# STEVE JACKSON'S

# GURPS®

## GENERIC UNIVERSAL ROLEPLAYING SYSTEM

GM's Screen

# STEVE JACKSON GAMES

# MANEUVERS

| Maneuver | Maximum Move | Facing Change (end of move) | Attack | Defense | Special Notes |
|---|---|---|---|---|---|
| Aim | ½ move; max 2 after first turn of aiming. | May not change after first turn. | +1 per turn aiming, after first turn. | Normal, but lose Aim benefits. | +3 maximum bonus; ranged weapons lose Acc bonus without one turn of aiming. |
| Change Position | 0 | Any | None | Normal | See *Table of Positions*. |
| Step and Ready | 1 hex | Any | None | Normal | Cannot parry without a ready weapon, or block without a ready shield. |
| Step and Attack | 1 hex | Any | Normal | Normal | |
| All-Out Attack | See special note. | May not change. | 2 attacks, or 1 at +4 to hit or +2 damage, or feint and attack. | Passive only. | Move up to half move. |
| Step and Feint | 1 hex | Any | Quick Contest (weapon vs. shield, weapon or DX). | Normal | Win with successful roll: penalty to foe's active defense by that much *next* turn. Both weapons still ready. |
| Step and Concentrate | 1 hex | Any | None | Any, but roll IQ-3 or break concentration. | Used with magic or psionics only. |
| Step and Wait | 1 hex | Any | Normal, when foe comes in range. | Normal | If you didn't move on your turn, you can move 1 hex *forward* and attack. |
| All-Out Defense | 1 hex | Any | None | 2 *different* defenses per attack. | No more than 2 parries per weapon, and 2 blocks. |
| Move<br>– forward (cost 1)<br>– side or back (cost 2)<br>– change facing (1/hexside) | Up to Move score. | Up to ½ Move: any facing. More than ½: change 1 hexside. | Wild swing only; penalties (see p. B105) for arming or firing ranged weapons. | Normal | See *Tables of Positions* for costs. |

# POSITIONS

| Position | Attack | Defense or penalty | Movement |
|---|---|---|---|
| Standing | Normal | Normal | Normal; may sprint |
| Crouching | -2 | Ranged weapons -2 to hit; normal vs. others | +½ cost per hex |
| Kneeling | -2 | Ranged weapons -2 to hit; -2 to any active defense | +2 cost per hex |
| Crawling (2 hexes) | -4, only close attacks | Ranged weapons -4 to hit; -3 to any active defense | +2 cost per hex |
| Sitting | -2 | As for kneeling | Cannot move! |
| Lying down (2 hexes) | -4 except w/crossbow or gun +1 | As for crawling | Only 1 hex/turn |

# MODIFIERS TO ACTIVE DEFENSE ROLLS

These modifiers affect Dodge, Parry, and Block. Subtract DX penalties for Bad Sight, off-hand weapon, etc., from Combat/Weapon skill *before* figuring Block or Parry score.

*Attack from above* .................................................. -2
*Combat at different levels* .......................... -1 or more
(GM's decision; see pp. B123-124)
*Combat Reflexes* ...................................................... +1
*Crawling* .................................................................. -3
*Kneeling* .................................................................. -2
*Knife parry* ......................................... -1 Parry if using a knife
*Lying down* .............................................................. -3
*Parry vs. hand weapon:*
  Flail ...................................................................... -4
  Shield bash ............................................................ -2
*Parry vs. thrown weapon*
  Most weapons ........................................................ -1
  Small weapons (e.g., knives) ................................ -2
*Passive Defense:* +PD.
*Retreating* ............................................................... +3
*"Runaround" attack* ................................................. -2
*Shield* .................................. -1 Parry if using a *large* shield
*Side attack* .............................................................. -2
*Sitting* ..................................................................... -2
*Stunned* ................................................................... -4
*Unarmed parry vs. weapon* ...... -3 except vs. thrusts or when using Judo or Karate
*Wounds* ............. Halve Dodge if you have 3 or fewer hit points left

# MODIFIERS TO ATTACK ROLLS

These modifiers affect any roll to hit a target with a weapon.

*Bad footing:* ................... -2 (more, at GM's option)
Exception: If you are firing a missile weapon, taking time to aim will also eliminate this penalty!
*Bad light* ................... -1 to -9; *Total darkness:* -10
*Blind* ........................... -6; *Blinded suddenly:* -10
*Close combat* ..... -2 if using a hand weapon in close combat
*Clothes are on fire* ......................................... -2
*Combat at different levels* ....................... -2 or more
(GM's decision; see pp. B123-124)
*Crawling* ........................................................ -4
*Crouching* ...................................................... -2
*Helm* ........................... -1 if wearing a greathelm.
*Kneeling* ........................................................ -2
*Lame (only for hand-weapon attacks):*
  Crippled leg ................................................. -3
  One leg ........................................................ -6
*Lying down* .................................................... -4
*Motionless and unaware target* ........ +4 if a turn is taken to "aim" first
*Nearsighted* .................................................... -2
*Off-hand attack* ........... -4 (no penalty if Ambidextrous)
*One eye* .... -1 for hand-weapon attacks, -3 for ranged attacks
*Shield* ....................... -2 if using a *large* shield
*Sitting* .......................................................... -2
*ST under minimum ST for that weapon* ....... -1 per point of difference
*Standing in water (knee-deep or more)* ........ See p. B91
*Striking into a close combat* ............................. -2
*Swimming* ........... -6, or underwater penalty (see p. B91)
*Weapon as target:*
  Polearm, spear, rifle, greatsword, etc. ............. -3
  Most weapons .................................................. -4
  Knife, pistol, etc. ........................................... -5
*Weapon in bad repair* ........................... -4 or more
*Wild Swing* ............. -5, maximum to-hit roll is 9
*Wounds* .... Penalty equal to hits you took on preceding turn.
High Pain Threshold advantage eliminates this penalty, Low Pain Threshold disadvantage doubles it

# HIT LOCATIONS

These hit locations apply to human and humanoid foes. They are listed in order from head to foot. Numbers in parentheses after each location are used when rolling 3d for a random hit location; some locations cannot be hit this way.

**BRAIN (3-4)**
*Modifier:* -7
*Miss By 1 Hits:* TORSO
*Multipliers:* Bullet (×4), Crush (×4), Cut (×4), Imp (×4)
*Blow-Through:* N/A
*Special Effects:* Skull provides DR 2. Critical hits use *Critical Head Blow Table*. Any blow that does exactly 0 (or more) damage requires a HT roll to avoid *knockout*. Victim *stunned* on hits over HT/3. Victim *knocked out* automatically on hits over HT/2.

