

ATOMIK ALIENZ



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Home Base

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What is Fuzion?

Fuzion is a unified set of role-playing rules combining the best of the *Hero System*[™] (*Champions*) and *Interlock*[™] (*Cyberpunk*[®], *Mekton Z*[™]). Not only can Fuzion be adapted to cover nearly every time, place, or setting, but it also has the ability to utilize existing *Hero*[™] and *Interlock*[™] rules and materials; if it is marketed as *Fuzion Capable*, it can be used as part of the Fuzion system.

Hero Games and R.Talsorian Games, Inc., jointly developed Fuzion. Many existing games systems use Fuzion, including *Champions: The New Millennium*, *Usagi Yojimbo*, *Bubblegum Crisis the RPG*, *VOTOMS*, *Mekton*, and many more. Fuzion uses a unique Plug-In system that allows for easy addition and removal of rules. For instance, to add Martial Arts to your campaign, you need only turn to a Martial Arts plug-in. To add Magic, Psionics, or Superpowers, these too may be easily plugged-in to the core rules (Total Fuzion).

Where Can I Get Fuzion?

The basic Fuzion rules (for character generation, combat, game mechanics, and basic plug-ins) can be found in any Fuzion product produced by R.Talsorian Games, Hero Games, or Gold Rush Games. However, as it is, these companies were kind enough to provide an on-line version of their core rules system. To obtain this file, please visit the following URL on the Internet (provided the site does not move, of course):

<http://www.sabram.com/rtalsoriangames/site/fuzion>

What is Atomik Fuzion?

Atomik Fuzion is collection of Fuzionable materials developed by Mark Chase, primarily plug-ins for *Mekton* and other Fuzion RPG gameworlds. These plug-ins include the mecha gameworld of *Metal Storm: 2380*, as well as generic plug-ins for psionics, magic, sci-fi, and alien characters.

Playing Fuzion

You have this Atomik Fuzion plug-in game, so how do you play Fuzion? First, you must get a set of Total Fuzion rules. As mentioned, the rules to create characters and play the game can be found in any Fuzion Capable RPG book or at the web site listed earlier. If you are having trouble finding a Fuzion game book, visit your local gaming store and ask about the R.Talsorian Games or Heroes Games product line. I recommend *Champions: The New Millennium* or *Bubblegum Crisis* for a good source. In late 1998 or 1999, R.Talsorian will be coming out with a Fuzion

version of *Cyberpunk* and *Mekton*, which I would highly recommend.

Creating a Fuzion Character

To create a character for any Fuzion game, you must have a Fuzion rulebook (see above). Most any Fuzion rulebook should do.

The first step is to develop your character's lifepath (see step one Fuzion character creation rules). I would recommend the lifepath chart show in *Bubblegum Crisis* (or *Cyberpunk* or *Mekton*, when they come out), or the on-line rules which you can download off the web. There are other lifepath systems, some made by fans, and these are acceptable at the GM's discretion.

The Origins Path for *Champions* is relevant only for superhero characters. If you are playing a superhero, Origins is a good way to flesh out his or her past. If not, you may ignore Origins all together.

Primary Characteristics as listed in Atomik Fuzion Plug-Ins are INT, WILL, PRE, TECH, REF, DEX, CON, STR, BOD, and MOVE. This is the same as it is for *Bubblegum Crisis* and *Champions*. PSI and MAGE may be added for Psionic or Magic plug-ins. Derived characteristics are calculated as normal.

Atomik Alienz

On par with high-tech gizmos and ray guns, alien creatures are one of the most dominant features of science fiction. Since the turn of the century aliens have been everywhere -- from Jules Verne's fantastic space adventures to the exotic aliens of Larry Niven. Aliens are among us, thousands in every bookstore, television channel, and movie theater. They terrorize our most horrific nightmares and stand at the edge of our wildest dreams. Aliens can be fearsome world-conquering monsters, or wise and benevolent saviors of our own self-destruction.

And so, with role-playing games that span the spectrum of genre, from fantasy, to superheroes, to sci-fi, a concise and balanced system for creating and playing aliens must be put forth. *Atomik Alienz* presents such as system. With *Atomik Alienz* you can create any creature imaginable from science fiction, fantasy, or horror. If a special alien ability or feature is missing from here, the GM should have no difficulty creating new abilities to expand this plug-in.

Atomik Alienz features many of the same powers as seen in *Champions: The New Millennium*. These are not, however, super-powers. Rather, they are racial advantages. This makes adding aliens into an existing *Champions* campaign all the easier!



Children of the Stars...

Billions and Billions...

There is a now famous image, taken by the Hubble Space Telescope. A image which seems no different than any glimpse of a the night sky, yet sends a chill of awe and wonder through me every time I lay my eyes upon it. Cast forth across the endless black void are a myriad points of light, countless in number. Yet each of those fussy specks of spiral cloud is not a star, but an entire galaxy. Hundreds of galaxies, each holding a hundred billion stars! And though as awesome as this single Hubble image may seem -- a snap shot from the very edge of the known universe -- it is not the image itself that awes me so.

For this is not a picture of *whole* night sky -- not half, nor even a mere arc minute of the heavenly dome! It is a pinpoint photograph -- a picture zoomed to a speck in the sky no larger than the head of a pin. And to imagine, just how many such precise pinpoints lie in the night sky above, in the darkness between those twinkling stars whose staggering magnitude we have just begun to image...

A Myriad of Worlds

The Drake Equation, formulated by Dr. Frank Drake and expanded by Dr. Carl Sagan, formulates through logical deductions and reasonable scientific assumptions, the number of habitable worlds in our galaxy, the number of potential civilizations, and the number of these civilizations which are advanced enough to be capable of space flight.

The formula takes in to account the number of stars in our galaxy (N), the fraction of these stars which may have planetary systems (f_p), the number of planets in such a system which can harbor life (n_e), the fraction of suitable planets on which life does arise (f_l), the fraction of these planets on which intelligent life arises (f_i), the fraction of planets with intelligent life that develops a civilization (f_c), and the fraction of a planetary life time graced by a technical civilization (f_L). The actual equation is $N \times f_p \times n_e \times f_l \times f_i \times f_c \times f_L$, where N is a constant (the number of stars), and all f values are all fractions.

We know N is equal to four hundred billion (4×10^{11}). All other numbers are hypothetical, and thus, can be adjusted to suit any conceivable sci-fi campaign. Reasonable assumptions for these values are expressed below. These are the numbers as proposed by Dr. Carl Sagan.

$$N = 4 \times 10^{11}$$

$$f_p = 0.3 \text{ (assuming most stars harbor planets)}$$

$$n_e = 2 \text{ (in our system Earth and Mars could harbor life)}$$

$$f_l = 0.3 \text{ (an education assumption)}$$

$$f_i = 0.1 \text{ (an educated assumption)}$$

$$f_c = 0.1 \text{ (an educated assumption)}$$

$$f_L = 0.00000001$$

If you are wondering why f_L is so low (one millionth of a percent), it is because our civilization has existed for less time than a millionth of the life-span of our world. Civilization on our world has only existed for, perhaps, six to seven thousand years, out of the four billion the world has been here (seven thousand divided by 4 billion is a very small number). Technological civilization has only existed for a hundred years (now divide 100 by 4 billion and you see what I mean!). Therefore, 1 millionth of a percent is a *very, very* optimistic assumption.

At any rate, when this number is computed ($4 \times 10^{11} \times 0.3 \times 2 \times 0.3 \times 0.1 \times 0.1 \times 0.00000001$) the result is 7.2. To make things simple, this number is rounded up to ten. This means that, at present, there are *probably* ten technologically advanced civilizations in our galaxy. But don't forget, there are hundreds of billions of galaxies just like ours!

The GM may adjust these numbers as he wishes. For instance, if the GM assumes that a technological civilization will exist for 1000 years, f_L can be increased to just 0.0000001, which would in turn make the result equal 100 advanced civilizations in our galaxy. Other adjustments would likewise give rise to other such changes. Below is a more "cinematic" universe, where there are many alien civilizations:

$$N = 4 \times 10^{11}$$

$$f_p = 0.3 \text{ (assuming most stars harbor planets)}$$

$$n_e = 2 \text{ (in our system Earth and Mars could harbor life)}$$

$$f_l = 0.5 \text{ (an generous assumption)}$$

$$f_i = 0.3 \text{ (an optimistic assumption)}$$

$$f_c = 0.3 \text{ (an educated assumption)}$$

$$f_L = 0.0000001$$

In this setting, the galaxy would harbor ($4 \times 10^{11} \times 0.3 \times 2 \times 0.5 \times 0.3 \times 0.2 \times 0.0000001$) 1080 alien civilizations. We shall consider this to be 1000 civilizations, for simplicity. The distribution of alien civilizations would still be extremely small, with a density of 1 civilization every three million cubic light-years (or spaced out from each other with a distance of two thousand light-years apart). This may be insufficient for a viable sci-fi campaign. The GM may

continue to make adjustments to the Drake formula to suit his universe, or simply declare how many civilizations exist. Nevertheless, the Drake formula is a good guideline to follow, especially for a hard sci-fi campaign.

They're Everywhere!

In a space opera, sci-fantasy, or action adventure campaign, it would not be unreasonable to assume that there are tens of thousands of alien cultures throughout the galaxy. In such a universe, four assumptions are made: 1) the formation of stars inherently gives rise to the formation of planets. 2) all main sequence stars have at least one planet located in a "biozone", capable of sustaining life. 3) Life will almost always arise on such planets, assuming they have a suitable atmosphere. 4) Eventually, intelligent life and civilization will appear and last for a very long time.

By these assumptions, the Drake formula can generate a result somewhere in the range of 50,000 to 100,000 alien civilizations. At this point, the density of civilizations becomes practical for a space adventure (about two to three hundred light-years separation). If each of these civilizations travel three hundred light-years in all directions, they would eventually collide with each other, thus creating war, conflict, and epic sagas.

Therefore, in the Fuzion spirit of campaign Dials and Switches, a Dial is provided below for setting the Drake Civilization Level for a campaign. A GM could always use the Drake Formula itself to tinker with a more realistic approach, but this dial should suffice:

Campaign Style	Alien Civilizations
The Sagan Estimate	7 - 10
Hard Sci-Fi	700 - 1000
Pulp Sci-Fi	3000 - 10,000
Life's Abundant	10,000 - 50,000
Cinematic	100,000 +
Super-Cinematic	1,000,000 +

Even with a million alien civilizations, the campaign could still be limited to a small sphere of activity (say, a thousand light-years across), containing ten to twenty alien civilizations.

Worlds to Explore...

Many GMs start to create their alien races without first considering the biggest factor in the development: their world. Before any alien race should be conceived, the first step is to build their world, consider its evolution, environment, and any exotic factors that might come into play.

First, there are three distinct forms of aliens in science fiction. The first class are from worlds of independent, self-contained evolution. These aliens

are radically different from anything on Earth, and extremely difficult to envision without falling into the "Monster Alien Menace From Galoopa Prime" stereotype. The second, more common approach is *panspermia*, discussed in the next section. Finally, there is the all too common "thoughtless" approach, where the writer simply doesn't care where the aliens came from and how they evolved, and just makes them up however he wants. The "thoughtless" approach will not be covered in this text (I assume you have this book to *avoid* the "thoughtless" approach).

In the Beginning...

First, a bit about stars. There are many different kinds of stars, ranging from red dwarf stars to brilliant blue-white super giants. The only classes of immediate concern are main sequence stars, that is, stars at the peak of their life cycle, burning bright and healthy. Star classes range from O to M.

- O - Blue stars
- B - Blue-white stars
- A - White stars
- F - Yellow-White (life-supportable)
- G - Yellow (our sun, life-supportable)
- K - Orange (life-supportable)
- M - Red (barely life-supportable)

O, B, and A stars cannot have worlds where life evolves. They burn too bright and hot, and last less than a billion years (O stars can last for just a few million!). F, G, and K stars have a high probability for life evolving on them. Our sun is, after all, a G-class star. Most M stars should not have planets, but if they do, it is possible a world in the first or second orbit may harbor life. It should be noted that M stars generate very little radiation, which is good for survival but bad for evolution. Fortunately, most M stars last for ten to fifteen billion years, giving plenty of time for intelligence to arise. All stars also have a sub-category, listed 0 - 9, where 0 is hotter and brighter, and 9 is cooler. Stars classes have a suffix as well, rated I, II, III, IV, V, or VI. I are supergiants, IV are sub-giants, V are like our Sun, and VI are dwarf stars. Under the assumption that only V stars are suitable for life, these stars will be stellar class of concern. Our sun's complete spectral type is G2 V. Possibly habitable stars range from F0 V to M5 V.

Once the star-type has been decided, so should the number and placement of planets. Based on our system, most systems should have between six to twelve planets (roll 1D6 + 2 or 2D6 for number of planets). There is also a formula for the placement of these planets, but it is not necessary to use, as it has only been verified for our solar system (thus, it may be incorrect). The GM can place worlds as he wishes, but as a general rule, each orbit should be twice the distance from the sun as the previous orbit (roughly speaking).

Orbits are rated in AUs (astronomical units, the distance Earth is from the Sun), equal to ninety-three million miles, or 150 million kms. According to the Titius-Bode Formula, the placement of orbits runs at a ratio of 0, 3, 6, 12, 24, 48, 96, 192, 384, and 768. The final number is added to 4 and divided by 10. For the first orbit, we compute $0 + 4$ and divide by ten, with a result of 0.4 (the distance Mercury is from the Sun). For the second orbit, we compute $3 + 4$ and divide by ten, with a result of 0.7 (the distance Venus is from the sun). For the third orbit, we compute $6 + 4$ and divide by ten, with a result of 1 (the exact distance Earth is from the sun). This continues for all orbits (the Astroid Belt counts as the 5th orbit for our system). To add variation, the added constant (B, which was 4 in the case of our system) can be any number ranging from 1 to 6 (roll 1D6), or can be set based on the star type. An F star would have a B value of 5, a G star would have a B value of 4 (as above), K would have 3, and M would have 2. Therefore, the third orbit of an M class star would be $6 + 2$ divided by ten, or 0.8. If this all seems too complicated, just make up however you want.

Ride into the Biozone

The Biozone of a star system is the most important aspect for determining the placement of the "homeworld" for your alien civilization. The Biozone is the orbit where the light, radiation, and temperature levels are not too hot and not too cold for life. For our sun (a G class star) this range is clearly 0.7 to 1.6 AUs. Earth is in the middle of this, Venus and Mars are at the extremes. Mars may have once harbored microscopic life, but failed to retain such life, due to its placement at the very edge of the Biozone. Venus has a sulfuric acid atmosphere, so it couldn't support life anyway. Earth was perfectly placed and had the perfect atmosphere to support life.

Other Biozone ranges are listed below. Type V main-sequence star is assumed.

Star	BioZone
F	1.8 - 3.0 AU
G	0.7 - 1.6 AU
K	0.5 - 0.8 AU
M	0.1 - 0.3 AU

One, two, or even three planets may fall into the Biozone bracket. However, the best choice is always the one closest to the midway point (1 AU for our system).

Planetary Attributes

There are many attributes that must be set for a world inside the biozone. Remember, it is extremely unlikely that a world will evolve just like Earth, even if it is in the third orbit of a G2 star. Factors to consider are: size of the planet, its gravity, planet-type (gas, ice, or terrestrial), climate range (desert, frozen, earthlike), terrestrial compounds

(high metallic core, iron core, silicate, etc.), rotation, seasons, length of day and year, number of moons, continents, oceans, atmosphere type (earthlike, high CO₂, methane, hydrogen, etc.), and many other factors as well. Remember, exotic aliens can evolve on an exotic world (such as a hot, heavy gravity, fluorine atmosphere world), and this will greatly influence the creation of that alien civilization.

To the Moon, Alice!

One thing I must point out -- moons for terrestrial worlds are a tricky subject. Many authors try to make an alien world more alien by have two or even three moons in the sky. After all, Mars has two moons, right? The problem is, our moon is an *extremely* exotic feature, we just don't see it that way. Another alien civilization would see it as an exotic feature (we technically have a *double* world!). By default, terrestrial worlds should not have a moon. Why? When a planet forms, all nearby matter is pulled into the largest body. Rarely will there be leftover material to form a moon (any leftover material will simply add to the forming planet). Our moon was formed about four to three and half billion years ago when a small planetoid smashed into our cooling world. This ripped off a huge chunk of our planet that fell into orbit. These two bodies cooled again and became spherical -- the larger body was our Earth, the smaller orbiting body, our Moon.

