the other hand, if you are a rugged nomad who is accustomed to eating bugs and sleeping propped up against a tree, your minimal expectations and poor hygiene may offend your more refined peers, but *you* will not be the grumpy one the next day.

In high-tech cultures, a person can carry all the necessities of civilized camping on their back. Bivvy sacks, titanium sporks, freeze-dried beef stroganoff, the works. A Late Atomic Era hiker can have *everything* they need (food, shelter, clothing for anything except winter, stove, toiletries) for two spartan but relatively comfortable weeks on the trail for a total weight of about 20 kilograms. It does not include water for that two weeks, but *does* include water purification. In low-tech cultures, you either do without or have a horse or pack mule. Heavy wool blankets, cast-iron cooking pots, flour, cooking oil, dried meat and forage. A Napoleonic soldier, not counting his weapon, would have clothing, four days of low-quality food, eating utensils, a blanket and a canteen in that same 20 kilogram load. No tent, and heavy things like camp axes and cook pots had to be split up between the people marching together, so everyone would be carrying a bit more than that 20 kilograms. *Plus their weapon and ammunition.*

Camping out is a staple of many genres of adventure and while *players* do not need to know the *actual* details of setting up and tearing down a camp, the interplay of tasks and who does them and how well can be part of the roleplaying, especially early on when there has not been a routine developed nor any sort of habitual division of labor. *For instance, do any of the adventurers even know how to cook!*

! Camping is a good example of '*players do not need to know the operational details of skills the adventurers know*'. A group of urban *players* should not have their *adventurers* penalized for not knowing the ins and outs of camping any more than a group of Atomic Era *players* should be penalized for their *adventurers* not knowing how to maintain a warp drive in a science-fiction campaign. However, in both cases, the *players should try to learn something of how these skills work in the context of the gameworld, if only to add some depth to their gameplay.*



accessibility: One difficulty with carrying lots of stuff is getting to it when you need it. In the first few turns of an encounter, individual seconds matter, so if something is not right there, odds are you should wait until a later turn. Here are some guidelines for the amount of time you need to give up to get something into your hands from an inconvenient location. You can decrease the time for many of these by 1 if you are willing to rummage and disrupt the other contents of the container.

location	turn mod
holster	+0
outside pocket/pants pocket	+2
inside pocket/jacket pocket	+2
sealed belt pouch	+4
outside pocket of pack	+6
somewhere inside a pack	+8

i If you have to take off your pack and open it up to find a first aid kit to try to stop someone from bleeding to death, it will take +8 time. If you frantically toss stuff out of the way to get to it, it would be +7 time. If you had the kit in a known outside pocket, +6 time. This is why medics have special packs that open up quickly to display and make accessible all the contents.

These times assume optimum conditions. If you have to take off your gloves in order to get at something in your pants pocket, it is going to take longer. If you have to get into your right-hand pocket with your left hand, it is going to take longer. The point is that you might not be able to have everything you want instantly at hand, which may involve some role-playing as you stall for the time you need to get at the things you need. It also gives you something to do with long turn mods in later rounds of a combat.

daily routines: One overlooked aspect of camping and life in general is your daily routine, things and rituals that take up time and are part of your image and how other people perceive you. Shaving, showering, makeup, whatever. There is how you *want* to look, how you *think* you look and how you *actually* look. To the extent that any of these are mirrored in game stats, disruptions to your daily routine can affect them. Sometimes this can be overlooked, sometimes not. If your job requires you be clean-shaven and you show up with a weekend's worth of stubble, it might cause problems.

i If you have stunning Looks, but you are filthy, you will not get any bonuses until you clean up a bit. On the other hand, being filthy might help *conceal* your Looks if that is what you are trying for. Or, your Status as a lord comes with the assumption that you look like a lord. If you were rolled in a back alley and left with nothing but filthy rags to clothe yourself in, convincing guards who do not know you that you are who you say you are may be difficult. *And if you start putting on lordly airs, there is a good chance they will beat the stuffing out of you...*

wear & tear: *Stuff wears out.* Adventurers have a tendency to break stuff before this happens, but if not, things become obsolete, worn or lose their like-new luster. The easiest way to deal with this is to *not* deal with it. If an item is something that is part of your lifestyle and it becomes worn to the point of unusability through general use, assume that part of your lifestyle is accumulating the money needed to replace it whenever this happens. This is different from "my laptop took a bullet", and is more "my laptop's keyboard has crapped out and the screen is starting to flicker". If you have an old car and it finally gives out, you get another *old* car to replace it. Only in the case of qualitative upgrades do you need to cough up savings to replace worn out clothes, gear and such.



Primitive Era ranged weapons

name	uses	Acc	damage	shots held	weight	cost	P	armor	hits	notes
Medium bow	arrow	0	1d+2 ^P	1 internal	.5(-13)	125(-6)	2	1d+1	2	2h, minimum Str 7
Heavy bow	arrow	1	2d+0 ^P	1 internal	.7(-12)	250(-4)	2	1d+1	2	2h, minimum Str 9
Light crossbow ⁺	quarrel	1	2d+1 ^P	1 internal	2.0(-8)	350(-3)	3	2d+1	2	2h, minimum Str 7
Heavy crossbow ⁺	quarrel	1	3d+0 ^P	1 internal	4.0(-5)	700(-1)	3	2d+2	3	2h, minimum Str 9

Basic Era ranged weapons

name	uses	Acc	damage	shots held	weight	cost	P	armor	hits	notes
Hand cannon ⁻	19mm ball	0	2d+2	1 internal	3.0(-6)	700(-1)	4	2d+1	2	2h, unreliable(≤9)
Flintlock pistol ⁺	12mm ball	0	1d+2	1 internal	1.3(-10)	250(-4)	2	2d+0	2	unreliable(≤7)
Flintlock musket ⁺	19mm ball	1	3d+0	1 internal	4.0(-5)	700(-1)	4	2d+2	2	2h, unreliable(≤7)
Blunderbuss	18mm ball	0	2d+1 ^g	1 internal	2.5(-7)	350(-3)	3	2d+1	2	2h, unreliable(≤9)

