

PLANET BUILDING KIT

The Argo Galaxy is an open sandbox. Only a handful of planets are defined so that the remaining possibilities match that which the GM wants to utilize for missions and campaigns. The same can be said about the Milky Way outside of the Sol System and if the GM creates a custom galaxy. As such, here is a simple toolkit for creating new planets when necessary.

When creating a new planet, a number of factors should be considered to flesh out the details of the planet's composition and characteristics. This allows the mercenaries to better understand what the planet is like and provides direction for what type of creatures and settlements could be found. If creating a home world for a xeno template, make sure it matches the description of the species. You wouldn't want an aquatic species coming from a desert planet.

SIZE

Defining the size of a planet is possibly one of its most important features. The size will subsequently define the number of possible satellites and landmasses, which can drastically alter how high the population is. For mission purposes, size can also define how many possible locations for encounters there are, how many indigenous species can thrive on the planet, and how far important locations are from each other.

SATELLITES

Satellites are objects within space that orbit around the planet. This may include a moon or asteroid that became trapped within the planet's gravitational pull. The number of moons possible should be relative to the planet's size. Smaller planets will have fewer satellites, if any at all.

ATMOSPHERE

Atmosphere is another very important feature as it defines what equipment the characters will need, or not need, to perform their mission on that planet. Planets with a thin atmosphere rarely hold enough oxygen, or any other gas for that matter, for the characters to breath. Additionally, it's very likely the rays of the local star heat the planet to extreme temperatures during the day and may end up frightfully cold during the night. A planet with an exotic atmosphere, such as something toxic, will force additional preparations to be made.

CLIMATE

Climate isn't so much an all-encompassing, worldwide climate. Instead, it's the climate the characters will either come into contact with the most often or is the one most prevalent on the planet. There are occasions where a planet may only have a single climate, but that's not very reasonable. Terrestrial planets will probably always have at least two, if not dozens, of different climate types. Thus, when building a planet, defining a single climate is more of a generalization for the planet and what's pertinent for the characters' mission. In the Random Planet Generator that follows, climate is extremely generalized.

GRAVITY

Gravity is one of those funny things that are a bit fantasy in nature. We know that planets with a lower gravity than Earth make walking difficult as one tends to bounce

off the ground (think walking on the moon). However, how high or low the gravity is compared to that of Earth is ultimately up to the GM, along with its corresponding side effects.

GEOLOGY

Geology is the process of defining the solid surfaces of a planet. How many landmasses does it have? Are they rocky or flat surfaces? Are they large, connected continents or non-contiguous islands scattered about? Geology can go hand-in-hand with climate to better define what the planet looks like. For instance, if the planet is cold, there will likely be a lot of large, tundra areas bordering glacial masses. These tundra areas would probably be quite rocky in nature and contain little to no soil for growing anything, even trees.

RESOURCES

Defining a planet's resources is a way of defining the corporations' motivations for building a facility, particularly a mining facility, on that planet. For instance, if a planet has no valuable resources, few corporations would pay it any attention. If the planet is covered with trees and this serves as its main natural resource, then corporations dealing with lumbering activities would be anxious to open a new facility. Additionally, planets rich in natural resources would have lots of corporations looking to expand there.

AGRICULTURE

Agriculture is an important way of defining how the planet's inhabitants survive. If agriculture simply isn't possible, then maybe fish are the only food available. Another possibility is that the indigenous population survives on moss and algae that grows on the trees. Farming in this environment wouldn't be necessary.

TECHNOLOGY

The Alliance, and the entire Argo Galaxy, is filled with species that utilize all different types of technology levels. When dealing with a species diplomatically, one should be cautious to not frighten their hosts with technology that overwhelms the senses. On the other hand, you don't want to bring a club to a plasma fight.

POPULATION

Defining a planet's population is more than just giving it a number. It may be very important to know how many species live on a planet and how those species interact with each other. Additionally, if a planet only has a single species, why aren't other species living there? Do the inhabitants prohibit other species? Maybe they discriminate against anyone that doesn't look like them? Of course, it could be that the environment is poisonous to anyone other than the indigenous species. Before landing, the characters should be aware of whom they will be dealing with.