Mars has two moons, but both are tiny captured asteroids. Venus and Mercury have no moons. Pluto has a "moon" call Charon, but both Pluto and Charon are quite possibly lost moons of Neptune. Gas Giants do form moons during their formation, but this is a side effect of their formation, similar to that of a miniature solar system. Inherently, terrestrial planets have no moons. This should be kept in mind. Most terrestrial worlds, if they have moons, will simply have a big orbiting asteroid.

Multi-Star System

Less than four light-years from our system are not one, but two, yes *two*, class G main sequence stars. Because of this, these stars have been the centerpiece of science fiction for nearly a hundred years. Not only are they our closest neighbors, not only can they be reached by conventional propulsion systems within a matter of decades, but G class stars are *the* best suited for harboring life! So what's the problem? These stars are in the same solar system, orbiting around each other!

This is, of course, the Alpha Centauri system. Alpha Centauri is actually a trinary star system, consisting of two G class stars (Alpha Centauri A and B) and a small red dwarf star, Proxima Centauri. There is much heated scientific debate as to the probability that a binary (let alone a trinary) star system could harbor life, or even planets.

Planetary orbits may be too unstable in a multi-star system to give way to their formation. Thus, Alpha Centauri may have no planets at all. Even if Alpha Centauri does have a few planets in a stable orbit around one (or both) of its G class suns, the chances of life evolving are extremely slim. The varying temperature, extreme conditions, and massive radiation from having two main sequence suns all work against the formation of life (Proxima Centauri would have a negligible effect). Fortunately, Alpha Centauri A and B orbit around a central gravitational point at a distance of roughly 50 AUs from one another. This may be a sufficiently distant to allow habitable planets to develop in the biozone of one, or both, stars.

Any world in a system with two main suns would be extremely harsh. Tatooine, from Star Wars, is a very good example of what a habitable world may be like in a double-star system.

If the GM is going to have habitable worlds in binary or trinary systems, he must seriously consider the reality-level of his campaign. Hard sci-fi campaigns should not have habitable planets in such systems. Space adventure or science fantasy campaigns suspend reality, and thus, anything can be allowed. It is important to remember at this point the real difference between *science* fiction and fantasy. Both are great and entertaining genres, but do not confused them.

Panspermia

No, it's not a dirty word, it's a scientific term meaning that life spreads outward through the universe in the form of microbes (usually on comets or meteoroids) from a common source. These microbes may have arrived on Earth (and other worlds) by comets, or may have even been planted by a previous alien civilization.

This is not as far-fetched as it first sounds. Consider the example of the now famous Mars rock. Indeed, the microbes on the Mars rock were fossils and long dead for a billion year before it landed on Earth. But *what if* a rock was blown off a planet rich in life, and hurled into space. The force of such an impact would destroy most life, however, some bacteria and other hardy microbes could survive the impact. Certainly, a microbe cannot live the frozen vacuum of space... Correct, but microbes can hibernate. It has been *proven* that some bacteria can remain in a state of frozen metabolic activity for tens of millions of years, awakening when placed in the presence of a livable environment (warm, wet, and rich in nutrients). Therefore, if a microbe-infested rock is blasted off a planet by an asteroid impact, such microbes could conceivably slip into hibernation and lie dormant for ten or more million years while their little rock huddles through the void of space. Then one day the rock is caught in the gravity well of

a hot, carbon dioxide poisoned world -- the third planet orbiting a young G class star. The rock crashes into an ocean of liquid water and the microbes awaken. Three billion years later, the descendents of those ancient microbes set foot on that planet's cold, airless moon...

It is also possible that the chemical processes needed for life first arose on a comet. Comets are rich in water and organic compounds (hydrocarbons). Furthermore, comets are exposed to massive doses of heat and solar radiation. It is plausible that, under the right conditions, a chemical reaction could take place that was the foundation for life as we know it. If all it takes is a dirty snowball being exposed to intense radiation, many such similar reactions could be set off on thousands of different comets. Some of these comets, hurtling through the cosmos, may one day crash on a world capable of supporting life, and thus, life begins.

A third possibility is the Localized Panspermia theory. In this, a region of space (perhaps a few light-years across) is a nebula of cometary fragments (such as our system's Oort Cloud). These fragments may be comets, or debris from a destroyed planet, but whatever the case, they hold hibernating microbes or proto-microbe organics. When star systems pass through this region of space, their planets are bombarded with thousands of microbe-infested comets. If one of these worlds can support life, the microbes may begin to grow, reproduce, and evolve.

Finally, there is always the possibility that an ancient alien civilization transplanted life to various worlds throughout its sphere of influence. After its collapse, these worlds evolved on their own, though all transplanted life on these planets would be similar. Many authors use this to explain the staggering similarities between humans and aliens (i.e., aliens look just like humans, except with funny foreheads or big ears). It may also be that all (or most) alien races are the descendents of the precursor civilization, in which case "humans" are just like everyone else.

Why Panspermia?

The reason for panspermia in science fiction is two fold. One, it may *be* the way life really arose on Earth an else where, so this should be established for any sci-fi universe. Two, it is a covenant mechanism to explain why alien worlds harbor similar life.

For instance, nearly all alien worlds, creatures, and races follow the biology of creatures on Earth. Alien worlds have fish, birds, and trees (you can even see Maple trees and pine trees on sci-fi TV shows! Amazing!). Of course, this is just the result of our limited capacity to invasion the *truly* alien, and should be forgiven, as unrealistic as it is. A convenient way to explain it all away with the wave

of a magic wand is to declare "Pansperma" and be done with it. Transplantation by a precursor civilization is also common place, declaring that some ancient empire spanned the galaxy a million years ago, then collapsed or died out for no apparent reason, leaving all the worlds to evolve *slightly* different humanoid races.

Pansperma, therefore, leads to two types of evolution. Ancient, microbe evolution, and recent, humanoid evolution. Microbe evolution insures that all alien creatures and races will be of similar biology, and may even have "creature-features", such as being insectoid, fish-men, ape-men, lizard-men, and so forth. They could be radically different exotics (see below) but would still breathe conventional gases (oxygen or CO₂), require water, and a temperature range between -20C and 50C (with a median range at 40-50C). This is a good basis for building alien races.

Second is the possibility of recent humanoid evolution. Under this assumption, all or most alien races were transplanted to various worlds by a precursor civilization that died out, collapsed, or just went away. Under these conditions, most alien creature and alien beings will be just like those seen on Earth, with added features (it's a bird, but reptilian and has four wings...). Alien races will be very much humanoid (if not exactly human), with the only discernable difference being in skin color, shape of their head, pointy ears, or a strange hairstyle. It is much easier to develop humanoid alien races, but is it certainly *not* hard science fiction.

Xeno-Exoticus

Rarely seen in science fiction, yet the most probable form, exotic aliens are life forms with radically different biologies from those seen on Earth. These possibilities will be explored in this section. It must be kept in mind that, although based on scientific information, everything described here is pure speculation. Feel free to let your imagination go wild, but never lose sight of the basic principles of physics, chemistry, and biology.

Pansperma Exotics

As described above, pansperma exotic aliens are those which evolved from universally common base microbes, but the evolution was radically different. In such a setting, alien worlds will be exotic and alien, but at least they will all have some common features. All pansperma exotics should be based on Earth-like biochemical processes. They will be carbon-based, require water, a standard atmosphere (Oxygen or CO₂), and will probably have a genetic code like DNA. Reproduction will usually be sexual, though it could be asexual (remember, though, asexual reproduction does not facilitate rapid evolution).

Pansperma exotics lie at the fringe of what we can imagine for truly alien aliens. Most of these aliens are envisioned to be big bugs, slugs, squids, or jellyfish-heads, which is unrealistic, though unavoidable.

To actually make up an alien world based on Earth biology, the best thing to do is create a time line, starting from the microbe stage and evolving the world step-by-step, making sure to change a few things along the way (to insure it does not parallel Earth's evolution). It should be noted at this point that there is now evidence that two different pansperma comets hit Earth. There are two radically different types of microbes and cell-structures seen on Earth. The first, most ancient kind, is called prokaryotic (which appeared about three billion years ago). Prokaryotic microbes have no nucleus structure and are primarily simple bacteria. The other kind, which appeared 1.7 billion years ago, is called eukaryotic. These are more complex bacteria, and eventually evolved to higher multicelled life forms like plants and animals. A world where prokaryotic life forms evolved would be a very exotic route to take.

Once the world is evolved to a state *dissimilar* to Earth, choose one of the alien life forms and make it sentient, build its civilization, culture, and history. Let them create technological marvels, perhaps far different than those on Earth (adapted to their needs, their biology, and their culture, *not* ours), and set them out unto the stars. Then you will have a viable alien civilization.

I recommend everyone to visit your local bookstore and pick up Wayne Barlowe's art book "Expedition". There are some amazing ideas there, and you won't be disappointed. You should also check out "Barlowe's Guild to Extraterrestrial". This should be required reading material.

If you are looking for a web-link, you must visit the Epona Project pages, located at: <http://www.io.com/~stefanj/82Eridani/>

Be sure to visit the Ecology and Geology links. This shows *exactly* how you should develop an alien world. As Larry Niven himself said about Epona, "Why can't they all be like this?". Three years in the making by a team of thirty scientists and sci-fi writers. You must check it out.

Xeno-Exotics

Truly alien aliens are the stuff of Hugo and Nebula awards. These aliens are rarer than gold in sci-fi, and prized above all because they are the result of brilliant imagination and genius. Most xeno-exotics (for lack of a better term) have radically different biologies (if it can even be called biology), highly alien (even terrifying) appearance, and a mentality utterly beyond human comprehension. They are not necessarily more intelligent, but xeno-exotics should not display human reason, emotion, or motivation. They are *alien*.

The best example of such an alien is the sentient world Solaris, in the novel *Solaris* by Stanislaw Lem (which you now must read). Other xeno-exotic aliens include Fred Hoyle's Dark Cloud, Jack Chalker's Uchjinians, and many of the aliens described by Asimov and Arthur C. Clark.

The key to creating a xeno-exotic races is imagination. These may be evolved from exotic bacteria, such as the bacterial colonies centered around deep ocean thermal vents, or sulfate-ingesting methane-excreting microbes. Even so, such a life form would *still* be a panspermia exotic. A xeno-exotic would be even more bizarre.

Life which arose independently on an alien world cannot *possibly* have any similarities to life on any other world. Life must be evolved from a base chemical reaction to a state of sentience, over the course of billions of years. This will vary, depending on the planet's characteristics. Chlorine based life could form on a world with an exotic chlorinate atmosphere. Methane based life forms have been proposed for decades, as have life forms which are based on silicon, rather than carbon. All these are in the realm of possibility, as well as even stranger things. Creatures of dark matter, anti-matter, quantum matter, or pure energy. Entire sentient worlds, sentient stars, and regions of space where consciousness simply rises can come in to play. Perhaps even a race of machine intelligences, the last survivors (or conquerors?) of the Precursor civilization... Remember, xeno-exotics are alien. *Alien.*

Threshold of the Imagination

Once you have decided upon the type of aliens that exist in your universe, it is necessary to develop them and their world. If you want a race of militant, hive-mentality bugs, this is probably unnecessary. But for a true alien civilization, and certainly for races that are to be used as characters, you must completely develop their world, their history, and their culture.

The world should already be developed, assuming you developed the race properly (that is, by step-by-step evolution). Assuming it is, the alien race must have evolved intelligence somewhere in the past, growing from a primitive "cave-beings" state to a fully developed world-spanning civilization. Do not fall into the cliché that the entire race has just one culture. And here I should differentiate between races and ethnic races. An alien race, in our terms, is actually an alien species, of which there can be many different ethnic races. We are of the primate species, but we are *human*. There are many ethnic races of humans. So should be the case for an alien species. If dogs were sentient instead of humans there would be thousands of dog races on Earth.

Their cultures, history, and development would be a reflection of this fact. Some ethnic races will have different characteristics for any given species. In fact, two (or more) sentient races could develop on the same world, perhaps on separate continents. This would be an extremely significant factor in that culture's development.

Fantasy Races

This book is not just about science fiction aliens. It can also be used to create fantasy races. Dwarves, elves, orcs, dragons, and even exotic fantasy creatures can all be created with the system provided here. Fortunately, Fantasy races will be far easier to devise, as they developed on an Earth-like world in parallel evolution to humans, and thus, are probably very much humanoid.

Genetic Engineering

It may be within the next hundred years, it may be within the next three hundred, but one day we will become masters of our own biology. Already science has opened the gateway to genetic engineering. Cloning is now within the realm of possibility, and the human genome project is making daily progress in decoding the massive genetic instruction set of our DNA. Once the codes for DNA are known, we can begin programming them to fit our needs, our desires, and our dreams.

The consequences of genetic engineering are both staggering and terrifying. Genetic engineering is discussed in detail in *Atomik Cybertek*, but an alternative to using *Cybertek* for genetically engineered people (or perhaps entire races and sub-races of engineered humanity) is to build these as artificially evolved human beings. Whole new races of human could come into play, perhaps a world with hundreds, even thousands, of varying types of people, all engineered for certain tasks or purposes. *Atomik Alienz* can be used to build and create a race (or "product model") of a genetically engineered human.

And if we can do it, certainly an advanced alien civilization could as well. To add a bit of color to any alien civilization, they could have advanced biotechnology and genetic engineering at their disposal. It may even be that the aliens humans encounter are not the real aliens at all, rather, they are genetically engineered "ambassadors to humanity", designed to best suit our delicate (and inferior) psychology. An alien ambassador may even look completely human, and learn to act and think like a human... Even fall in love with a human. Such bizarre possibilities are within the fantastic realm of science fiction.

Creating Aliens

Types of Aliens

As discussed in great detail earlier, there are several different general categories of aliens seen in science fiction literature. This ranges from the utterly silly to the scientifically plausible. Depending on the campaign, a certain level of Factuality level is called for. Factuality level is similar to Reality level, however, since it is pure speculation, the best we can hope for is to gauge realism in terms of facts and educated guesses. That is to say, it is extremely unlikely that Little Green Men exist in the universe (not because they are little or green, but because they are men), however, it is within the realm of scientific conjecture that we may one day meet up with an alien of an extremely exotic nature, radically different from anything seen on Earth.

There is no "Factuality Dial" per say, rather, Factuality level is an abstraction which should be part of the GM's thought process when considering the development of an alien race. Even if the GM decides for a "pulp sci-fi" style campaign, there can easily be exceptions within any give universe. If most aliens are humanoid, there can also be xeno-exotic aliens. Likewise, is the universe is populated by bizarre, exotic aliens, there can be cases localized panspermia (or "lost colony" scenarios) where there are a few humanoid aliens.

Humanoids

Aliens look just like us! Sure, some have big ears, funny foreheads, or a real bad skin problem, but other than that, they are pretty much human. Their culture (though historically different) is easily put into human terms. Their technology, society, and even language seem completely human. In many science fiction books and TV shows (I won't name the one) aliens even speak English at the time of first contact! Parallel evolution is truly an amazing thing.

Humanoid aliens are the easiest route to take for devising alien civilizations, and some say a copout. This is the lowest Factuality level, at the epitome of space opera and pulp fiction, yet still an extraordinary setting for conflict, epic adventure, and exploration (as said unnamed show portrays).

It is, however, possible to explain away the existence of humanoid aliens with the theory of panspermia (as described earlier). It can even be said that a precursor civilization once populated the galaxy, and we (and all the other humanoid aliens) are their descendents (or possibly the descendents of the slaves who rebelled and overthrew their dark

overlords... Overlords who are now returning and... oh, never mind).

For a role-playing game, humanoid aliens are actually the *best* choice for a campaign. Why? Well, have you ever tried to role-play a two-ton silicate-based methane slug? I thought not. It is much easier for players to step into the shoes of an alien who is very much human, mentally, physically, and culturally. Therefore, humanoid aliens are, by default, the aliens of choice for Player Characters.

Creature-Features

Second in popularity to humanoid aliens, "Creature-Feature" aliens are quite prominent in science fiction. This should not be confused with "It Came From Outer Space!" (below) which is mainly for monster aliens. Creature-Feature aliens are those that are based on Earth biology, but evolved from a different primordial ancestor (such as spiders, crabs, worms, and so on).

