Guide to Planets

This is a guide to help people better understand how to create planets, but also, what they can add to a planet to 'flavor' it up a bit and seperate it from the norm. This guide was originally started out as something for the kingdom_of_neshaten faction by it's FM, but a request by the site's administrator changed that.

Creation Process

When creating a planet, it is good to remember that you need to have a balance in what goes into the planet and also the system that planet is attached to. If you are going to make a planet for an already established system, but a system that presently doesn't have any information on it, then make sure to ask the settings manager first.

The first thing to look at is this site: Star System Generator, a note - even though this links to a star system generator, that generator also generates the planets and all of the information that you would need.

Once you have a system, you can work on the planets. Naturally, you can alter some of the information to your need. For example, maybe you want the last planet in the system to be habitable? You can do that, just add a few small pieces of information and you've got it.

Now, that isn't the only thing about planets that you can do with it. A planet, while the generator does give you some neat things (like wreaked starships and such) you can put a lot more on a planet. It is impossible to assume that every planet in the universe would be just like our Earth, or like the planets in our local star system, if you've seen Venus then you know that a planet can have a situation much different from our own.

What this means is that you can add other things to a planet, the list below is what has been compiled thus far on what can be on a planet and what each one of the headers means.

Requirements

In order for you to have a great star system article, you will need:

- An article about the star system (in the *system:* namespace)
- An article for each terrestrial planet in the system (in the *planet:* namespace)

Using A Generator

There is a really great Star System Generator over at http://donjon.bin.sh/scifi/system/ that can be used.

Instructions

1. Enter your Star System's name in the Name field.
2. Check "Force this system to include a terrestrial world" if desired.
3. Press the "Create" button to generate a star system.

Note that terrestrial planets (only) will have a link usable to get detailed information about the planet.

Putting It On The Wiki

If the system you generated doesn't meet your needs, you can use your browser to go back to the white screen and press the random button to generate a new seed number.

If you like the system, create the system wiki page and put the system information in an H3 "Data" section of the wiki page. The section headers for the various planets should be H4. Make sure to remove the tab spacing copied over so the text comes out correctly on the wiki. Make sure to link to the planet's page.

For the planet page, make sure to link back to the system page. Both the planet and the system pages should have at least a few sentences of original text giving the reader an overview of the star system or planet. Just copy/pasting the generated data is not acceptable. If appropriate consider adding a random small starport.

Images

The planet page will automatically include a rectangular "map" image of the surface.

Here's a neat trick, though: Note that in the planet page's URL there is the seed number and the amount of water and ice. Open the Scifi World Generator in another tab and set the image height to 175 or below and enter the seed, ice, and water numbers and then change the image type to animated globe. The generator will show your planet as a rotating gif image!

Public Domain Images

We also have some public domain images (from NASA) available here: Public Domain Images

Other Useful Images

Animated Planets

[planet_images](#)

Special Features

Sometimes the generator will add special features like Advanced Alien Artifacts. Remember to avoid making these overpowered. Here's a good guide to what alien artifacts might be: http://www.xenology.info/Xeno/24.3.3.htm

Examples

The following pages are good examples of what your results should look like:

- Cellondora III
- Yicuqibu and Yicuqibu I
- gamjie and gamjie_i
- butulonzen and butulonzen_i
- HX-12 II
- HX-8 II

Seeds

This section contains seed numbers known to generate useful and/or interesting results. Most of these were generated with the "Force terrestrial world" box check so you should check the box to get the correct result.

Note: if you create a wiki article using one of these, please remove it so we don't end up with two identical systems.

Alien Homeworlds

- 1591665970
- 963171758
- 1953647616
- 1434446031
- 539609271
- 914834808
- 2106135219
- 1254737928
- 934072714
- 92910094

- 1875054549
- 342338342
- 1335722707

Dense Breathable

- 997801477 with plants
- 691394976 algae
- 33774793 white giant
- 992121701
- 1908266896
- 1850931631
- 311940438
- 364745739 colony (cc, f)
- 999989994 (f)

Standard Breathable

Breathable planets are rare. Don't hog them!