Industrial Era ranged weapons

name	uses	Acc	damage	shots held	weight	cost	P	armor	hits	notes
Flintlock rifle ⁻	12mm ball	3	3d+2	1 internal	4.0(-5)	2.0K(+2)	4	2d+2	2	2h, unreliable(≤7)
Light revolver	9mm bullet	0	1d+2	6 internal	1.0(-11)	175(-5)	1	1d+2	1	
Heavy revolver	11mm bullet	1	2d+1	6 internal	1.6(-9)	350(-2)	2	1d+2	2	
Repeating rifle	13mm bullet	3	3d+1	8 internal	3.0(-6)	1.4K(+1)	4	2d+2	2	2h
Hunting shotgun	19mm bullet	1	3d+0 ^g	2 internal	4.0(-5)	1.0K(+0)	3	2d+2	2	2h

Atomic Era ranged weapons

name	uses	Acc	damage	shots held	weight	cost	P	armor	hits	notes
Light semi-auto pistol	7mm bullet	0	1d+2	11 clip	.5(-14)	175(-5)	1	1d+2	1	
Semi-auto pistol	9mm bullet	1	2d+1	15 clip	1.0(-11)	350(-3)	1	1d+2	2	
Heavy revolver	11mm bullet	1	3d+0	6 internal	1.3(-10)	500(-2)	1	2d+0	2	
Submachinegun	9mm bullet	1	2d+2	32 clip	2.5(-7)	700(-1)	1	2d+1	2	2h, autofire
Hunting shotgun	19mm bullet	3	3d+2 ^g	2 internal	3.0(-6)	1.0K(+0)	1	2d+1	2	2h
Hunting rifle	7mm bullet	4	5d+0	6 clip	3.0(-6)	2.8K(+3)	3	2d+2	2	2h, scope
Assault shotgun	19mm bullet	3	3d+2 ^g	10 clip	4.0(-5)	1.0K(+0)	3	2d+2	2	2h
Assault rifle	7mm bullet	2	4d+2	25 clip	5.0(-4)	2.0K(+2)	3	2d+2	2	2h, autoburst
Heavy crossbow	quarrel	3	3d+2	1 internal	3.0(-6)	500(-2)	2	2d+1	2	2h, scope, -1 init.
Heavy machinegun	13mm bullet	3	6d+2	125 ext.	125(+10)	16K(+8)	4	3d+1	7	2h, autofire, -1 init.
Anti-tank rocket	90mm rocket	2	10d+1 ^a	1 internal	8.0(-2)	5.6K(+3)	6	3d+0	3	2h, disposable

Post-Atomic Era ranged weapons

name	uses	Acc	damage	shots held	weight	cost	P	armor	hits	notes
Heavy revolver	11mm bullet	2	3d+2	6 internal	1.0(-11)	700(-1)	1	1d+2	2	
Semi-auto pistol	6mm bullet	1	2d+2	25 clip	1.3(-10)	700(-1)	1	1d+2	2	
Stunner(non-lethal)	electricity	2	5d+0	11 clip	.8(-12)	1.0K(+0)	2	1d+2	1	23m range, armor stops all damage
Gauss SMG	3mm needle	2	4d+0 ^a	65 clip	2.5(-7)	1.4K(+1)	2	2d+1	2	2h, autoburst
Laser pistol ⁺	electricity	4	3d+1 ^s	30 clip	1.3(-10)	1.4K(+1)	2	2d+0	2	autofire, no recoil
Hunting rifle	6mm bullet	6	5d+1 ^s	6 clip	4.0(-5)	4.0K(+4)	4	2d+2	3	2h, scope
Assault rifle	6mm bullet	4	5d+0	50 clip	5.0(-4)	5.6K(+5)	5	2d+2	2	2h, autoburst, scope
Heavy laser rifle ⁺	electricity	4	5d+2 ^s	50 clip	5.0(-4)	8.0K(+6)	5	2d+2	2	2h, autob., no recoil
Gauss sniper rifle	6mm needle	8	8d+1 ^a	8 clip	10.0(-1)	16K(+8)	4	3d+0	3	2h, scope

Advanced Era ranged weapons

name	uses	Acc	damage	shots held	weight	cost	P	armor	hits	notes
Disruptor pistol	electricity	3	2d+0	15 clip	1.0(-11)	700(-1)	2	1d+2	2	ignores one armor
Disruptor carbine	electricity	8	4d+1	30 clip	2.5(-7)	4.0K(+4)	4	2d+1	2	2h, ign. one armor



Melee weapons (cut/stab)

name	damage	type	length	weight	cost	P	armor	hits	notes
Combat knife	strike+0	lethal	short	.4(-15)	30(-10)	2	1d+2	1	1h, throwable
Short sword	strike+1	lethal	medium	1.0(-11)	65(-8)	2	1d+2	2	1h
Longsword	strike+2	lethal	long	1.6(-9)	250(-4)	2	2d+0	2	1h
Greatsword	strike+4	lethal	long	3.0(-6)	700(-1)	2	2d+2	2	2h, -1 initiative

Melee weapons (cut/chop)

name	damage	type	length	weight	cost	P	armor	hits	notes
Hand axe	strike+1	lethal	medium	.8(-12)	125(-6)	2	1d+2	2	1h, throwable
Battle axe	strike+3	lethal	medium	2.0(-8)	350(-3)	2	2d+1	2	1h, -2 initiative
Poleaxe	strike+4	lethal	very long	3.0(-6)	500(-2)	2	2d+2	2	2h, -3 initiative

Melee weapons (crush/blunt)

name	damage	type	length	weight	cost	P	armor	hits	notes
Brass knuckles	strike+1	half-lethal	short	.3(-16)	30(-10)	2	1d+2	1	1h
Riot baton	strike+2	half-lethal	medium	.6(-13)	90(-7)	2	1d+2	1	1h
Club	strike+3	half-lethal	medium	1.6(-9)	125(-6)	2	2d+0	2	1h, -2 initiative
War hammer	strike+2	lethal	medium	1.0(-11)	175(-5)	2	1d+2	2	1h, -1 initiative
Morningstar flail	strike+2 ⁹	lethal	medium	1.3(-10)	175(-5)	2	2d+0	2	1h, -1 initiative
Spiked flail	strike+3	lethal	long	2.0(-8)	350(-3)	2	2d+1	2	1h, -2 initiative

Melee weapons (other)

name	damage	type	length	weight	cost	P	armor	hits	notes
Staff	strike+2	half-lethal	very long	1.0(-11)	90(-7)	2	1d+2	2	2h
Spear	strike+2	lethal	very long	1.6(-9)	125(-6)	2	1d+2	2	1h, throwable, -1 init.