Many such creatures are hybrids with the humanoid class, that is, we can have Lizard-Men, Ape-Men, Bug-Men, Squid-Men, and any conceivably weird animal with a "-Men" postfix. Other Creature-Feature aliens included those that just look like twisted version of Earth beasties, such as giant bugs (Starship Troopers), giant slugs (Jabba the Hut), and various types of strange sea creatures.

Creature-Feature aliens are a compromise between humanoid aliens and exotic aliens. They are not so exotic as to be unplayable in a role-playing game, yet they are more scientifically plausible (assuming they are done *right*; avoid cliché bug-men). Such aliens must also arise from panspermia, however, the stellar fertilization occurred at a microscopic level, delivered by comets to hundred different worlds, rather than by active transplantation by an ancient civilization.

Even Creature-Feature aliens must have a world, a culture, a society, and even religions, myths, and dreams. Their mentality may be terribly alien, though there could be underlying "laws" of sentience, which help to make certain psychological traits universal. Nevertheless, such aliens can make for very interested PCs or NPC characters.

It Came From Outer Space!

To the uninitiated of sci-fi, the first image conjured by the words "Space Alien" is a big green big-eye monster with huge crab-claws, two tails, and drooling tooth-laced mouth. Such space monsters are certainly "creature-feature" aliens, but they should not be considered for a serious hard sci-fi

game. Many such monsters are reserved for pulp sci-fi, space opera, and movies which can only be watched if shown on MST3K. However, "It Came From Outer Space!" space monsters do have a place in many sci-fi games.

In a Buck Rogers/Flash Gordon style space adventure campaign, most of the enemy aliens will be space monsters. Indeed, they will be simi-intelligent, perhaps even intelligent, but they do not need to be developed or thought out the same way a more logical or "flushed out" alien civilization should. I do not want to anger any *Alien* movie fans, but the xenomorph Alien from the *Aliens* series is a contemporary example of an "It Came From Outer Space!" space monster. However, due to the popularity of *Alien*, the Alien (and its race) became a flushed out, well-developed alien race. Thus, in such a campaign, the heroes may meet up with "Just another space monster" only to discover it is the most terrifying nemesis the universe has ever seen.

"It Came From Outer Space!" monsters are not suitable for player characters, or even NPCs. They are just space monsters.

Xeno-Exotics

Few and far between in science fiction are truly alien aliens. Exotic aliens will have little to no similarity to Earth creature and have completely alien psychologies. Xeno-Exotics, therefore, cannot be used for PCs. This is not because they are too powerful or too unbalanced, but simply because it is not possible for a human to role-play something whose thought process is utterly alien. Xeno-Exotics can be used as NPCs under the GMs control (though the GM should really try to play up the alien aspects of the alien), or as a distant, alien force. Xeno-Exotics make good enemies in a space war, and are extremely unpredictable due to their alien nature. We may not even understand their motivations.

Xeno-exotics are also good for first encounters and deep space exploration adventures. They can add color to any type of campaign, be it hard sci-fi or pulp space opera. Even in a campaign where aliens are just "humans with funny foreheads", xeno-exotics can appear from time to time.

Gods from the Stars

The ultimate xeno-exotics in science fiction are entities of stellar magnitude. Massive energy beings, sentient worlds, sentient stars, super crystalline structures, and other exotic super beings. Such beings are staggeringly old and have a god-like intelligence. They are certainly unsuitable for PCs, but make for very interesting (often dangerous) encounters. Read Stanislaw Lem's *Solaris* for a superb example of how humans might handle first contact with a sentient world.

Making of an Alien

Making an alien race is almost the same as building a character. Alien races have modifiers to the base Characteristics, can have inherent Talents (though these are usually part of their systems or adaptations), and psychological traits derived from character Complications (such as Intolerance, Stubborn, Bad Rep, and so forth).

Aliens are built by a Darwinian process, where certain biological traits, systems, and adaptations are selected. Each of these cost points, called EP (Evolution Points). Thus, simple creatures have a very low EP. Higher life forms have a much higher EP. By default, Humans have an EP of 75. Therefore, in an all-human campaign, all characters are technically granted 75 EP, but these are automatically spent buying Human as the race. More on EP, later.

Races also have modifiers to Characteristics, but this is usually an effect of their traits, systems, and adaptations. That is, if an alien race is quite large, they will have bonuses assigned to BOD, CON, and STR, automatically. Bonus or penalties to Characteristics are simply an effect of the creature's evolution, and is not direct assigned.

Evolution Points

Evolution Points (EP) measure how evolved an alien race is. Highly evolved or extremely well adapted traits and systems are expensive, and thus, cost a lot of EP. However, lesser evolved traits (such as an open circulator system) cost little or no EP, as they have very little evolutionary power.

Humans cost 75 EP. As mentioned earlier, in a Human Only campaign, this is irrelevant. However, in a space campaign with alien PCs, it is an important factor. Not all races will be as evolved as humans. Some will be more evolved, others less so.

It may be tempting to treat EP as any other point cost system (such as OP or PP), but this should not be the case. Aliens are balanced within their own race, thus, they should not have to pay anything to be of their race. If a player wishes to play a certain alien race, he picks it and applies all traits and modifiers.

If this seems unbalancing, the GM still has absolute control. The GM gets to make up the alien races available for PCs in his own campaign. Thus, he can make all PC aliens have an EP value of 75, making them all effectively equal. If the GM wants to allow players to make up their own aliens, he can simply tell them "Do not exceed 75 EP". NPC aliens can have any EP value, but the GM should not tell the PCs what this value is. After all, it is a tricky matter to judge what race is evolutionarily superior to another. In fact, many galactic wars have been triggered by such disputes as this.

Option Points

Okay, you really want to charge players OP (or PP) for playing an alien? This is fine. One Evolution Point is roughly equal to 1 OP. Because humans are balanced at 75 EP, this is the zero-point radix from which all EP values should be reset. Thus, to find the OP cost of any give alien race, simply subtract 75 from their EP value. If a race was at 100 EP, it would cost 100 - 75, or 25 OP. Divide by 5 to compute how much PP it would cost. This race would cost 25 OP or 5 PP. If a race had just 65 EP, it would give back 10 OP, or 2 PP, to any character who chooses to play a member of that race.

Complications

Many alien species display psychological complications. For instance, Larry Niven's Puppeteer's had extreme Cowardice (30 OP value). Complications are measured in Option Points, but this can also be translated into Evolution Points. It is assumed that Complications have a negative impact on evolution, therefore, any Psychological, Personality, or Compulsive Behavior Complications subtract only $\frac{1}{2}$ their value from the race's Evolutionary Points. The Complication's cost halved because it has less impact between actual members of the same race, thus it is not really a character flaw, just an evolutionary trait.

For instance, if you are making the Puppeteer race, it would have the Personality Trait Constant Extremely Severe Coward, which has an OP value of 30. This would be equal to -15 EP.

It is very common for aliens to have Social Complications, such as Bad Rep, Personal Habits (usually related to eating habits), Oppressed, and very often Outsider and Distinctive Features. However, these Complications are only relevant outside their own race. Therefore, they cannot be applied to Evolution Points. When a race is made, it is simply background information that "Most people are disgusted by the eating habits of the Pak'ma'ra". Therefore individual Pak'ma'ra *characters* will have Disgusting Eating Habit Complication (probably at a 10 OP value). This is part of the *character*, not the race. The same applies to all Social Complications.

Distinctive Features is another tricky Complication. The GM may disallow this as a Complication if he feels it is irrelevant. That is, because the alien is an alien, it will of course have distinctive features. This should only be a Complication in a campaign where aliens are rare, hated, or feared.

Humanity Points

In a campaign with alien characters, Humanity (equal to PRE x 10 or WILL x 10, depending on what Fuzion rulebook you read),

becomes a rather difficult subject to handle. Humanity is supposed to relate how human our attitudes are toward one another, but this assumes all people in a campaign are human. An alien character, by default, would have 0 Humanity, and would be, effectively, a psychotic maniac according to the rules.

Clearly, this is silly, so Humanity will have to be handled differently. For simplicity, Humanity could simply be discarded and ignored, and this is the recommended route to take (if a rule doesn't work, chunk it).

If a GM does want a way to gauge a character's mental stability relative to some universally constant factor, he may simply substitute Humanity with Mental Stability. This assumes that all sentient thought has some basic pattern or Law of Sentience, which governs the sanity and psychological stability of all races. In essence, Mental Stability is *exactly* the same as Humanity. However, it is called Mental Stability instead of Humanity, because the term "Humanity" is a racist term.

Cultural Interaction

The trickiest topic is cultural interaction between alien races. For the most part, this is race specific, and should be established by the GM. For instance, if a race is extremely xenophobic and intolerant of other race, they will have a great deal of trouble interacting successfully with other races, and likewise, other races will have trouble interacting with them.

Depending on the race, its similarity to other races, its general attitude, and true "alienness", the penalty to interacting with other races will vary. Therefore, it is necessary to gauge the Presense penalty based on these factors. Below is a small table, along with a number of additional multipliers.

Relation	PRE
Cultural only	-1
Somewhat Alien	-2
Very Alien	-4
Radically Alien	-6
Totally Alien	-8
Psychology	Mult.
Culturally Adaptable	x0.5
Neutral	x1
Xenophobic	x2

For example, two alien human cultures, which perhaps developed independently for the past ten thousand years on different worlds, would have a -1 PRE penalty when interacting with one another. If a human character meet with a different humanoid alien (a different race, with a different culture, etc.) there would be a -2 PRE penalty between the two. Likewise, two radically alien race (exotic in respect to each other) would be at a -6 when interacting.

The Psychology multipliers may also be figured in. A culturally adaptable races would not have as much trouble interacting with other races, thus, if such an alien meet with a very different alien, the penalty to PRE between the two would only be -2 (instead of -4). If both aliens are culturally adaptable, the penalty is halved *again*. In contrast, if a xenophobic alien meet with a very different alien the total PRE penalty would be -8, rather an -4. The very worst possible case would be to have two Totally Alien Xenophobic races meet, which would have a total PRE penalty (-8 x 2 x 2), or a total of -32! Forget diplomacy, this is total war!

Creating an Alien

Enough talk already! You know the basics by now, and have in mind all the little details and scientific facts necessary to make a reasonable alien race. So let's make an alien.

This system is concerned only with the biological aspects of the alien itself, and has nothing to do with its culture of psychology. Psychological traits can be added (as described early) and the GM should build the society and world as he wishes. The biology of the alien can be as human or as alien as the GM wants to make it.

Ten different systems must be considered when making an alien. Form, Physical Exterior, Cardiovascular System, Respiratory System, Bio-Stats, Method of Locomotion, Feeding Method, Sensory and Communication, Neurological System, Special Adaptations. Each of these are described in detail below. Not all systems are essential for a race to survive, but in many cases EP cost is astronomical for such a *lack* of a system. For instance, it cost 20 EP *not* to have a respiratory system, because this is inherently a massive evolutionary advantage.

As a general rule, all creatures need the following: A form (even if it is "formless"), cardiovascular system, respiratory system, bio-stats, feeding method, and a neurological system. Other systems are optional, though extremely advantageous to have. After all, few people want to play a blind, sessile rock, even if it is extremely intelligent. Special Adaptations include evolutionary advantages as well as of super-human abilities, such as "magic" powers and psionics. This should only be used if they suit a GM's campaign.

In Form, the size (relative to human size) must be selected from a range between 30kgs to 300 kgs. This is to keep alien creation as level as possible. Once the alien is complete, it may be Scaled (similar to Scaling in Mekton), where it may be scaled from microscopic size to planet-sized (even star-size). This is done last, as the scaling multiplier effects the final EP value of the race. This is the only multiplier considered in this system. To keep it at a

human scale, the multiplier is simple x1, that is, no change.

Below is a standard Human. This can be easily modified to allow the rapid creation of other humanoid races. Extra cosmetic features, such as "Bone crest on forehead" or "pointy ears" are just effects of its appearance with no EP cost (simply note it in the description).

Race: Human Being

Native Designation: Homo Sapien Sapien

Homeworld: Earth (aka Terra)

Form: Multicellular Carbon Based, 80kg ave., 4 EP

Physical Exterior: Skin (with hair follicles), 1 EP

Cardiovascular: Close Centralized, 1 heart, 5 EP

Fluid Type: Warm Blooded, 4 EP

Respiratory: Air Lungs, hold breath 5 min, 6 EP

Bio-Stats

Life-Span: 60 years (unaugmented), 12 EP

Sleep-Time: 30% of the time, 5 EP

Vulnerabilities:

Radiation, Extreme, Stunning, -4 EP

Vacuum, Strong, Killing, -5 EP

Immunities: G-Forces, 8 Gs, 4 EP

Locomotion: Biped, Lateral Walker, 4 EP

Partial Swim, 2 EP

Feeding Method: Omnivore, 4 EP

Sensory: Sight, Optical, 4 EP

Smell, 3 EP

Taste, 2 EP,

Touch, Direct, 2 EP

Hearing, Sonic, 3 EP

Communication: Vocal Comm, Sonic, 2 EP

Body Comm, 1 EP

Neural: Neuro-Electrochemical, Centralized, 5 EP

Special Features

Secondary Limbs, 1 pair, 4 EP

Fine Manipulators (both limbs), 6 EP

Visage Manipulators (on feet), 0 EP

Visage Tail, 0 EP

Crushing Jaw, 1 EP

Racial Complications: None, racially

Scale: x1 Human-scale

TOTAL POINT COST: 75 EP

OP COST: 0 OP

Form

All aliens races must have a form. The Form will determine the alien's biochemistry, structure, and physical properties. Form can range from the mundane (Multicellular Carbon Based) to the exotic (crystalline, pure energy, sonic resonance). Once Form is determined, the alien's Physical Exterior should also be chosen, if applicable (it may not be, in some cases). If a form is not present which the GM wishes his alien race to portray, he should feel free to invent new ones.

Protocellular Carbon Based 1 EP
Carbon based biochemical structures, lacking unified cellular organization. Primarily reserved for single cellular organisms. However, large, macro-scale organisms could display similar protocellular organization. Most Shapeshifters should be protocellular. Requires water and basic carbon based cellular nutrients to support life. Environmental tolerance requires either oxygen or CO2 for reparation, temperature range from between -10 to 40 C (at extremes). High intolerance to radiation and violently reactive chemicals. A Physical Exterior must be chosen (exterior will be Carbon Based).

Multicellular Carbon Based 4 EP
A multicellular carbon based form is typical of most Earth and Earth-like creatures. All biological systems are comprised of specialized groups of microscopic cells, clustered to form organs and internal structures that are the mechanism of life. Requires water and basic carbon based cellular nutrients to support life. Basic chemical and biological structure is controlled by DNA. Environmental tolerance requires either oxygen or CO2 for reparation, temperature range from between -10 to 40 C (at extremes). High intolerance to radiation and violently reactive chemicals. A Physical Exterior must be chosen (exterior will be Carbon Based).

Multicellular Silicate Based 5 EP
Similar to Carbon Based, except Silicon is primary base element. Cells are comprised of silicon crystal structures, but water is still essential. Growth of biochemical structures is controlled by a crystalline form of DNA. Silicon based organs, structures, and silicate chemical reactions are the mechanism of life. It does require water and basic silicate nutrients. Environmental tolerance requires either oxygen or methane for reparation, temperature range from between -30 to 50 C (at extremes). High intolerance to radiation and violently reactive chemicals. A Physical Exterior must be chosen (exterior will be Silicon Based - Silicon Skin, Silicon Fur, etc.).

Silicon Crystalline 8 EP
A silicon crystalline form is a complex structure organized in the form of silicon based crystals. There are no cells, rather, the life form's existence is based purely on the dynamics of the energy and growth patterns of the silicon crystals. Unlike non-living crystals, a silicon crystal life form has a crystal-morphic body, that is, it can shape and reform its crystals, allowing for a wide range of mobility, growth, and adaptation seen in carbon based life forms. A silicon crystalline life form does not require water. However, an abundant supply of

energy is needed, usually solar in nature (Feeding Method would be Solar Energy). Energy distribution can be chemically distributed (select Osmosis Circulatory System). Other requirements should be similarly selected. Temperature ranges from -30 to 50C (at extremes). High intolerance to radiation and violently reactive chemicals. Physical Exterior is unnecessary, though one may be taken.

