

SCRAMBLES

A scramble happens when the party enters a relatively small enclosed area – a spaceship, skyscraper, ancient ruin, cave complex, etc – someplace they should probably not be and take to exploring it.

To do a scramble right the GM should give the party leader a **Ghost Map** of the area. This is a skeletal copy of the map the GM uses with all of the secrets filed off. It is disposable and players should feel free to scribble all over it.

The idea of a scramble is that when the party moves through the complex the leader will draw a line on the ghost map to keep track of where they are. When an encounter happens we draw a circle in that square. Once the encounter is over the circle gets X-ed out and the scramble continues from an adjacent square.

[visual example of drawing on a map]

Movement

A scramble is also a length of time equal to **one minute** for the characters in the game. It is the amount of time the party has to move with before the GM rolls for a random encounter. How far the party can move depends on their speed. There are three: Slow, Medium and Fast.

Speed	Movement	Ramifications
Slow	Move x 2	May Search or Hide.
Medium	Move x 4	No Searching or Hiding.
Fast	Move x 6	Double Random Encounter.

Ghost maps use squares, each of which is roughly equal to three meters. Movement is the number of squares the party can move per scramble and depends on the slowest member of the party. If your slowest character has Walk 4 then the party will move 8 squares at slow speed, 16 at medium speed and 24 at fast speed. Keep in mind that you are dealing with a grid so it takes 2 squares to move diagonally. While characters may run or sprint to speed themselves up during combat, they cannot do so here.

Slow speed is the only speed at which you can search or try to hide in the area you are passing through.

Medium speed is the fastest the party can move while still staying relatively quiet. No searching or hiding is possible.

Fast speed is the party high-tailing it. This makes a ton of noise. At the end of a fast scramble the DM rolls twice on the random encounter table and uses the lesser of the two rolls. You won't encounter twice as many things, but it is always better to roll high than low on a random encounter table.

Searching. To search an area, announce you are doing so at the start of the scramble and have everyone make a **Sense** check. Should any strength beat the **Secret** strength of something hidden in that area a character takes notice of it. Otherwise the party notices nothing. It doesn't matter how many hidden items there are, beat its secret strength and the item is discovered.

Searching for something in particular often makes the Search check easier, but it limits the character to searching for just that one thing. They may miss other things they might have noticed. Describing where you are searching and how you are doing it also tends to make the check easier.

Hiding. You cannot search and hide at the same time. If you decide to hide, do the same thing as searching. Make a **Sense** check and that is the strength at which you are hidden. Anything that comes looking for you needs to beat that strength with a **Sense** check to find you.

As with searching, the more descriptive and creative you are in hiding your character the easier the check should be. However, you do need something to hide behind. There is no hiding in an empty room!

Encounters

Random encounters will not always be with a creature looking for a fight, but when one is we need to figure out just how far away it is and in what direction it is coming from.

For direction, roll a **1d8** with the following table. When limited to three directions roll a **1d6**. For two directions roll a **1d4**.

1: Before. **3:** Behind **5:** Side/Left **7:** Right

For distance, how far away depends on the party's light source. It should have a **Light** aspect to tell us how many squares away from the party it illuminates. When this is the case, the encounter will appear in the last square farthest away from the party. In perfect darkness the encounter hits the party with a surprise attack.

In an illuminated area (as many places are) the encounter will make its appearance by coming out of the nearest door or from around the nearest corner in the hall.

Reaction Rolls. Most of the time, the party are some place they shouldn't be and will be treated as invaders. At other times, when we don't know how the creatures will react, the GM should ask for a **Reaction Roll**. This is a Charm check made by the first character to open their mouth and say something. If the character's **Social Inclination** has one element in common (the G in VG and PG) with the creature they get a +5. Two elements in common (VG and VG) increases it to +10.

Charm

3: Ecstatic!

2: Friendly.

1: Indifferent.

1/2: Belligerent.

F: Attack.

C: Destroy!

Ecstatic! The creature is enamored of you, willing to bend the rules for you, but nothing crazy or suicidal.

Friendly means the creature thinks you're pretty cool. Don't ask for too much and you might just get it.

Indifferent creatures don't care one way or another and are probably just hoping you will go away.

Belligerent creatures are openly antagonistic. They're not up to attacking but might choose to mess

with you a bit. **Attack** means you ticked the creature off. Unless assaulting you seems suicidal they will attack. **Destroy!** The creature just made your destruction its life purpose. *It will attack no matter what!*

Rooms. A room is any area with a specific encounter in it. The room will be marked on the GM's map but not yours. Enter a room and the current scramble comes to an early end. We handle the encounter and start a new scramble right after it. Typically you start drawing from a square adjacent to the circle marking the encounter. You may also start from a different point on the map when it makes sense to do so.

Resting. During a scramble you can stop to rest but you need to spend a whole minute (one scramble) resting. The GM will roll for a random encounter and if something shows up your rest has been disrupted and you get nothing for it. Otherwise make a **Health Save -5 per Rest Taken** and recover **1d10 Stamina per success** (see *Rest & Recovery in Adventure*).

Limited Inhabitants. Scrambles often happen in a small place with a limited number of inhabitants. For this reason, the GM will usually check off a random encounter once it is rolled up as a reminder not to run it again. Instead, the next encounter down the list is used.

Once everything in a random encounter table has been encountered, the GM should go back and erase the check marks by those encounters that can happen again. Any that depend on creatures which have been slain will not happen again. The **No Encounter** entry that begins every random encounter table should never be checked off.

Doors

Most complexes will have a single stock door you can find on most of its rooms, exceptions will be noted when they occur. They come with a description and a number of strengths like: *Heavy Hidden Locked Door (break 120, secret 40, lock 50, hear 30)*. Doing anything to a door will be a challenge verses one of these strengths. Only one attempt can be made per character per scramble to do any of them.

Break. Breaking down a door requires a **Muscle** check to beat the door's Break strength. A half success damages the door, removing 10 points of strength. A full success breaks the door down. Multiple characters can combine their strengths but they make **Hard Muscle** checks when doing so. More than two characters will also need something like a battering ram to combine their strengths.

Doors can be outright damaged. Roll to hit and every 10 points of damage removes 10 points of strength. However! This happens in 10 point increments. Do 9 points of damage to a door and you may scuff its surface but not weaken it.

Secret. Hidden doors have a Secret strength to tell us how well it has been hidden. Anyone searching the area will need to beat this strength with a **Sense** check to find it. Even a half success will give the doors location away.

Lock. Locked doors have a Lock strength that needs to be beaten by an **Intellect + Technician** check while using a robocomkit to hack into it. It takes **1 minute** to take off the door's control panel, wire

oneself into it and attempt to open the door. It takes **3 minutes** to put everything back together and make it look as if the door had not been broken into.

Hear. Hear is the strength you need to beat with a **Sense + Eavesdrop** check when trying to listen through a door. The greater your success the more you can make out. A half success will hear muffled noises but be unable to tell what they are. Failure hears nothing.

Traps

In a world with robots who can stand guard, eternally alert and ever vigilant, traps are rare but not unheard of. Mostly you will find them when dealing with primitive societies or raiding ancient tombs and temples that want to keep their treasures hidden. Gamewise, traps often come with a name and a bunch of stats in parentheses such as *Pendulum Blade (secret 40, disable 20, hit 60%, dmg 1d12e)*.

Secret is the strength the trap has been hidden with. **Disable** is the strength you need to beat to disable it. **Hit %** is the trap's chance of hitting once fired. **DMG** is the amount of damage it does per success.

Checking For Traps. Parties check for traps and secret doors at the same time while scrambling at slow speed. Each character makes a **Sense** check and if one of them beats the secret strength they detect the trap without setting it off.

The Trap Springs! If no one checks for traps or if the trap is not detected, everyone should make a **Luck Save**. The character with the lowest strength will be attacked by the trap. The GM should roll the trap's Hit %. If it succeeds the trap will do one roll of damage per success.

Pit Traps. Hidden pit traps suck in anyone who fails their **Luck Save**. A half-success will leave the character dangling from its side. It takes a Muscle check to pull oneself up. Others may assist a dangling character by making a Hard Muscle check and adding their strength to the character's Muscle check. *Careful though!* A fail strength subtracts from the dangling character's strength.

The length of the fall determines the damage done. The lethality depends on the floor of the pit: non-lethal for soft surfaces like dirt, semi-lethal for hard surfaces like slate or steel, lethal damage for sharp surfaces like a bed of spikes. (see *Falling in Adventure*).

Disabling A Trap. Once a trap is detected it can be easily avoided. Disabling it is a bit trickier. If the trap has no disable strength make just an Intellect + Technician check.

Intellect + Technician vs Disable

1: Trap Disabled.

½: Try Again.

F: Snared! Disabler is unable to move without setting the trap off. Someone else needs to disable it.

C: Snap! The trap fires on its disabler.

Setting A Trap. Traps are basically pieces of equipment. You can set one up or reset a trap that has been fired. Use your Intellect plus the Technician skill if you have it. Succeed and the trap's Hit score is 50% plus 10% for each success.

Intellect + Technician

1: Trap's Hit is 50% + 10% per success.

1/2: Try Again.

F: Trap will not go off when triggered.

C: Trap fires on whoever is setting it with a strength of 2d6!

RAMBLES

A ramble is basically a scramble that happens on a much larger scale. It uses hex maps where one hex represents one kilometer of distance. Instead of minutes ticking away inside a enemy-infested compound, we spend hours called *Rambles* spent meandering through the great outdoors. Gamewise, the ramble has a definite structure:

1. Roll for Weather.
2. Mark the Travel.
3. Handle Vehicles.
4. Roll for Exhaustion.
5. Roll for Random Encounter.

This continues ramble after ramble until finally the party gets to where they are going. Enter a hex bearing a planned encounter and the ramble ends prematurely as we stop to deal with it. After it is over a new ramble begins.

Weather

The weather table tells us what kind of precipitation the party will endure over the course of the hour. The following table is something you might use with an Earth-like planet during the summer. On other planets you might get something more dramatic like flaming hail.

1d100	Weather	Exhaustion	Action	Solar
40:	Nothing	0	0	+0
30:	Drizzle	+1	0	-2
20:	Shower	+3	-5	-4
10:	Downpour	+5	-10	-6
01:	Storm	+10	-15	-8

Here you have a 60% chance of nothing at all, clear skies and a good day for a hike. The other results are rain. **Exhaustion** increases the amount of Stamina damage the characters take at the end of the ramble (this doesn't happen to characters riding in vehicles). **Action** is a penalty the character takes to anything they try to do during that hour, such as fighting in the rain. **Solar** is a modifier that applies to the die roll used by solar arrays when charging a power supply (see *Solar Array* in *Substance*).