Melee weapons (improvised)

name	damage	type	length	weight	cost	P	armor	hits	notes
Broken bottle	strike+0 ⁹	lethal	short	.3(-16)	-	1	1d+1	1	1h, fragile
Metal bar/crowbar	strike+3	half-lethal	medium	2.5(-7)	-	2	2d+1	2	1h, -1 initiative

Basic Era other weapons

name	damage	type	length	weight	cost	P	armor	hits	notes
Black powder	3d+0	half-lethal expl.	-	.5(-14)	45(-9)	1	1d+1	1	2x size/+1P is +1d effect
Grenade	2d+1	lethal expl.	-	.4(-15)	45(-9)	2	1d+2	1	thrown

Industrial Era other weapons

name	damage	type	length	weight	cost	P	armor	hits	notes
Dynamite	4d+1	half-lethal expl.	-	.5(-14)	90(-7)	1	1d+1	1	2x size/+1P is +1d effect
Grenade	3d+1	lethal expl.	-	.4(-15)	90(-7)	2	1d+2	1	thrown

Atomic Era other weapons

name	damage	type	length	weight	cost	P	armor	hits	notes
Plastic explosive	5d+1	half-lethal expl.	-	.5(-14)	125(-6)	1	1d+1	1	2x size/+1P is +1d effect
Grenade	4d+1	lethal expl.	-	.4(-15)	125(-6)	2	1d+2	2	thrown
40mm rifle grenade ⁺	3d+1	lethal expl.	-	.3(-16)	125(-6)	2	1d+2	2	range of 350m
Stun grenade	5d+1	non-lethal expl.	-	.4(-15)	125(-6)	1	1d+2	2	thrown
Molotov cocktail	3d+2	lethal expl.	-	.4(-15)	20(-11)	1	1d+1	1	thrown, lasts 1 minute

Post-Atomic Era other weapons

name	damage	type	length	weight	cost	P	armor	hits	notes
Nitramine	6d+1	half-lethal expl.	-	.5(-14)	175(-5)	1	1d+1	1	2x size/+1P is +1d effect
Grenade	5d+1	lethal expl.	-	.4(-15)	175(-5)	2	1d+2	2	thrown
Stun grenade	6d+1	non-lethal expl.	-	.4(-15)	175(-5)	1	1d+2	2	thrown



Primitive Era personal armor

name	armor	type	covers	weight	cost	P	notes
Padded cloth ⁺	0d+2	flexible	whole body	5.0(-4)	250(-4)	4	worn over or under clothing or armor
			torso(9-12)	2.0(-8)	125(-6)	1	
			head(5-6)	.8(-12)	45(-9)	1	
			arms(7-8)	1.3(-10)	65(-8)	1	
			legs(13-18)	1.6(-9)	90(-7)	1	
Hardened leather ⁺	1d+0	rigid	whole body	13.0(+0)	500(-2)	4	worn over clothing
			torso(9-12)	5.0(-4)	250(-4)	1	
			head(4-6)	2.5(-7)	125(-6)	1	
			arms(7-8)	3.0(-6)	125(-6)	1	
			legs(13-18)	4.0(-5)	175(-5)	1	
Scale armor ⁺	1d+2	rigid	whole body	16.0(+1)	1.4k(+1)	5	worn over clothing
			torso(9-12)	6.0(-3)	500(-2)	1	
			head(4-6)	3.0(-6)	250(-4)	1	
			arms(7-8)	4.0(-5)	250(-4)	1	
			legs(13-18)	5.0(-4)	350(-3)	1	
Mail armor ⁺	2d+0	flexible	whole body	32(+4)	2.8K(+3)	5	worn over or under clothing or armor
			torso(9-12)	13.0(+0)	1.0K(+0)	1	
			head(4-6)	6.0(-3)	500(-2)	1	
			arms(7-8)	6.0(-3)	500(-2)	1	
			legs(13-18)	10.0(-1)	700(-1)	1	
Small shield(6 hits) ⁺	1d+1	rigid	any	4.0(-5)	250(-4)	1	+2 on defensive melee skill use
Large shield(8 hits) ⁺	1d+2	rigid	any	6.0(-3)	350(-3)	1	+4 on defensive melee skill use

Basic Era personal armor

name	armor	type	covers	weight	cost	P	notes
Plate armor	2d+1	rigid	whole body	25(+3)	2.8K(+3)	4	worn over clothing
			torso(9-12)	10.0(-1)	1.0K(+0)	1	
			head(3-6)	5.0(-4)	500(-2)	1	-1d reduced visibility if using eyeslits
			arms(7-8)	6.0(-3)	500(-2)	1	
			legs(13-18)	8.0(-2)	700(-1)	1	

Industrial Era personal armor

name	armor	type	covers	weight	cost	P	notes
Plate armor ⁻	2d+1	rigid	torso(9-12)	10.0(-1)	500(-2)	2	appropriate vs. early Industrial Era or earlier firearms
Silk vest	2d+0	flexible	chest/abd.(10-11)	1.0(-11)	350(-3)	1	appropriate vs. mid-Industrial Era or earlier firearms