Silicon Non-crystalline 8 EP
Essentially, this is a living rock. Amorphous mineral patterns within the non-crystalline silicon stone form the energy conductive pathways for the basis of the being's brain (Neurological System is thus electrical semi-conductor). Most rock beings lack limbs and mobility. However, "golem"-like silicon rock creatures are also possible with the addition of limbs and a means of locomotion. Like the crystalline silicon form, this form also distributes energy chemically (select Osmosis Circulatory System). Other requirements should be similarly selected. Temperature range from between -50 to 80 C (at extremes). High intolerance radiation and violently reactive chemicals. Physical Exterior is unnecessary, though one may be taken. Scaled up to Planetary Scale, this might represent a Sentient World.

Metallic Crystalline 10 EP
Metallic crystalline life forms are comprised of metallic compounds, crystals, and often silicon as well. These are not robots or machines, they are naturally evolved on worlds of metallic crystal life. A metallic crystalline life form does not require water (and should, in general, avoid water). An abundant supply of energy is needed to sustain it, any conceivable feeding method could be used (Carnivorous, in this case, would be eating metals). Respiration and Circulatory systems can be taken, or select None. Temperature range from between -40 to 60 C (at extremes). Most do not far well in water (rusting), and it may be vulnerable to other things as well (such as radiation, energy spikes, etc.). Physical Exterior is unnecessary, though one may be taken.

Mechanical (artificial) 10 EP
A mechanical form is robotic in nature. Generally, this is artificially created. It is advisable to use Mekton (or a similar system) to design a race of mechanical life forms. If you want to use this system, treat it as above (Metallic Crystalline), except the life form is indeed mechanical, not crystal.

Gaseous 15 EP
The life form's body is made up of chemically active gasses, clustered into a cohesive cloud (often colored, or even glowing). Generally, the "gas" is simply billions of complex molecules interacting with

one another. A gaseous being can float, but would drift aimlessly with the wind unless some form of locomotion was taken (Glide or Air Jet propulsion can work for this). Feeding Method is usually solar, and many gaseous beings require respiration of some sort of reactive gas (oxygen, hydrogen, chlorine, etc.). Circulation should be Osmosis. No physical exterior is necessary.

Liquid 20 EP

This life form has a gelatinous or a cohesive body of chemical liquid. This liquid is usually made of organic compounds, perhaps hydrocarbons, but could also be a silicate compound. Fully swim or slither (or both) is most often the prime choice of locomotion. Circulation should be Osmosis. No physical exterior is necessary.

Sonic Resonance 30 EP

The entity does not exist within a physical body, rather, it resides as a conscious pattern of sonic vibration, resonating through molecules in the air or other nearby matter. It must obtain energy to maintain its resonance, or it will fade away and disappear. It is impervious to kinetic attacks, but energy does normal damage. Sonic attacks can seriously disrupt, even kill, such a being. It will die if exposed to a vacuum where sound cannot exist. This is an extremely exotic form, the precise nature of which should be determined by the GM. No physical exterior is necessary.

Pure Energy 40 EP

Patterns of energy comprise the form and consciousness of this being. The energy can be of any form (but must be specified) -- light, radiation, magnetic, electrical, thermal, atomic (fusion/fission), quantum (sub-atomic), and so on. The being's body is of pure energy, so all other traits and systems must reflect this. That is, for neurological systems, Superconductive should be taken. Be sure to adapt other such systems to follow suite. Energy beings are impervious to physical attacks, but energy attacks should do damage as normal. This is an extremely exotic form, the precise nature of which should be determined by the GM. No physical exterior is necessary.

Space-Time Structure Matrix 50 EP

Beyond pure energy are conscious beings that exist within the folds and patterns of space-time itself. Where space can warp, bend, and crumple, a powerful space-time "matrix" can form into a crystal like pattern. This pattern, like all patterns, can conceivably become self-aware. This is an extremely exotic form, the precise nature of which should be determined by the GM. No physical exterior is necessary.

Physical Exterior

All physical beings must have a physical exterior. Unless the form you selected states "No physical exterior is necessary" you must select one from below. It will automatically be set to match your physiology, that is, if the being is carbon based multicellular, so will the exterior. If it is silicon crystalline, the exterior will also be silicon based.

Skin 1 EP

If a race has nothing else, it must take skin. In many cases, the skin will have small hair follicles, but this is not considered fur. If you want Fur, see below.

Fur 2 EP

This being has a layer of fur. This is normally reserved for mammal-like creatures, but some dinosaurs may have had fur, and many insects and crustaceans have fur-like exteriors, therefore it is possible that any type of creatures could have fur. Fur automatically has Skin built in (you do not need to buy both). However, fur maybe take in addition to another exterior, such as shell or exoskeleton, and you must pay for both. Primarily, this exterior helps in keeping warm in cold weather.

Scales 5 EP

A specialized type of skin designed to provide armor protection (Natural Armor must be taken separately). This is what most reptiles have. Scales give a +5 KD armor protection.

Feathers 4 EP

This is an evolved type of scale that is no longer used for protection, but instead is primarily used as a flight surface. All birds have this exterior. Some dinosaurs may have had this exterior as well, in conjunction with scales. Feathers will add +2 MOVE to flight.

Shell 5 EP

This is a naturally formed casing that provides excellent protection. Most shellfish have these, as well some other types of mollusk. Some dinosaurs also have had shells. This provides armor protection (Natural Armor is taken separately) and gives +15 KD. However, due to lack of mobility, the race has a -1 DEX and a -1 REF.

Exoskeleton 10 EP

This is a naturally formed protective exterior found on all insects and crustaceans. It provides armor protection (Natural Armor is taken separately) and gives +10 KD. Because the exoskeleton is fully articulated, there are no penalties.

Cardiovascular Systems

Cardiovascular system is what is used to describe how nutrients are transported through the being's body, and waste is removed. Normally, this is by fluids that travel through veins in the body, pumped by a central pumping organ, but this is not always the case. In some cases, it is not "cardiovascular" at all, but this category name is the only way to describe it. All races must have a cardiovascular system, even if None is chosen. You must select *both* the **System** and the **Fluid**.

Open Centralize Circulatory System -10 EP

This is a very primitive circulatory system where blood is pumped into a lung or gill, then into a cavity where it is absorbed by surrounding tissues, then pumped back out. In effect, the race is very fragile. -2 CON, -1 BOD.

Closed Centralize Circulatory System 5 EP

This is the normal circulatory system found on most animals, consisting of a heart, blood vessels and so forth. It is typical of most Earth animals. Some may have two or more central pumping organs (i.e., two hearts, three hearts, etc.), this helps insure that if one heart is destroyed, another will still be pumping to keep the race alive. Each extra heart costs 3 EP and effectively adds +2 hit points, up to a max of +6 (for a total of four hearts).

Closed Decentralize Circulatory System 12 EP

Same as above, however, there is no central pumping organ. Muscles in the body pump the blood to the lungs, digestive system, and throughout the rest of the body. The effect is that there is no central pumping organ that can be damaged or destroyed. Thus, the race is less susceptible to direct damage. With a decentralize circulatory system, the being gains a +5 hit points.

Osmosis Circulation 15 EP

This can be considered Open Decentralized Circulator System, but it is far more advanced than any other circulation system. This should be used to describe highly exotic forms of circulation, where energy, light, radiation, or other forms of nutrient circulation are necessary. Basically, the fluid (or nutrient source) is simply filtered through the body (whatever form that body might be) to sustain life.

None (no system) 30 EP

This is for races that have no circulator system. Be sure you understand what this means before you select it. In many cases, Osmosis should be taken. Even if the being is Pure Energy, it must circulate fresh energy and expel waste heat somehow, and this is usually by Osmosis (above). Machines would use Closed Decentralized

Circulatory system, conveying electrons through circuitry as their form of circulation. I can think of no immediate examples that would have No Circulatory System.

Fluid Type (blood type)

Now that you have a circulatory system, you must have a fluid (or something) to circulate.

Cold Blooded 2 EP

Cold-blooded races are at the mercy of the environment. When it gets too cold, they slow down. When it is too hot, they also slow down. At the extremes, they will die. Only at a certain temperature level will they be at peak performance. Speed is SPD, which determines actions per Phase.

Freezing	Death or Dying
0-10 C	Reflexes and Speed at x0.2
11-20 C	Reflexes and Speed at x0.5
20-25 C	Reflexes and Speed at x0.75
25-30 C	Reflexes and Speed at x1
31-35 C	Reflexes and Speed at x1.2
36-40 C	Reflexes and Speed at x1
41-45 C	Reflexes and Speed at x0.5
56-50 C	Death or Dying

Warm Blooded 4 EP

Warm-blooded races are able to sustain their body temperature despite what the outside environment is. Operating parameters may range from -20 to over 40 degrees C, at the extremes.

Chlorophyll 2 EP

Chlorophyll is a green organic compound comprised of oxygen, hydrogen, nitrogen, carbon, and magnesium. It absorbs solar radiation used for photosynthesis. You must get Feeding Method Solar Energy and should take Absorption Respiration (the gas is usually CO or CO₂). Chlorophyll is usually circulated by Closed Decentralized Circulator System, as seen in plants.

Oxygenated Hydrocarbons 5 EP

Liquid hydrocarbon compounds that are oxygenated (or carrying CO₂) can be used to deliver oxygen and nutrients throughout a body. This may be found in multicellular carbon-based aliens. Hydrocarbons should be used on races in an Earth-like environment. Chlorofluorocarbons and Chlorofluoromethane are similar, though more exotic, derivatives of this. Chlorofluorocarbons can carry O₂ or CO₂, but work at low temperatures (below freezing) allowing for a temperature range of -50 to 0 C. Chlorofluoromethane works at even lower temperatures where CO₂ is frozen, so Methane is the choice chemical for respiration (that is, Methane breathers use Chlorofluoromethane for circulation).

Acidic Chemicals

4 EP

The race has acid for blood. This usually implies a highly exotic environment (such as a sulfuric acid atmosphere), but can also evolve in an Earth-like world (in which case oxygen is delivered by chemical reaction through the body). Such a race is usually impervious to acid itself. By default, the acid is not dangerous or corrosive. It cost +1 EP for the acid to do +1 DC of acid damage. The max is 10 DC (hydrofluoric acid, aqua regia, etc.).

Exotic Chemical

4 EP

Other chemicals could also transport oxygen, CO₂, methane, chlorine, fluorine, and other highly exotic gases and nutrients. These are up to the GM. If the chemicals can do damage (like acid) this costs +1 EP per +1 DC of chemical damage, as above.

Energy

5 EP

Energy is the "fluid" of circulation. This can be thermal, electrical, light, or whatever. Usually, this is reserved for crystalline beings, silicate beings, or energy beings and works in conjunction with either Osmosis Circulation or Closed Decentralized Circulator System (circuitry).

Respiratory System

Most races need to breathe a gas of some sort. This evolves because gasses typically make up a large portion of the race's native environment. The gas of choice is irrelevant to the systems described below, but you should specify both the inhaled gas and the exhaled gas. That is, O₂ → CO₂, or Ammonia → Water, and so forth. This usually works in conjunction with the race's Feeding Method and Circulator System. If it has no Circulator System, typically, No Respiration should also be taken. However, many such races can use Absorption as well. You may select two of these systems to make a multi-respiratory system race, such as an amphibious life-form. That is, Water Gills and Air Lungs.

Absorption

1 EP

This is a primitive gas extraction system that lets gases seep in and out through the skin. Due to the fragile nature of races with this, reduce its CON by -1. You must specify if it works only in water or only in air. You pay 2 EP if it works in both.

Water Gills

2 EP

Gills are external structures filled with millions of gas absorbing tissue. Many water-dwelling creatures on Earth have these. Gills are vulnerable to direct attack, and can be targeted at -4 (if hit, damage is x1.5).

Water Lung

3 EP

Basically these are the same as a water gill, however, they are fully internal. These are found in

higher evolved non-terrestrial aquatic life forms. The lungs cannot be directly targeted.

Air Gills

2 EP

This is a primitive oxygen extraction system, usually in the form of feathery fans or fleshy external frills that absorb gases. Gills are vulnerable to direct attack, and can be targeted at -4 (if hit, damage is x1.5).

Air Lungs

5 EP

These are fully internal gas absorbing organs used for respiration (most Earth land animals have these). The lungs cannot be directly targeted.

Hold Breath

1 EP per 5 minutes

Hold Breathe can be taken in conjunction with any of the above systems. It is assumed all creatures can safely hold their breath for a minute. It costs 1 EP to extend this to 5 minutes. Thus, 2 EP gives you 10 minutes, and so forth. Many whales can hold breath for up to thirty minutes, or more.

No Respiration

15 EP

This is for races that do not need to breathe at all. In most cases, these races extract needed gases from chemical synthesis and highly advanced anaerobic metabolic regulation.

Bio-Stats

Bio-Stats covers a broad category of biological traits, including Life-Span, Sleep Time, and Special Vulnerabilities.

Life Span

1 EP per 5 years

All races have a life span. The average human life span, unaugmented by medical technology, is approximately sixty years, which costs 12 EP. It costs 1 EP per 5 years of unaugmented life span.

Unaging Enhancement

5 EP

This is an enhancement to Life Span. The life span is normal, as above, but members of this race will not appear to age beyond full maturity (for humans, this would be 24 to 30 years old). The race is not immortal, simply, they do not age, and will die (or "switch off") at the end of their life span.

Immortal Life

40 EP

Instead of choosing Life Span, the race could simply be Immortal. Members of this race will not age (as per Unaging) and have an unlimited life span. They can still be killed, and are vulnerable to diseases.

Sleep Time

Most races require down time to rest and recover fatigue, heal, and allow their brains to refresh and reorganize. This is accomplished through sleep. Sleep is measured in percentages of total time. That is, humans spend 30% of their time sleeping (or

seven hours out of a 24-hour day).

Sleep	EP
90% of the time	-1
80% of the time	0
70% of the time	1
60% of the time	2
50% of the time	3
40% of the time	4
30% of the time	5 (human)
20% of the time	6
10% of the time	8
Does not Sleep	10

Vulnerabilities

Vulnerabilities are special evolutionary flaws. These might be caused by a lack of a substance on the home world (such as UV rays), and when exposed to such, members of that race have no protection, and take damage. The range of vulnerabilities are as infinite as the number of substances and forms of energy in the universe, so I can't list them all. Vulnerabilities should be designed in a similar fashion to Complications (they are, technically, Complications) and can return EP, just as Complications do.

Three things must be decided when choosing a Vulnerability. How common it is (relative to the *campaign*, not the homeworld!), how much damage it does, and whether the damage is Stunning or Killing. For instance, Radiation is extremely common in space, though we on earth are protected. Thus, we require radiation protection on our ships and space stations. If exposed to radiation, we take damage. This is a vulnerability. Vulnerabilities do not give too many EP points back. This is to help prevent abuse of this system. Many races have many vulnerabilities. You should only select two or three major ones.

Frequency	Value	Example
Very Rare	1	Exotic matter (dark matter)
Rare	2	Rare element, exotic chemical
Unusual	3	Radiation, Chemical, Vacuum
Common	4	Metal, Plastic, Noise
Very Common	5	Sunlight, Oxygen, Water

Intensity	Value	
Mild	1	1DC per Phase exposed
Strong	2	2DC per Phase exposed
Severe	3	3DC per Phase exposed
Extreme	5	5DC per Phase exposed

Damage Type	Value
Mental	divide by 5
Stun	divide by 2
Killing	x1

Mental Damage is basically a psychology phobia. Stun damage can carry over killing damage as normal (every 5 Stun does 1 Killing). Most Vulnerabilities are actually Stunning (not Killing). Death only comes from extremely prolonged exposure.

For instance, humans have a vulnerability to intense radiation. Damage is Extreme, but it is Stunning (and remember, 5 Stun does 1 Killing). This has a value of $(3 + 5 / 2)$, or 4. So, with this Vulnerability, humans get back 4 EP to use elsewhere.

Immunities

Immunities are opposite from vulnerabilities. They make a race immune to something that usually does damage. Damaging categories are listed below. Note that you cannot take an Immunity for something that you just took a Vulnerability too. If you're immune to Electricity, Electrical attacks do no damage and have no effect on you.

