

# Creating a Star System

This page is place to keep common links and information helpful to creating star systems

## FAQ

The following is a FAQ for Star System Creation in General:

### **Are there actually any special rules for creating Star Systems?**

No. To be more specific, the rules you obey in Star System Creation are the same rules for other technology in SARP. In general though it is your best interest to have an idea of where you star system is in relation to other planets and contact the SARP's Game Master when you want the local neighborhood star map updated with your system included.

### **So is their even like a preferred format in SARP from making a Star System or Planet?**

Actually yes! Even though their are no rules exclusive to making systems, over the years the community has evolved a general preference toward how star systems have looked. This *format is best seen though by looking at examples like those shown below*. By using these general examples, one should notice the following:

1. 99% of approved star systems have wikipages listed under the `id=system:` section of the StarWiki or under the faction section they belong to.
2. Stars Systems have a purpose such as being a faction homeworld, strategic base for some faction, or a place where something important has occurred. Many of the famous ones even have short descriptions and historical information about each planet
3. Many of the most actively used star systems have or have a had some kind of artwork done for them whether it is a map or a picture of the planet.
4. In the first one or two lines of the wikipage, a star's location is always given in light years relative to another famous approved object in SARP. Typically one choose Yamatai as the reference point. This is to help the game master figure out where to put them on the map
5. The star's color and/or 🌌 [Star's Type](#) is typically included.
6. Star systems have list of properties of about planets in the system in table format. Typically the planet's the planet's name; type, semi-Major axis (orbital radius); orbital period, and rotation (length of the day) are considered mandatory information. Including the planet's mass, radius, circumference, gravitational acceleration, temperature, and escape velocity is consider optional information. For each planet one should also list any major cities, orbiting stations, or nearby orbiting fleets found on the planet.

**Please add additional questions here**

## Question about Star System's History (for Wes to answer)

- What is like the basic history of Star System Creation that you remember, Wes? Any interesting

highlights or events?

- Was Yamatai the only planet when SARP first started?
- What was the first planet/star system made after Yamatai and the original planets? In other words when Starwiki came about, when did people star making systems?
- When was the starmap created in SARP? Who have been the major contributors to the starmap?
- Did people ever use Celestia for Star System creation?
- Optional (if Wes doesn't mind): What is SARP take on the use of Supernova: for pre-SARP systems like [Kohana](#)?, for post-SARP systems, for the environmental effects of supernovas?

## Great Star System Examples

For beginners the following examples may be helpful to look at. They are separated into class 1, with pictures, and class 2, without pictures:

### Great Examples with Art

- [AX-01](#)
- [Iruotl System](#) and [Maekardan](#)
- [Journey's End](#)
- [Sairen system](#)
- [Daichi System](#) and [Daichi](#)
- [SX-05](#)
- [stars\\_crossroads](#)

### Great Examples without Art

- [ASE-006](#)
- [Asura System](#)
- [Azorea](#)
- [Jaspis](#)
- [Koukotsu System](#)
- [Miyamae System](#)
- [Nyli System](#)
- [System P1-7 "Malaise"](#)
- [System P1-10 "Dejection"](#)

## Basics 101

### Intro

When making a star, everyone should ask themselves the following questions:

## Star Questions

- *What is the color do I want my sun? Do I want a light blue (A), white (F), yellow (G), orange (K), or red (M) sun?*
- *What is the order of my planets?*
- *What is the name of my system? Where is my system located? Who is the system for?*
- *Does my solar system have a asteroid belt?*

## Gas Giant Questions



- *Is my gas giant a 🌌 [Chthonian](#), a 🌌 [Traditional Gas Giant](#), or a 🌌 [Hot Jupiter](#)?*
- *What are the primary colors of my gas giant? Does my gas giant have bands and storms or is it completely opaque and placid?*
- *Does my gas giant have moons or rings? If so are they does my Gas giant have prominent Saturn rings or tiny Jupiter rings? (Number of rings is about equal to or less than the number of moons)*

## Small Planet Questions

- *Is my planet a 🌌 [Super Earth](#), the size of earth, or smaller?*
- *Is my planet habitable?*
- *What kind of type of planet do I have? Is it a type of 🌌 [Ocean Planet](#) or 🌌 [Rock Planet](#)? It is surface mainly icy, desert, forest, volcanic, ice rock, or water?*
- *Does my planet have a breathable, trace, or lethally toxic atmosphere?*
- *Does my planet have moons?*