Atomic Era personal armor

name	armor	type	covers	weight	cost	P	notes
Fragmentation vest ⁻	2d+1	rigid	torso(9-12)	3.0(-6)	175(-5)	1	worn over clothing
Riot armor ⁻	3d+1	rigid	whole body	8.0(-2)	1.0K(+0)	2	worn over clothing, -2d vs. firearms
Riot shield(6 hits) ⁻	3d+2	rigid	any	3.0(-6)	175(-5)	1	+4 on defensive melee skill use, -2d vs. firearms
Anti-stab vest	3d+0	flexible	chest/abd.(10-11)	1.3(-10)	500(-2)	1	worn under clothing, -2d vs. firearms
Level 2 vest	3d+0	flexible	chest/abd.(10-11)	1.3(-10)	500(-2)	1	worn under clothing, -2d vs. melee
Level 3A vest	3d+2	flexible	chest/abd.(10-11)	2.0(-8)	1.0K(+0)	2	worn over or under clothing, -2d vs. melee
Level 3A vest	3d+2	rigid	torso(9-12)	4.0(-5)	1.0K(+0)	2	worn over clothing
Level 4 vest	4d+2	rigid	torso(9-12)	8.0(-2)	2.0K(+2)	3	worn over clothing, hardened
Steel helmet ⁻	2d+1	rigid	head(5-6)	1.3(-10)	65(-8)	1	worn over clothing
Kevlar helmet	3d+2	rigid	head(5-6)	1.6(-9)	175(-5)	1	worn over clothing
Plastic SCA armor	2d+2	rigid	whole body	8.0(-2)	250(-4)	1	worn over clothing, -2d vs. firearms

Post-Atomic Era personal armor

name	armor	type	covers	weight	cost	P	notes
Ballistic bodysuit	3d+0	flexible	whole body	2.0(-8)	2.8K(+3)	1	-2d if layered, effectively a high-tech gambeson
Combat helmet	4d+2	rigid	head(3-6)	1.3(-10)	2.0K(+2)	3	hardened, includes radio and heads-up anti-blinding and night vision display
Combat vest	5d+0	rigid	torso(9-12)	6.0(-3)	1.4K(+1)	1	hardened, worn over clothing
Combat inf. suit(20)	5d+2	rigid	whole body	20.0(+2)	32K(+10)	4	hardened, gives +3 to Strength and negates its own weight if powered, uses 60 power per hour
Comb. spacesuit(20)	5d+1	rigid	whole body	20.0(+2)	90K(+13)	6	Like combat infantry suit with helmet capabilities and full life support, life support uses 15 power per hour
Environment suit(5)	3d+1	flexible	whole body	8.0(-2)	2.8K(+3)	2	Life support and radio, uses 15 power per hour, -2d vs. weapons

Advanced Era personal armor

name	armor	type	covers	weight	cost	P	notes
Flux armor(20)	8d+0	rigid	whole body	40(+5)	125K(+14)	5	negates special effect of disruptors, gives +6 to Strength and negates its own weight when powered, may alter structure to give +1d against one type of attack, uses 240 power per hour



Primitive Era stuff

name	weight	cost	P	armor	hits	notes
Basic clothing	2.0(-8)	90(-7)	0	0d+1	3	durable. Includes footgear with 0d+2 protection
Luxury clothing	3.0(-6)	500(-2)	0	0d+1	4	durable. Includes footgear with 0d+2 protection
Winter clothing	3.0(-6)	90(-7)	1	0d+2	4	durable. Each layer adds 5°C to felt temperature, each tech era adds +5°C per layer
Camouflage drape	2.0(-8)	90(-7)	1	0d+2	3	durable. Adds +2 difficulty to be spotted if in appropriate conditions, +4 if stationary. Negates special benefits of surveillance devices of lower tech than the camouflage.
Scroll tube	.1(-)	10(-13)	0	1d+0	1	weatherproof protection for small items
Waterskin(full)	4.0(-5)	10(-13)	0	1d+0	2	fragile. Holds four liters of water, enough for one person for a day of moderate activity
Travel rations	.8(-12)	10(-13)	0	1d+0	2	durable. Dried or semi-perishable food that carries well (bread, hard cheese, fresh or dried fruit, salted or dried meat), enough for one person for a day of moderate activity
Saddle/tack	25(+3)	500(-2)	0	1d+0	6	required for carrying gear on horseback, includes saddlebags for up to 40kg of normal density items
Camping gear	20(+2)	250(-4)	1	1d+0	6	durable. One person's share of the weight for a tent, blankets that count as a layer of winter clothing, stove and personal items. This could be part of a larger camp setup, or personal-size items. Mass is -2 to listed per full tech era higher.
Rope, 25 meters	2.0(-8)	10(-13)	1	1d+0	3	strong enough to hold one person and their gear
Torch	.8(-12)	5(-)	1	1d+1	2	negates increased difficulty for darkness out to 3 meters, penalties increase by +2 each range level after this (past +8 is total dark), lasts 2 hours
Sewing kit	.5(-13)	45(-9)	0	0d+1	1	needles, thread, leather stitching, buttons, patches

Basic Era stuff

name	weight	cost	P	armor	hits	notes
Small book	.2(-18)	10(-13)	0	0d+2	2	equivalent to small reference or spellbook
Large book	1.0(-11)	45(-9)	0	1d+0	2	durable. equivalent to large reference or spellbook
Lantern	.8(-12)	30(-10)	1	1d+2	1	negates increased difficulty for darkness out to 3 meters, penalties increase by +2 each range level after this (past +8 is total dark), lasts 8 hours, refill with .3kg of oil
Small pack	1.6(-9)	30(-10)	0	1d+0	2	durable. holds 10kg of normal density items. Mass is -2 to listed amount for each higher tech era
Large pack	6.0(-3)	125(-6)	0	1d+1	3	durable. holds 40kg of normal density items. Mass is -2 to listed amount for each higher tech era
Armory tool kit	200(+12)	1.0K(+1)	1	3d+1	8	durable. small anvil, portable forge, hammers, tools, metal stock
Spyglass	.5(-14)	45(-9)	1	1d+0	1	subtracts 4 from difficulty for range to visually spot something in a particular narrow arc, usually can only be used from a steady platform.
First aid kit	2.0(-8)	90(-7)	1	1d+1	2	suitable for treating non-crippling injuries. Its capabilities increase with tech era and are often genre-specific.