Normally characters will see weather coming in the distance. Against a storm they should have time enough to pitch a tent and wait it out but they will spend the entire hour making camp and then breaking it down.

Travel

As in a scramble, the GM should provide the party leader with a **Ghost Map** to draw on. Hex maps better fit wilderness adventure since you don't have to worry about diagonal movement when using them. Draw a line through the hexes the party travels through and draw a circle in the hex the ramble ends in. The GM rolls for a random encounter. The party handles it. The circle is X-d out and a new ramble begins from an adjacent hex.

[example]

Speed. After figuring out the weather the party leader should declare its speed. Like a scramble you have Slow, Medium and Fast.

Speed	Movement	Exhaustion	Ramifications
Slow	Move x 0.5	+3	Searching is Possible.
Medium	Move x 1.0	+5	Hard Searching is Possible.
Fast	Move x 1.5	+7	No Searching is Possible.

The slowest member of the party determines its speed. You cannot go faster than that character without leaving them behind. With vehicles the slowest **Cruising Speed** becomes the speed the party uses, providing there is no one out walking alongside it.

Slow is the party moving at half speed, often spread out so they can search the area they are moving through.

Medium is normal speed. The party can still search the area but make Hard Sense checks while doing so.

Fast is a forced march. The party won't have the time or energy to search the hexes they move through.

Regions. All of this assumes that there is a road under your feet or open field which is easily traversed. Different regions will change the number of kilometers it takes to **enter** a single hex. For example:

- 2 Hex Regions:** Bramble, Hills, Sand, Shallow Water, Snow.
- 3 Hex Regions:** Badlands, Forest, Jungle, Mountains, Mud, Rapid Water, Swamp.
- 4 Hex Regions:** Canyons, Cliffs, Dense Forest, Glaciers, Lava Fields, Rock Falls, Steep Mountains.

Enter is important because if you don't have the kilometers to travel with you cannot enter the hex. Unused kilometers carry over into the next ramble. When it comes to 4 hex regions a slow party may need multiple rambles to get through a single hex.

[example]

Vehicles

Vehicles come with a **Terrain** that tells us what they can move across. These are broader categories than hex regions (think: *Land, Sea, Air, Space* etc). If the vehicle's terrain says **Roads** it can only travel through hexes containing a road. The **Land** terrain allows for off-road travel, but even that should be taken with a grain of salt. Most off-road vehicles cannot travel through anything more gnarly than a 2 hex region.

Speed & Burn. Terrain gives us the vehicle's **Cruising Speed** and **Burn Rate**, i.e. the number of energy units you will burn with each hour of travel. At the end of each ramble, but before a random encounter is rolled you should drain the vehicle's power supply by its burn rate.

You may change the burn rate by changing its cruising speed. Every 10% change in speed causes a 10% change in burn. Ten percent of 60 is 6 and ten percent of 20 is 2. So you can increase your cruising speed by 6 kph but doing so increases your burn rate by 2 points. Slowing the vehicle down does the opposite, conserving energy to a minimum of 1 EU.

$$10\% \text{ Speed Change} = 10\% \text{ Burn Change}$$

Note that speed changes should be set at the start of the ramble and represent your average overall speed. You cannot speed up or slow down during the ramble and hope that this makes a difference. All vehicles have a top speed equal to **double** its cruising speed.

Encumbrance. Like characters, vehicles carrying more weight than they were designed to carry are going to run into problems. First you get a piloting penalty which effects everything you try to do with the vehicle. Second you get a burn multiplier that can dramatically increase the amount of energy used.

Encumbrance	Pilot	Burn
Packing	-10	x2
Lugging	-20	x3
Trudging	-30	x4
Straining	-40	x5

So if our rover is burning 20 EU at 60 kph, it will burn 40 EU when packing, 60 EU when lugging, 80 EU at trudging, and 100 EU when straining. A vehicle that has reached its stopping point is over-burdened and cannot move.

Out Of Juice! Burn is something you should figure out before the vehicle is moved. If you don't have enough EU's in your power supply you cannot make the trip. Hopefully you brought along some solar arrays and the weather is nice. Otherwise you might want to try unburdening the vehicle or slowing its cruising speed to where it can make the trip.

Maintenance. Every hour of travel adds **1 hour** to the vehicle's **Maintenance Clock**. Mark this on the vehicle sheet using roman hash marks. Every time you add **ten hours** to the clock (meaning at 10, 20, 30, 40, etc) you need to roll **1d100** and add the clock to it. If the vehicle has taken any damage add **+20** to the roll. If the vehicle has taken **half or more of its HP** it is stressed and should add a **+40** instead. Roll a 100 or more and you have a breakdown on your hands. That vehicle is going nowhere until it is fixed.

$$1d100 + \text{Maintenance Clock} + 20 \text{ Damaged or } + 40 \text{ Stressed}$$

Total >= 100 is a Breakdown.

Fixing It. Fixing a breakdown requires **one hour** of time plus an Intellect + Technician check minus the Maintenance Clock. You can make as many attempts as you have loads of *Spare Parts* to pull from. Succeed and the vehicle will run again. A half success lets you try again at +10. Nothing happens when

you fail. Crash the check and whatever broke is something you don't have a replacement for in any of your spare parts. The vehicle is going nowhere until you get that gizmo.

Intellect + Technician - Maintenance Clock

1: Success! the vehicle will run again.

1/2: Try Again at +10.

C: Something broke that you cannot repair.

Spare Parts. You may only make as many Fix-up attempts as you have loads of spare parts. Eventually you will use up your reserve of spare parts. It's just assumed that you will replenish anything you used the next chance you get. Should you run out of spare parts while on a ramble, you may cannibalize parts from other vehicles but the other vehicle you took parts from will now refuse to run.

Tune-Ups. Performing a tune-up cleans hours off the maintenance clock. It uses the same Intellect + Technician - Maintenance Clock as a fix-up, takes an hour to perform, but does not require any spare parts. Each success removes 1d10 hours from the maintenance clock. Crash the check and you just caused a breakdown that now needs to be fixed.

Intellect + Technician - Maintenance Clock

S: Remove 1d10 hours from the MC per success.

C: The vehicle breaks and now you need to fix it.

Multiple Mechanics. It takes one hour for a single character to perform a fix-up or tune-up. More than one character may work on the same vehicle at the same time, but they each should make separate checks. The maximum number of characters who can work on a vehicle simultaneously is half of its passenger count.

Exhaustion

Traveling for prolonged periods of time is exhausting and the exhaustion roll is **Stamina** damage that everyone takes right after they finish moving with no time to rest before an encounter occurs.

Base Exhaustion. The base exhaustion caused by hiking depends on the party's move speed. Those who are traveling on or in a vehicle take a single point. Those riding a steed or open vehicle (like a motorcycle) take two. The steed itself will be exhausted according to the party's move speed.

Slow = +3

Medium = +5

Fast = +7

Vehicle = +1

Steed = +2

Weather. The next factor is exhaustion caused by the weather. This should be a part of whatever weather table you are using. Anyone sheltered from it will not be exhausted by it.

Encumbrance. Traveling while encumbered will also wear you out. It's the reason why people use pack animals. Depending on your level of encumbrance:

Packing	= +3
Lugging	= +5
Trudging	= +7
Straining	= +9

Climate. Last but not least, there is the matter of a character's adjusted climate compared to the climate you are in. Inside a vehicle with climate control use whatever it has been set at. The table below contains its modifier.

Climate	Torrid	Tropical	Warm	Temp	Cold	Frigid	Arctic
Torrid	+0	+3	+6	+9	+12	+15	+18
Tropical	+3	+0	+3	+6	+9	+12	+15
Warm	+6	+3	+0	+3	+6	+9	+12
Temperate	+9	+6	+3	+0	+3	+6	+9
Cold	+12	+9	+6	+3	+0	+3	+6
Frigid	+15	+12	+9	+6	+3	+0	+3
Arctic	+18	+15	+12	+9	+6	+3	+0

It doesn't matter what row or column you use. If your adjusted climate is Cold and you are traveling through a Tropical climate it will increase your exhaustion by 9 points.

Roll It! Add everything together and use the Dice Table to turn it into a die roll. This impacts a character's **Stamina**. Once you run out of stamina you cannot do anything that requires it, like *Try Hard*. When your stamina drops below zero you take **1 wound per 10 points** below zero. This can kill! It's called *death from exposure*.

Every Hour. If you haven't been moving neither movement nor encumbrance will add to your exhaustion roll. If the weather is good and the climate is right your exhaustion should be zero and there is no need to roll the dice. Otherwise, exhaustion should be rolled at the end of every hour. Creatures in the wrong climate, like a polar bear in the tropics, are not long for the world.

Robotics and Cybernetics. Robots do not have stamina and do not suffer from exhaustion. Instead they need to subtract their total **EC** (aka *Energy Consumption*) from their power supply. If this drains them dry they will go into sleep mode and not wake up until someone recharges their batteries. Likewise, characters with robotic parts need to do the same. Once their power supply runs dry their cybernetics stop working.

Encounters

After exhaustion, at the very end of each ramble, the GM should roll for a random encounter. This uses a 1d100 table tied to whatever region the party ended the ramble in. Like a scramble, an encounter will not happen every time the dice are rolled. The lower the dice roll the worse the encounter tends to be.

[sample table]

Planned Encounters. A planned encounter is a hex with something important in it, one marked on the GM's map but not the Ghost Map. When the party enters it the current ramble abruptly ends with the planned encounter taking the place of a randomly rolled encounter. Yes, you still need to roll for exhaustion.

If the planned encounter is a destination of some sort, like a deserted temple the party has been searching for, we switch gears and stop the ramble altogether to handle it. Rambling recommences once the party is ready to leave.

Distance. When a random encounter occurs and it doesn't say how far away it is, a *Sense + Wilderness Survival* check should be made by the party leader to find its distance.

Sense + Wilderness Survival.

2: Far Off, avoid if desired.

1: Distant, you have 1d6 minutes until contact.

1/2: Close, you have 1d6 rounds until contact.

F: Face To Face!

C: Caught By Surprise!