Half the EP cost if your immunity only protects from Stun. Full cost for total protection (Stun and Killing). This list can be expanded by the GM.

Type	EP
G-Forces (per 2 Gs)	1 per 2 Gs
Disease (per type)	2 per
All Diseases	15
Poisons (per type)	2 per
All Poisons	15
Acid	10
Heat/Fire	10
Electricity	15
Ranged (bullets, etc.)	25
Melee (sword, etc.)	20
Hand-to-Hand	20
Sonics	15
Light/Laser	20
Other Energy	20

For instance, total Immunity to Kinetic Damage can be accomplished by combining Ranged, Melee, and Hand-to-Hand costing 65 EP. Total Immunity to Energy Damage would be covered by Fire, Electricity, Sonics, Light, and Other (if applicable), costing 62 EP.

Immunities are rare, and there should be an evolutionary explanation for having one. Having an Immunity to Heat/Fire might occur on a species that is evolved on a hot, volcanic world. Most immunities are to Disease, Poison, Acid, and Electricity. Others are more "superheroic" than realistic.

Locomotion Method

If a race is to be mobile, it must have some form of locomotion. Many races have more than one form of locomotion. Humans have both Partial Swimming and Biped (Lateral Walker). Birds have Winged Flight and Biped (Lateral Jumper). Flying Fish have Full Swimming and Glide Flight. A well evolved race may have three, or even four forms of location (some birds can fly, walk, and swim!). Most locomotion methods use MOVE as a base characteristic (as normal).

None 0 EP
The race can't move. Members may be anchored to one spot, or perhaps they tumbled across the ground if pushed. This race has no MOVE characteristic.

Full Swimming 4 EP
The race is designed to swim in water. Members have fins and are aquadynamic. MOVE characteristic x2 equals Swimming Speed in m/y moved.

Partial Swimming 2 EP
The race is not designed to swim, but has another form of locomotion or appendages that may be improvised (such as legs, wings, arms, etc). Humans have Partial Swimming. MOVE characteristic x1 equals Swimming Speed in m/y moved.

Winged Flight 5 EP
The races has wings, which flap, and allow them to fly with out restriction (other than the fact that a max altitude is about 1000 meters). MOVE characteristic x3 equals Flight Speed in m/y moved (multiply *this* by x3 to find KPH). Hover enhancement costs +2 EP.

Glide Flight 3 EP
The race has wings, but can only use them to glide short distances. It can only glide down, or catch upward air currents, and it has to jump off trees or cliffs to achieve flight. MOVE characteristic x2 equals Flight Speed in m/y moved (multiply *this* by x3 to find KPH). Typically, the glider will drop 2 meters per phase, unless it catches an upward air current.

Gas Bag Flight 1 EP
This race has a large bag of hydrogen gas to support them in the air (hydrogen because helium is impossible to form biologically. Hydrogen maybe created by applying electricity to water). This race is very slow and normally floats with the wind. However, most have large fleshy fins or sails which use sailboat-type maneuvering to floating in any direction, even directly *into* the wind (by zigzagging). MOVE characteristic x1/2 equals Flight Speed in m/y moved (multiply *this* by x3 to find KPH). Air jets or Winged Flight could be used to make it fly faster (the speed is additive for multiply flight systems).

Note that the gasbag is very susceptible to explosions. Lightning is a big killer of these creatures, and shooting one down is a fiery death indeed!

Jelly Bag Swimming 1 EP
This is a bag of jelly material in the form of a bubble (like a jellyfish). It allows for floatation in

water, either on the surface or under water. With this ability, the race may only float with the currents. Aqua Jets or Full Swimming must also be taken for it to move on its own.

Aqua Jets 5 EP
This is a water propulsion seen on squid, octopi, and jellyfish. Water is sucked in, and jetted out the back, causing the creature to thrust forward. MOVE characteristic x3 equals Swimming Speed in m/y moved. If Jelly Bag Swim is bought, the race has buoyancy, so it can float. If not, it will sink when not jetting along.

Air Jets 8 EP
This is basically a turbo fan for flying creatures. Instead of winged or glide flight, this race has a jet-like "engine" which sucks in air, then shoves it out at a faster rate, using muscles or a biological equivalent of a turbo fan. MOVE characteristic x5 equals Flight Speed in m/y moved (multiply *this* by x3 to find KPH). Hover enhancement costs +2 EP.

Slither 2 EP
This is the motive system of snakes, as well as snails and slugs. MOVE characteristic x1/2 equals ground speed in m/y moved.

Monoped 3 EP
This race moves by hopping on a single large leg/foot. In most cases, the single leg seems to have evolved from two legs that grew together, making this a race of very good jumpers. It cannot walk and can only jump. Leap distance equals MOVE x 2 meters per leap (at max).

Biped (Lateral Walker) 4 EP
Typical for most bilateral bipedal races (such as humans). Two legs, with the ability to walk, run, or jump. Combat move is MOVE x 2m, Noncombat Move is MOVE x 3m, Leap is MOVE x 1m.

Biped (Lateral Jumper) 3 EP
This is a two-legged jumper, like a kangaroo. It cannot walk and can only jump. Leap distance equals MOVE x 2 meters per leap (at max).

Biped (Liner Walker) 4 EP
This is basically an evolved quadruped whose legs grew together to form two legs, one front, one rear. In effect, the creature is less stable, but much more agile. Combat move is MOVE x 2m, Noncombat Move is MOVE x 4m, Leap is MOVE x ½ m. These creatures can only jump *sideways*.

Quadruped 4 EP
The race has four legs for locomotion. Typically, they are fast and are good at jumping.

Combat move is MOVE x 3m, Noncombat Move is MOVE x 4m, Leap is MOVE x 1m.

n-taped 4 EP +

This is a legged creature with any number of evenly paired legs above (such as a six-legged gazelle-thing, or an eight-legged insect, and so on). Base speed is the same for a quadruped (see above). +2 EP per extra set of legs. Each extra set can increase one of the movement characteristics (combat move, noncombat move, or leap), by + x1. That is, a six legged gazelle-thing might have a Combat move of x3m, Noncombat move x4m, but a Leap of MOVE x 2 (instead of x1).

Feeding Method

Unless the race does not require food or water, all races must have some form of Feeding method. The precise nature of its diet should be determined, based on the Feeding method and its native world's environment. For instance, a silicon-based Carnivore that evolved on a planet with only silicon-based life forms would only eat "silicate-meat", and would not be a flesh-eating space monster. Rarely ever should food or life forms from other planet even be digestible, and may even be extremely toxic. Humans, for instance, would not be able to digest biomaterial native to other worlds, unless an extremely cinematic view is taken.

Herbivore 1 EP

This race eats plant material, or the equivalent for their native world. Plants should be very plentiful, however, they are not filling. Large herbivores must eat constantly.

Carnivore 3 EP

This race eats meat and fleshy material (or equivalent for their native world). It must hunt to find food, or if developed, operate farms and breed life-stock. Most carnivores are satisfied with one large meal a day, but this can vary (one huge meal, a week, for instance "The Day of Feasting").

Scavenger 2 EP

This race can eat any sort of dead or partially decayed material. It does not hunt, rather, it scavenges for suitable food. A civilized scavenger society may have strict religious laws on how long dead the food must be before eating.

Omnivore 4 EP

This is the most diverse feeding method. This race can eat both plant and meat (cost is +2 EP if it can also act as a Scavenger). Normally, a few small meals or one big meal can satisfy daily requirements.

Liquivore 2 EP

This race feeds by sucking juices. The exact method is up to the creator. It could act as a spider or vampire bat, sucking the blood and juices out of an animal, or it could inject digestive juice into its pray, liquefy its innards, and the suck it dry.

Parasite 0 EP

This is a race that must latch on to another race without being detected and live off its host's metabolism (tape worms, heartworms, chiggers, etc). Without a host, it will die.

Solar Energy 1/3/6/9 EP

This race feeds off solar energy. It could take one of many forms -- plants, on Earth, use solar energy as their feeding method for photosynthesis. Other races may use a similarly system, or a differently one, such as photoelectric, or other chemical processes. The EP costs depends on the evolutionary advancement:

- Must be constantly exposed to Solar Energy, 1 EP
- Requires half a day of exposure, 3 EP (normal)
- Requires a quarter of a day of exposure, 6 EP
- Only requires one hour of exposure, 9 EP

Thermal Energy 3 EP

Many bacteria and worms flourish on the deep-sea thermal vents on Earth's oceans. Such a feeding method may also exist on alien races. Hot thermal energy is used to cause the chemical reactions that sustain life. Sulfur-based metabolism often fits well which such a life-form.

No Feeding Required 15 EP

This race does not require food or water. This is generally unavailable, but some extremely evolved entities may have this ability.

Sensory and Communication

In order to perceive and react with the environment, all creatures must have some form of sensory input. This is not required, but it is an extreme handicap for a race not to have any form of sensory input. This does effect the Perception checks of the race. For instance, a life form that does not have sight may have evolved highly acute smell and hearing. This is not a handicap, rather, it is the way the race evolved, and all its technology, language, history, and culture must reflect this.

Sight, Optical Spectrum 4 EP

This is sight, as humans perceive it, ranging from red to violet in the EM spectrum. Sight is normally by "eye" which can be as ours (and other mammals), or as insects (multifaceted), or an array of dozens of eyes (such as on clams). Many exobiologist believe eyes are a "Universal trait", as

they evolved on thousands of completely different terrestrial life-forms (mammals, squids, clams, insects, etc.). This only costs 2 EP if the race is color blind (only seeing in shades of gray). +2 EP (total 4 EP) if the sight is also enhanced by Nightvision (seeing in low light).

Sight, Infrared 6 EP

This is sight in the low red to infrared range. It enables the race to see primarily in heat, making it less susceptible to the penalties of darkness. This may evolve on races which life underground, or on "dark worlds" where there is little sunlight. This, in addition to Optical Spectrum Sight, is highly advantageous.

Sight, Radio Wave 8 EP

Radio wave sight organs must be quite large, usually in the form of a long antenna, or "fan" of connected antenna (for parabolic radio reception). This only allows the race to see radio waves, not interpret them as a radio message (unless it is blinking in a language they understand). However, races with Radio Communication must take this (or Radio Hearing) to receive the radio message. This is determined by how Radio Communication works.

Sight, Ultraviolet 6 EP

This is a form of sight that uses the ultra violet portion of the EM spectrum. This may evolve on worlds where a great deal of UV radiation penetrates the atmosphere. Alternatively, the race may have a UV "flashlight" organ to illuminate its surrounds (+1 EP).

Smell 3 EP

This sense works by taking in a sample of air and tasting it with specialize organs or tissues, which determine the chemicals and particles in the air. Signals are sent to the brain for interpretation.

Taste 2 EP

Taste evolved from the same system as Smell, and generally where there is one, so is the other. Taste is much more acute, but localized to food or items placed directly in the mouth. This can help determine the quality of the food, and if it is eatable or poisonous. For taste sensors on the outside (such as on the hands) this costs +1 EP.

Touch, Direct 2 EP

Sensors throughout the skin are able to detect pressure, damage (pain), heat, cold, and other, similar sensations. This is a direct contact sense.

Touch, Ranged 6 EP

Basically the same as touch, but works at a range. It is used to feel pressure changes and

movement at long range. Sharks, and other super-predators, often have this ability.

Hearing, Sonic 3 EP

Sonic hearing is the sound perception sense familiar to humans and most terrestrial animals. Hearing is usually parabolic, enabling the race to determine the source of the sound.

Hearing, Subsonic 3 EP

This is hearing in a range far below that of terrestrial animals. Races with subsonic hearing often communicate subsonically as well.

Hearing, Ultrasonic 3 EP

This is hearing in a rage far above that of terrestrial animals (though some Earth animals, like bats, do have this ability). Races with ultrasonic hearing often communicate ultrasonically as well.

Hearing, Radio 5 EP

This is hearing in the radio wave band of the EM spectrum. Races with radio hearing can pick up radio waves, though they may not be able to interpret them. Species that communicate by radio may use a form of "Morse Code" or a more complex form of wavering radio squeaks and whines. Races with Radio Communication must take this (or Radio Sight), to receive the radio message. This is determined by how Radio Communication works.

Sonar 5 EP

This race sees by sending out subsonic pings to roughly image its surroundings. This works in either water or in air but not both. For both, two systems must be taken (Air Sonar and Water Sonar), costing 10 EP.

Radar 8 EP

This race sees by sending out pulses of electromagnetic radiation, and receives the reflection to image its surroundings. This is effective only in the air, but has a much longer range and generates a crisper image than sonar could.

Electromagnetic Sense 5 EP

This is basically the ability to sense the polarization of strong EM fields, such as a planetary magnetic field. This is only used as a navigation aid and is found on most flying animals. It gives a +1 Navigation, but may also have other advantages.

EM Imaging 8 EP

This race can see electromagnetic fields created by magnets, electronics, and even neural brainwave patterns. It can sense anything electrical, neuro-electrical, metallic, or magnetized.

Antenna +2 EP per sense
 This is a set sensory antenna which assist in sensing the environment through subtle odors, shifts in the air, and direct contact. Any sensory system enhanced by an Antenna gains a +1 to Perception checks. However, antenna are very delicate, and can be easily damaged.

Acute Sense +3 EP per sense
 Any of the above senses by be made acute, that is, sharper than normal. Each acute sense is granted a +1 to all Perception checks, and all ranged attack modifiers are 2 points less than normal.

Enhanced Perception +5 EP per sense
 Any of the above senses can be enhanced beyond being merely acute. This grants a +3 to all Perception checks for that sense.

360-Degree Sense +3 EP per sense
 Any of the above sense can be given a 360 degree range of perception. Hearing and Smell are already 360 by default, but Sight, and other exotic senses, are not. It cost +3 EP to make them 360.

Vocal Communication, Sonic 2 EP
 This is the form of communication used by most Earth creatures. Vocal communication is accomplished by blowing air through a confined space, and using delicate tissues and muscles to vibrate and create sounds in certain patterns, perceivable as a form of communication. It is required that this species also have Hearing, Sonic, to receive and interpret the communication.

Vocal Communication, Subsonic 3 EP
 Same as above. It is required that this species also have Hearing, Subsonic, to receive and interpret the communication.

Vocal Communication, Ultrasonic 3 EP
 Same as above. It is required that this species also have Hearing, Ultrasonic, to receive and interpret the communication.

Chemical Communication 1 EP
 Chemical Communication is fairly short-ranged (perhaps even Touch Only). It is accomplished by sending chemical singles in the form of odors or pheromones to other members of its species. Range is usually limited to ten meters, or less. Ants communicate in this manner. Chemical Communication requires that this species also have the Smell sense to receive and interpret the communication. If this is Touch Only (that is, the singles cannot be sent unless in direct contact), it costs 0 EP, in which case either Taste or Smell may be used. The race may use Smell (or Taste)

Antenna to help extend Touch Only Chemical Communication.

Body Communication 1 EP
 This is a form of body language communication. This can be like human "sign" language, or a full body dance language. Depending on the race's physiology, such communication could be quite beautiful and exotic to other races, even if it is difficult to understand. Members of this race must have some way of seeing to interpret this form of communication.

Optical Communication 2 EP
 Members of this race can chance color, or otherwise send pulses or flashes of light as their form of communication. Fireflies communicate in this manner. Members of this race must have some way of seeing to interpret this form of communication.

Radio Communication 5 EP
 This race is able to communicate by naturally evolved radio communication. This has extremely long range, and the airwaves around communities are filled with radio chatter. Individuals may have their own unique frequency, or all may share a common bandwidth. Radio communication can come in one of two forms: Radio Sight or Radio Hearing. Radio Sight sends radio waves that can only be interpreted through a visual radio matrix (via, Radio Sight sense). Radio Hearing acts more like a radio transmitter/receiver, and requires the use of Radio Hearing.

Highly Exotic Communication 8 EP
 There are other, more exotic forms of communication which are also possible. Such forms of communication as Tachyon Communication, Mental or Psychic Communication, Intra-Dimensional Phase Shifting Communication, or whatever. These forms of communication assume the race also has some way of perceiving it.