**EYES (–)**
*Modifier:* -9 (-10 through helm's eye slits – only with missile or thrusting attacks)
*Miss By 1 Hits:* HEAD
*Multipliers (except on BRAIN hit):* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×2)
*Blow-Through (except on BRAIN hit):* Bullet (HT×3), Energy (HT×6), Imp (HT×3)
*Special Effects:* Critical hits use *Critical Head Blow Table*. More than 2 hits of damage blinds the eye; this *stuns* the target. An impaling or missile hit (if the missile is less than 1 inch across) gives an automatic BRAIN hit; skull's DR does not protect.

**HEAD or FACE (5)**
*Modifier:* -5
*Miss By 1 Hits:* TORSO
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×2)
*Blow-Through:* Bullet (HT×3), Energy (HT×6), Imp (HT×3)
*Special Effects:* No DR from helmets without full-face protection. Critical hits use *Critical Head Blow Table*. Any blow that does exactly 0 (or more) damage requires a HT roll to avoid *knockout*.

**NOSE (–)**
*Modifier:* -6
*Miss By 1 Hits:* HEAD
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×2)
*Blow-Through:* Bullet (HT×3), Energy (HT×6), Imp (HT×3)
*Special Effects:* No DR from helmets without full-face protection. Critical hits use *Critical Head Blow Table*. Any blow that does exactly 0 (or more) damage requires a HT roll to avoid *knockout*. Roll against HT-1 (at +5 for High Pain Threshold or at -1 per point of damage for Low Pain Threshold) or be *stunned*.

**JAW (–)**
*Modifier:* -6
*Miss By 1 Hits:* HEAD
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×2)
*Blow-Through:* Bullet (HT×3), Energy (HT×6), Imp (HT×3)
*Special Effects:* No DR from helmets without full-face protection. Critical hits use *Critical Head Blow Table*. Any thrust/crushing blow that does exactly 0 (or more) damage requires a HT roll to avoid *knockout*. Roll against HT-2 or HT minus damage (whichever is *lower*) or be *stunned*.

**NECK (–)**
*Modifier:* -5
*Miss By 1 Hits:* TORSO
*Multipliers:* Bullet (×2), Crush (×1.5), Cut (×2), Imp (×2)
*Blow-Through:* Bullet (HT×3), Energy (HT×6), Imp (HT×3)
*Special Effects:* Use the PD and DR of the TORSO (unless a heavy helm is worn, in which case its PD and DR should be used instead). Victim is *stunned* on damage over HT/3. Any crushing blow that does over HT/3 damage requires a HT roll to avoid a crushed throat; if the throat is crushed, the victim must make a HT roll every turn, taking 1 hit of damage if he fails, until he dies or receives medical attention. Any cutting blow that does over HT damage requires a HT roll to avoid decapitation (i.e., *instant death*).

**VEINS and ARTERIES (–)**
(Cutting attacks only.)
*Modifier:* -4 (radial or femoral artery, in the arm and leg respectively), -7 (jugular vein or carotid artery, in the neck)
*Miss By 1 Hits:* ARM (radial), LEG (femoral) or NECK (jugular or carotid)
*Multipliers:* Cut (×2) for radial or femoral artery; Cut (×3) for jugular vein or carotid artery
*Blow-Through:* Cut (HT×3)
*Special Effects:* Surrounding bone gives +1 PD. On a critical hit, the artery or vein is torn open. This automatically inflicts 1 hit per 2 turns (radial or femoral artery) or per turn (jugular vein or carotid artery), until the victim dies or receives medical attention.

**TORSO (9-11)**
*Modifier:* 0
*Miss By 1 Hits:* –
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×2)
*Blow-Through:* Bullet (HT), Energy (HT×2), Imp (HT)
*Special Effects:* –

**NEAR (WEAPON) ARM (8)**
*Modifier:* -2
*Miss By 1 Hits:* –
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×1)
*Blow-Through:* Any (HT/2)
*Special Effects:* Damage over HT/2 cripples arm; this *stuns* the target. Excess damage is lost.

**FAR (SHIELD) ARM (6)**
*Modifier:* -2 (-4 if a shield is carried)
*Miss By 1 Hits:* –
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×1)
*Blow-Through:* Any (HT/2)
*Special Effects:* Damage over HT/2 cripples arm; this *stuns* the target. Excess damage is lost.

**HAND (7)** (Roll for left or right.)
*Modifier:* -4
*Miss By 1 Hits:* –
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×1)
*Blow-Through:* Any (HT/3)
*Special Effects:* Damage over HT/3 cripples hand; this *stuns* the target, and anything in that hand is dropped. Excess damage is lost.

**SHIELD HAND (–)** (Only if a shield is carried; otherwise, see HAND.)
*Modifier:* -8
*Miss By 1 Hits:* –
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×1)
*Blow-Through:* Any (HT/3)
*Special Effects:* Damage over HT/3 cripples hand; this *stuns* the target. Excess damage is lost.

**VITAL ORGANS (17-18)**
(Missile and thrusting attacks only.)
*Modifier:* -3
*Miss By 1 Hits:* TORSO
*Multipliers:* Bullet (×3), Crush (×1), Cut (×1), Imp (×3)
*Blow-Through:* Bullet (HT×3), Energy (HT×6), Imp (HT×3)
*Special Effects:* Any crushing blow that does exactly 0 (or more) damage requires a HT roll to avoid *knockout*. Impaling or bullet attacks have a 1 in 6 chance of hitting the HEART instead.

**HEART (–)** (Missile and thrusting attacks only.)
*Modifier:* -4
*Miss By 1 Hits:* TORSO
*Multipliers:* Bullet (×3), Crush (×1), Cut (×1), Imp (×3)
*Blow-Through:* Bullet (HT×3), Energy (HT×6), Imp (HT×3)
*Special Effects:* On any bullet or impaling hit that does damage equal to or greater than HT×3, an additional HT roll is required to avoid *instant death*.

**KIDNEYS (–)** (Only from behind. Missile and thrusting attacks only.)
*Modifier:* -4
*Miss By 1 Hits:* TORSO
*Multipliers:* Bullet (×3), Crush (×1.5), Cut (×1), Imp (×3)
*Blow-Through:* Bullet (HT×3), Energy (HT×6), Imp (HT×3)
*Special Effects:* Any crushing blow that does exactly 0 (or more) damage requires a HT roll to avoid *knockout*.