Far Off means the character spies the encounter in the distance. The party can easily avoid encountering it if desired.

Distant is closer than far. A confrontation is inevitable but the party will have 1d6 minutes to ready themselves before it happens. They have not been spotted and may try to hide from the encounter.

Close puts the two uncomfortably close to each other. The party has just 1d6 rounds to prepare for the encounter. If the encounter is a creature it will have spotted the party.

Face To Face causes the two to stumble right into each other with no time to hide or prepare.

Caught By Surprise means the party was caught off guard by the encounter. If it is an attacking creature the party will be unable to do anything during the first round of combat, just as if a 1 had been rolled on their INI die.

Endless Encounters. Unlike a scramble which is confined to a relatively small area and has a limited supply of things to encounter, in the wilderness there is an endless supply of denizens out there. Because of this, the GM will often mark a random encounter entry after running it to make sure it doesn't get played again any time soon (instead you play the next encounter down the list). Once the table is completely played out, the check marks get erased and we start over with a full table. The *No Encounter* entry at the top of the table is the only exception to this. It should never be checked off. There should always be a chance that nothing will be encountered.

Resting. You cannot rest before an encounter happens, but you can rest multiple times after an encounter happens to build up your stamina. This should be done before the next ramble begins. It will not consume enough time to effect the journey.

Camping

Eventually a short rest isn't going to cut it and the party is going to need some sleep. They should break to make camp in the hex the last ramble ended in. It is assumed that they took time to eat something before turning in.

Because the party is not moving around, the GM should **roll twice** for each hour and use the greater of each roll. This makes more likely that nothing will be encountered (since No Encounter should be the highest roll). Characters need at least 4 hours of sleep to get half a night of sleep and 8 hours for a full night of sleep, but this doesn't have to happen all at once. (see *Recovery* in *Adventure*).

Standing Guard. It is good to leave someone standing guard while the rest of the party sleeps. When something is encountered, this character gets to make the **Distance** check to see how far away it is. If more than one character has been standing guard they each get to make a Distance check and the best result is used.

If no one stands guard, each sleeping character should make a **Luck Save** when the encounter happens. Succeed and they wake up in time to defend themselves against attack. Fail and they are caught by surprise, just as if they had rolled a 1 on their INI die.

TREKking IT

The galaxy is a big place and we won't always have a map for every building, city, and planet the party travels to. Sometimes there is no interest in rambling or scrambling. *We just want to get to where we are going.* For this Free Frontiers has the **Trek Check**. The character leading the party should make it, using their Trek ability plus the Navigation skill (if they have it) as well as the Complex modifier of the place they are in.

Trek + Navigation + Complex

1: You get there on time.

½: Try again.

H: You encounter Trouble.

C: You encounter Big Trouble.

Complex. Instead of maps, places will often have a stat block to tell you something about it without going into too much detail. The **Complex** modifier tells us just how complex the Complex is to get around in. Places that are maze-like with poor infrastructure will have penalties. Others that are well designed, maintained and have accurate signs posted around them will have bonuses.

Trouble. These are encounters you may run into while exploring these areas. Sometimes they are guards set up to keep the peace. Other times they may be denizens eager to take advantage of the unwary. *It could be anything!* Unless, of course, the place doesn't have any troubles for the party to encounter. In that case the party simply **gets lost** and it takes them even longer to get to where they are going.

Big Trouble is worse than just Trouble. When a random roll table for encounters is involved, the GM should roll **twice** on it and use the lesser of the two rolls. Once the trouble is handled the trek check should be made again.

Getting Lost. Every time you get lost it takes another stint of time to get where you are going. Big trouble doubles this amount. Often we are talking about hours, but the amount of time depends on how big an area you are traversing. The bigger the area is the longer the stint.

The time it takes to get somewhere can be quite useful when you have two or more parties racing to be the first to get somewhere. Running into trouble that doesn't involve getting lost will increase the party's travel time but often only **half** as much as actually getting lost.

Exhaustion. Unlike rambles, there is no exhaustion roll in a trek. However, if the leader *tries hard* to make the Trek check then everyone in the party will take stamina damage from it. The whole party needs to try hard or no one does.

If any member of the party doesn't have the stamina for this then the leader must make a normal check. Like a ramble, there will be no time to rest before an encounter happens, but characters should be allowed to rest at least once before making another trek check.

Connections. There are three tiers of adventure in Free Frontiers: encounters, scrambles and rambles. Encounters are the most important part of the game, characters and creatures coming together to settle their differences. Scrambles are a connective tissue that brings encounters together. Rambles are an even larger connective tissue that brings scrambles together.

The Trek? The purpose of a Trek is to work as a quick substitute for a scramble or ramble that the GM did not prepare for. It takes time to prepare such things so if your GM presents you with a ghost map? *That's not an accident.* Use it before resorting to a Trek check.

ADVENTURE

The Adventure section is an alphabetical listing of different concerns that might come up during a game. Keep in mind that this isn't chess. *You do not need to know everything about the game in order to play it* – just be willing to look things up or even make things up when needed.

No Do-Overs. With this said, keep in mind that the game only moves forward. If you suddenly realize that a battle might have gone differently had you known about *Charging* – no, we cannot go back and do it again – just try to remember it next time. Through hindsight is how much of this is learned.

Ammo

Weapons with an **Ammo** count can fire that many shots before needing a reload. If the **Rld** aspect is just a number that is the number of rounds it takes to reload the weapon. Weapons that have an ammo count should keep it beneath the weapon's entry in the character sheet's attacks table to keep track of it.

Load & Fire. An ammo using attack that has no Rld aspect is a *Load & Fire* weapon, such as the Compound Bow. You load and fire it every time you use it. Beatwise they tend to be slower than other attacks; however, if you load a shot before combat begins it only takes **1 beat** to fire the first shot.

Natural Attacks. Natural attacks that use ammo, such as snake venom, reload as a creature sleeps. Get a full night of sleep and you get a full reload. Get half a night of sleep and you get just half of your ammo back.

Area Attacks

Area attacks hit an area rather than an individual. It floods the space with damage, the dice are rolled and anything caught in the area takes the same amount of damage.

Area Aspects. You will know an area attack by its area aspect. This often combines a shape such as Cone or Wall with a size which is its radius in meters. As for the shapes, when looking down from above...

Blast	= a full circle.
Stream	= a 15° angle.
Cone	= a 45° angle.
Funnel	= a 90° angle.
Curve	= a 180° angle.
Pour	= a 270° angle.
Cloud	= a projected circle.
Dome	= a bubble.
Cylinder	= a column.
Cube	= a full square.
Torus	= a doughnut.

Area Size. The size is its radius measured in meters radiating out beyond the step the explosion detonated in...

0: Dinky.
 1: Small.
 3: Medium.
 6: Large.
 12: Big.
 24: Huge.
 48: Massive.

If there is no area size the radius is equal to the damage roll divided by 5, rounded down. So an explosion doing 30 points of damage is a Blast 6.

No Size = Damage Roll / 5.

Blast. An explosion with Blast 0 is like a firecracker. It hits anything in the same step as itself. A Blast 2 hits step zero as well as everything two meters beyond it.

Stream. With miniatures, a streaming attack shoots forward in a line, hitting everything it crosses paths with. Without minis, a streaming attack can hit up to 2 different targets per success as long as they are assumed to be standing in a relatively straight line.

Cone, Funnel, Curve and Pour. With these step zero is the step in front of the step the character creating it is standing in. They attack an ever-widening area the farther they fan out.

Cloud. A cloud attack is like a Blast attack except instead of billowing out around the point of detonation this one projects one length of its radius forward and billows out around that point. This protects the cloud's creator from being hit by it.

Cube. A cube forms a square space that is as high, wide and deep as its size. A Cube 3 starts with 3x3x3 as its dimensions but most can be scrunched into different shapes like a wall with 4x4x1 or a beam with 1x1x7, just as long as the three dimensions add up to triple the cube's size in meters.

Dome. A dome is a sphere whose sides drape to the ground. It covers everything as tall as the sphere including the ground beneath it. Up in the air it forms a bubble.

Cylinder. A cylinder is like a dome but its height can be up to twice its radius. Up in the air it takes on more of a pill shape.

Torus. A torus is essentially a giant doughnut. It goes off like a blast but leaves the core unharmed, often protecting its creator. This protected zone can often be widened. Doing so does not change the overall size of the torus.

Armor

Armor is anything that comes with an **Armor** value attached to it - helmet, gauntlets, a skein suit - if the item has an armor number and is not a shield it is considered armor. The armor number turns into a die roll and the die roll subtracts from incoming damage.

Armor Sacrifice. When taking damage you may sacrifice your armor to enhance its protection. It permanently loses 1 point of protection but adds 1d10 to the protection provided in that moment.

So if you get hit by 10 points of damage and your armor only rolls a measly 2 points of protection, you can permanently lose a point of armor protection and add a 1d10 to your roll. Should this roll an 8 it completely nullifies the attack.

Be sure to readjust the die rolls on your character sheet. While armor sacrifice will send bits and pieces of armor flying, it will not lighten the weight of it, not unless you decide to chuck a now worthless shield or helmet.

Shields. Shields are rare but they do exist. They work just like armor, but we keep them separate from the rest of your armor because they only protect the front and side of your character.

The arm holding a shield can do nothing but wield that shield. While you don't have to declare the use of a shield for defense, a shield cannot be used as a weapon in the same round that it is used to protect the character.

Shields may be sacrificed like armor but you cannot sacrifice both of them at the same time. It's either one or the other.

Aspects

Aspects are tags that work as shorthand reminders of how something works.

1shot. This item can be used once and never again.

2h. It requires two hands to work.

Ammo. The number of shots a weapon can take before needing to be reloaded.

Armor. The armor value a piece of equipment supplies.

Bastard. A bastard weapon is typically a one-handed melee weapon made with an elongated grip that allows it to be used with two hands when needed. With two hands it gains **Damage +2**. Using a non-bastard weapon with two hands only brings Damage +1.

Turning a weapon into a bastard weapon increases its price by 25%. Be sure to attach Bastard to its name, such as Bastard Sword or Bastard Mace.

Melee weapons that have Bastard as an aspect, such as the spear, are made to be used one-handed but can be easily used with two for a **Damage +2** bonus.

Ranged weapons that have Bastard as an Aspect are one-handed weapons that gain a **Hit +5** when held with two hands.