Hive Mentality 5 EP
 Some races are members of a large hive whose mind is spread out between many individuals instead of just one. Usually, this encompasses a shared or group memory, centralized command (from a queen), and various levels of hierarchy (workers, soldiers, drones, masters, queens, etc.). Exactly how it works is up to you, but generally Chemical, Radio, or Exotic communications are the choice forms of Hive communication. It is unlike that a member from a Hive can be a PC, unless it is a rouge unit that has broken off from the Hive itself. Hive races can make good alien enemies.

Neurological System

In Earth life-forms, the neurological system encompassed the brain and nervous system. In alien life-forms, such a system should also exist, though it may take a different form -- simi or super conductive circuitry, intra-cellular communication, or other signal carrying, information processing system. Current exobiology studies show that neurosystems similar (at least in form) to those on Earth may be a universal trait, as there are no successful examples of an alternative system. Even computer system can be considered primitive artificial neurological system.

Exotic beings, such as those comprised of gas or pure energy, must also have a neurosystem to process information. An energy being might use Superconductive Distributed. Gaseous life-forms may use Biochemical Distributed.

Neuro-Electrochemical, Centralized 5 EP

This is the basic neurological system for all Earth life-forms. Chemical singles are passed through nerves, special cells designed to quickly processes information, and transport the singles to a central cluster of highly interconnected neurons. These neurons communicate in a complex matrix of electrochemical signals, which translates to nothing less than the equivalent of sentient bio-computer. Damage to the central processing center (the brain) is can cause extreme critical damage. This is the base, default neurosystem, and there are no characteristic modifiers for taking it.

Neuro-Electrochemical, Distributed 5 EP

Similar to above, however, there is no central processing center. Thought and memory are distributed through the neural system of the entire body. It is impossible to make a direct hit on the brain. On the down side, severe injury to any part of the body can cause mental trauma or memory lose. Because of the distribution, thinking tends to be slower, but reflexes are somewhat enhanced. This grants a +1 REF but a -1 INT.

Biochemical, Centralized -5 EP

There is no real nervous system, rather, each cell communicates directly with the cells beside it, passing information by chemical osmosis. There is a central processing center, a group of specialized cells with a high level of interconnectivity and rapid chemical processing capability. Damage to the central processing center (the brain) is can cause extreme critical damage. This system is much slower and more primitive than Neuro-Electrochemical. It incurs a -1 INT and a -1 REF. This *gives back* 5 EP.

Biochemical, Distributed 0 EP

Similar to above, but there is no need for a central processing center. Thought and memory are distributed on a cellular basis, with each cell

performing a small portion of the brain function. It is impossible to make a direct hit on the brain. On the down side, severe injury to any part of the body can cause mental trauma or memory lose. Thinking and memory recall is not improved, but the added distribution helps alleviate the reflex impediment by giving a quicker reaction time. This system only incurs a -1 INT.

Simiconductive, Centralized 10 EP

This may be in the form of crystalline-metallic conduction, or a naturally evolved silicon-based neural network. Whatever the case, thought and memory are processed by electrical impulses carried through semiconductor material. Singles are carried through the body in a similar fashion. Damage to the central processing center (the brain) is can cause extreme critical damage. This should be the default system for all silicon-based life-forms. This system works faster and better than neuro-electrochemical, giving a +1 INT and a +1 REF.

Simiconductive, Distribute 15 EP

Similar to above, but there is no central processing center. Thought and memory are distributed through the entire system, much like a network of billions of processing nodes. It is impossible to make a direct hit on the brain. On the down side, severe injury to any part of the body can cause mental trauma or memory lose. Thinking and memory recall is not improved, but the added distribution allows for faster reflexes. This grants a +1 INT and a +2 REF.

Superconductive, Centralized 20 EP

Similar to simiconductive, however, the signals are carried on superconductive material. This may be optical, or it may be superconductive electrical. Such as system would be possible on a race native to an extremely cold environment (such as a crystalline being on a frozen methane world), or other such exotic life forms. Because it can think and react so fast, this grants a +2 INT, +2 REF.

Superconductive, Distributed 25 EP

Similar to above, but there is no central processing center. Thought and memory are distributed through the entire system, much like a network of billions of processing nodes. It is impossible to make a direct hit on the brain. On the down side, severe injury to any part of the body can cause mental trauma or memory lose. This is the default system for energy beings, sentient worlds and stars, and other such super-entities where thought and memory are processed by quantum weirdness, psionics, or just plain magic. This system grants a +3 INT and a +2 REF.

Blind Reaction +2 EP

Members of this race can counterstrike with no negative modifiers for darkness in hand-to-hand, even if they can't see their opponent.

Combat Sense +2 EP/Level

Members of this race automatically react faster to danger. For every level taken (up to 5), this race gains a +1 to Initiative rolls in combat.

Eidetic Memory +2 EP

Members of this race can never forget anything, and can easily recall memories and information.

Lightening Calculator +2 EP

Members of this race can automatically perform complex mathematics operations without using aids.

Common Sense +2 EP

This race has the Common Sense Talent.

Intuition +2 EP

Members of this race have an uncanny feel for hunches, as per Intuition Talent.

Direction Sense +2 EP

Members of this race never get lost; they always know where they are and can orient without external clues.

Time Sense +2 EP

Members of this race always know what time it is and how much time has elapsed between the present and the last time you checked.

Special Features**Secondary Limbs** 4 EP per pair

Most races that have limbs have only legs. These are covered in the Locomotion section. However, many sentient life-forms have arms as well.

It cost 4 EP points to have *one* pair of arms. It cost +5 EP each additional pair of arms (higher cost because it is so rare). Such limbs may be used to grasp, strike, and hold things. Fine manipulators may be added (long fingers and an opposable thumb), otherwise the limb is not automatically capable of fine manipulation.

Vestige Limbs are limbs that have atrophied over the course of evolution. These may still have a slight value, able to move a bit, and perhaps hold a very small or light object. A vestige limb only costs 1 EP per pair, and should have little use. Ambidexterity costs +2 EP per pair of limbs. Double-Jointed also costs +2 EP per pair of limbs.

Tentacles 4 EP per pair

Many alien races seem to have tentacles. These are like limbs, but far more flexible. Tentacles are basically the same as limbs (that is, they can grasp, strike, and hold), however, they *cannot* have fine manipulators. On the other hand, tentacles are far more flexible than normal limbs, with an amazing degree of motion and grasping capability. Of then, this flexibility can more than make up for a lack of fingers or thumbs. Each *pair* of tentacles cost 4 EP. Some races have only one tentacle (a trunk) and this cost just 2 EP. To have four pairs of tentacles (eight tentacles) would cost 12 EP.

A tentacle can do striking damage equal to normal punching damage of the same Strength. Vestige tentacles are called Tendrils, see below.

Tendrils 1 EP per pair

Do not mistaken tendrils with tentacles. Tendrils are smaller miniature tentacle-like structures. They serve little practical functions, are often evolutionary leftovers from gills, swimming fins, or other such structures. Tendrils may hand down from the face, and serve as "lips" or food-shoveling organs, which help in eating.

Fine Manipulators 3 EP per limb

Fine manipulators are those such as fingers, thumbs, or something equivalent. They enable delicate or fine manipulation of small object, tools, buttons, and other such abilities familiar to us all. It cost 3 EP per limb, therefore, to give fine manipulators on both limbs would cost 6 EP.

Vestige manipulators are fine manipulators that have atrophied over the course of evolution. On humans, the toes of our feet have become vestige manipulators. They still served a small purpose, but are not very useful for fine manipulation. Vestige manipulators cost 0 EP.

Tails 1 EP for one

Tails can be used for stabilization, arboreal movement, or striking. Many animals have tails that serve only to assist in movement (bird tails and so on) or have no purpose at all, as is the case for horses and dogs. As this is just the nature of their design, these cost 1 EP

However, tails that can strike, or are used as a "tentacle" cost 2 EP (basically, this is a tentacle, and should be treated as such).

Vestige tails are simple, useless flaps of skin, and normally completely vanish within a few generations (though a bone structure may remain where they were). Such vestige tails cost 0 EP.

Rapid Regeneration 10 EP

This ability allows the race to heal at a much faster rate. Instead of days, this race will recover a number of hits equal to its REC every *hour* when resting.

Instant Regeneration 20 EP

This ability allows the race to heal at an astounding rate, even faster than Rapid Regeneration. Instead of days, this race will recover a number of hits equal to its REC every *minute* when resting.

Regrowth 10 EP per level

This ability allows the race to regrow lost limbs or body parts. At Level 1, it can regrow tails, fingers, toes and other small, simple parts. At Level 2 it can regrow limbs, ears, and will not get permanent scar tissue. At Level 3 it may regrow more complex organs such as eyes, vital organs, and even recover from neurological damage to the spine and brain.

The time it takes to regrow *one* lost body part is equal to 30 days, divided by the level taken (so at Level 3 it would only take 10 days). If Rapid Regeneration is also taken, cut this time by half. If Instant Regeneration is taken, cut the time by $\frac{1}{4}$.

Natural Armor 1 EP per KD

Normally, a race has zero KD armor. However, a shell, exoskeleton, thickly matted hair, tough skin, and so forth can provide armor protection. It costs 1 EP to add 1 KD of natural armor protection. Remember, 50 KD equals one Kill of armor. Larger races may have as much armor as some vehicles or mecha.

Enhanced Metabolism 5 EP

With this characteristic, a race's metabolic systems are much more finely tuned and efficient than the normal. This race uses energy, food, air, and water (or the equivalent) to its utmost advantage, excreting far less waste and thus requiring less food and water.

The race's eating and drinking requirements are half. Furthermore, it can also hold its breath twice as long, and can go without water for extreme periods of time.

Chameleon 5 EP per Level

Chameleon ability allows a race to change color in relation to its surroundings. Level 1 to 3 only allows for slight body color shifts and camouflage. Level 4 is partial invisibility, and level 5 is full invisibility. Thus, for each level, the race receives a +1 to Stealth.

At level 4 the race can turn, effectively, invisible, however, he still has a "fringe effect" around him. An invisible race with a fringe effect can be spotted at a range of 2 meters or less. At level 5 the race is totally invisible with no fringe effect.

For Levels 1 to 3, only the Stealth bonus is of consequence (+1 through +3). For Levels 4 and 5 (invisible) there is the +4 and +5 Stealth bonus, as well as the bonuses from the invisibility effect. If an opponent cannot make a Perception check, then he

is at $\frac{1}{2}$ (REF+Skill) in hand-to-hand and 0 (REF+Skill) at range. If the opponent can make a non-targeting PRE test, he is at $\frac{1}{2}$ (REF+Skill) for both hand-to-hand and ranged combat. If the invisible creature is making a visible attack, the attacker is only a -1 to his REF, even at Range.

Spines 2 EP

These can be spiked hair (like a porcupine) or bony spines (like a sea urchin). Either way, spines are normally for defense, not attack. A race with spines will automatically inflict damage to an attacker if it comes into direct contact. Spines normally do 1DC of damage on contact, but can be poisoned (see Poison Glands).

If spines are on a striking tail or limb, that limb becomes a lethal weapon, and will do Killing damage instead of Stun damage.

Spikes 4 EP

These are normally bony spikes or horns (as on a triceratops or stegosaurus, or modern horned animals.). Spikes are designed to be used aggressively. A race with spikes can make a charging or striking attack (depending on how the Spikes are arranged), and will do Punching damage +2 DC, but as Killing, instead of Stunning.

If spikes are on a striking tail or limb, that limb becomes a lethal weapon, and will do Killing damage instead of Stun damage, with a +2 DC.

Claws 3 EP per limb

Claws are weapons that are attached to limbs or fine manipulators, such as a lion's claws or bear's claws. They automatically make any damage done by that limb Killing instead of Stunning.

Pincer Claws 4 EP per limb

Pincer claws are those such as on crabs, lobsters, or a praying mantis. They act as semi-fine manipulators, able to do some limited manipulation, but nothing as fine as true fine manipulators are capable of. Pincers are primarily weapons. They can grasp and hold a target (as per Grab or Choke Hold maneuvers), and inflict terrible crushing damage to the target. When grasp, a pincer will inflict Punching damage to the target, but the damage is Killing instead of Stunning. Choke Hold is extremely deadly (giving an additional +2DC killing damage).

Crushing Jaw 1 EP

This is a jaw that has strong crushing action. Most large land creatures have this type of mouth for chewing and eating plants and meat. Biting damage is 1 DC killing damage.

Fanged Jaw 2 EP

This is a jaw that consists of two to four sharp fangs. Snakes and spiders have this type of

mouth. Biting does 2 DC killing damaged, but many fangs may also have poison glands.

Razor Jaw 3 EP

This is a jaw which consist of dozens of razor sharp teeth. Many carnivorous animals have this type of mouth. Biting damage is equal to 3 DC.

Poison Glands Various

These are glands that secrete deadly poison. They maybe placed in fangs, claws, spins, on the skin, or even in the mouth for direct spitting. It is assumed the races is immune to its own poison. Each gland cost a certain amount of EP, depending on how potent it is. One gland supplies poison to only specific body part. The possible parts are: Spines, Spikes, Claws, Fangs, Skin (for direct contact), or Blood (making the race toxic to eat). Thus, to poison both Claws and Fangs this must be bought twice. Spitting capability cost +2 EP, but it can be used at range, up to 10 meters.

Poison Potency	Damage	Cost
Irritant	1 DC Stun	1 EP
Mild	3 DC Stun	2 EP
Moderate	6 DC Stun	3 EP
Serious	1 DC Killing	4 EP
Severe	2 DC Killing	5 EP
Deadly	4 DC Killing	6 EP
Corrosive	+1 DC Killing	+1 EP
Acidic	+2 DC Killing	+2 EP
Paralyzing	Special	+2 EP
Instant Effect	Special	+2 EP

Normally, poisons take effect in 1D6 minutes, unless Instant Effect is taken. For Instant Effect, the poison takes effect in 1D6 seconds. This is common for deadly, acidic, or corrosive poison (Acidic poison is by default instant, but Corrosive is not). Paralyzing poison can paralyze its victim (temporarily) by interfering with signals from the nervous system to the brain. When infected by a paralyzing poison, the victim must make a successful CON task roll vs. 18 or be paralyzed for 1D6 minutes.

It should be remember that poisons may have a different effect, or no effect at all, on races of a different or alien metabolism.

Electroshock 3 EP per Level

The race is able to produce an electric field through a series of electricity discharging organs. Each Level produces 1 DC Stun damage with a range of 1 meter. However, this uses a lot of energy, and so the creature must expend 2 END for every level used. For instance, at level 4, the creature can generate an electroshock field out to 4 meters doing 4 DC of Stun damage, and it will expend 8 ENDurance points. This can be made to Killing damage for x2 Cost and x2 END expenditure.

For a more superheroic Lighting Bolt throwing abilities, see Superpowers, Psionics, or Magic.

Enhanced Characteristics 5 EP per Level

This race has characteristic enhancements far greater than what would be normally possible. Better neural connection, stronger bones or denser muscles, greater constitution, and so forth, Each +1 level to a primary characteristic cost 5 EP.

Reduced Characteristics -5 EP per Level

This race has reduced characteristics that are below those which should have naturally evolved. Each -1 level to a primary characteristic returns 5 EP to use elsewhere.

Enhanced Secondary Characteristics

Like enhanced Primary Characteristics, a race may have better secondary (derived) characteristics, above and beyond what should normally be possible.

- +2 SD & ED for 5 EP
- +1 SPD for 10 EP
- +1 REC for 5 EP
- +2 END for 1 EP
- +3 Resistance for +5 EP
- +1 STUN for 1 EP
- +1 HIT for 1 EP

Reduced Secondary Characteristics

Like reduced Primary Characteristics, a race may have poor secondary (derived) characteristics, below what should have naturally evolved.

- 2 SD & ED returns 5 EP
- 1 SPD returns 10 EP
- 1 REC returns 5 EP
- 2 END returns 1 EP
- 3 Resistance returns 5 EP
- 1 STUN returns 1 EP
- 1 HIT returns 1 EP

Altered Time Scale 5 EP/-10 EP

For some reason, this race is out of sync with the normal flow of time. This may be an accelerated or decelerated time-scale.

Accelerated Time Scale means the race's time scale runs much faster. Accelerated to 50% above normal (costing 5 EP) the race gains a +1 SPD, but it's apparent life span is cut by 75% (to that race, however, their life-span is normal). Communication is difficult (-1 PRE) because members of this race talk very fast (but they act naturally to other members of their race). There may also be other time effects to consider. At double speed time scale (costing 10 EP), the race gains a +2 SPD, but its apparent life span is half. At x3 (costing 15 EP), the race gains +3 SPD, but its apparent life span is cut by 1/3. This can continue for x4, x5, x6, and so forth, but it becomes impractical.