- 1384976362
- 1345940364 (f)
- 873048810
- 144586420
- 1046664169
- 608960
- 949254148
- 581429327
- 476433909 (no water)
- 1964944270
- 1347247131

Thin Breathable

- 1307242345
- 867741567
- 1847264956
- 1774772041
- 1795620836
- 1888513888

Trace Breathable

- 225195505

- 1312109862

Other Stuff of Interest

- 1270773869
- 1871873766
- 681889081
- 1308805395 algae
- 405029992 algae, silicon based (f)
- 658336991 arthropods
- 308805514 worms
- 601170514 fungi
- 364745748 bryophytes (cc, force)
- 1345942402 5 Cthonians
- 675379875 nanotech fungi
- 1144366345 blue white with cthonian, oceanworld
- 1347243252 Cth

Planetary Classifications

A classification is a type of anomaly that a planet might have, this can range from being a perfect pearl world where the climate is great for habitation, or could be one that makes habitation very difficult or even makes combat on that world likewise rather hard.

There are multiple different anomalies that a planet can have, and they are not just limited to the following list, but if you as a player and a creator have any suggestions - send them to kyle and he'll add them.

Hollow Planet

A hollow planet is a planet that has a network of tunnels that run throughout the outer, and even potentially the inner, crust of a planet. Although these tunnels can't be explained in how they were created, there can be speculation that it was either done naturally, a creature had done it, or even some long dead race. Whatever is the case though, these tunnels can be large enough for cities to be built inside and even for starships to pass through.

Eden World

An Eden World is essentially a planet that has all of the right stats to be a world that is great for colonization.

Electromagnetic Storms

An anomaly that can be found on some worlds, EM Storms are storms that mess around with electronic devices and can bring down starships if they don't have the proper shielding for their electronics, even regular shield systems aren't effective in combating an EM Storm.

EM Storms also make sensor scanning of a planet very difficult to do.

Font

A font is a planet that is constantly shifting in terms of its land masses, this results in constant earthquakes each and every day of that planets life. This makes habitation excessively difficult.

Planetary Special Conditions

The following are planetary conditions that take the place of the specials tag when creating planets. These conditions are optional when creating planets, they are mainly there to add a bit more depth to a planet, such as bonuses, positives and negatives.

Ideally a planet can either have a positive or a negative, having both a positive AND a negative adds interesting elements. Examples being that the planet might have a Noxious Atmosphere, but may also have a Cavernous System, which means that while the surface is unfavorable for constructing buildings, the underground is not.

Planets can also have both a ground and space based condition.

Ground Based Conditions

Ground Based Conditions refers to conditions that are found below its cloud cover.

Dense Cloud Cover

Dense Cloud Cover is the result of either a reoccurring storm on the planet or due to constant volcanic action. This type of cloud cover makes it very difficult to see the surface, rendering all form of sensor scanning technology useless due to the density of the clouds.

Cavernous System

A system of caverns that reside under the planets surface, these caverns are very wide and dense in numbers, making them ideal for the construction of underground cities. This system also adds to the

difficulty of sieging a planet, because most of the population might not even be located on the surface but rather underground, which adds another bonus of making it difficult to TAKE the planet as well.

Unstable Planetoid

An unstable planet that is not really suitable for much in terms of construction, the planet is in a constant - seemingly forever - state of shaking, this makes construction of buildings highly difficult; farming is useless due to the broken terrain. The only use such a planet has is that its ground is broken up to the point that rich sources of ore and other minerals are much more easily accessible.

Noxious Atmosphere

A Noxious atmosphere is one where the planet is not suitable by any lengths for colonization without the use of highly advanced life support systems, but this is depending on what makes up the atmosphere; some of these atmospheres might actually be dangerous to buildings.

Dense Flora

A planet that is covered in dense flora makes for a good planet to house agricultural industries, but also makes life difficult on invading forces.