Bal. Bal stands for balanced. Any melee weapon can be thrown with a range of 10 and a **Hit -10**. Balanced weapons suffer no such penalty.

Burst. This attack fires off a machine gun like burst. It comes with a die roll that tells us how many shots hit and a beat modifier which adds to the beat count of the weapon (which is always a single shot). A weapon with **Burst 1d6, +2b** has a burst die of 1d6 and adds 2 beats to the attack. If the weapon uses ammo it loses the best roll of its burst die every time it fires a burst (see *Burst* in *Adventure*).

Close. This attack was made for fighting in close quarters, aka Reach 0, meaning two opponents are right on top of each other. You may, however, attack into an adjacent step without penalty.

Con. Short for Contraband, this number grades an item's legality from 1 to 10, semi-legal to highly-illegal. Governments often post the maximum acceptable contraband level at their ports of entry, so if it says Con 4 you can bring in anything with a contraband number of 1 to 4. (see *Contraband* in *Galaxy*).

Def. Short for *Defense*, this is the ability one uses to defend against an attack (See *Challenges in Action*).

Disarm. This attack gets a +10 when attempting to disarm opponents (see *Disarm* in *Adventure*).

Dur. Dur is short for *Duration*. It tells us how long something lasts. A number is in rounds. A PS stands for *Per Success*. So a talent with *Dur 5 PS* lasts five rounds per success.

Dur Conc. This lasts as long as its creator concentrates on making it last. Being stunned or trying to do anything other than move around at normal speed will break the character's concentration.

Elec. This attack hits with an electrical current. Metal armor does not protect against it.

Energy. Like Bastard and Great, this is an aspect you attach to a weapon's name. Think *Energy Great Sword* or *Energy Bastard Mace*. It adds an electric charge to a melee weapon. It increases the DMG by 4, adds EU 1 as an aspect, and triples the weapons price to a minimum of \$100. Hitting someone protected by an energy force field will deflect the weapon, reducing the damage it does.

EU. This is the number of Energy Units the weapon drains every time it is used.

Fire. This attack stands a chance of setting a character on fire (see *Fire* in *Adventure*).

Flex. This is a flexible attack. Shields only protect half as well against it.

Grab. This attack does damage **and** grapples whoever it hits when desired. It uses the hit strength as its grapple strength (see *Grapple* in *Adventure*).

Great. Like Bastard, this aspect is normally found attached to the name of a weapon, a one-handed Melee weapon made larger and two-handed to deal more damage. It gains 1 beat, Damage +4, and requires two hands to use. Making a weapon great doubles its price and weight. Be sure to attach *Great* to its name, such as *Great Sword* or *Great Mace*.

HD. Half-Defense. Armor, shield and force fields only work half as well against this attack.

Light. The number of 10' squares a light source will illuminate beyond the one its bearer is in (see *Illumination* in *Scrambles*).

ND. No Defense. Armor, shield and force fields do not protect against this attack.

Poison. This attack delivers a dose of poison. If it comes with a modifier attached to it (ex: Paralytic Poison +10) that effects the check that delivers the dose and determines the poison's strength (see *Poison* in *Adventure*).

Rad. This is the protection against radiation damage that a suit provides. It works just like an armor roll but only against radiation damage (see *Radiation* in *Adventure*).

Range. Ranged attacks hit from a distance. This aspect is a small **r** and a number indicating its effective range, aka *how far it can shoot before running into problems*. You can shoot into the next longer range but the shot takes a **Hit -10** to do so. The maximum range of the attack is double its range number. The most common ranges are:

Range	= Description
r10	= Point-Blank
r20	= Short
r40	= Medium
r80	= Long
r160	= Xtra-Long 1
r320	= Xtra-Long 2
r640	= Xtra-Long 3

So something with an r20 is a short range weapon that can hit anything from 0 to 20 meters away without problem. It takes a Hit -10 at 21 to 39 meters. Anything at 40 meters or more is out of range and cannot be hit.

Reach. Reach tells us just how far away a melee attack can attack. A spear with Reach 2 is designed to hit two steps away from the character. You may attack an opponent standing closer than **half** this distance but doing so hardens the hit. A weapon with Reach 4 will have a hard time hitting anyone standing 2 steps or closer.

All melee attacks have a reach number. *They just don't always show it.* Close attacks have Reach 0. Normal attacks have Reach 1. Both can attack into the step adjacent to the one a character is in, but normal attacks have a hard time hitting anyone occupying the same step as the character. We don't mention their Reach because the Close aspect exists, and any attack without Close or a Reach aspect is Normal by default.

Rld. Rld is short for Reload. When just a number it is the number of rounds it takes to reload a weapon.

RoF. Rate of Fire tells us the maximum number of times a weapon can be used in one round. Something with RoF 1 can only be fired once per round. An attack with no RoF can be used any number of times per round.

RP. *Requires Power.* While this device doesn't drain enough energy to matter, it does require access to a power supply to work.

Save. This is like the Def aspect except you use a Saving Throw to defend yourself (See *Challenges in Action*).

Special. This attack does something unique. See the item's description in the substance book.

Time. This is the amount of time it takes to commit an action that cannot be pulled off in a single round. When just a number it is a number of rounds.

During this time the character cannot do anything except work on committing that action. If stunned or otherwise distracted the attempt will be lost and the character will have to start over.

Once the time requirement is fulfilled a check can be made in the following round. So a talent with *Time 1* can be used every other round.

W. This is the number of warmth points a piece of equipment adds to your character to help deal with the cold. A negative number does the reverse and helps you deal with the heat. When a range of numbers is present the warmth is adjustable. The spacesuit's W10-50 can be turned as low as W10 or as high as W50 or anywhere in between.

Vol. Short for *Volatile* and usually followed by a modifier such as Vol -20. Anything bearing it is explosive and may go off if dropped or shaken. Whoever dropped it should make a **Luck Save** minus the item's volatility. Fail and Boom!

Burst

A burst fires off a machine-gun like volley of missiles. Its aspect is the burst roll you make as well as the number of extra beats that making a burst attack adds to the weapon. For example:

Light	= Burst 1d4, +b1.
Small	= Burst 1d6, +b2.
Medium	= Burst 1d8, +b3.
Large	= Burst 1d10, +b4.
Heavy	= Burst 1d12, +b5.

So if your attack has - *Burst 1d6, +b2* - it can fire a small burst. Roll to hit and roll for damage, then make the burst roll. That tells us the number of shots that hit the target. Each shot delivers a **separate** helping of the same amount of damage. Separate is important because it means that each shot needs to get

past the target's defenses on its own. To save time the defender should roll their defenses just once and use the same amount against each shot.

Spreading the Burst. You can fan a burst out over an area to strike multiple targets but doing so will impact your burst roll:

Tight concentration (15° angle) = -1

Loose concentration (45° angle) = -2

Wide spread of fire (90° angle) = -4

A small burst spread over a wide area rolls 1d6-4. *Good luck hitting anything!* Any burst roll of zero or less spreads the burst so thin that it misses everything. When you do hit something it is up to you to determine where the shots go.

Because not all targets are going to have the same chance to be hit (because opponents *hit the dirt, took cover*, etc) when trying to mow down multiple targets it is best to make the burst roll first, tell us where the bullets are going, and then roll to hit for each individual target.

Extra Beats? Every weapon is listed as firing a single shot. So if it takes 1 beat to fire a Laser Blaster then it takes 3 beats to fire a small burst with it. If this adds up to more than three beats you will need to either spread the attack out over two rounds or take a Hit -10 for each extra beat (see *Push The Tempo! in Action*).

Ammo. When it comes to the ammo or energy consumed by a burst, the number of shots you fire off is equal to the best roll of the burst die. A Burst 1d6 consumes six shots no matter how many actually hit.

Body Size

Most characters in Free Frontiers are *Medium* or *Man-Sized* in build and can ignore body size. For everything else we have sixteen different size categories ranging from Tiny for cat-sized creatures to Gargantuan for kaiju-sized creatures. The influence of size is largely controlled through this table.

Index	Size	Mass	Dmg	Dis	Hide
1	Tiny	0.1	0.2	0.4	+30
2	Little	0.3	0.4	0.6	+20
3	Compact	0.5	0.6	0.8	+10
4	Small	0.8	0.8	1	+5
5	Medium	1	1	1	+0
6	Large	1.5	1.2	1	-5
7	Extra	2	1.5	1.2	-10
8	Big	4	2	1.5	-20
9	Huge	6	2.5	2	-30
10	Massive	10	3	2.5	-40
11	Enormous	15	4	3	-50
12	Humongous	30	5	4	-60
13	Colossal	60	7	5	-70
14	Gigantic	100	10	7	-80
15	Titanic	300	15	10	-90
16	Gargantuan	500	20	15	-100

Mass. Mass tells us how body size relates to medium size. A compact creature has half the mass of a medium-sized character. A huge one has six times that mass. Mass multiplies:

- Muscle Scores (after character creation).
- Cost & Weight of any equipment made to fit the character's size.
- Base Load for determining encumbrance.
- Food, the amount you need to eat.
- Body and Fat weight.

After character creation is important seeing as muscle is pivotal in determining such things as movement speeds, base load, durability, etc. During character creation your Muscle score should stay at medium size. After creation you can multiply the score to fit the character's size mass.

Dmg. This multiplier deals with damage. It effects:

- Armor & Shield.
- Attack Damage.
- Durability.
- Muscle Modifier.

So a medium character with a Durability of 5 will have a 4 when made small and a 12 when huge. Any attack attached to their body (think Claws and Jaws) or weapons that have been made to fit their body size will likewise have their damage factor multiplied before it is turned into a die roll. A sword doing 8 at Medium size does 6 when Small and 15 when Huge. Although Muscle is normally multiplied by size mass, because the Muscle Modifier deals damage it is always multiplied by dmg. **Size does not effect Stamina!** Exhaustion comes from what a character does to oneself so size is irrelevant.

Dis. This multiplies movement speeds and distances. If a creature has a breath weapon with Cone 3 at medium size, that shrinks to Cone 1 when made tiny and enlarges Cone 45 at gargantuan.

The Reach of melee attacks should be multiplied by Dis. Both Close and Normal attacks have a distance of Reach 1, so a punch attack made by a Gargantuan creature has Reach 15. Half of that is Reach 7 so the creature will have a hard time hitting anything standing seven steps or closer.

Hide. This is a Sense check modifier used by the creature when it is attempting to hide from sight (see *Hide & Seek in Adventure*).