## Figuring out Planet Type

Planet Type is basically what is the general characteristic and features of planet. In science fiction, this typically mean like is a water world, a earth-like world, a forest world, a cold snow world, a volcanic world, a ring world, a gas gaint/cloud world, etc. In real life though astronomers have a very specific way of classifying 🌌 [extrasolar planets](#) that is a bit broader in variety and realistic than typical hardcore scifi planets. As shown by the 🌌 [Wikipedia's Exoplanet Classification section](#) or the 🌌 [Wikipedia's Exoplanet Category](#), most planet are classified by their temperature and mass allowing for possibilities such as super-lava Chitonians, oceanic worlds under a layers of rock, Hot Jupiter Gas Giants the undergo active nuclear fusion, and much much more.

Thus one can either define the each planet type by normal scifi classification of what the planets major features are or use a more realistic exosolar planet classification.

# Star System Calculator

**We don't forget to mention exoplanet.eu and permission we got from its founder** Current Calculator links:

[Excel 2007 Template Calculator](#) [Excel 2007 Ver. Calculator](#) [Excel 2003 Ver.](#)
















## Calculator Questions





**please add any question/comments about the calculator**

## Determining Planet Composition

When figuring out what a planet should be made of there are two methods. The first is to include any minerals/alloys your enemy needs to make weapons/armor, and then include one of the minerals you need to make weapons/armor. The second method is to use actual planets as a basis and basically copy and paste. Below are the compositions of various famous real planets.

### Small Planet, Dwarf Planet, and Moon Examples

Planet	Type Ver. 1	Type Ver. 2	Temp	Planet's Atmosphere	Planet's Surface	Interior Composition
 <a href="#">GJ 1214 b</a>	Ocean	Ocean Super-Earth	396 K	H2O, H, He, CO2	-----	-----
Venus	Lava	Coreless Terrestrial	735 K	 <a href="#">Venus's Atmos.</a>	-----	-----
Io	Lava	Silicate Terrestrial	110 K	 <a href="#">Io's Atmos.</a>	 <a href="#">Io's Surf.</a>	S, Si, Fe
Mars	Desert	Silicate Terrestrial	210 K	 <a href="#">Mar's Atmos.</a>	 <a href="#">Martian Soil, Dry Ice</a>	 <a href="#">Martian Interior</a>
Moon	Desert	Silicate Terrestrial	220 K	very trace	 <a href="#">Lunar Soil</a>	 <a href="#">Moon Interior</a>
 <a href="#">Europa</a>	Ice; Ocean	Iron Terrestrial	396 K	very trace	Ice, Unknown Comp.	Ice, H2O, Si, Fe
Mercury	Desert; Rock	Iron Terrestrial	442.5 K	very trace	Ca, He, OH, Mg, O, K, Si, Na	 <a href="#">Mercury Interior</a>
Earth	Forest; Ocean	Ocean Terrestrial	287.2 K	 <a href="#">Earth's Atmos.</a>	 <a href="#">Earth's Soil, Water</a>	Granite, Basalt, Si, Fe
Titan	Ocean	Ocean Terrestrial	93.7 K	 <a href="#">Titan's Atmos.</a>	 <a href="#">Titan's Lakes, Organic Comp.</a>	-----

Planet	Type Ver. 1	Type Ver. 2	Temp	Planet's Atmosphere	Planet's Surface	Interior Composition
 Callisto	Ice Rock	Terrestrial	396 K	H2O, H, He CO2	-----	-----
 Ganyamede	Ice Rock; Ocean	Terrestrial	396 K	H2O, H, He CO2	-----	-----
 Rhea	Rock	Terrestrial	396 K	H2O, H, He CO2	-----	-----
 Titania	Ice Rock	Terrestrial	396 K	H2O, H, He CO2	-----	-----
Triton	Ice Rock; Lava	Terrestrial	396 K	H2O, H, He CO2	-----	-----

Gas Giants and Chitonian Examples



-  Jupiter
-  Saturn
- Gas Giant Compositions

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