**GROIN (–)** (Missile and thrusting attacks only.)
*Modifier:* -3
*Miss By 1 Hits (roll 1d):* TORSO (1-2), NEAR LEG (3-4) or FAR LEG (5-6)
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×2)
*Blow-Through:* Bullet (HT), Energy (HT×2), Imp (HT)
*Special Effects (human males only):* Use the PD and DR of the armor on area 11 (lower torso). On a hit, make a HT roll at -1 for every point of damage or be *stunned*. Make a second (unmodified) HT roll to avoid *knockout*. High Pain Threshold gives +5 to these rolls; Low Pain Threshold *doubles* the penalties.

**FAR LEG (12)**
*Modifier:* -2
*Miss By 1 Hits:* –
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×1)
*Blow-Through:* Any (HT/2)
*Special Effects:* Damage over HT/2 cripples leg; this *stuns* the target, and a two-legged target falls down. Excess damage is lost.

**NEAR LEG (13-14)**
*Modifier:* -2
*Miss By 1 Hits:* –
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×1)
*Blow-Through:* Any (HT/2)
*Special Effects:* Damage over HT/2 cripples leg; this *stuns* the target, and a two-legged target falls down. Excess damage is lost.

**FOOT (15-16)** (Roll for left or right.)
*Modifier:* -4
*Miss By 1 Hits:* –
*Multipliers:* Bullet (×1), Crush (×1), Cut (×1.5), Imp (×1)
*Blow-Through:* Any (HT/3)
*Special Effects:* Damage over HT/3 cripples foot; this *stuns* the target, and a two-legged target falls down. Excess damage is lost.

# NPC REACTIONS

Roll 3 dice and apply the modifiers described on p. B204.

## 0 or less: Disastrous.

*General reaction:* The non-player character hates the characters and will act in their worst interest.

In a *potential combat situation*, the NPCs will attack viciously, asking no quarter and giving none.

*Commercial transactions* are doomed: The merchant will have nothing to do with you. Make a "potential combat" roll at -2.

*Requests for aid* are denied totally. Make a "potential combat" roll at -4. If combat is called for but not possible, the NPC will work against the PCs in any way possible.

*Requests for information* are met with anger. Make a "potential combat" reaction roll, at -2.

*Loyalty:* The NPC hates you or is in the pay of your enemies, and will take the first good chance to betray you.

## 1 to 3: Very Bad.

*General reaction:* The NPC dislikes the characters and will act against them if it's convenient to do so.

In a *potential combat situation*, the NPCs attack, and flee only if they see they have no chance. (A fight in progress will continue.)

*Commercial transactions* are next to impossible. The merchant asks three times the fair price, or offers 1/3 the fair price.

*Requests for aid* are denied. Make a "potential combat" roll; no reaction better than neutral is possible.

*Requests for information* are met with malicious lies.

*Loyalty:* The NPC dislikes you, and will leave your service (probably taking everything he can carry) or sell you out as soon as possible.

## 4 to 6: Bad.

*General reaction:* The NPC cares nothing for the characters and will act against them if he can profit by doing so.

In a *potential combat situation*, the NPCs will attack unless outnumbered. If they are outnumbered they will flee, possibly to attempt an ambush later. (A fight already in progress will continue.)

*Commercial transactions* go badly. The merchant asks twice the fair price, or offers half the fair price.

*Requests for aid* are denied. The NPCs go about their business, ignoring the player characters.

*Requests for information* are denied. NPCs will lie maliciously or demand payment for information. If paid, the NPC will give true, but incomplete, information.

*Loyalty:* The NPC has no respect for you. He will leave or betray you given even moderate temptation, and will be a sluggish worker.

## 7 to 9: Poor.

*General reaction:* The NPC is unimpressed. He may become hostile if there is much profit in it, or little danger.

In a *potential combat situation*, the NPCs will shout threats or insults. They will demand the PCs leave the area. If the PCs stick around, the NPCs will attack unless outnumbered, in which case they will flee. (If a fight is in progress, it will continue.)

*Commercial transactions* are unprofitable. The merchant asks 120% of the fair price, or offers 75% of the fair price.

*Requests for aid* are denied, but bribes, pleas or threats might work. PCs may roll again, at -2.

*Requests for information* are unproductive. The NPCs will claim not to know, or will give incomplete data. A bribe may improve their memory; roll again if a bribe is offered.

*Loyalty:* The NPC is unimpressed with you and/or dislikes the job; he thinks he's overworked and underpaid. He'll probably betray you if offered enough, and would certainly take a "better" job if he thought he had one.

## 10 to 12: Neutral.

*General reaction:* The NPC ignores the characters as much as possible. He is totally uninterested.

In a *potential combat situation*, the NPCs are inclined to go their own way and let the PCs go theirs. (If a fight is already in progress, the NPCs will try to back off.)

*Commercial transactions* go routinely. The merchant will buy and sell at fair prices.

*Requests for aid* are granted – if they are simple. Complex requests are denied, but the PCs can try again at -2.

*Requests for information* will be successful. The NPC will give the information requested if it is simple. If the question is complex, the answer will be sketchy.

*Loyalty:* The NPC thinks you're just another boss, and this is just another job. He will work hard enough to keep you happy, but no harder. He will not leave unless he is sure the new job is better, and will not betray you unless the temptation is *very* strong.

## 13 to 15: Good.

*General reaction:* The NPC likes the characters and will be helpful within reasonable, everyday limits.

In a *potential combat situation*, the NPCs find the characters likeable, or else too formidable to attack. The characters may request aid or information – +1 on a second roll. (If a fight is in progress, the NPCs will flee.)

*Commercial transactions* go pleasantly. The merchant will buy and sell at fair prices, and will volunteer useful information or small bits of help if possible.

*Requests for aid* will be granted if the request is reasonable. The NPCs' attitude is helpful. Even if the request is silly and must be denied, they will offer helpful advice.

*Requests for information* will be successful. The question will be answered accurately.

*Loyalty:* The NPC likes you and/or the job. He will be loyal, work hard and accept any reasonable hazard that you will accept.

## 16 to 18: Very Good.

*General reaction:* The NPC thinks highly of the characters, and will be helpful and friendly.

In a *potential combat situation*, the NPCs are friendly. The PCs may ask for aid or information (+3 on a reaction roll). Even sworn foes will find an excuse to let the PCs go . . . for now. (If a fight has already started, the NPCs will flee if they can, or surrender otherwise.)