Equipment. It's a medium-sized galaxy and everything is medium-sized by default. Equipment can be made to fit different body sizes but both Price and Weight should be multiplied by the desired Size Mass. A huge sword costs and weighs 6 times more than a normal one. With smaller than medium-size only weight is effected. *The weight gets lighter but the price remains the same.* Only those items with the **SL** aspect cannot be changed. SL stands for *Size-Locked* and those are always medium-sized.

Wrong-Sized Weapons. You may use weapons that are not made for your body size but every size difference brings a **-10 to hit**, with an additional -5 when two-handed. The same goes for characters trying to use weapons that are too small for them but without the two-handed penalty.

So a medium character trying to swing a large two-handed sword will take a Hit -15. Increase the size of the weapon to Extra Large and it brings on a Hit -25. A small two-handed sword takes just a Hit -10.

Charging

Charging puts velocity behind the damage of a melee attack. Every 10 SPR causes a Hit -5 to a maximum of Hit -30, the damage done by the blow increases by 2 points, and the character dealing the blow experiences blowback damage by being on the other end of it.

Speed	Hit	Damage	Blowback
10	-5	+2	2n
20	-10	+4	4n
30	-15	+6	6n
40	-20	+8	8n
50	-25	+10	10n
60	-30	+12	12n
70	-30	+14	14n
80	-30	+16	16n
90	-30	+18	18n
100	-30	+20	20n

[example]

Speed Not Distance. Charging has nothing to do with the distance traveled before impact. Charge 27 spr and you get speed 20 even though you may have only traveled 5 steps. Charging does nothing for speeds of 9 spr or less.

Blowback. Blowback comes from the concussion you receive when dealing the blow. Treat it as a single successful attack made against your character. For a 100 spr hit your character takes 1d20n in damage. Armor and shield defend against it. Inertia fields do not since you need to temporarily drop the force field to make the attack.

Chases

Eventually it happens, a character or creature takes off running and the rest go chasing after. Unless you are using a map and minis, this turns the game into a series of **Trek Competitions**, each representing a few rounds of movement. Divide into two groups (or more if needed), and the character with the **lowest Trek** score makes a check representing the entire group. Typically the first group to win **three competitions** wins. When the chased party wins they get away. When the chasers win, they have cornered the chased into a position from which there is no escape. An encounter is inevitable.

Speed Matters. For a chase to even happen the speed of the slower group multiplied by 1.5 needs to be greater than or equal to the speed of the faster group. Otherwise, the faster group is too fast to be caught or avoided.

Slower Group x 1.5 >= Faster Group

Group speed is always the speed of its slowest member. While running and sprinting may be involved, these options cannot be used when comparing speeds. Always use the characters standard movement speed. When vehicles are involved? Use their cruising speeds.

[example]

Knowing the Territory. The difficulty of these checks depends on how convoluted and maze-like the area is where the chase will take place. An urban neighborhood may be a hard check for someone who is new to it yet an easy check for someone who lives there.

Speed Is Exhausting. After each competition **1d6 Stamina** damage should be rolled by each character traveling on foot. This is pure exhaustion and there is no way to avoid it.

Hazards. If the GM has a hazard table for the chase it should be rolled on once after taking stamina damage. This is a table of possible things the chase might run into such as a barred door that needs to be knocked down, a rooftop ledge to be jumped over, a dead end, etc.

Generally speaking, the chased party needs to deal with the hazard or be caught. After that the chasers also need to deal with the hazard or drop out of the chase.

Where It All Ends. While we may have a map of the area, chases often take place in the imagination. The winner gets to choose where it ends, *within reason*. The chase shouldn't cover too great an area or allow characters to slip through any barrier they couldn't easily move through otherwise. When the winning characters have no idea where they are, the end of the chase is left up to the GM.

Climbing

Climbing is an Agility check made hard or easy by the nature of the climb. The slicker, more vertical or higher the climb, the harder the check should be. Meanwhile, using climbing gear or climbing a surface the character has climbed before will make the check easier. The more successes you score the quicker you make the ascent. A half success requires you to make the check again. Fail and you plummet to the bottom (see *Falling* for the damage this does).

Agility + Climb

- 1: The more successes you make the faster you climb!
- 1½: Make the check again.
- F: You fall from halfway up.
- C: You fall from all the way up.

Crowded Areas

Firing a weapon into a crowded area is a **Hit -10**. Anyone who might be in the way should make a **Luck Save**. Fail and they are hit instead of the intended target. When multiple characters might be in the way, the character with the lowest Luck strength will be hit.

Disarm

Sometimes you just want to knock the weapon out of your opponent's hand. This is a **Hard Hit vs Hit Save** challenge, meaning your ability to hit with the attack verses a save roll made from the hit score of the attack you are trying to disarm. The number of successes you score determines what happens next:

Hard Hit vs Hit Save

- 4: Ah-hah! The weapon flips gracefully through the air to land in your other presumably open hand.
- 3: Thwanggg! The weapon flies across the room to stick into something with an impressive noise.
- 2: The weapon is knocked free of your opponent's hand and drops to the ground.
- 1: Your weapons lock together. Your opponent loses their next immediate action to breaking free.
- C: Whoops! Your own weapon goes flying across the room.

Disarm. If the weapon you are using bears the Disarm aspect then it was made for this sort of thing. Remove the -10 that the Hard brings to the check.

Two-Handed Weapons. Two-handed weapons are harder to disarm than one-handed ones. Take a -10 when trying to disarm an opponent wielding a two-handed weapon.

Unarmed Attacks. You may attempt a disarm with an unarmed attack such as punch, but the weapon you are disarming needs to have a sizable area to grab onto such as a spear shaft. You cannot disarm an attack that is physically attached to your opponent's body (such as punch).

Ranged Weapons. Want to shoot the weapon out of your opponent's hand? It's a flat **Hit -30 vs Hit Save**. One success does the trick. Miss and your shot goes wild. Whether the weapon is destroyed or not is left up to the GM.

Dive For Cover

Diving for cover is an Agility check that will reduce the amount of damage you take if not eliminate it when all goes well. Crash the check and you take double damage. In combat diving for cover takes **3 beats** to perform.

Agility

3: No Damage.

2: 25% Damage.

1: 50% Damage.

½: 75% Damage.

C: Double Damage.

[example]

This check should be made hard or easy depending on how much cover there is to dive behind, so it is good to describe what you are doing. There is no diving for cover in an empty room.

Drawing a Weapon

As a general rule, it takes as many beats to draw a weapon as it takes to attack with it, so you can draw a weapon and fire it all in the same action but it takes **double** the beat count. A laser pistol takes 1 beat to use. It takes 2 beats to draw and fire.

Dodge

Can you dodge a laser beam? *No you cannot.* However, move in an erratic fashion, making yourself an unpredictable target, and that might just save your bacon.

Gamewise, when you go to move, declare you are making a dodge for a certain amount of protection ranging from **-5 to -30**. This takes **3 beats** to do. Make an Agility check minus that penalty. If it succeeds then anyone targetting you for the rest of the round will suffer the dodge penalty as a target modifier. A half success reduces it by half. Fail and you don't get any protection. Crash and not only do you not get the protection but your character falls down, same as a knock down.

Agility – Dodge Penalty

S: Harder to hit.

½: Half as hard to hit.

C: Knocked Down!

[example]

A dodge may not be combined with other evasive maneuvers such as *hitting the dirt, crouching, taking cover*, etc.

Falling

A fall does a maximum damage of **3 points per meter fallen** (aka *1 point of damage per foot*). This should be added up and turned into a die roll using the Dice Table. So a 4 meter fall does 12 points which turns into a roll of 1d12. Armor, shields and inertia fields protect against falls at **half** value. Lethality depends on the landing:

Non-Lethal	= Lawn, field, dirt.
Semi-Lethal	= Concrete, cobblestones, flagstones, asphalt, metal flooring.
Lethal	= Jagged rocks, broken timbers, spikes, stalactites.

Soft Landings. Landing on something softer than dirt, such as thick mud, snow, water, or a conveniently placed dumpster full of garbage bags is cause for a **Luck Save** that may dramatically change the amount of damage done by the fall (note that this is the same table used by *Dive For Cover*). Lethality stays at Non-Lethal.

Luck Save
3: No Damage.
2: 25% Damage.
1: 50% Damage.
½: 75% Damage.
C: Double Damage.

Body Slam! When a creature falls on a character (or vice versa) the same amount of falling damage is taken by both, but the muscle modifier of the falling character adds to the damage done to their opponent. As an attack, use **Agility vs Agility** to find its success.

Gravity. Gravity effects a fall by multiplying the max damage right before turning it into a die roll. Earth's moon has Gravity 0.16. A fall of 4 meters on the moon will do ($3 \times 4 = 12 \times 0.16 = 1.92$) a single point of damage. Meanwhile Jupiter has Gravity 2.4. The same fall would do ($3 \times 4 = 12 \times 2.4 = 28.8$) a none too gentle 1d20+1d8 in damage.

Fire

Any attack bearing the **Fire** aspect that manages to break through a character's defenses should be followed by a **Luck Save** to see if the character has been set on fire.

Luck Save
½: Nothing Happens.
F: Fire Damage 1d6s.
C: Fire Damage 1d12s.

Fire damage should be rolled at the end of each round until the blaze is extinguished, this includes the round that started the fire. Armor only half protects against it. Shields do not protect against fire. An active Energy Field will extinguish it one round after the fire is detected.

Stop, drop and roll lets you remake the Luck Save **once per round**. Of course, doing that is all you can do. Diving into something like a pool of water puts the flames out instantly.

Food & Water

Organic lifeforms need to eat and drink in order to survive. Each day spent without one or the other causes a single **wound** of damage. Once the wound penalty reduces your Health to zero you die.

Provisions. Generally speaking, man-sized characters need at least **1/2 kilo** of food and **1 pint** of water per day. Dietary requirements may change for different species, but the fact remains the same. If you don't eat what you need your body will eat itself.

If your body size is something other than medium, multiply what you need to eat by your body mass. A huge creature needs to eat three kilos of food and 6 pints of water each day.

Burning Fat. Body fat can be burned to stave off starvation but not dehydration. Half a kilo of fat equals 1 meal. Intentionally burning fat when food is available requires a **Hard Command** check to do so.

Gravity

Organic creatures evolve to fit the gravity provided by their home planet. More or less gravity will make it hard to do anything. Compare your character's native gravity to the gravity they are currently in and use the table below to find their action modifier.