Industrial Era stuff

name	weight	cost	P	armor	hits	notes
Powercell	.1(-)	15(-12)	1	1d+2	1	holds 3 'power'. If an item is listed like 'item(2)', the number in parentheses is the number of powercells used. Non-rechargeable powercells have half the cost.
Telephone/telegraph	.5(-14)	30(-10)	1	1d+0	2	requires a wired connection between units. Uses 1 power per hour. May be operated with powercells
Flashlight(2)	.3(-16)	30(-10)	1	1d+2	1	negates increased difficulty for darkness out to 15 meters in a wide arc, penalties increase by +2 each range level after this (past +8 is total dark), uses 1 power per hour.
Radio transceiver(6) ⁺	6.0(-3)	90(-7)	1	1d+2	1	has a range of +32(23km), takes a minute to warm up, uses 4 power per hour
Binoculars	.5(-14)	90(-7)	1	1d+2	2	subtracts 6 from difficulty for range to visually spot something in a particular narrow arc, usually can only be used from a steady platform.
Telescopic sight	.3(-16)	175(-5)	1	1d+1	1	+1 to Accuracy of appropriate ranged weapon, usually can only be used from a steady platform
Mechanical tool kit	10(-1)	175(-5)	1	2d+0	3	durable. Assortment of wrenches and screwdrivers, hammer, saw, nails, screws and fasteners

Atomic Era stuff

name	weight	cost	P	armor	hits	notes
Powercell	.1(-)	22(-11)	1	1d+0	1	holds 8 power
Solarcell	8.0(-2)	350(-3)	1	1d+2	2	durable. Fills a hexagon and generates about 90 power per hour in full sunlight. A folding model is +2 cost and -1 to armor.
Radio/cellphone(1)	.3(-16)	250(-4)	1	1d+1	1	fragile. Can reach a similar radio or relay station up to a range of +28(5.6km). Uses 1 power per 4 hours on standby, 4 power per hour if active
Base station radio	4.0(-4)	500(-2)	1	1d+1	2	fragile. Can reach a similar radio or relay station up to a range of +40(360km). Requires large antenna for best performance or extended range
Portable computer ⁺ (4)	2.5(-7)	1.0K(+1)	1	1d+1	1	fragile. Capabilities will vary <i>greatly</i> within the same part of an era. Uses 4 power per hour.
Night vision goggles(1)	1.0(-11)	2K(+2)	1	1d+2	2	negates all darkness penalties, but all sight Awareness rolls and vision-based skills are at a -2 penalty. Uses 1 power per hour
Rope, 25 meters	1.6(-9)	90(-7)	1	1d+2	2	strong enough to hold several people and gear, or a horse or small vehicle
Utility tool	.2(-)	90(-7)	0	1d+2	2	allows rudimentary tool use for skills that require a mechanical tool kit or subset of it.
Trauma kit	.5(-14)	45(-9)	0	1d+1	1	medical supplies sufficient to stop bleeding or shock on one injury. A 'first aid kit' of the this cost and size would have a larger selection of supplies for cuts, scrapes and very minor (1 hit) injuries, but nothing for major trauma.
Electrical tool kit	5.0(-4)	250(-4)	1	1d+2	3	durable. Portable soldering iron, test meters, wires, tools for disassembly of electronic devices.



Post-Atomic Era stuff

name	weight	cost	P	armor	hits	notes
Powercell	.1(-)	30(-10)	1	1d+0	1	holds 23 power
Fuelcell	2.0(-8)	375(-3)	1	1d+2	2	generates 60 power per hour, takes the place of 20 powercells, only works in an oxygen-containing atmosphere, refill with 1kg of fuel each 24 hours
Stealthsuit(2)	2.0(-8)	2.0K(+2)	1	1d+2	2	durable. Worn over clothing. Automatically adapts to provide camouflage in any conditions, uses 4 power per hour.
Night vision glasses(1)	.2(-)	500(-2)	1	1d+1	1	fragile. Negates all darkness penalties, internal powercell, uses 1 power per hour.
Videophone(1)	.2(-)	250(-4)	1	1d+1	1	fragile. Can reach a similar device or relay station up to a range of +28(5.6km). Uses 1 power per day on standby, 4 power per hour if active
Portable computer(2)	1.0(-11)	2.0K(+2)	1	1d+2	2	fragile. Wearable computer with glasses-mounted display. Can be programmed to perform a specific Awareness task at 5d+0 or give a user +4 on their roll. Use videophone stats for one that uses remote computer for processing. Uses 4 power per hour.

Advanced Era stuff

name	weight	cost	P	armor	hits	notes
Powercell	.1(-)	45(-9)	1	1d+0	1	holds 65 power
Fuelcell	2.0(-8)	500(-2)	1	1d+2	2	generates 240 power per hour, takes the place of 20 powercells, only works in an oxygen-containing atmosphere, refill with 1kg of fuel each 24 hours
Flux clothing(1)	2.0(-8)	500(-2)	1	1d+0	2	durable. May be switched to any color or insulation combination for 8 energy, or may be switched to provide 1d+0 protection against any form of mundane damage. One size fits all.
Link(1)	.2(-)	500(-2)	1	1d+2	1	fragile. Serves functions of videophone, radio, portable computer, translator and global tracking system, possibly directly integrated into nervous system and powered by biological fuel cells. Uses 1 power per hour.
Paramed kit(1)	4.0(-5)	1.0K(+0)	1	1d+2	3	durable. Includes small medical scanner, drug synthesizer, trauma patches and other extreme tech gizmos.
Flux tool kit(1)	5.0(-4)	2.0(+2)	1	1d+2	4	durable. Contains tools and raw materials needed to service or repair small to medium mutable matter devices.