*Commercial transactions* will go very well. The merchant will accept your offer unless you tried to buy below 80% of the fair price or sell above 150% of the fair price. In that case, he will offer those rates. He will also offer help and advice.

*Requests for aid* are granted unless they are totally unreasonable. Any useful information NPCs have will be volunteered freely.

*Requests for information* will be successful. The NPC will answer in detail and volunteer any related information he has.

*Loyalty:* The NPC will work very hard, and risk his life if need be. Under most circumstances, he puts your interests ahead of his own.

## 19 or better: Excellent.

*General reaction:* The NPC is extremely impressed by the characters, and will act in their best interests at all times, within the limits of his own ability. Merchants will offer very good deals.

In a *potential combat situation*, the NPCs are extremely friendly. They may even join the party temporarily. The PCs may ask for aid or information: +5 on this reaction roll. (If the fight has already started, the NPCs will surrender.)

*Commercial transactions* will go extremely well. The merchant will accept your offer unless you tried to buy below 50% of fair price or sell above 200% of fair price. In that case, he will offer those rates. He will also offer help and advice.

*Requests for aid* will be granted. NPCs will help in every way within their power, offering extra aid.

*Requests for information* will be extremely successful. The question will be answered completely. If the NPC doesn't know everything you need, he will exert himself to find out. He may even offer to help; roll a request for aid (at +2), with no reaction worse than "poor" possible.

*Loyalty:* The NPC worships you (or your cause), will work incredibly hard, puts your interests ahead of his own at all times, and would even die for you.

# FRIGHT CHECKS

A Fright Check is a special kind of Will roll; see p. B93 for modifiers. When a character fails a Fright Check, roll 3 dice. *Add the amount by which the Fright Check was missed*, and consult the following table.

Many of these results will give the character a new Quirk, Phobia, Delusion, or other mental disadvantage. The GM assigns the disadvantage. It must be related to the frightening event. If possible, it should also be related to an existing Quirk, Delusion, or Phobia!

Disadvantages acquired this way *do* reduce the point value of the character.

**4, 5** – Stunned for one turn, then recovers automatically.

**6, 7** – Stunned for one turn. Every turn after that, roll vs. unmodified IQ to snap out of it.

**8, 9** – Stunned for one turn. Every turn after that, roll vs. Will, plus whatever bonuses or penalties you had on your original roll, to snap out of it.

**10** – Stunned for 1d turns. Every turn after that, roll vs. modified Will, as above, to snap out of it.

**11** – Stunned for 2d turns. Every turn after that, roll vs. modified Will, as above, to snap out of it.

**12** – Lose your lunch. Treat this as being stunned for 15 turns, then roll vs. HT each turn to recover. Depending on the circumstances, this may be merely inconvenient, or humiliating.

**13** – Acquire a new *Quirk* (p. B41). This is the only way a character can acquire more than five Quirks.

**14, 15** – Take 1d of fatigue, and 1d turns of stunning, as per #10 above.

**16** – Stunned for 1d turns, as per #10, and acquire a new Quirk, as per #13.

**17** – Faint for 1d minutes, then roll vs. HT each minute to recover.

**18** – Faint as above, and roll vs. HT immediately. On a failed roll, take 1 hit of damage as you collapse.

**19** – Severe faint, lasting for 2d minutes; then roll vs. HT each minute to recover. Take 1 hit of injury.

**20** – Faint bordering on shock, lasting for 4d minutes, and take 1d fatigue.

**21** – Panic. Victim runs around screaming, sits down and cries, or does something else equally pointless for 1d minutes. At end of that time, roll vs. unmodified IQ once per minute to snap out of it.

**22** – Acquire a *Major Delusion* (p. B32).

**23** – Acquire a *Mild Phobia* (p. B35) or other -10-point mental disadvantage.

**24** – Major physical effect, set by GM: hair turns white, you age five years overnight, you go partially deaf. In game terms, acquire -15 points worth of physical disadvantages (for this purpose, each year of age counts as -3 points).

**25** – If you already have a Mild Phobia that can logically be related to the frightening incident, it becomes Severe. If not, add a new Mild Phobia or -10-point mental disadvantage.

**26** – Faint for 1d minutes, as per #18, and acquire a new -10-point Delusion, as per #22.

**27** – Faint for 1d minutes, as per #18, and acquire a new -10-point mental disadvantage, as per #23.

**28** – Light Coma. You fall unconscious, rolling vs. HT every 30 minutes to recover. For 6 hours after you come to, all skill rolls and attribute checks are at -2.

**29** – Coma. As above, but unconscious for 1d hours. Then roll vs. HT; if the roll fails, remain in a coma for another 1d hours, and so on.

**30** – Catatonia. Stare into space for 1d days; then roll vs. HT. On a failed roll, remain catatonic for another 1d days, and so on. If you have no medical care, lose 1 HT the first day, 2 the second, and so on. If you survive and awaken, all skill rolls and attribute checks are at -2 for as many days as the catatonia lasted.

**31** – Seizure. You lose control of your body, and fall to the ground in a fit lasting 1d minutes and costing 2d Fatigue. Also, roll vs. HT. On a failed roll, take 1d damage. On a critical failure, you lose 1 HT *permanently*.

**32** – Stricken. You fall to the ground, taking 2d damage in the form of a mild heart attack or stroke.

**33** – Total panic. You are out of control; you may do *anything* (the GM rolls 3 dice; the higher the roll, the more useless your reaction). For instance, you might jump off a cliff to avoid the monster. If you survive your first reaction, roll vs. IQ to come out of the panic. If you fail, the GM rolls for another panic reaction, and so on!

**34** – Acquire a *Severe Delusion* (see p. B32).

**35** – Acquire a *Severe Phobia* (see p. B35) or other mental disadvantages worth -15 points.

**36** – Severe physical effect, as per #24, but equivalent to -20 points of physical disadvantages.

**37** – Severe physical effect, as per #24, but equivalent to -30 points of physical disadvantages.

**38** – Coma, as per #29, and a Severe Delusion, as per #34.

**39** – Coma, as per #29, and a Severe Phobia or other -30-point mental disadvantage, as per #35.

**40+** – As #39, above, but victim also loses 1 point of IQ *permanently*. This automatically reduces all IQ-based skills, including magic and psi skills, by 1.