Gravity	3.0g	2.5g	2.0g	1.5g	1.0g	0.5g	0.0g
3.0g	+0	-5	-10	-20	-30	-40	-50
2.5g	-5	+0	-5	-10	-20	-30	-40
2.0g	-10	-5	+0	-5	-10	-20	-30
1.5g	-20	-10	-5	+0	-5	-10	-20
1.0g	-30	-20	-10	-5	+0	-5	-10
0.5g	-40	-30	-20	-10	-5	+0	-5
0.0g	-50	-40	-30	-20	-10	-5	+0

So a character whose native gravity is 2.0g will take a -10 when trying to do anything in 1.0g. When gravity doesn't come in clean amounts of .5g you should use whatever comes closest. A 1.6 or 1.7 would use 1.5, meanwhile a 1.8 or 1.9 would use 2.0.

Any character fighting in zero gravity who is stunned, knocked down or knocked out during combat will be pushed off into space. Hopefully they have been tethered to something.

Gravity Sickness. Some weightlessness can be fun, but too much of it will make you sick. Every alien race comes with a native gravity which is the number of g-forces they evolved to live with back home. Constant gravity is the average amount of g-force they have been living under for the last seven days.

Native/Constant	0.0	0.5	1.0	1.5	2.0	2.5	3.0
0.0	0	1	2	3	4	5	6
0.5	1	0	1	2	3	4	5

1.0	2	1	0	1	2	3	4
1.5	3	2	1	0	1	2	3
2.0	4	3	2	1	0	1	2
2.5	5	4	3	2	1	0	1
3.0	6	5	4	3	2	1	0

When native gravity equals constant gravity everything is fine. Otherwise, **once a week**, a heavy environment will steal that number of **Health** points from the ability score of your character. A light environment steals those points from your **Muscle** score instead. If either score reaches zero you die.

Too Heavy = Lose Health

Too Light = Lose Muscle.

Artificial Gravity. There is a rare-earth element known as *Selinsalguodium* which when given an electric charge will change the gravity surrounding itself. This is often used in the decking of spacecraft to give it artificial gravity and help its crew spend more time in space without getting sick. It can increase or decrease an area's gravity by up to 3.0g.

Grapple

Grappling is wrestling, an **Agility Competition** where the winner locks the loser in a hold using the strength it was won at. Round after round the winner can do nothing but maintain the grapple while the loser can do nothing but try to escape it.

Escape. Escape is a **Grapple vs Muscle** challenge for those trying to bust loose or a **Grapple vs Agility** challenge for those trying to wriggle free. In either case, the grapple does not need to be re-rolled. Simply use the strength the grapple was set at. For those who just want to avoid being grappled, you can go straight to the muscle or agility challenge.

Easy Targets. Anyone locked in a grapple, including the grappler, will be an easy target for anyone not involved in the grapple. They are unable to move and attacking them is a **Hit +10**. Any grappler stunned by an attack immediately releases the grapple.

One-Armed Grapple. Trying to grapple an opponent with just one arm so as to leave the other arm free is a one-arm grapple. This can be done but takes a **Hit -10**.

Dog Pile. More than one character can attempt to grapple another. Agility strengths combine, but **Hard Agility** checks should be made from the chaos this creates.

Grenades

When you throw a grenade a successful hit roll lands it where you want it to land. Unless the grenade specifically says otherwise, success does **not** multiply damage. You get **one roll of damage** and that's it.

Reflex + Thrown Weapons

S: Grenade lands where you want it to land.

1/2: Grenade lands 1d6 steps from your target in a random direction.

F: Grenade lands 2d6 steps from your target in a random direction.

C: You drop the grenade and throw the pin!

Random Direction. Roll **1d8** to figure out where a grenade goes in relation to the character throwing it. When playing without miniatures or a map, it is left to the GM to figure out where the grenade goes.

1: Beyond

2: Beyond Right

3: Beyond Left

4: Goes Right

5: Goes Left

6: Falls Short Right

7: Falls Short Left

8: Falls Short

Chuckling It Back. Grenades take **two rounds** to explode. *Six seconds.* At the very end of the second round it goes off. Grabbing a thrown grenade is a **Hard Reflex** check. Fail and you will be right on top of it when it goes off. It takes **3 beats** to catch a grenade and throw it.

Group Initiative

With Group Initiative you are a part of a team being led by a single character. That character will supply the INI die used by the team. Add the team leader's Sense, Reflex and Command scores together and divide by three. Add to this double their Leadership skill bonus.

$$\text{INI} = ((\text{Sense} + \text{Reflex} + \text{Command}) / 3) + \text{Leadership} \times 2.$$

Find the total in the table below to find the INI die. Anything greater than 120 uses a d20. To keep from having to do this calculation over and over, it is best to write it down somewhere on the team leader's character sheet.

120: d20

100: d12

80: d10

60: d8

40: d6

00: d4

Now when initiative is rolled the entire team goes all at once with individual team members going when it makes sense to. As with normal initiative, when rolls tie the characters go before the creatures. When the team is under attack and a 1 is rolled during the first round of combat the entire team is caught by surprise.

Characters who lack confidence in the team leader do not have to be a part of the team (when you have a d12 and your team leader has a measly d4 why would you?) Simply roll your INI die independent of the team and go when it tells you to.

Hide & Seek

Skulking about is essentially a **Sense Competition**. When dealing with groups, if the worst strength of the hiders can beat the best strength of the seekers they pass undetected.

Worst Hider > Best Seeker = No Detection.

Hiders. On the hider's side, studying the area and looking for a good place to hide should make the check easier. If your character is something other than medium size you get a Hide modifier.

Seekers. Seekers need to be actively searching for something. If they are just passively milling around and not looking for anything in particular they should make **Hard Sense** checks.

Large Groups. With large groups of characters or creatures, making checks for everyone can waste a ton of time. Often it is best to **choose two characters** to represent each group. Pit the best possible seeker verses the best possible hider and have the result apply to everyone.

Surprise Attacks. A surprise attack is an ambush. It happens when the Hiders beat the Seekers and are in the position to launch an attack. During the first round it is as if everyone being attacked has rolled a 1 on their INI die. An ambush can only be launched once per encounter.

Hirelings

Hirelings are creatures you hire to accompany the party on an adventure. How much this **costs per day** depends on the level of the hireling, your character's Charm and Leadership skill, and the hireling's Intellect (or lack thereof).

Charm + Leadership vs Intellect

3: \$10 per level.

2: \$20 per level.

1: \$30 per level.

1/2: \$60 per level.

F: Sorry mate, no sale.

C: Did you just insult my mother?

Roll up two successes while trying to hire a third level character and it costs (\$20 x 3) 60 credits per day for their service. Most hirelings will want at least a week's pay in advance.

Loyalty. During the adventure, any event outside of what the hireling signed on for (being arrested, shot at, poisoned, etc) will be cause for a loyalty challenge, this is a **Charm + Leadership Save vs Sense** pitting the employer's innate charm against the hireling's good senses. *This is a secret challenge.* The employer will not know the outcome of it until it's already too late.

Rout, Run & Mutiny! A lost loyalty challenge will become apparent once the hireling takes the next best opportunity to disappear.

Good aligned hirelings will often sneak off hoping to never run into the party again. They may even leave behind their advance as a token of good will.

Neutral hirelings will not only disappear without returning their advance but they may steal a few things on the way out.

Evil hirelings will not only steal anything not nailed down but they might just stalk the party, hoping to pounce on them when they are at their weakest.

GM Controlled. All hirelings are ultimately creatures run by the GM. Treat them badly, use them as meat shields, force hirelings to take risks that the characters are not willing to take and all agreements are off. The hirelings will quit on the spot and even the good ones may come seeking retribution.

Max Number of Hirelings? The only thing limiting the number of hirelings a party can have is the amount of money they have to spend on them. What works for a small party of adventurers also works for an interstellar army.

Rebellion! When it comes to loyalty challenges and large numbers of hirelings the GM should choose an NPC to represent the whole group. This will be a revolutionary leader actively instigating revolt against the employer.

At some point, there should be a **Command Competition** between the two, plus Leadership when they have it. Should the rebel leader win those forces will break away to become a separate faction under the rebel leader's command. Otherwise the rebel leader will be abandoned and have to flee.

Heavy Points

Heavy Points, aka **HP**, is the amount of damage a non-living thing can take before breaking. The item may not be obliterated but it will no longer function the way it should. Unless something says otherwise, it takes **10 normal damage points** to do 1 heavy point of damage.

If a jetcopter has 15 HP, hitting it with 9 points of normal damage doesn't do squat. Hitting it with 10 to 19 points of damage drops its HP by 1. Hitting it with 20 points of damage it drops its HP by 2.

Attacks doing heavy point damage will have an **h** before their damage type. An attack doing 6hs does *1d6 heavy semi-lethal damage*. That is 10 to 60 points of semi-lethal normal damage when used against a character. Lethality only matters when dealing with living creatures and does not apply to material objects.

Durability. When a number in parenthesis follows the hit point count, that is the item's durability, aka the amount of normal damage that it takes to do one hp of damage. A Vault Door with *HP 10 (30)* has a durability of 30. It takes 30 points of normal damage to do 1 point of heavy damage to it. A jetcopter should have HP 15 (10) but we leave off the (10) since ten is the default.

Jumping

Jumping requires an Agility check made hard by just how far you have to jump and how intrepid the leap actually is. There is a big difference between jumping over a puddle and jumping between skyscrapers, even though the distance may be the same. Characters with the Hop form of movement get an automatic +20 bonus.

Agility + Acrobatics

3: You make it with a back flip or two.

2: You make it in style.

1: You make the leap.

½: You are on the other side dangling by your fingertips.

F: GAHhhhhhhhhhhhhhhhhhhhh-hhh!!!!

C: Splat.

Gravity can also play a factor. Every 0.5 below 1.0 makes the jump easier. Every 0.5 above 1.0 makes it harder:

3.0: -40

2.5: -30

2.0: -20

1.5: -10

1.0: +0

0.5: +10

0.0: +20

Miniatures

We only break out the maps and minis when something big is about to happen. This will slow down combat but it definitely helps when dealing with large numbers of combatants. A few things you might want to have on hand are:

Miniatures. Paper, Plastic or Metal. One for each character and creature involved.

Vinyl Battle Mat. Covered in 1-inch squares or hexes, designed to be drawn on using Dry Erasable Markers.