GOVERNMENT

There are many different types of governments; too many to properly list here. As with a planet's population, their government is another important thing for the characters to know. When the occasion calls for it, the characters may need to know how to 'properly' address the ruler of a government to avoid further ramifications (especially if they need that ruler to help them out). Some of the more common ones are: democracy, hegemony, monarchy, socialism, theocracy, oligarchy, and autocracy.

RANDOM PLANET GENERATOR

To randomly create a new planet, use the standard deck of playing cards and deal out a total of three cards. Each card's suit and value defines the different planetary characteristics. If a Joker is dealt, place it back into the deck and deal a new card.

READING THE CARDS

Card number one's suit defines the basic category of the planet. Card number one's value then defines the characteristic of that planet considering its categorization. Other than a moon or moon-like planet, all planets are terrestrial, thus being suitable for sustaining life.

Card number two's suit defines the overall composition of the planet. Card number two's value then defines a prominent characteristic associated with that type of composition.

Card number three's suit defines the overall society of the planet. Card number three's value further defines the society including its general attitude towards its own people and outsiders.

CARD NUMBER ONE

Club

Moon: The planet is actually a moon or the size of a moon (dwarf planet). One day lasts 12-16 hours and one year lasts 250-300 days.

Diamond

Small: The planet is smaller than Earth. One day lasts 16-20 hours and one year lasts 300-350 days.

Heart

Medium: The planet is approximately the size of Earth. One day lasts 20-36 hours and one year lasts 350-425 days.

Spade

Large: The planet is much larger than Earth. One day lasts 32-56 hours and one year lasts 400-825 days.

Note: If creating a moon or dwarf planet, the second card may not apply and some of the third card options may not apply.

CARD VALUE (CLUBS)

| | |
|------|--|
| 2-3 | Barren moon with deposits of minerals. |
| 4-5 | Barren moon with deposits of precious gems. |
| 6-7 | Barren moon with deposits of ore. |
| 8-9 | Barren planet with deposits of minerals. |
| 10-J | Mostly barren planet with deposits of precious gems. |
| Q-K | Ice-capped planet with deposits of ore. |
| A | Fertile planet with exotic animals. |

CARD VALUE (DIAMONDS)

| | |
|------|--|
| 2-3 | Fertile with agriculture and no satellites. |
| 4-5 | Oceanic with deposits of ore and 1 satellite. |
| 6-7 | Volcanic with deposits of precious gems and no satellites. |
| 8-9 | Swamp with exotic animals and 1 satellite. |
| 10-J | Fertile with deposits of minerals and no satellites. |
| Q-K | Ice-Capped with deposits of ore and no satellites. |
| A | Tropical with exotic animals and 1 satellite. |

CARD VALUE (HEARTS)

- 2-3** Fertile with agriculture, minerals, and 1-2 satellites.
- 4-5** Fertile with precious gems, ore, and 1 satellite.
- 6-7** Oceanic with exotic animals and 2 satellites.
- 8-9** Barren with minerals, ore, and 1-2 satellites.
- 10-J** Ice-Capped with minerals, precious gems and 1 satellite.
- Q-K** Volcanic with precious gems and 2 satellites.
- A** Fertile with asteroid ring, exotic fibers, and 1 satellite.

CARD VALUE (SPADES)

- 2-3** Barren with minerals and 3-5 satellites.
- 4-5** Fertile with agriculture, minerals, ore, and 3 satellites.
- 6-7** Barren with nothing and 5 satellites.
- 8-9** Tropical with exotic animals, ore, and 3-5 satellites.
- 10-J** Ice-Capped with exotic animals and 4 satellites.
- Q-K** Fertile with ore, exotic fibers, and 3-5 satellites.
- A** Swamp with exotic animals and 3 satellites.

CARD NUMBER Two

- | | |
|----------------|--|
| Club | Thin: The planet's composition is altered by a thinner atmosphere. |
| Diamond | Standard: The planet's composition thrives within a fairly standard atmosphere. |
| Heart | Dense: The planet's composition is altered by a denser atmosphere. |
| Spade | Exotic: The planet's composition is shaped due to an exotic atmosphere. |

CARD VALUE (CLUBS)

- 2-3** Cold climate, normal gravity, 1-2 major landmasses.
- 4-5** Hot climate, normal gravity, 1-2 major landmasses.
- 6-7** Hot climate, normal gravity, 3-5 major landmasses.
- 8-9** Hot climate, normal gravity, no major landmasses, small islands only.
- 10-J** Temperate climate, low gravity, 1-2 major landmasses.
- Q-K** Hot climate, low gravity, 3-5 major landmasses.
- A** Cold climate, low gravity, 1-2 major landmasses.