# FIRST AID

| Tech level | | Time per victim | Hits restored* |
|---|---|---|---|
| 0 | (Stone Age) | No First Aid skill exists. | Use bandaging only. |
| 1 | (Bronze Age) | 30 minutes | 1d-4 |
| 2, 3 | (Roman/medieval) | 30 minutes | 1d-3 |
| 4 | (up to U.S. Civil War) | 30 minutes | 1d-2 |
| 5 | (Civil War to WWI) | 20 minutes | 1d-2 |
| 6, 7 | (WWII/modern) | 20 minutes | 1d-1 |
| 8 | (near future) | 10 minutes | 1d |

**9+** As for TL8, with the addition of various special healing drugs and devices.

* First aid always restores a *minimum* of 1 hit point.

# FALLING DAMAGE

When you fall, roll for damage as follows:

*1 or 2 yards* . . . . . . . . . (1d-4) per yard
*3 or 4 yards* . . . . . . . . . (1d-3) per yard
*5 or more yards* . . . . . . (1d-2) per yard

A successful Acrobatics roll will reduce the effective distance by 5 yards. If you land on something soft (including water, on a successful Swimming roll), subtract 1 point per yard fallen. Treat any fall of more than 50 yards as only 50 yards. Cloth, leather or flexible plastic armor protects at full DR, to a maximum of DR 3. Medieval-style metal armor protects at ½ DR (round down). TL8+ combat armor protects at ⅓ DR. See p. B131 for optional hit location rules.

# BITING DAMAGE

When a carnivore bites, this is treated as a *cutting* attack, unless specified otherwise. The bite of a herbivorous creature like a horse is *crushing* damage appropriate to about half its actual ST. An animal bite – even from a carnivore – *can* do zero damage.

| ST | Damage | ST | Damage |
|---|---|---|---|
| 1-2 | 1d-5 | 26-30 | 1d+2 |
| 3-5 | 1d-4 | 31-35 | 2d-1 |
| 6-8 | 1d-3 | 36-40 | 2d |
| 9-11 | 1d-2 | 41-45 | 2d+1 |
| 12-15 | 1d-1 | 46-50 | 2d+2 |
| 16-20 | 1d | 51-55 | 3d-1 |
| 21-25 | 1d+1 | | and so on . . . |

# PROBABILITY OF SUCCESS ON 3D

| Target Number | Probability of Success | Target Number | Probability of Success |
|---|---|---|---|
| 3 | 0.5% | 10 | 50.0% |
| 4 | 1.9% | 11 | 62.5% |
| 5 | 4.6% | 12 | 74.1% |
| 6 | 9.3% | 13 | 83.8% |
| 7 | 16.2% | 14 | 90.7% |
| 8 | 25.9% | 15 | 95.4% |
| 9 | 37.5% | 16+ | 98.1% |

# CRITICAL MISSES

Use this table when a fighter critically fails at an attack with an ancient/medieval hand or missile weapon, when a defender critically succeeds on an active defense vs. *any* hand weapon attack, or for any critical failure on an armed parry.

**3, 4** – Your weapon breaks and is useless. Exception: Certain weapons are resistant to breakage. These include *maces, flails, mauls, metal bars,* and other solid "crushing" weapons; *magic weapons;* and *finely-made* weapons. If you have a weapon like that, roll again. Only if you get a "broken weapon" result a second time does the weapon really break. If you get any other result, you drop the weapon instead. See *Broken Weapons,* p. B113.

**5** – You managed to hit *yourself* in the arm or leg (50% chance each way). Exception: If this was an impaling or ranged attack, roll again. It's hard to stab yourself, but it can be done. If you get a "hit yourself" result a second time, count *that* result – half or full damage, as the case may be. If you get something other than "hit yourself," count that result.

**6** – As above, but half damage only.

**7** – You lost your balance. You can do nothing else until your next turn. All your active defenses are at -2 until your next turn.

**8** – The weapon turns in your hand. Spend one extra turn to ready it before using it again.

**9, 10, 11** – You drop the weapon. Exception: A *cheap* weapon *breaks*. See p. B113 for dropped/broken weapons.

**12** – The weapon turns in your hand. Spend one extra turn to ready it before using it again.

**13** – You lose your balance. You can do nothing else until your next turn. All your active defenses are at -2 until your next turn.

**14** – Your weapon flies 1d yards from your hand – 50% chance straight forward or straight back. Anyone on the target spot must make their DX roll or take half damage from the falling weapon! Exception: If this was an impaling attack, you simply drop the weapon, as per #9. A missile weapon will not fly from your hand – it just drops.

**15** – You strained your shoulder! Your weapon arm is "crippled" for the rest of the encounter. You do not have to drop your weapon, but you cannot use it, either to attack or defend, for 30 minutes.

**16** – You fall down! (Ranged weapon users, see #7 instead.)

**17, 18** – Your weapon breaks. See #3, above.

# UNARMED CRITICAL MISSES –
## *STRIKING AND PARRYING*

Use this table when a fighter critically fails at a punch, kick or other unarmed strike, when a defender critically succeeds on an active defense vs. an attack like that, or for any critical failure on an unarmed parry.

**3** – You trip and knock yourself out! If kicking, you slip and fall on your head; otherwise, you fall face-first into your foe's fist, knee, shield, weapon, etc. Roll vs. HT every 30 minutes to recover.

**4** – You connect with the wrong part of your body! You immediately take enough damage to cripple the body part you were striking with (HT/3 for a hand or foot, HT/2 for an arm or leg). DR has no effect on this damage. On a Head Butt, see #3 instead.

**5** – You hit a solid object (wall or floor) instead of your opponent. Roll normal damage and apply it to the body part you were striking with; DR protects normally.

**6** – As #5 above, but for half damage only.

**7** – You stumble forward. Advance 1 hex past your opponent and end the turn facing away from him. Your foe is now behind you!

**8** – You fall down!

**9, 10, 11** – You lose your balance. You can do nothing else until your next turn. All your active defenses are at -2 until your next turn.

**12** – You trip. Make a DX roll to avoid falling down. Roll at -4 if kicking, or at *twice* the usual DX penalty for any maneuver that requires a DX roll to avoid mishap on a normal failure (e.g., Flying Jump Kick).

**13** – You let your guard down. All your active defenses are at -2 for the next turn, and any successful feint made against you during this turn counts *double!* This *will* be obvious to your foe.

**14** – You stumble forward. See #7, above.

**15** – You pull a muscle. Take 1d-3 damage to your arm (if attacking with a hand/arm), leg (if using a leg/foot) or neck (on a Head Butt). You are off balance and at -1 to all attacks and defenses for the next turn. You are at -3 to any action involving the injured arm or leg (or to *any* action, if you injure your neck) until this damage heals. This penalty is reduced to -1 if you have the High Pain Threshold advantage.