Dry Erasable Markers. Do not use permanent markers. *Sharpies are forever!*

Paper Towels. For cleaning off the mat after a battle.

Small Measuring Tape. For making quick distance measurements.

Mini-Mag Light. For lighting up areas.

Hexes or Squares? Often buildings use squares while wilderness encounters use hexes. Both have benefits and drawbacks.

Squares are good for places defined by walls, but if you want to move diagonally it takes 2 steps of movement to do so.

Hexes let you move in any direction, but if more than half a hex is occupied by something such as a wall you cannot move through it. You have to go around it.

To play without grids or hexes, use a ruler to measure the distance traveled. **1 inch = 1 step** of movement.

Distance. When it's your turn to go, move your mini your speed in steps. All forms of movement can Run or Sprint. Running requires two beats but you get to move twice. Sprinting takes three beats and you move three times. All forms of movement can be made to run or sprint.

Run = 2 beats, move double speed.

Sprint = 3 beats, move triple speed.

A character traveling normally can turn up to 90° per step without problem. More than that will cost an extra step of movement. Running characters can only turn up to 45° per step. Sprinting characters can turn up to 45° every other step. Characters moving normally can move in any direction. Running or sprinting can only be done in a forward direction.

Measuring Distance. When measuring distance using just the map (not a tape measure) count the steps along the **shortest** route between two combatants. Start in a step adjacent to the character and stop with the step a creature occupies. If the creature fills more than one step, stop in the closest step it fills.

Melee Reach. Normal melee attacks can hit into an adjacent step. Those with the Reach aspect, such as a spear, can attack the reach number in steps away from its wielder. A spear with Reach 2 can hit anything standing up to two steps away. Unfortunately, reaching attacks have a hard time hitting anyone standing half the reach away or closer. A weapon with Reach 2 will have a hard time attacking anything 1 step or closer.

Close Quarters. Close attacks are meant for close quarters combat where combatants are right on top of each other. To show this, move both minis halfway in and out of the same space. Any melee attack that isn't a close one will take a Hit -10.

Ranged Attacks. Ranged attacks come with an r-number to tell us its **Effective Range**. Anything inside this range can be hit without problem. Anything beyond it takes a **Hit -10**. Anything at double this number or beyond is out of range and cannot be hit.

Range	= Description
r10	= Point-Blank
r20	= Short
r40	= Medium
r80	= Long
r160	= Xtra-Long 1
r320	= Xtra-Long 2
r640	= Xtra-Long 3

So a weapon with r20 is a short range attack that will have no problem hitting anything 20 meters or closer. At 21 to 39 meters the attack takes a Hit -10. At 40 or more meters the target is out of range and cannot be hit.

Area Attacks. For area attacks, find the space the blast detonates in – aka step zero – and measure on the battle mat the size of its radius horizontally. Hold a flashlight above the point of detonation and move it upwards until the edge of the light hits the outer edge of the blast.

Any mini caught in the light will be hit by the blast. Any character straddling the beam should make a **Luck Save** to see if they are hit or not. For cone shaped attacks, lay the flashlight on its side and shine it forward. Mini-maglights are good for this because they come with a lens that can change the width of the beam it casts.

Picking Pockets

Picking a pocket lets you lift a single item off another character or creature known as your *Mark*. The mark defends against this with a Sense Save. The more successful your pick pocketing attempt is the longer it takes for the mark to notice that something has gone missing.

Reflex + Pick Pocket vs Sense Save

- 4: Notice in 1d6 days.
- 3: Notice in 1d6 hours.
- 2: Notice in 1d6 minutes.
- 1: Notice in 1d6 rounds.
- ½: Fail to snatch the item. Try again.
- F: Fail and be caught trying to steal it.
- C: Owner gets to make a surprise attack!

Fail! With a defeat or half success you do not grab the item but may try again. Fail and the mark catches you in the act. Crash and not only does the mark see you coming but can hit you with a surprise attack as you go in for the grab, just like rolling a 1 for initiative!

Factors. This check is made hard by just how well protected the item is. Maybe it is overly large or hanging around a person's neck. If the item is too big, constantly watched, or securely attached to something it cannot be lifted.

Distraction. Having someone distract the mark will harden the mark's Sense Save. Usually it all boils down to a Charm check made by whoever is creating the distraction. Describing what the character is doing to distract the mark will often make the check easier.

Charm

1: Each success brings a Sense -10

½: Nothing happens.

F: The mark is suspicious and gets a Sense +10

C: *The Gig is up!* The mark cannot be pick-pocketed!

Poison

Poisons come with a description and a quality modifier (ex: *Paralytic Poison* +10). Whoever is delivering it needs to make either an **Intellect + Medical** check or a **Hard Luck** check. Poisons bearing a quality bonus add it to the check. Crashing the check means the character has accidentally poisoned themselves with a strength of 1d100.

Whoever is being poisoned now needs to defend against the strength of the poison with a **Health Save**. If the poison is defeated nothing happens. The character might feel a bit sick but that is all. Otherwise the nature of the poison tells us what happens next:

Lethal Poison. The character falls unconscious and will die in 1d6 minutes minus 1 minute for each success. At less than a minute the character dies instantly.

Knock-Out Drug. The character is knocked unconscious for 1d6 hours per success.

Paralytic Poison. The character is immobilized yet still aware of all that is happening for 1d6 hours per success.

Hallucinogen. The character trips through wild dreams and take a -30 to anything they try to do. The effect lasts 1d6 hours per success.

Intoxicant. The character becomes intoxicated and will take a -20 to every check they make. It lasts 1d6 hours per success. At the end of each hour a Health or Muscle check -20 should be made. If it fails the character falls unconscious until they sober up.

Antidotes. An antidote is a reverse poison. Administer it with a strength that can defeat the strength of a poison and it nullifies it. This can even stop a lethal poison if administered within an hour of the poisoning.

Venom. Poisons are imbibed. Venom is injected – *snake bite, scorpion sting, a poisoned dagger* – all of these need to do enough damage to get past a character's defenses to deliver a dose. Hyposprays do not do any damage so they don't have this problem, but against a highly armored opponent they should be treated like a melee weapon doing 1d10 damage, even though they do not do any actual damage.

Natural Poisons. Poisons naturally created by creatures should have the strength of the poison **multiplied by Body Size**. So a huge space wasp with a body size of 6 will produce poison that is six times stronger than a medium sized dose.

Likewise, the strength of the Health Save a creature uses against a poison should also be multiplied by its body size. Trying to poison a huge space wasp is going to take a toxin that is six times greater than what you would need with for a medium sized character.

Creating Poisons. Those with access to the right chemicals can create a poison. Doing so usually takes 1d6 hours, depending on the situation. Success determines its quality.

Intellect + Medical

S: A +10 per success.

½: No quality bonus.

F: A penalty of 1d6 x -10.

C: You accidentally poison yourself with a strength of 1d100.

Creating a poison for a body size larger than medium takes a **-5** for each size difference. Huge is six sizes larger than Medium and takes a -30 to the check.

Push

Sometimes all you want to do is push the other guy around. With a Tackle, Trip or Throw your opponent will be knocked to the ground and need to spend **3 beats** standing back up again. Lethality depends on the landing. Dirt does non-lethal damage, a hard metal floor does semi-lethal damage, a bed of spikes does lethal damage (see *Falling in Adventure*). All push attacks take **3 beats** to pull off.

Trips. You knock your opponent on their butt. This is an Reflex vs Agility challenge doing 1d4 damage per success. It can only be done to those whose body size is the same as your own or smaller.

Throws. You pick your opponent up and slam them down. This is a Hard Muscle vs Agility challenge doing 1d8 per success. Your opponent may be thrown up to 1 step per success in a direction of your choice.

Tackles. A tackle slams your opponent to the ground. It uses Muscle vs Muscle or Agility and does 1d6 damage per success.

Rushes. With a rush you try to push your opponent around. No damage is done. Use Muscle vs Muscle. Succeed and you push them using **half** your movement speed.

Scrums. A scrum is a rush between two groups. It is a group Muscle Competition. The side that wins it with the most successes pushes the other side around with the speed of its slowest member.

Push	Check	DMG	Beats
Trip	Reflex vs Agility	1d4?	3
Throw	Hard Muscle vs Agility	1d8?	3
Tackle	Muscle vs Muscle or Agility	1d6?	3
Rush	Muscle vs Muscle	none	3
Scrum	Group Muscle Competition	none	3

Radiation

Radiation is any transmission of energy, but what most people think of when they hear *Radiation* is deadly high-frequency radiation, the invisible kind that can cook you from the inside out. Gamewise, radiation contaminates an area. Every **minute** spent exposed to it will do a roll of damage depending on the level of radiation.

Level	Damage
Low	1d6e
Medium	2d6e
High	3d6e
Extreme	4d6e

So at the end of each minute spent in an irradiated area the dice are rolled and compared to the character's Durability. Unlike normal damage this will not stun, knock down or knock out a character, but it can cause lethal wound damage. Characters who spend less than a minute exposed to radiation take **half** damage from the die roll.

Protection. Suits that protect against radiation damage come with a **Rad** aspect which works like an Armor roll, removing itself from the damage you should have taken. If a suit is torn (i.e. when lethal or semi-lethal damage slips past the character's defenses) its radiation protection drops by **half**.

Energy force fields do protect against radiation, but unless you have a large power supply the lead-lined biohazard suits are far more reliable. Energy fields are generally treated as an emergency backup for a radiation suit. Normal armor does not protect against radiation damage.

Rest & Recovery

Adventure is tough business and characters are eventually going to need to spend time recovering from it.

Rest. Spend one **minute** catching your breath and make a **Health Save -5 for each rest taken**. Succeed and you get to erase 1d10 points of stamina damage per success. You also get 1 XP for every point you recover. Be sure to mark every rest you take on your character sheet.

Health Save -5 per Rest

S: Recover 1d10 per success.

1/2: Recover half of 1d10.

C: Make a Death Save!

Sleep. After getting **8 hours** of sleep a Health Save should be made to see how it went. Going without eating, trying to sleep in armor or uncomfortable circumstances will harden the check. Being wounded penalizes both resting and sleeping.

Health Save

1: Recover all Rest and Stamina.

1/2: Recover half your Rest and Stamina.

C: Make a Death Save!

Succeed and you can erase your rest count and stamina damage. Half succeed and you only recover half of each. Fail and you recover nothing.