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Name Gender Age

Background

Goals

Stam Hits

1	1
	-0d
2	2
3	3
4	4
5	5
	-1d
6	6
7	7
8	8
9	9
	-2d
10	10
11	11
12	12
13	13
	-3d
+10	14
+20	15
	16
Enc	17
-1	-4d
Str-8	18
-2	19
Str-6	20
-3	21
Str-4	-6
-6	20
Str-2	-9
-9	-5d
Str-0	22
Exp	23
any	23
A	24
S	25
-5d	25
P	26

Strength

level roll d+

strike d+

Agility

level roll d+

dodge

Awareness

level roll d+

spot d+

Will

level roll d+

tough

Health

level roll d+

walk run sprint recov

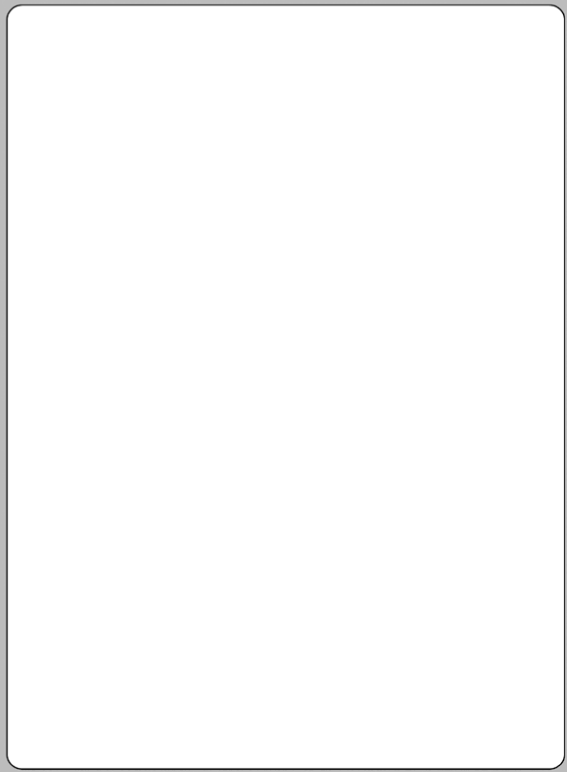
Fate

level roll d+

luck d+

I 3 5 7 9
II 13 15 17 19

Skills	Attribute	bonus	skill roll
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+
<input type="text"/>	<input type="text"/>	+	d+



head d+ torso d+ arm d+ leg d+

3-6 9-12 7-8 13-18

Gear **weight**

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Lifestyle Invested

Savings

Traits **value**

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Name

Gender

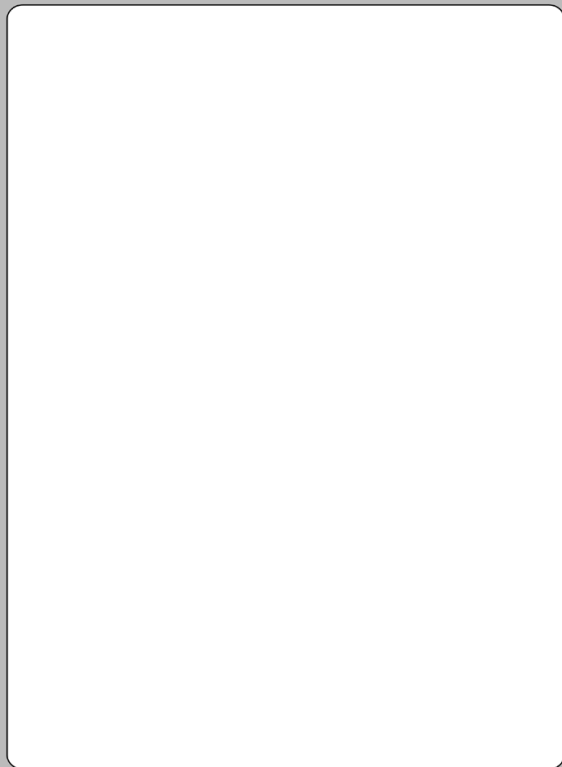
Age

Background

Goals

Stam Hits

- 1 1
- 2 2
- 3 3
- 4 4
- 5 5
- 6 6
- 7 7
- 8 8
- 9 9
- 10 10
- 11 11
- 12 12
- 13 13
- +10 14
- +20 15
- 16
- Enc**
- 1 17
- Str-8
- 2 18
- Str-6
- 3 19
- Str-4
- 6 20
- Str-2
- 9 21
- Str-0 22
- Exp**
- any 23
- A 24
- S 25
- P 26



Strength level roll d+

carry

strike

throw

strike d+

kick d+

throw d+

Agility level roll d+

fight

balance

throw

dodge

balance

throw

fight d+

balance d+

throw d+

dodge

Awareness level roll d+

cognitive

sight

hearing

think d+

spot d+

listen d+

Will level roll d+

toughness

charm

resistance

tough

charm d+

resist d+

Health level roll d+

speed

stamina

recovery

walk

run

sprint

recov

head d+ torso d+ arm d+ leg d+

3-6 9-12 7-8 13-18

Gear	weight
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Fate level roll d+

shield

power

luck

shield d+

power d+

luck d+

1 3 5 7 9

11 13 15 17 19

Lifestyle Invested

Savings

Skills	Attribute	bonus	skill roll
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+
<input type="text"/>	<input type="text"/>	<input type="text"/> +	<input type="text"/> d+