**16** – You strain your shoulder! If parrying or punching, that arm is "crippled" for the rest of the encounter. You cannot use it to attack or defend for 30 minutes. All subsequent punches and parries with the other arm will be at -1. If kicking, you fall down hard instead, taking 1d-1 damage. DR protects normally.

**17** – You connect with the wrong part of your body. See #4, above.

**18** – You trip and knock yourself out. See #3, above.

# UNARMED CRITICAL MISSES –
## *GRAPPLING, LOCKS AND THROWS*

Use this table when a fighter critically fails at a grapple, Judo throw or other close-combat maneuver, or when a defender critically succeeds on an active defense vs. an attack like that.

**3** – You knock yourself out! You smash foreheads with your opponent or catch a knee in the solar plexus. Roll vs. HT every 30 minutes to recover.

**4** – You throw your back out (1d-3 damage) and are at -6 DX and -4 IQ from the pain until someone resets your back with a First Aid-2 roll. These penalties are halved if you have the High Pain Threshold advantage.

**5** – You fall down *hard*, taking 1d-1 damage. DR protects normally.

**6** – As #5, but for 1d-3 damage only.

**7** – You stumble forward. Advance 1 hex past your opponent and end the turn facing away from him. Your foe is now behind you! If you were attempting an Arm or Finger Lock, or a Judo Throw, and if your foe's fighting style includes that maneuver, he can instead immediately inflict that maneuver on *you* if he can make an unmodified Judo or Wrestling roll!

**8** – You fall down!

**9, 10, 11** – You lose your balance. You can do nothing else until your next turn. All your active defenses are at -2 until your next turn.

**12** – You trip. Make a DX roll to avoid falling down.

**13** – You let your guard down. All your active defenses are at -2 for the next turn. You are also at -2 to DX in any Quick Contest made in close combat, and any successful feint against you counts *double!* This *will* be obvious to your foe.

**14** – You stumble forward. See #7, above.

**15** – You pull a muscle. Take 1d-3 damage to your back (area 9-11). You are off balance and at -1 to all attacks and defenses for the next turn. You are at -3 to any action until this damage heals. This penalty is reduced to -1 if you have the High Pain Threshold advantage.

**16** – You fall down *hard*. See #5, above.

**17** – You throw your back out. See #4, above.

**18** – You knock yourself out. See #3, above.

# FIREARM CRITICAL MISSES

Use this table when a critical miss is rolled for an attack with a firearm, beam weapon, grenade or other high-tech weapon.

**3, 4** – The weapon breaks. It can be repaired (with the proper tools) in 1d hours with a successful Armoury roll. If the attack is with a grenade, it simply fails to go off.

**5** – You managed to shoot yourself in the leg (50% chance, right or left), doing normal damage.

**6** – As above, but you shot yourself in the foot.

**7** – The weapon recoil knocks you off balance. You can do nothing until next turn, and all active defenses are at -2 until then. If the attack is with a grenade or a recoilless weapon, ignore this result.

**8** – A dud. This shot simply doesn't go off (and the ammunition is wasted), but the weapon is not harmed.

**9, 10, 11** – The weapon jams. It will require a successful skill roll (Guns-4 or Armoury) to clear it. If the weapon is cheap, the roll is at a -3 penalty. If the attack is with a grenade or beam weapon, ignore this result and reroll.

**12** – A dud, as #8 above.

**13, 14** – You drop the weapon. A cheap weapon breaks (to fix it, see #3, 4 above). Otherwise, you must pick it up and ready it again. If the attack is with a grenade, place the activated grenade in an adjacent hex – and hope you set it for a long delay . . .

**15** – The weapon recoil knocks you down. You are on the ground, sitting or lying (your choice). Make a DX roll to hold on to the weapon! If your ST is at least 5 more than the minimum ST for the weapon (or 12 and higher, in the case of weapons with no minimum ST rating), ignore this result and use #7 (above) instead. If the weapon is *recoilless*, nothing happens.

**16, 17** – The weapon breaks, as in #3, 4 above.

**18** – The weapon explodes. You take the damage amount of the weapon in crushing damage; if the Aim maneuver was taken before the shot was made, you are *also* blinded for five minutes. If the weapon was an energy weapon or flamethrower, you are also on fire. If the weapon was a grenade, it goes off in your hand, doing double damage to that hand.

# RANGED WEAPON ATTACKS

When using a ranged weapon, figure your adjusted skill by:

(1) Taking your base skill with the weapon type. Add the bonus of the specific weapon's *Accuracy* if you have taken at least 1 turn to aim. The Accuracy modifier cannot be more than your base skill.

(2) Modifying for *size of target*.

(3) Modifying for target's *range and speed*.

(4) Modifying for conditions (snap shot or aim, bracing, darkness, and so on), including any special conditions determined by the GM.

The result gives your *adjusted skill*. A roll of this number, or less, is a hit.

## Size of Target

The larger the target, the easier it is to hit. Use its length (or its width, if width is less than 1/2 of length). Round up to the next larger size, and read the modifier in the *second* column of the table. Objects larger than man-sized give a bonus to hit; smaller objects, a penalty.

## Target's Speed and Range

The target's speed and range give a single modifier. The *sum* of range (in yards) and speed (in yards per second) gives a number from the table.

This means that if the target is very fast, its distance becomes less important . . . or if it is very far away, its speed becomes less important. Round up to the next larger speed/range number. If the firer is moving, use the (apparent) *relative* speed.

Yards per second is the Move score; it is also half the speed in miles per hour. Thus, 60 mph is the same as 30 yards per second. For very large or distant targets, the table gives a subsidiary column using *miles* and *miles per second*. If you use miles for the range, always use mps for the speed.

# RANGED ATTACK MODIFIERS

These modifiers apply to attacks made using *ranged* weapons.