Decelerated Time Scale means the race's time scale runs much slower. At 75% slower

(returning 10 EP) the race has a -1 SPD, but its apparent life span is *increased* by 50%. Communication is difficult (-1 PRE) because members of this race talk so slow. At half time scale (costing -20 EP) the race has -2 SPD, but its apparent life span is double. This can continue for x.25, x.13, and so forth, but it becomes impractical.

Total Coordination 4 EP

This race has a greatly enhanced coordination ability, able to fully coordinate their body and balance. This grants Ambidexterity, as well as a +3 to any DEX roll to keep balance, and skills such as climbing, acrobatics, and athletics.

Metabolic Control 4 EP

A race with full metabolic control can control all normally involuntary functions of the body, such as pulse, blood flow, respiration, digestion, endocrine, and adrenaline. Metabolic control gives the ability to Simulate Death and also reduces by 30% the amount of food, water, and oxygen need to stay alive.

Insubstantiality 50 EP/30 EP

This race can become (or is) insubstantial, that is, made of ectoplasm, strange, quasi-physical particle, quantum energy-matter, exo-dimensional croutons, or whatever. For 50 EP this race can turn from its native form to a fully insubstantial form at will. For 30 EP it is permanently insubstantial. Note that for races with a Gaseous body, or a body of energy, sonic, or other strange physics, it may have some partially insubstantial advantages, but it is not fully insubstantial.

Insubstantiality allows the being to pass through all solid objects as if they did not exist. However, it cannot carry, hold, or manipulate physical objects either. Physical attacks (killing and stunning) have no effect. Energy attacks do *half* damage, and mental and telepathic attacks will have effect as normal.

Insubstantial beings are still visible as a glowing ghostly image. It must take Chameleon at level 4 or 5 to be completely invisible and insubstantial.

Shapeshifting 5 EP/25 EP

This is the ability for members of this race to change their form at will. There are two versions of Shapeshift. One is Singular Shifting, meaning the race has two forms which it can shift between (a werewolf, for instance, is a singular shapeshifter). It cost +5 EP each additional Singular form, so for 15 EP, a race could have 3 different forms. However, for a full 25 EP the race could be universal polymorphs, able to shift their bodies at a cellular or even molecular level, to turn into any creature or object they desire.

Each form should have the same basic characteristics as the individual. Physical Characteristics, however, can be shifted. That is, if turning into a lion, the points between DEX, REF, STR, CON, BOD, and MOVE can be slightly rearranged (by +/- 2 points, or as the GM wishes), and this allows the shapeshifter to better fit his new form. You cannot add new points to the Characteristics when you change form, only exchange your existing points.

Mass should never change in a realistic setting, though the body can become more or less dense to fit a larger or smaller size. A polymorph (one who has many forms) must be familiar with the creature or object he is morphing into. Studying a form for an hour should be sufficient to memorize it.

When attempting to shift into the form of another being, it may be necessary to mimic their voice. This requires the shapeshifter to have a skill in Mimicry. The shapeshifter must also possess that being's native communication method. He cannot mimic radio broadcast or other sophisticated traits unless they are part of his race's evolution.

Most Shapeshifters are Protocellular with a Neuro-chemical or Biochemical Distributed neurological system. Respiration is often Absorption and circulation is typically by Osmosis. The race must pay points for any traits they are capable of using. That is, if the race has Two Arms and they take a form with four arms, they can only use two at a time. This applies to all traits and features. There are no free deals in purchasing Shapeshifter.

Psionics

Some races may demonstrate psionic powers. Psionic powers (such as telepathy, teleportation, ESP, etc.) can be purchased for a race from **Atomik Psioniks**. Each category of a power can be bought at a certain level (ESP level 5), and there are a number of different ways to use the power (each method is a separate skill). For instance, in Atomik Psioniks, Telepathy cost 2 PP per level. If a race has level 5 Telepathy, this would cost 10 PP, or 50 OP. This translates to 50 EP.

However, because it is for an entire race, it is only an advantage outside their race. Therefore, racially granted psionic powers are half cost (a good deal!). Level 5 Telepathy, therefore, only cost 25 EP. The cost of additional enhancements for any *individual* cost the normal amount (for additional levels or other powers) and uses OP or PP.

Members of a psionic race must also have a PSI characteristic. The race could have a default PSI which cost 5 EP per level (PSI 4 would cost 20 EP). See **Atomik Psioniks** for details.

Superpowers

There are many superpowers to choose from in the various **Champions: TNM** books. A superheroic alien race may have many superpowers above and beyond normal alien racial powers. A race may have superpowers, built as normal in **Champions: TNM**, and the final EP cost (for the race) is the power's PP x 3. That is, if the power cost 5 PP, it would only cost 15 EP. Just as for psionics, these powers are only special outside their native race, so the racial cost is lower (it would normally be PP x 5, but is only PP x 3). Using superpowers is a good way to give aliens even more diverse traits and abilities. Each power does require a Use Power Skill.

Magic

Some aliens may have magical powers. Often, these effects are created by technology, psionics, or superpowers. But, in a universe where real magic can exist, and alien race (or fantasy race!) may inherently have magical abilities.

For magic, **Atomik Magick** should be used. A race with inherent magical powers has some native level of MAGE. Each level of MAGE cost 5 EP. Therefore, to have a MAGE characteristic at level 6 would cost 30 EP. Each spell is a skill that can be learned, just like any ordinary skill.

Other magical options, such as the magical casting system, aptitudes, and so forth, can also be specified for the race. For instance, a race of Elves might have a native MAGE of 5, costing 25 EP, and the spell casting system Elven Magic. Individual elves may purchase a higher level of MAGE at character creation.

Evolutionary Complications

In the course of creating an alien race, you have no doubt discovered it can be quite expensive to make the race you have imagined. You can lower the cost by giving the race a few complications (at half value) as mentioned at the beginning of this text, or by giving them certain vulnerabilities. Furthermore, a simple way to balance the cost of major enhancements is to take a few levels of Reduced Characteristics.

Scaling Races

The final step is to scale your race. This is a shifted version of the Mekton scaling system, where human-scale is x1 (instead of x1/10), and this is obviously to reflect the fact that most races will be human scale.

There are eight scales ranging from x1/10 (or x1/100 in Mekton scale) to excessive scale, where being is as large as planets or stars.

There are several factors effected by scaling:

Physical characteristics BOD, STR, CON, and

MOVE can be increased or decreased by scaling. These are listed specifically. Hit points and other Derived characteristics should then be recomputed to reflect the new scale.

KD/DC reflects the increase in KD armor or DC damage. To convert to Kills, divide the DC by 14, so 30DC becomes about 2 Kills. Hits are only scaled indirectly by the increase (or decrease) in BOD, unless the creature (or object) for some reason has no BOD, in which case its hits are treated as SDP.

General reflects the general scale modifier for other things not listed (weight, volume, attack ranges, and so forth).

EP Cost is a multiplier or divisor of the final cost of the race.

Scale	BOD	STR	CON	MOV	KD/DC	Generl	EP
x1/10	x1/3	x1/3	-2	x1/2	x1/5	x1/10	x1/5
x1/5	x1/2	x1/2	-1	x2/3	x1/3	x1/5	x1/3
x1	x1	x1	+0	x1	x1	x1	x1
x5	x3	x1.5	+1	x2	x3	x5	x5
x10	x5	x2	+2	x5	x10	x10	x10
x100	x25	x3	+3	x15	x50	x50	x100
x1000	x50	x5	+5	x30	x1000	x500	x2500
X ?	GM's Discretion for Excessive Scale						

Micro Scale is x1/10th. This is the scale for insects, bugs, itty-bitty critters and so forth.

Mini Scale is x1/5th. This is for rodent-sized creatures, but can include bigger bugs. This is about the smallest size for a sentient race.

Human Scale is x1. This is the standard scale for most races. x1 scale creatures range from the size of a dog or cat to a bear.

Dino Scale is x5 (same is Roadstriker Scale in Mekton). This is the size of elephants and dinosaurs, and giant-size races (like the Zentran from Macross). A dino scale creature should weigh between 2 and 20 tons.

Mekton Scale is x10 (same is x1 Mekton Scale). This is the size of huge mecha robots, whales, and the very largest dinosaurs. A Mekton scale creature would weight in the range of 20 to 100 tons.

Super Scale is x100 (same as Corvette scale in Mekton). This is the x10 bigger than the Mekton scale. Such a creature would be enormous, and probably confined to water, floating in the air or outer space. Giant "space dragons" might be super scale. A super scale creature might weight hundreds of tons.

Ultra Scale is x1000 (same as Ship scale in Mekton). This scale is x10 bigger than super scale! Such a creature could be kilometers in size and weight tens, if not hundreds of thousands of tons.

Excessive Scale is so large it would be silly to describe it in terms of stats and modifiers. Simply, something this big would just be a plot device. A sentient world or sentient star, or other such super-massive life-form.

Alien Races

Alien Races

To illustrate the usage of this system, several sample races are provided. Many are from literature, in addition to a few fantasy races. There are also some aliens of my own design.

Kzinti (also, Wing Commander Kilrathi)

Context: Larry Niven's *Known Space* saga

Homeworld: Kzin

Form: Multicellular Carbon Based, 100kg ave., 4 EP

Physical Exterior: Fur (orange or yellow), 2 EP

Cardiovascular: Close Centralized, 1 heart, 5 EP

Fluid Type: Warm Blooded, 4 EP

Respiratory: Air Lungs, hold breath 5 min, 6 EP

Bio-Stats

Life-Span: 50 years (unaugmented), 10 EP

Sleep-Time: 30% of the time, 5 EP

Vulnerabilities:

Radiation, Extreme, Stunning, -4 EP

Vacuum, Strong, Killing, -5 EP

Immunities: G-Forces, 10 Gs, 5 EP

Locomotion: Biped, Lateral Walker, 4 EP

Partial Swim, 2 EP

Feeding Method: Carnivore, 3 EP

Sensory: Sight, Optical with Nightvision 6 EP

Smell, Enhanced (+3 Percpt.), 8 EP

Taste, 2 EP

Touch, Direct, 2 EP

Hearing, Sonic, Acute (+1), 6 EP

Communication: Vocal Comm, Sonic, 2 EP

Body Comm., 1 EP

Neural: Neuro-Electrochemical, Centralized, 5 EP

Special Features

Secondary Limbs, 1 pair, 4 EP

Fine Manipulators (both limbs), 6 EP

Claws (both paws), 6 EP

Visage Manipulators (on feet), 0 EP

Tail, non-striking, 1 EP

Crushing Jaw, 1 EP

Total Coordination, 4 EP

Enhanced STR +3, 15 EP

Enhanced BOD +2, 10 EP

Reduced INT -1, -5 EP

Reduced PRE -1, -5 EP

Racial Complications: Kzinti Code of Honor, -5 EP

Scale: x1 Human-scale

TOTAL POINT COST: 105 EP

OP COST: 30 OP

The Kzinti are a race of feline (lion-like) warriors. The Kzinti are a proud and honor drive race, though brutal and unsympathetic to other races. The Kzinti expand their borders through war and conquest, but their

recent encounter with humanity proved fatal. Never once have the Kzinti been victorious in any of the Man-Kzin wars, and the Kzinti Empire has been reduced to a mere fraction of its former glory.

The Kzinti race can also double for the Kilrathi of *Wing Commander*.

Vulcan

Context: Star Trek™

Homeworld: Vulcan

Form: Multicellular Carbon Based, 80kg ave., 4 EP

Physical Exterior: Skin (with hair follicles), 1 EP

Cardiovascular: Close Centralized, 1 heart, 5 EP

Fluid Type: Warm Blooded, 4 EP

Respiratory: Air Lungs, hold breath 5 min, 6 EP

Bio-Stats

Life-Span: 100 years (unaugmented), 20 EP

Sleep-Time: 20% of the time, 6 EP

Vulnerabilities:

Radiation, Sever, Killing, -6 EP

Vacuum, Strong, Killing, -5 EP

Immunities: G-Forces, 8 Gs, 4 EP

Locomotion: Biped, Lateral Walker, 4 EP

Partial Swim, 2 EP

Feeding Method: Omnivore, 4 EP

Sensory: Sight, Optical, 4 EP

Smell, 3 EP

Taste, 2 EP

Touch, Direct, 2 EP

Hearing, Sonic, 3 EP

Communication: Vocal Comm, Sonic, 2 EP

Body Comm, 1 EP

Neural: Neuro-Electrochemical, Centralized, 5 EP

Eidetic Memory, Lightning Calc., 4 EP

Special Features

Secondary Limbs, 1 pair, 4 EP

Fine Manipulators (both limbs), 6 EP

Visage Manipulators (on feet), 0 EP

Visage Tail, 0 EP

Crushing Jaw, 1 EP

Enhanced INT +1, 5 EP

Enhanced STR +1, 5 EP

Telepathy Level 2, 15 EP

Racial Complications: No Emotions, -8 EP

Honesty, -5 EP

Scale: x1 Human-scale

TOTAL POINT COST: 95 EP

OP COST: 20 OP

Vulcans are a very humanoid race, the only difference being in their pointed ears and usage of copper-oxide instead of iron-oxide for blood. Vulcans are obsessively logical and suppress their emotions to the point of effectively nullifying them. Vulcans are culturally incapable of lying. They are telepathic.

Alien of LV-426

Context: *Aliens* motion picture series

Homeworld: Unknown

Form: Multicellular Carbon Based, 130kg ave., 4 EP

Physical Exterior: Exoskeleton 10 KD, 10 EP

Cardiovascular: Close Centralized, 1 heart, 5 EP

Fluid Type: Acidic - 7DC, 11 EP

Respiratory: Air Lungs, hold breath 30 min, 11 EP

Bio-Stats

Life-Span: 10 years (unaugmented), 2 EP

Sleep-Time: 20% of the time, 6 EP

Vulnerabilities: None

Immunities: G-Forces, 10 Gs, 5 EP

Acid, 10 EP

Electricity, 15 EP

Locomotion: Biped, Lateral Walker, 4 EP

Partial Swim, 2 EP

Feeding Method: Carnivore, 3 EP

Sensory: Smell, Enhanced (+3 Percpt.), 8 EP

Taste, 2 EP

Touch, Direct, 2 EP

Touch, Ranged, 6 EP

Hearing, Sonic, Acute (+1), 6 EP

Communication: Exotic Comm. (Telepathy), 8 EP

Hive Mentality, 5 EP

Neural: Neuro-Electrochemical, Centralized, 5 EP

Special Features

Secondary Limbs, 1 pair, 4 EP

Fine Manipulators (both limbs), 6 EP

Claws (both hands), 6 EP

Visage Manipulators (on feet), 0 EP

Tail, (striking tentacle), 2 EP

Crushing Jaw, 1 EP

Rapid Regeneration, 10 EP

Enhanced Metabolism, 5 EP

Metabolic Control, 4 EP

Enhanced STR +3, 15 EP

Enhanced BOD +3, 15 EP

Enhanced CON +2, 10 EP

Reduced INT -2, -10 EP

Reduced PRE -2, -10 EP

Reduced TECH -1, -5 EP

Racial Complications: None

Scale: x1 Human-scale

TOTAL POINT COST: 186 EP

OP COST: 111 OP

They are the perfect product of artificial evolution, the epitome of alien genetic engineering and biowarfare. Created by a now extinct alien civilization, the Aliens are the ultimate killing machines. They exist in four stages of development -- from egg to "facehugger", to chestburster to adult. Presented here is the adult, though the Queen Alien is much more powerful. Aliens have an exoskeleton giving them 10 KD of natural armor. They do not use visual sight as a sense, but rely on smell, hearing, and ranged touch (motion sensing).

Solaris

Context: Stanislaw Lem's *Solaris*

Homeworld: It is its homeworld!