Atmospheric Instability

Atmospheric Instability refers to a planet whose atmosphere is slowly being 'bled' away, the atmosphere on the planet is so unstable that there are 'holes' in it, which means that there might be areas on the planet that can't support life while other areas can.

Volcanically Active

This type of planet is highly active in terms of volcanic activity, earthquakes are also common-place and the land is usually covered in molten seas and lakes. The average temperature may be to high for people to explore the planet without specialized equipment and even then setting up buildings is next to impossible. A phenomenon known as 'lava-rain' usually plagues these types of planets.

Lava Rain

Lava Rain is essentially lava that has been spewed into the air at such high velocities that it comes back down to the planet in the form of rain, usually resembling very thin threads that are capable of puncturing bodysuits and most lightly armored individuals, this type of rain can also destroy equipment

and can severe damage to starships that may fly through it.

Ancient Ruins

These ancient ruins are evidence of a once long dead civilization, although whether they are the remains of a city or a small outpost remains to be seen. Such ruins could contain a wealth of information or even a great deal of danger.

Orbital Conditions

Like the ground based conditions, this one relates to what might be orbiting a planet.

Dense Planetary Rings

Dense Planetary Rings are a boon to mining corporations, due to the large numbers of asteroids that make up the rings themselves. These defence rings can also serve as a perfect location for a planetary defence network, such as star fighter hangers built into an asteroid or large gun emplacements.

Derelict Starship

Derelict Starships can either be a boon or a hindrance depending on what is contained within; such ships can either be big or small, wide or narrow.

Derelict Station

Similar to a derelict starship, derelict stations can pose both a positive or a negative depending on what is found within. Some of these stations could be in a decaying orbit, which means they would eventually crash onto the planet and depending on their size - they could easily cause considerable damage upon impact.

Moons

Self-exclamatory.

Close Orbital Planetoids

While similar to moons, they differ in that they are not located in a stable orbit, these particular types of moons are dangerous because of how close they orbit their parent planet. Most planets that possess

these types of moons may in fact not have a stable atmosphere or no atmosphere at all.

Star Army Guide to Types of Planets

> ⚠️ **The following article is currently NOT APPROVED for in-character usage.**

As anyone can see from SARP's Star Map, Star Army Galaxy has a vast number of different kinds of systems. Like our own Milky way, this means that their are a vast number of different planets in Star Army. To make both the Milky Way with over 497 planets and our Star Army Galaxy seem simpler, we can similar planets together in individual groups . This guide is also here to help with understanding the star system creation guide in particular by help people understand the vast number of choices they have when they use the Star System Calculator.

Although it may seem strange, the broadest way to classify planet is actually by density and mass. In fact, there are three main broad density-classified planetary groups– Terrestrials, Neptune-like, and Large Gas Giants. Beyond this classification we can classify planets based on what their atmosphere, composition, or temperature.

Note to self: need to remark about overlaping defintions and especially where ocean worlds fit.

Units

Before we can really talk in detail about exoplanets we need to have an understanding of units we use for Density, Temperature, and Planetary Mass.
The Average Density of a Planet is of course roughly a planets mass divided by the Approximate Volume it would have it it was a perfect sphere. Density is measure either in units of kg/m^3 or g/cm^3. One kg/m^3 equals 1000 g/cm^3.
The Average Surface Temperature of a planet is measured in either degrees Celsius or degrees Kelvin. The conversion from Celsius to Kelvin is simple as 0 C = 273.15 K.
The Planetary Mass like all masses is first and foremost measured in units of kilograms. However, most planets then to have masses on order of 10^24 or 10^27, therefore to make thing more manageable, we use the units of Earth_Mass (ME) and Jupiter_mass (MJ),which are based on the Mass of Earth and Jupiter. Generally Jupiter is 317.8 time more massive than Earth (1 MJ = 317.83 ME), so one normally uses Earth Mass for Terrestrial Planets and Jupiter Masses for Gas Giants. Compared to the sun; however, Jupiter is very small, in fact 1 Sol or Solar_Mass 1048 time 1 MJ. The table below highlights conversions between various mass units