*Aiming time:*
Snap shot . . . . . . . . . -4 unless adjusted skill >= weapon's SS number
One turn of aiming . . . . . . . . . . . . . . . . . . . . . +ACC
Two turns of aiming . . . . . . . +ACC+1 (maximum possible if walking)
Three turns of aiming . . . . . . . . . . . . . . . . +ACC+2
Four or more turns of aiming . . . . . . . . . . . . . +ACC+3
*Bracing a crossbow, rifle, pistol, etc.* . . . . . . +1 if time is taken to aim
*Erratic movement of target; e.g.:*
A man sidestepping and dodging as he runs (halving Move) . . . . . . . -1
A man evading rapidly (max. Move 2) . . . . . . . . . . . . . . . . . . . -2
A rat running across the floor . . . . . . . . . . . . . . . . . . . . . . . . -3
A hummingbird or equally unpredictable target . . . . . . . . . . . . . -4
*Firing on the move (multiply by 3 for crossbows, by 6 for bows):*
Walking (max. Move 2) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . -1
Running (Move 3+) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . -2
*Firing through an occupied hex* . . . . . . . . . . . -4 per occupied hex
*Nearsighted* . . . . . . . . . . . . . . . . . . . . . . . . Double range penalties
*Opportunity fire (includes snap-shot penalty):*
Evaluating target before firing . . . . . . . . . . . . . . . . . . . . . . . . -2
One hex being watched . . . . . . . . . . . . . . . . . . . . . . . . . . . . . -2
Two hexes being watched . . . . . . . . . . . . . . . . . . . . . . . . . . . -4
Three or four hexes being watched . . . . . . . . . . . . . . . . . . . . . -5
All hexes along a line being watched . . . . . . . . . . . . . . . . . . . -5
Five or six hexes being watched . . . . . . . . . . . . . . . . . . . . . . -6
Seven to ten hexes being watched . . . . . . . . . . . . . . . . . . . . . -7
More than ten hexes being watched . . . . . . . . . . . . . . . . . . . . -8
*Pop-up attack* . . . . . . . . . . . . . . . . . . -2, and -4 for snap shot; total -6
*Rolling to hit the wrong target* . . . . . . . . . . . . . Normal roll, max. 9
*Shooting blind* . . . . . . . . . -10 or roll of 9, whichever is worse
*Shotgun firing shot* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . +1
*Target's elevation:*
Higher target . . . . . . . . . . . . . . . +1 yd. to range per yd. higher
Lower target . . . . . . . . . . . . . . . -1 yd. to range per 2 yd. lower
*Target's position:*
Prone behind minimum cover, head down . . . . . . . . . . . . . . . . -7
Any position, only head exposed . . . . . . . . . . . . . . . . . . . . . . -5
Head and shoulders exposed . . . . . . . . . . . . . . . . . . . . . . . . -4
Behind someone else . . . . . . . . -4 for each intervening figure
Prone or crawling without cover . . . . . . . . . . . . . . . . . . . . . . -4
Body half exposed . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . -3
Behind light cover . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . -2
Crouching, sitting or kneeling without cover . . . . . . . . . . . . . -2
*Unfamiliar gun/beam weapon of known type* . . . . . . . . . . . . . -2
*Unfamiliar type of weapon* . . . . . . . . . . . . . . . . . . . . . . . . . . -4
*Unfamiliar vehicular aiming system* . . . . . . . . . . . . . . . . . . . -2

# HITS IN A BURST

| Rounds in Group | Attack Roll Made by | | | | | | |
|---|---|---|---|---|---|---|---|
| | -1 | 0 | 1 | 2 | 3 | 4 | 5+ |
| 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 0 | 1 | 1 | 1 | 1 | 1 | 2 |
| 3 | 1 | 1 | 1 | 1 | 2 | 2 | 3 |
| 4 | 1 | 2 | 2 | 3 | 3 | 3 | 4 |

# SIZE AND SPEED/RANGE TABLE

**Example:** The target is an automobile. It is 5 yards long (+3 to hit). It is 40 yards away, and moving 30 mph. 30 mph is 15 yards per second. 40 + 15 = 55. On the table, 55 rounds up to 70, giving a speed/range modifier of -9. The cumulative modifier is -6 to hit, before the particular weapon is taken into account.

| Speed/Range | Size | Linear Measurement (size or range/speed) | | Range/speed in miles |
|---|---|---|---|---|
| +15 | -15 | 1/10″ | | |
| +14 | -14 | 1/5″ | | |
| +13 | -13 | 1/3″ | | |
| +12 | -12 | 1/2″ | | |
| +11 | -11 | 2/3″ | | |
| +10 | -10 | 1″ | | |
| +9 | -9 | 1 1/2″ | | |
| +8 | -8 | 2″ | | |
| +7 | -7 | 3″ | | |
| +6 | -6 | 6″ | | |
| +5 | -5 | 12″ | | |
| +4 | -4 | 1 1/2 ft | | |
| +3 | -3 | 2 ft | | |
| +2 | -2 | 1 yd | | 2 mph |
| +1 | -1 | 1 1/2 yd | | 3 mph |
| 0 | 0 | 2 yd | | 4 1/2 mph |
| -1 | +1 | 3 yd | | 7 mph |
| -2 | +2 | 4 1/2 yd | | 10 mph |
| -3 | +3 | 7 yd | | 15 mph |
| -4 | +4 | 10 yd | | 20 mph |
| -5 | +5 | 15 yd | | 30 mph |
| -6 | +6 | 20 yd | | 45 mph |
| -7 | +7 | 30 yd | | 70 mph |
| -8 | +8 | 45 yd | | 100 mph |
| -9 | +9 | 70 yd | | 150 mph |
| -10 | +10 | 100 yd | | 200 mph |
| -11 | +11 | 150 yd | | 300 mph |
| -12 | +12 | 200 yd | | 450 mph |
| -13 | +13 | 300 yd | | 700 mph |
| -14 | +14 | 450 yd | 1/4 mi | 1,000 mph |
| -15 | +15 | 700 yd | 2/5 mi | 1,500 mph |
| -16 | +16 | 1,000 yd | 3/5 mi | 2,000 mph |
| -17 | +17 | 1,500 yd | 1 mi | 3,000 mph |
| -18 | +18 | 2,000 yd | 1 1/2 mi | 4,500 mph |
| -19 | +19 | 3,000 yd | 2 mi | 7,000 mph |
| -20 | +20 | 4,500 yd | 3 mi | 10,000 mph |
| -21 | +21 | 7,000 yd | 4 1/2 mi | 15,000 mph |
| -22 | +22 | 10,000 yd | 7 mi | 20,000 mph |
| -23 | +23 | 10 mi | | 30,000 mph |
| -24 | +24 | 15 mi | | 45,000 mph |
| -25 | +25 | 20 mi | 20 mps | 70,000 mph |
| -31 | +31 | 200 mi | 200 mps | |
| -37 | +37 | 2,000 mi | 2,000 mps | |
| -43 | +43 | 20,000 mi | 20,000 mps | |
| -49 | +49 | 200,000 mi | 200,000 mps | |

# CRITICAL SUCCESS AND FAILURE

A roll of 3 or 4 is always a critical success.

A roll of 5 is a critical success if your effective skill is 15+.