Death Save? That's right! If your character is wounded and crashes while resting or sleeping the character needs to make another **Health Save** minus their wounded penalty. If this one doesn't succeed they fall asleep and do not wake up.

Healing Wounds. After a week spent doing nothing but recuperating make a Health Save. Each success heals one wound of damage. The Medical skill can be used with this check. If the character doesn't have it but is being nursed back to health by someone who does, the nurse's skill can be used in its absence. Recuperating in a hospital or medical bay may dramatically speed up the recovery time, often shortening it to days or even hours depending on just how advanced the equipment is.

Health Save + Medical

S: Heal one wound per success.

1/2: Nothing happens.

F: Make a Malady Save.

C: Make a Hard Malady Save.

Maladies. Fail or crash while healing wounds and you get to test your luck with a *Malady Save*. No matter what happens you lose 5 points of Health. A minor loss is typically some kind of disfigurement such as the loss of a hand, foot, ear or eye. A major loss is more along the lines of losing an arm or a leg. Crash and the character dies.

Luck Save

S: Health -5.

1/2: Health -5 & Minor Loss.

F: Health -10 & Major Loss.

C: Dead.

What is lost is left up to the character's player but something needs to happen otherwise the character dies. Most will choose to lose a limb that can be replaced with cybernetics. Characters that don't technically have arms or legs (like Thralasites) may lose an additional five points of Health instead.

Role-Playing

Role-Playing is where you assume the persona of a character and say what that character might say given the current situation. While this sounds simple enough, many choke on it because of all that the imagination has to leap over. The role-player may not look or sound anything like the character they are portraying. You are probably sitting around a table instead of standing on a stage filled with elaborate set pieces and wearing a costume.

Easier Than It Looks. It's good to remember that we are not expecting Shakespeare so much as a campfire skit. You do not need to talk in a funny voice to portray a character, and often it's better that you don't as that gets exhausting after awhile. The GM can, but the GM may only be playing the character for a minute or two. There is no telling just how long your character will be around. *Do you really want to spend hours upon hours talking like that?*

Switching Characters. To change characters try doing what authors do. Verbally introduce the character by name before speaking as them. Say something like, "Well, Sheila says to the guard..." and with that established you go on to speak as Sheila and continue speaking as her until she is finished or you switch to a different character by saying, "And Dent is like...", from which point on you would speak as Dent.

Once they are done speaking you pretty much go back to being yourself. You do not have to play "in character" all the time. It is often easier if you don't.

The Power Word "Like." The word *Like* may not seem like much, and if you remember the valley girls of the 1980's you know it can be abused, but Like is a powerful word. Saying "my character is like..." introduces you as doing something more than just speaking on a character's behalf. *You think like them. You emote like them.* When you wave your hands around it is easy to imagine the character doing the same.

So don't use the word Like too often, but do realize that it leads to what role-players crave. Acting like a character will take you closer to being that character, at least for a brief moment in time.

Slip-Thru

In combat, especially when using miniatures, you cannot move through a space occupied by another character or creature, not without making a Slip-Thru check first. This is you ducking under, sliding past, or possibly even vaulting over whatever is in your way. It adds **2 beats** to your action and calls for an Agility check. Challenging this is an Agility check made by the creature you are trying to get past.

Agility + Acrobatics vs Agility

1: You make it thru!

1/2: Lose rest of movement.

F: Lose rest of action.

C: Knocked Down!

Succeed and you can continue with the rest of your action. Half succeed and you lose the rest of your movement. This will leave you planted in front of your opponent for the rest of the round. Fail the check and not only do you stop moving but you lose the rest of your action. That's right, *no attack for you!* Crash and you fall on your butt. This both stuns and knocks down your character.

Back Attacks. One good reason to make a slip thru is so you can attack an opponent's backside. They cannot use a shield to defend against you and you gain a **Hit +20** with your attack.

Threatened Space. This may seem like splitting hairs but it is important. If the creature you are trying to slip past can make a melee attack, you may not move through any space the attack threatens without making a slip-thru check first.

A sword can strike into any adjacent space on the front and sides of a character, so moving through one of those spaces requires a slip-thru check. The good thing is that you only need to make one slip-thru check per opponent per round. You do not need to make it for every step you take.

Allied Space. When trying to slip past a character who is on your side nothing opposes the check. Just make an Agility + Acrobatics check. Crash this check and if your ally is the same body size as yourself or smaller you knock them down as well as yourself. Allies will not threaten the space you are trying to move through.

Speed Reduction

Speed Reduction is optional. It makes sense but it can also be annoying to implement. Basically, add up any penalty your character is suffering from (ex: Wounds, Encumberment, Intoxication, etc) **double** the total and turn it from a penalty into a percentage reduction.

Suffering a -10 will slow your movement speeds by 20%. If your movement speed is Walk 6, twenty percent of six is 1.2 so that -10 has reduced your movement speed to Walk 5.

Swimming

If you have the Swim form of movement then swimming is not a problem. Otherwise, once you hit the water you need to make a Muscle check. Swimming doubles the weight of any equipment you are carrying for purposes of encumbrance. It also adds **3 beats** to any round in which you swim. You do not need the Swim skill to do this but it helps.

Muscle + Swim

S: Swim with a speed equal to your success x 2.

1/2: Try again at -10.

F: You sink to the bottom.

C: Startled, you inhale water and drown.

Breath Holding. Every **4 rounds** you hold your breath you lose 1 point of Stamina. Once your stamina reaches zero you exhale your last breath and drown.

Drowned Characters. A drowned character is essentially dead, but they can be revived through artificial respiration providing it is done within **2d20 rounds**. This requires an **Intellect + Wilderness Survival** check made by whoever is attempting it.

Intellect + Wilderness Survival

S: Each success gives the drowned character one Command Save.

1/2: The drowned character gets one Hard Command Save.

F: The drowned character dies.

If it succeeds the drowned character gets to make one Command Save per success or a Hard Command Save for a half success. Should any of these saves succeed the character coughs out some water and starts to breathe again.

Steeds

A steed is a living creature you ride. Just like a character, it should have its own set of stats. When you climb onto its back you become the steed's rider and in charge of making any checks the steed needs to have made. For your Pilot score use the steed's Agility plus any skill bonus you have in *Ride Steed*. Add or subtract from this a measure of how onary the beast is.

Pilot = Steed Agility + Ride Steed - Onariness.

Onariness. Animals not accustomed to having a rider on its back will be far more onary than those that were bred for it. In the end, what a creature has is left up to the GM and will typically be a 10 point modifier ranging from a friendly +10 to a -40 *get the hell off my back!* Doing something to win the steed's favor before climbing onto the creature might influence this factor.

Encumberment. As with everything, encumberment is an issue. Force a steed to carry too much weight (including the character's body & gear weight) and it will start taking performance penalties.

Speeds. It is good to remember that movement speeds are in *steps per round* as well as *kilometers per hour*. A steed's Cruising Speed is its normal movement speed.

Cruising Speed = Movement Speed

Trying Hard. As the steed's rider, you can get it to Try Hard to do better at whatever it is doing, but the exhaustion this causes does stamina damage to **both** you and the steed. If either of you become too exhausted then you cannot try hard.

Single Minded. Steeds have minds of their own and are notorious for not listening to riders they disagree with. Most of the time they will do what is asked of them unless the action seems reckless, in which case it is perfectly within the steed's right to refuse to budge, ditch its rider, or do whatever it thinks should be done.

This last one often occurs with steeds unaccustomed to being in combat. If a steed has not been trained for combat, the creature will spook at loud explosions and seek self-preservation above all else.

Other Concerns. It's important to remember that steeds are living things. They need to feed and sleep at the end of the day. They take damage and will be effected by exhaustion as well as injury. Unlike a vehicle, they will abandon you if poorly treated.

Vision

Unless something says otherwise, all characters come with color vision that may suffer under different light levels. Illumination we narrow down to five magnitudes.

Solar Light is the dazzling bright light of a star, unfiltered by any atmosphere. Normal vision takes a -10 when trying to deal with it.

Bright Light is as bright as a sunny day. Normal vision is well adapted to seeing in it.

Normal Light is the light of a cloudy day and akin to most indoor lighting. This is the comfort zone for normal vision.

Low Light is near darkness, the light of a full moon or a single candle. Colors fade. Actions that depend on sight take a -10.

No Light is perfect darkness. Actions requiring sight cannot be performed. Those that can take a -30.

There are four major ways creatures and even some characters get around the problem of seeing in the dark.

Echolocation. Echolocation is not vision but the ability to chirp out a sound and read the way it echoes back. While a creature with echolocation cannot see colors or read print, they are very good at telling where things are and can "see" in all directions at once. Loud noises will render them blind. Needless to say, they like to keep things exceedingly quiet.

Infravision. Infravision is heat vision. Cool areas appear green and fade to blue, purple and black as they grow colder. Warm areas start red and fade to orange, yellow and white as they grow hotter. Large sources of heat can be blinding. You can see in any level of light but definition is severely lacking. You may see something in the darkness ahead of you but have no idea what it is.

Nightvision. Nightvision is normal vision adapted to low-light conditions. It inverts the penalties experienced by normal vision. It still needs some light to see by and has a hard time seeing in perfect darkness.

Ultravision. Everything is slightly radioactive and ultravision sees by way of this ambient radiation. Unlike infravision, definition is not lacking. Print on a page can be read. Perfect darkness is not a problem. Colors tend to be a bit fluorescent, like seeing the world through a blacklight poster. Unfortunately, ultravision is very sensitive to bright light and will take a -50 in solar light and a -30 in daylight. Too much exposure to either or any source of high-frequency radiation may blind ultravision permanently!

All Together. That may seem like a lot but it's not hard to keep straight. Echolocation and Infravision never suffer a penalty. Characters with Normal, Nightvision and Ultravision suffer action penalties as their vision gives out.

Sight/Light	Solar	Day	Normal	Low	None
Normal	-10	+0	+0	-10	-30
Nightvision	-30	-10	+0	+0	-10
Ultravision	-50	-30	+0	+0	+0

Switching Vision. Characters with Infravision or Echolocation may also have Normal, Night or Ultravision. It takes 1 round to intentionally switch between the two.

Permanent Blindness. It's assumed that a permanently blind character will have learned to deal with their affliction and only suffers a -10 to most activities. Those actions which absolutely depend on sight cannot be performed. Actions that make prominent use of other senses such as hearing or smell gain a +10.