Traits	value
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

level	roll	mass	dist.	time	qty
-12	-	.8kg	-	-	-
-11	-	1kg	-	-	-
-10	-	1.3kg	-	-	-
-9	-	1.6kg	-	-	-
-8	-	2kg	-	-	-
-7	-	2.5kg	-	-	-
-6	-	3kg	-	-	-
-5	-	4kg	-	-	-
-4	-	5kg	-	-	-
-3	-	6kg	.1m	-	-
-2	-	8kg	-	.5s	x.5
-1	-	10kg	.3m	.7s	x.7
+0	0d+0	13kg	-	1s	x1
+1	0d+1	16kg	.5m	1.4s	x1
+2	0d+2	20kg	.7m	2s	x2
+3	1d+0	25kg	1m	3s	x3
+4	1d+1	32kg	1.4m	4s	x4
+5	1d+2	40kg	2m	6s	x6
+6	2d+0	50kg	3m	8s	x8
+7	2d+1	65kg	4m	11s	x11
+8	2d+2	80kg	6m	15s	x15
+9	3d+0	100kg	8m	23s	x23
+10	3d+1	125kg	11m	30s	x30
+11	3d+2	160kg	16m	45s	x45
+12	4d+0	200kg	23m	1m	x60
+13	4d+1	250kg	32m	1.4m	x90
+14	4d+2	320kg	45m	2m	x125
+15	5d+0	400kg	65m	3m	x175
+16	5d+1	500kg	90m	4m	x250
+17	5d+2	640kg	125m	6m	x350
+18	6d+0	800kg	175m	8m	x500
+19	6d+1	1t	250m	11m	x700
+20	6d+2	1.3t	350m	15m	x1k
+21	7d+0	1.6t	500m	23m	x1.4k
+22	7d+1	2t	700m	30m	x2k
+23	7d+2	2.5t	1km	45m	x2.8k
+24	8d+0	3.2t	1.4km	1h	x4k
+25	8d+1	4t	2km	1.4h	x5.6k
+26	8d+2	5.1t	2.8km	2h	x8k
+27	9d+0	6.4t	4km	3h	x11k
+28	9d+1	8t	5.6km	4h	x16k
+29	9d+2	10.2t	8km	6h	x25k
+30	10d+0	12.5t	11km	8h	x32k
+31	10d+1	16t	16km	11h	x45k
+32	10d+2	20t	23km	16h	x64k
+33	11d+0	25t	32km	1d	x90k
+34	11d+1	32t	45km	1.5d	x125k
+35	11d+2	40t	64km	2d	x175k
+36	12d+0	50t	90km	3d	x250k
+37	12d+1	64t	125km	4d	x350k
+38	12d+2	80t	175km	6d	x500k
+39	13d+0	100t	250km	8d	x700k
+40	13d+1	125t	350km	11d	x1m
+41	13d+2	160t	500km	16d	x1.4m
+42	14d+0	200t	700km	23d	x2m
+43	14d+1	250t	1k km	32d	x3m
+44	14d+2	320t	1.4k km	45d	x4m
+45	15d+0	400t	2k km	2m	x6m
+46	15d+1	500t	2.8k km	3m	x8m
+47	15d+2	640t	4k km	4m	x11m
+48	16d+0	800t	5.6k km	6m	x16m
+49	16d+1	1kt	8k km	8m	x23m
+50	16d+2	1.2kt	11k km	1y	x32m
+1	+1	x1.3	x1.4	x1.4	x1.4
+2	+2	x1.6	x2	x2	x2
+3	+1d	x2	x2.8	x2.8	x2.8