Form: Protocellular Carbon Based, 4 EP

Physical Exterior: An Atmosphere... 0 EP

Cardiovascular: Osmosis Circulation, 15 EP

Fluid Type: Energy (Neutrinos), 5 EP

Respiratory: No Respiration (self-contained), 15 EP

Bio-Stats

Life-Span: Immortal, 40 EP

Sleep-Time: Does not Sleep, 10 EP

Vulnerabilities:

Anti-Neutrinos, Extreme, Killing, 10 EP

Immunities: G-Forces, 10 Gs, 5 EP

Locomotion: None, 0 EP

Feeding Method: Solar Energy, 9 EP

Sensory: None (it uses ESP), 0 EP

Communication: None (it uses telepathy), 0 EP

Neural: Neuro-Electrochemical, Distributed, 5 EP

Special Features

Enhanced INT +5, 25 EP

Enhanced WILL +3, 15 EP

Telepathy Level 15, 75 EP

ESP Level 10, 25 EP

Electrokinesis Level 10, 75 EP

Telekinesis Level 12, 90 EP

Racial Complications: None

Scale: x1,000,000,000 Excessive Scale

TOTAL POINT COST: 423,000,000,000

OP COST: 422,999,999,925 OP

Solaris is a sentient world, though technically only the jelly-plasma sea of its surface is the living part. Solaris can control its orbit by telekinesis, or by some unknown form of electrogravitation manipulation. The surface is quite diverse, with polymorphic organic structures forming and changing as the planet attempts to understand itself. When first contacted by humans (the first contact Solaris had with *anything* other than itself) it was able to study the scientists by telepathy and limited psychic contact. It was able form neutrinos into fully self-realized clones of individuals from the scientists memories (only discernable from Baryonic matter on a subatomic scale), and used these "illusions" to interact with the visiting humans.

These illusionary people are extracted from the host's memories of that person, and thus can be "more perfect" or "more flawed" than the original, depending on the relation to that person. The neutrino illusion can be killed, but will come back the next day, awakening with no memory of past events. The illusionary form is not aware of its relation to Solaris, and may become self-aware and independent, but will vanish if removed from orbital proximity of Solaris. The form can be permanently irradiated with an intense exposure to anti-neutrino radiation.

Little else is know about Solaris.

The Black Oil

Context: *The X-Files*, television series

Homeworld: Unknown

Form: Liquid, hydrocarbon based (oil), 20 EP

Physical Exterior: None

Cardiovascular: Osmosis Circulation, 15 EP

Fluid Type: Chemical (oil), 4 EP

Respiratory: No Respiration, 15 EP

Bio-Stats

Life-Span: Immortal, 40 EP

Sleep-Time: Does not Sleep, 10 EP

Vulnerabilities: Unknown

Immunities: Unknown

Locomotion: Slither, 2 EP

Full Swim, 4 EP

Feeding Method: Parasite, 0 EP

Sensory: None (it uses ESP), 0 EP

Communication: None (it uses telepathy), 0 EP

Neural: Biochemical, Distributed, 0 EP

Special Features

Telepathy Level 8, 40 EP

ESP Level 6, 15 EP

"Nuclear" Flash (10 Phases), 45 EP

"Nuclear" Area Attack (Killing), 8DC / 8m, 42 EP

Racial Complications: None

Scale: x1 Human Scale

TOTAL POINT COST: 252

OP COST: 177 OP

The Black Oil, also called the Black Cancer, is an alien organism of a highly non-terrestrial biology. Even so, the Black Oil can "possess" a human victim, possibly with a powerful form of psychic mind control. The Black Oil seems to come to earth on meteorites, and the governments of the world are fighting over samples to use in the control of their population. Larger issues may also be at stake, and it is now believed that two alien races are also fighting a desperate war that somehow involves the Black Oil. According to some theories, one side is a race possessed or controlled by the Black Oil, the other side are the rebels who fight to destroy the Oil. These "rebels" look human, but have their mouths and eyes sown up so as to keep the Oil from infecting them. The rebels exterminated a large number of humans who were implanted with small alien microchips (the chips were implanted to bring the people together in one spot where the Black Oil would then infect them, en masse). The Rebels however drew the potential hosts out with a similar signal and destroyed them. However, on their last attempt a Colonist ship appeared (controlled by the Black Oil) and drove the rebels away, thus saving a few of the would-be human hosts.

Further information regarding the Black Oil, the conspiracies, and alien involvement on Earth is sketchy, and possibly incorrect.

Sylvan Elf

Context: Fantasy Genre

Form: Multicellular Carbon Based, 80kg ave., 4 EP

Physical Exterior: Skin (with hair follicles), 1 EP

Cardiovascular: Close Centralized, 1 heart, 5 EP

Fluid Type: Warm Blooded, 4 EP

Respiratory: Air Lungs, hold breath 5 min, 6 EP

Bio-Stats

Life-Span: 100 years (unaugmented), 20 EP

Unaging Enhancement, 10 EP

Sleep-Time: 30% of the time, 5 EP

Vulnerabilities:

Radiation, Extreme, Stunning, -4 EP

Vacuum, Strong, Killing, -5 EP

Immunities: G-Forces, 6 Gs, 3 EP

Locomotion: Biped, Lateral Walker, 4 EP

Partial Swim, 2 EP

Feeding Method: Omnivore, 4 EP

Sensory: Sight, Optical with Nightvision, 6 EP

Enhanced Sight (+3), 5 EP

Smell, 3 EP

Taste, 2 EP

Touch, Direct, 2 EP

Hearing, Sonic, 3 EP

Communication: Vocal Comm, Sonic, 2 EP

Body Comm, 1 EP

Neural: Neuro-Electrochemical, Centralized, 5 EP

Direction Sense, 2 EP

Special Features

Secondary Limbs, 1 pair, 4 EP

Fine Manipulators (both limbs), 6 EP

Visage Manipulators (on feet), 0 EP

Visage Tail, 0 EP

Crushing Jaw, 1 EP

Total Coordination, 4 EP

Enhanced INT +1, 5 EP

Enhanced DEX +1, 5 EP

Enhanced REF +1, 5 EP

Reduced BOD -1, -5 EP

Reduced STR -1, -5 EP

Reduced CON -1, -5 EP

Racial Complications: None

Scale: x1 Human-scale

TOTAL POINT COST: 105 EP

OP COST: 30 OP

Sylvan elves are a race of magical humanoids who inhabit forests and woodland areas. They are typically tall, thin, and have beautiful or handsome features. Elves have prominently pointed ears and sharp facial features. Most have fair skin and hair color ranges from dark to golden blond or even silver white. Sylvan Elves have a very long life span, upwards of 100 years on the average, though some elves live far longer, and they do not age past their mid-twenties. Elves are quite magical, and usually know several elemental and nature spells.

Great Dragon

Context: Fantasy Genre

Form: Multicellular Carbon Based, 4 EP

Physical Exterior: Scales (5 KD), 5 EP

Cardiovascular: Close Centralized, 1 heart, 5 EP

Fluid Type: Cold Blooded, 2 EP

Respiratory: Air Lungs, hold breath 10 min, 7 EP

Bio-Stats

Life-Span: 300 years (unaugmented), 60 EP

Sleep-Time: 80% of the time, 0 EP

Vulnerabilities:

Radiation, Extreme, Stunning, -4 EP

Vacuum, Strong, Killing, -5 EP

Immunities: G-Forces, 10 Gs, 5 EP

Heat/Fire, 10 EP

Locomotion: Quadruped, 4 EP

Winged Flight, (MOVE x4), 5 EP

Feeding Method: Carnivore, 3 EP

Sensory: Sight, Optical, 4 EP

Sight, Infrared, 6 EP

Smell, 3 EP

Taste, 2 EP

Touch, Direct, 2 EP

Hearing, Sonic, 3 EP

Communication: Vocal Comm, Sonic, 2 EP

Neural: Neuro-Electrochemical, Centralized, 5 EP

Special Features

Visage Manipulators (on feet), 0 EP

Claws (all *four* feet), 12 EP

Tail, (striking tentacle), 2 EP

Spikes on Tail (+2 DC), 4 EP

Crushing Jaw, 1 EP

Natural Armor (+15 KD), 15 EP

Fiery Breath (5DC Killing Attack), 7 EP

Enhanced BOD +3, 15 EP

Enhanced STR +2, 10 EP

Enhanced CON +1, 5 EP

Racial Complications: None

Scale: x10 Mekton-scale, (4-K Armor)

TOTAL POINT COST: 2000 EP

OP COST: 1925 OP

Great Dragons are powerful magical beasts. They are quite enormous, most nearly a hundred meters from head to tail. They have a large body, long neck and tail, and have a similar appearance to a great reptile or dinosaur. Unlike some lesser dragons, Great Dragons have mighty wings that enable them to fly, some upwards of 60 km per hour.

Great Dragons are at x10 Mekton Scale. Lesser Dragons are similar, but x5, and Ancient Dragons are x100 Scale! Great Dragons have a STR usually ranging between 10 to 14, and a BOD of 30 to 40. Thus, Great Dragons usually have between 150 to 200 hit points, or 3 to 4 Kills. Their scaly bodies also provide 4 Kills of armor protection!

The Great Dragon's Fiery Breath does 5DC x 10, x10 as the Great Dragon has been scaled. This is 50 DC damage, or simply, a 3.6 Kill attack.

Silicites (Sil-e-kites)

Homeworld: Silicus

Form: Silicon, Non-Crystalline, (150 kgs), 8 EP

Physical Exterior: None

Cardiovascular: Osmosis Circulation, 15 EP

Fluid Type: Electrical Energy, 5 EP

Respiratory: Absorption, Sulfur Dioxide, 1 EP

Bio-Stats

Life-Span: 50 years, 10 EP

Sleep-Time: Does not Sleep, 10 EP

Vulnerabilities: Water, Sever, Killing, -8 EP

EMP, Extreme, Stunning, -4 EP

Immunities: G-Forces, 10 Gs, 5 EP

Locomotion: None, 0 EP

Feeding Method: Solar Energy, 6 EP

Sensory: Radar, w/ 360 Degrees, 11 EP

EM Imaging, w/ 360 Degrees, 11 EP

Touch, Ranged, w/ 360 Degrees, 9 EP

Hearing, Radio, 5 EP

Communication: Radio (to Hearing), 5 EP

Neural: Semiconductive, Distributed, 15 EP

Eidetic Memory, Lightning Calc., 4 EP

Special Features

Electrokinesis Level 3, 23 EP

Telekinesis Level 3, 23 EP

Enhanced Hit Points +10, 10 EP

Reduced REF -2, -10 EP

Reduced DEX -3, -15 EP

Reduced BOD -2, -10 EP

Reduced STR -2, -10 EP

Racial Complications:

Constant Strong Racial Paranoia, -5 EP

Constant Severe Intolerance to other Races, -8 EP

Scale: x1 Human Scale

TOTAL POINT COST: 135

OP COST: 60 OP

The Silicites are a race of rock-like silicon-based life forms who evolved on a hot volcanic, sulfur/silicon planet, similar to the Jovian moon Io, orbiting a red dwarf star. Over billions of years, silicate intelligence formed as metallic 'circuit' structures made patterns in the molten rocks. The Silicites are a highly complex form of such life, and are very "computer-like" in their neural organization. They take in solar energy from their red sun, and respire sulfur-dioxide by absorption to create their energy, and expel silicon-oxides and sulfur dust. The Silicites can generate powerful electrical fields, giving them an apparent Electrokinetic power. They also demonstrate telekinetic powers, but these are also generated by their electrical fields. They can levitate themselves using these powers, and can thus move about. The Silicites war with each other, their primary weapon being Electrokinetic EMP attacks.

When first contacted by other races, the Silicites became extremely paranoid. They now control a small empire of several star systems and have formidable warships to guard their borders.

The Whist

Homeworld: Extra-Dimensional

Form: Gaseous, 15 EP

Physical Exterior: None

Cardiovascular: Osmosis Circulation, 15 EP

Fluid Type: Exotic Chemical, 1 DC, 5 EP

Respiratory: None, 15 EP

Bio-Stats

Life-Span: 60 years, 12 EP

Sleep-Time: 40% of the time, 4 EP

Vulnerabilities:

Radiation, Extreme, Killing, -8 EP

Vacuum, Extreme, Killing, -8 EP

Rare Earth Elem., Strong, Stunning, -2 EP

Immunities: G-Forces, 4 Gs, 2 EP

Locomotion: Gas "Bag" Flight, 1 EP *see description
"Air Jets", 8 EP *see description

Feeding Method: Solar Energy, 6 EP

Sensory: Sonar, w/ 360 Degrees, 8 EP

Touch, Ranged, 6 EP

Hearing, Ultrasonic, 3 EP

Smell, 2 EP

Communication: Vocal Comm, Ultrasonic, 5 EP
Intra-dimensional exotic, 8 EP

Neural: Biochemical, Distributed, 0 EP

Special Features

Chameleon Level 2, 10 EP

Decelerated Time-Scale 75%, -10 EP

Insubstantiality at will, 50 EP

Reduced REF -1, -5 EP

Reduced DEX -2, -10 EP

Reduced BOD -1, -5 EP

Reduced STR -1, -5 EP

Racial Complications:

Frequent, Paralyzing Phobia (Sound), -5 EP

Constant Strong Obsession(Science), -4 EP

Frequent Strong Cowardice, -3 EP

Scale: x1 Human Scale

TOTAL POINT COST: 110

OP COST: 35 OP

The Whist (so called by humans) have been known for millennium by countless other races, yet little is known about them. Their homeworld is unknown, and it seems they originate from an entirely different dimensional plane of reality. The Whist are bright glowing blue spots of gas (about a meter in diameter) and can become completely insubstantial at will. They can also phase back into their native dimension (though it takes them a long time to completely fade away). The Whist have no starships, but can appear anywhere and do so for no apparent reason. They are not hostile and typically flee from attacks. The Whist are extremely inquisitive and seem to have been studying our galaxy for thousands of years.

Whist float (thus using "gas bag flight") but can propel themselves by controlling the air like a jet (thus using Air Jet movement).

The Kichii

Homeworld: Chii Ktiiki

Form: Multicellular Carbon Based, 4 EP

Physical Exterior: Fur (short blue-gray), 2 EP

Cardiovascular: Close Centralized, 2 hearts, 6 EP

Fluid Type: Warm Blooded, 4 EP

Respiratory: Air Gills, (CO² breather) 2 EP

Bio-Stats

Life-Span: 50 years (unaugmented), 10 EP

Sleep-Time: 30% of the time, 5 EP

Vulnerabilities:

Radiation, Extreme, Stunning, -4 EP

Vacuum, Strong, Killing, -5 EP

Immunities: G-Forces, 6 Gs, 3 EP

Locomotion: Biped, Lateral Walker, 4 EP

Partial Swim, 2 EP

Feeding Method: Herbivore, 2 EP

Solar Energy, 3 EP

Sensory: Sight, Ultraviolet, 6 EP

Taste, Exterior, 3 EP

Smell, Enhanced, w/ Antennas (+4), 10 EP

Touch, Direct, 2 EP

Hearing, Sonic, 3 EP

Hearing, Ultrasonic, 3 EP

Communication: Vocal Comm, Sonic, 2 EP

Neural: Neuro-Electrochemical, Centralized, 5 EP

Blind Reaction, Combat Sense +2, 6 EP

Special Features

Secondary Limbs, 1 pair, 4 EP

Fine Manipulators (both limbs), 6 EP

Visage Manipulators (on feet), 0 EP

Tail, (striking tentacle), 2 EP

Crushing Jaw, 1 EP

Rapid Regeneration, 10 EP

Regrowth, Level 2, 20 EP

Total Coordination, 4 EP

Enhanced BOD +2, 10 EP

Enhanced STR +2, 10 EP

Enhanced DEX +2, 10 EP

Enhanced REF +2, 10 EP

Enhanced SPD, +1, 10 EP

Racial Complications: None

Scale: x1/5 Mini-scale

TOTAL POINT COST: 175 EP (175 / 3 = 58)

OP COST: -16 OP

The Kichii are a small rodent sized race. They gain a +2 BOD, +2 STR, +2 DEX, +2 REF, and +1 SPD, however, their final BOD and STR are halved, and they incur a -1 CON for their size. They also gain +2 Hit Points from having two hearts. The Kichii have huge "ears" at the back of their heads, but these are really air gills for extracting CO² and expelling oxygen. Kichii are very quick, and though they look cute to many humans, they are in fact quite warlike, and ruthless when it comes to business. They only see in UV and often wear a small UV lamp on their head. The Kichii are working on a "mecha" battlesuit to help them level the playing field with other races.