Mass Unit	Symbol	Conversion to kg	Conversion to ME	Conversion to MJ	Conversion to Sol
1 Earth Mass	1 ME	5.98 E24 kg	1 ME	1/(317.83) MJ	1/(332,775.92) Sol
1 Jupiter Mass	1 MJ	1.8986 E27 kg	317.83 ME	1 MJ	1/(1048.14) Sol
1 Solar Mass	1 Sol	1.99 E30 kg	332,775.92 ME	1,048.14 MJ	1 Sol

Terrestrials

Super Earths vs. other Terrestrials

1. Def of Super-Earth (Mass Range of 1.5 ME to 10 ME)
2. Def of Dwarf Planet (Mass Range less than 1/80 ME)

Silicate Planets

General Silicate Planet

1. Def of Silicate planet
2. terrestrial planet with a silicon mantle and typically and iron core

Examples: Earth, Iroma, Mars…. etc.

Core-less Planets

1. Coreless planet
2. planet with a silicon crust but completely lacking in a magnetic iron core, meaning it lack at magnetic field

Coreless Lava Worlds

Examples: Venus

Coreless Rocky Deserts

Examples: Moon and most other planet barren moons

Habitable Earth-like Planets

Examples: Earth
Suggestions?

* Hanako's World

Forest Planets

Suggestions?

Swamp Planets

Suggestions?

Ice Rock and Ice Planets

Examples: Europa, Pluto?

1. cryovolanic ocean words is a subcategory of this...

Rocky Desert and Desert Planets

Examples: Mars

1. If no atomosphere is very soft landing
2. Many are prone to violent storms
3. May have flash flooding

Iron Planets

General Iron Planets

1. 🜨 Iron planet

Desert Rock Worlds

Examples: Mecury

Ice Rock Worlds

Examples: Ceres

Carbon Worlds

General Carbon Worlds

1. 🔊 Carbon_planet

Example: Titan

"Swamp"

Cryovolcanic

Example: Pluto?

Ice

Examples: Moons of Uranus and Neptune

Terrestrial Ocean

🔊 Ocean_planet Ocean planets; however, tend to cross over also more into other categories. Except for a handful or silicon ocean planets that will be covered. Although Theoretically possible no carbon-silicate ocean worlds have been seen

General Ocean World

Cryovolcanic Silicate Ocean Worlds

1. underground oceans that serve as a mantle of the planet.

Example: Ganymede

Super Earth Silicate Ocean Worlds

Carbon Ocean Worlds

Example Titan

Small Gas Giants

Mass:	.13 - .30 MJ (12 - 96 ME)
Density	250 - 2,000 kg/m3

Cold Neptune

Semi-major Axis	> 1 AU

Examples: Neptune and Uranus

Hot Neptune

Semi-major Axis	< 1 AU

- 🔗 Hot Neptune

Chitonians

Example: Corot-7b

Large Gas Giants

Jupiter-like Gas Giants

1. 🔗 Gas giant

Example: Saturn and Jupiter

Hot Jupiter

Mass	1 - 25 MJ

- 🔗 Hot_Jupiter

Other Mysterious Planets

Generally this category is a place holder for artifical planets and planet that not everything can be know about immediately without actually going there in a space exploration vessel.

Artificial Planets

1. Ancient giant artifact Terrestrial Planet that are immediately noticable due to their odd non-spherical shape. Typically these include ring-worlds, helical worlds,
2. Ask Wes about any notable ones still left in star army

Pulsar Planets

1. 🌐 Pulsar_Planet
2. Generally little is known about the exact composition of these planets as they are not actually planets but the remains of planet cores from supernovas that are still orbiting thier parent star. However, it can be certain that they are completely inhabitable and can be dangerous, depending how far they are from their pulsar.

Rogue Planet

1. Cold Desolate planets cores that where kicked off during a supernova explosion and now drifting without a star to give them home.
2. These are typically turn out to be Hot Jupiters so they are kind of hard to miss…

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https://wiki.stararmy.com/ - **STAR ARMY**

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Last update: **2023/12/20 15:52**