other adventurer notes

training and experience

starting points A S P

traits

attributes

skills

powers

armor	type	covers	weight	cost	hand	worn	pack

weapons	damage	Acc	shots	weight	cost	hand	worn	pack

gear	armor	hits	weight	cost	hand	worn	pack

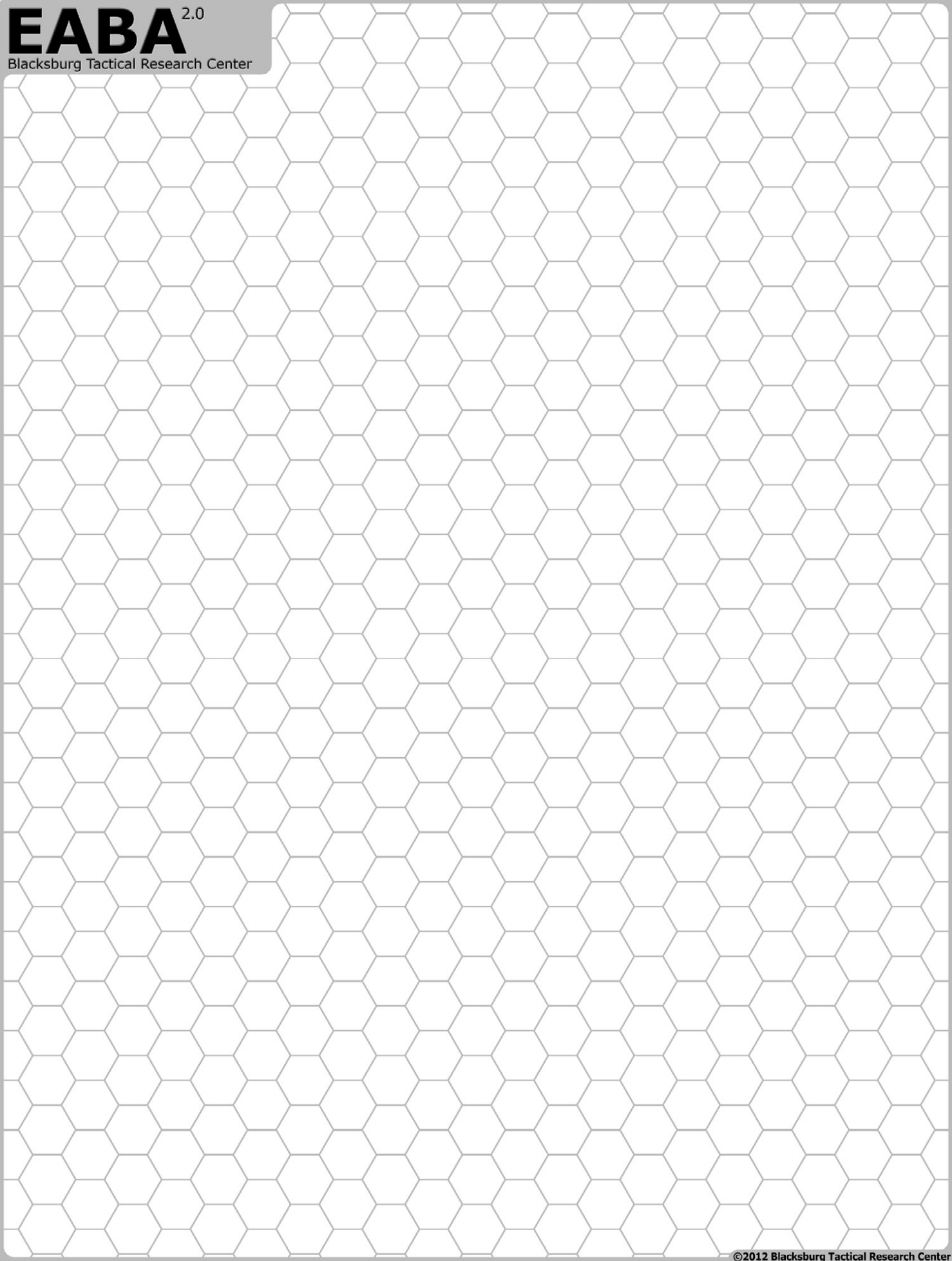
heaviest item

2nd heaviest item

weekly expenses

EABA^{2.0}

Blacksburg Tactical Research Center



Name Tech

Mass tons Size hexes Hits

speed armor -0d

3 front d+

4 right d+

6 left d+

8 rear d+

11 top d+

16 bottom d+

23

32 to hit -2d

45 dmg limit

65 cost P

90 MCr

125 capabilities scale 1:1 -3d

175

250

350

500 -4d

handling 1 2 3 4 5 6 7 8 9 10 +5 +10

fuel 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% fire

penetr. hits +5 +10 -5d

Name Tech

Mass tons Size hexes Hits

speed armor -0d

3 front d+

4 right d+

6 left d+

8 rear d+

11 top d+

16 bottom d+

23

32 to hit -2d

45 dmg limit

65 cost P

90 MCr

125 capabilities scale 1:1 -3d

175

250

350

500 -4d

handling 1 2 3 4 5 6 7 8 9 10 +5 +10

fuel 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% fire

penetr. hits +5 +10 -5d

Name Tech

Mass tons Size hexes Hits

speed armor -0d

3 front d+

4 right d+

6 left d+

8 rear d+

11 top d+

16 bottom d+

23

32 to hit -2d

45 dmg limit

65 cost P

90 MCr

125 capabilities scale 1:1 -3d

175

250

350

500 -4d

handling 1 2 3 4 5 6 7 8 9 10 +5 +10

fuel 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% fire

penetr. hits +5 +10 -5d

Name Tech

Mass tons Size hexes Hits

speed armor -0d

3 front d+

4 right d+

6 left d+

8 rear d+

11 top d+

16 bottom d+

23

32 to hit -2d

45 dmg limit

65 cost P

90 MCr

125 capabilities scale 1:1 -3d

175

250

350

500 -4d

handling 1 2 3 4 5 6 7 8 9 10 +5 +10

fuel 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% fire

penetr. hits +5 +10 -5d



ADVENTURER SUMMARY



campaign	attr.	skill	pow.	trait
<input type="radio"/> low normal	30A	5S	-	≤9
<input checked="" type="radio"/> normal	35A	10S	-	≤11
<input type="radio"/> heroic	40A	15S	5P	≤15
<input type="radio"/> grand heroic	50A	20S	10P	≤20
<input type="radio"/> superheroic	65A	25S	30P	≤30
<input type="radio"/> grand super.	85A	35S	60P	≤45
<input type="radio"/> other	-	-	-	-

Attributes

(✓ = in use in this campaign)

no attribute can be more than 3 points higher/lower than next closest without gamemaster permission.

Strength(STR)

- ✓ strike
- kick
- throw

Will(WIL)

- ✓ tough(dice)
- charm
- resist

Agility(AGL)

- fight
- balance
- throw
- ✓ dodge(dice x 2)

Health(HLT)

- ✓ walk
- ✓ recovery

Awareness(AWR) Fate(FAT)

- ✓ spot
- listen
- think
- ✓ luck
- shield
- power

Secondary attributes

Hits: equals Strength + Health

Stamina: equals Health

Skills

skill bonus	+0d	+1d	+2d	+3d
cost	1S	2S	4S	6S

Free skills

- area kn.(home region)(AWR): +0d
- native language(AWR): +0d
- common skill in your culture: +0d (governing attribute varies)

General skill list

combat(Agility)

- archery
- blade
- brawling
- club
- firearms
- heavy weapon
- martial arts
- polearm
- sling
- staff
- throwing
- wrestling

transport(Agility)

- beast riding
- air vehicles
- land vehicles
- water vehicles
- space vehicles

other(Agility)

- climbing
- security systems
- sleight of hand
- stealth
- trades(choose one)

academic(Awareness)

- chemistry
- history
- language
- sciences(choose one)
- law
- medicine
- programming
- psychology
- religion

magic(Awareness)

- sorcery
- enchantment

other(Awareness)

- area knowledge
- armorer
- bribery
- diplomacy
- technician(choose one)
- scrounging
- tracking

other(Will)

- leadership
- acting

other(Health)

- running
- swimming
- carousing

special skills

- jack-of-all-trades(choose attr.)
- hobbies

General trait list

(✓ = in use in this campaign)

name	points
advantages	varies
✓ age	varies
✓ background	+1
boon/bane	±varies
enemies	+1 to +4
experience	-1
favors	-1
forte/weakness	-1A/+2A
friends	-1 to -4
increased/decr. hits	+1/-1
larger than life	-2P/-5P
✓ looks	±1S
✓ motivation	+1S
mythic archetype	special
neat trick	-1
organization	-varies
permits	-1S
✓ personality	+varies
secret	+1 to +4
status	±varies
unusual background	-1
✓ wealth/poverty	±varies

Money

base stand. of living = best skill dice - 10

savings = standard of living + 12

Other rules

(✓ = in use in this campaign)

- hit locations
- stunning
- crippling damage
- blunt trauma
- dramatic called shots
- encumbrance