A roll of 6 is a critical success if your effective skill is 16+.

A roll of 18 is always a critical failure.

A roll of 17 is an ordinary failure if your effective skill is 16 or better, and a critical failure if your effective skill is under 16.

Any roll of 10 or more greater than your effective skill is a critical failure. That is, 16+ on a skill of 6, 15+ on a skill of 5, and so on.

# CRITICAL SUCCESS AND FAILURE ON DEFENSE ROLLS

*Critical Success:* Your *foe* goes immediately to the appropriate *Critical Miss Table.* You "faked him out," knocked the weapon from his hand or otherwise defended *very* well. Exception: Against a *ranged* attack, a critical success has no special effect.

*Critical Failure:* If you tried to *dodge,* you lose your footing and fall. If you tried to *block,* you lose your grip on your shield and must take a turn to re-ready it before you can block again (its passive defense still counts). If you tried to *parry,* you go to the appropriate *Critical Miss Table.*

# CRITICAL HITS

Use this table when a critical hit is rolled in combat. All doublings or triplings of normal damage refer to the basic die roll.

**3** – If the blow hit the torso, it does normal damage and the foe is knocked unconscious. Roll vs. HT every 30 minutes to recover. Otherwise, it does triple damage.

**4** – The blow *bypasses all armor* and does normal damage.

**5** – The blow does triple normal damage.

**6** – The blow does double normal damage.

**7** – Normal damage, *and* foe is *stunned* until he makes his HT roll.

**8** – If blow hit an arm, leg, hand or foot, it does normal damage, and that body part is *crippled* regardless of the damage done. However, this is only a "funny-bone" injury, and will wear off in six turns. (Of course, if enough damage was done to cripple the limb anyway, it does not wear off!) Otherwise, the blow does normal damage.

**9, 10, 11** – Normal damage only.

**12** – As #8, above.

**13** – The blow *bypasses all armor* and does normal damage.

**14** – If the blow hit an arm, leg, hand or foot, it does normal damage, and that body part is *crippled* regardless of the amount of damage done. Otherwise, double normal damage.

**15** – Enemy's weapon is dropped, *and* he takes normal damage.

**16** – The blow does double normal damage.

**17** – The blow does triple normal damage.

**18** – If the blow hit the torso, it does normal damage and the foe is knocked unconscious. Roll vs. HT every 30 minutes to recover. Otherwise, triple normal damage.

# CRITICAL HEAD BLOWS

Use this table only when a critical hit is rolled on a head blow.

**3** – Foe is killed instantly!

**4, 5** – Foe is knocked unconscious. Roll vs. HT every 30 minutes to recover.

**6** – Foe is hit across both eyes and blinded. Use "crippling" rules to determine whether eyes can heal (roll separately for each). Foe is *stunned* and fights at -10 DX for the rest of the battle.

**7** – Foe is blinded in one eye. Use "crippling" rules to determine if it heals. Foe is *stunned;* will fight at -2 DX for the rest of the battle.

**8** – Foe is knocked off balance; he may defend normally next turn but may do nothing else. The blow also does normal head-blow damage.
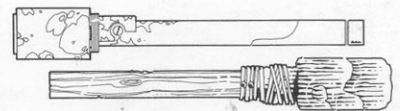
**9, 10, 11** – Normal head-blow damage only.

**12** – If the attack was a crushing blow, it does normal head-blow damage *and* the foe will be deaf for 24 hours. If it was a cutting or impaling blow, it does only 1 hit damage, but the foe's face is scarred.

**13** – If the attack was a crushing blow, it does normal head-blow damage *and* foe may be permanently deafened (use "crippling" rules to see if he recovers). If it was a cutting or impaling blow, it does only 2 hits damage, but the foe's face is badly scarred.

**14** – Normal head-blow damage. Foe flinches and drops his weapon (if foe has two weapons, roll randomly to see which is dropped).

**15-18** – Normal head-blow damage, *and* foe is *stunned.*

# VEHICLE CRITICAL HITS

Use this table when a critical hit is rolled when attacking a vehicle. It is *greatly* simplified from the one in **GURPS Vehicles.** All damage is applied to the vehicle's hit points; a vehicle with 0 hit points will no longer function.

**3** – Triple normal damage. If any damage penetrates DR and there are computers in the vehicle, one computer is destroyed as well!

**4** – Double normal damage. If damage in excess of 5% of body hit points (minimum 1 hit) penetrates the DR of a water or air vehicle, its rudder system is damaged and the vehicle can no longer maneuver (if using **Vehicles,** halve MR instead).

**5** – The hit bypasses 90% of armor DR and does normal damage. Whether damage penetrates DR or not, one sensor (if any) is disabled.

**6** – Normal damage, *and* the vehicle's largest engine (if any) is badly damaged, halving the vehicle's top speed and acceleration. If this result occurs a second time, the engine stops working. If the vehicle has only batteries or power cells, treat as #14, below.

**7** – Normal damage. If any damage penetrates DR, or if the vehicle is made of wood, fire breaks out! This does 2d damage (3d to wooden vehicles) every 10 seconds, ignoring DR.

**8** – Normal damage, *and* one of the vehicle's weapons (if any) is struck and disabled.

**9, 10, 11** – Window hit. If the vehicle has windows or a transparent canopy, one shot goes in through them, ignoring all but window DR (DR 1 for normal windows).

**12** – Normal damage, *and* one item of miscellaneous equipment is disabled (GM's option).

**13** – The hit bypasses 90% of DR and does normal damage.

**14** – If the vehicle has a battery or power cell, half of its storage capacity (along with half the stored power) is lost. If the vehicle has no batteries or power cells, treat as #6, above.

**15** – Normal damage. If any damage penetrates DR and there are communications or ECM system in the vehicle, one such system is disabled.

**16** – Double normal damage. If the vehicle has a fuel tank, it develops a leak: 1d% of the total fuel capacity leaks out immediately, plus another 1d% every minute (unless the tank is self-sealing). Also, roll 3d for flammable fuel. Diesel will catch fire on 9 or less, gasoline on 11 or less, and jet or rocket fuel on 13 or less. This does damage per #7, above. If the fuel ignites, check every 10 seconds for an explosion, rolling 3d vs. *half* the number above (e.g., 5 or less for gasoline). An explosion will immediately disable the vehicle.

**17** – Triple normal damage.

**18** – Double normal damage. If any damage penetrates DR and the vehicle is carrying explosive ammunition, the ammo explodes, doing damage equal to 1d shots of that ammo (or whatever is left, if less).