CARD VALUE (DIAMONDS)

- 2-3** Temperate climate, normal gravity, 1-2 landmasses.
- 4-5** Temperate climate, normal gravity, 3-5 landmasses.
- 6-7** Temperate climate, normal gravity, 6-8 landmasses.
- 8-9** Temperate climate, normal gravity, fractured islands.
- 10-J** Hot climate, normal gravity, 1-2 landmasses.
- Q-K** Cold climate, normal gravity, 1-2 landmasses.
- A** Hot climate, normal gravity, 3-5 landmasses.

CARD VALUE (HEARTS)

- 2-3** Cold climate, normal gravity, 1-2 major landmasses.
- 4-5** Hot climate, normal gravity, 1-2 major landmasses.
- 6-7** Hot climate, normal gravity, 3-5 major landmasses.
- 8-9** Hot climate, normal gravity, no major landmasses, small islands only.
- 10-J** Temperate climate, high gravity, 1-2 major landmasses.
- Q-K** Hot climate, high gravity, 3-5 major landmasses.
- A** Cold climate, high gravity, 1-2 major landmasses.

CARD VALUE (SPADES)

- 2-3** Acidic atmosphere, temperate climate, normal gravity, 3-5 major landmasses.
- 4-5** Sulfuric atmosphere, temperate climate, normal gravity, 3-5 major landmasses.
- 6-7** Toxic atmosphere, temperate climate, normal gravity, 3-5 major landmasses.
- 8-9** Helium atmosphere, cold climate, low gravity, 6-8 major landmasses.
- 10-J** Tephra (volcanic ash) atmosphere, hot climate, normal gravity, fractured islands.
- Q-K** Explosive gas-filled atmosphere, cold climate, high gravity, 3-5 major landmasses
- A** Carbon dioxide atmosphere, low gravity, cold climate, 3-5 major landmasses.

CARD NUMBER THREE

- Club** **Low-tech:** The population primarily utilizes low technology devices.
- Diamond** **Mid-tech:** The population primarily utilizes basic technology devices common most everywhere.
- Heart** **High-tech:** The population utilizes a lot of uncommon, high technology devices.
- Spade** **Advanced-tech:** The population makes use of the most advanced technology.

Note: Culture could signify species, cultures, races, or sub-races.

CARD VALUE (CLUBS)

- 2-3** Population less than 10,000, a single primary culture, and tribal society.
- 4-5** Population less than 10,000, a single primary culture, and an autocracy.
- 6-7** Population less than 100,000, a single primary culture, and theocracy.
- 8-9** Population less than 100,000, two primary cultures, and tribal societies.
- 10-J** Population less than 1 million, two primary cultures, and oligarchy.
- Q-K** Population less than 1 million, four primary cultures, and tribal societies.
- A** Population less than 10 million, five primary cultures, and theocracy.

CARD VALUE (DIAMONDS)

- 2-3** Population less than 10 million, four primary cultures, and democracy.
- 4-5** Population less than 10 million, six primary cultures, and capitalism.
- 6-7** Population less than 100 million, two primary cultures, and fascism.
- 8-9** Population less than 100 million, six primary cultures, and democracy.
- 10-J** Population less than 100 million, six primary cultures, and monarchy.
- Q-K** Population less than 1 billion, eight primary cultures, and theocracy.
- A** Population less than 1 billion, ten primary cultures, and libertarianism.

CARD VALUE (HEARTS)

- 2-3** Population less than 100 million, four primary cultures, and democracy.
- 4-5** Population less than 500 million, six primary cultures, and capitalism.
- 6-7** Population less than 500 million, six primary cultures, and monarchy.
- 8-9** Population less than 1 billion, eight primary cultures, and democracy.
- 10-J** Population less than 1 billion, eight primary cultures, and capitalism.
- Q-K** Population less than 5 billion, ten primary cultures, and capitalism.
- A** Population less than 5 billion, twelve primary cultures, and capitalism.

CARD VALUE (SPADES)

- 2-3** Population less than 1 billion, four primary cultures and theocracy.
- 4-5** Population less than 5 billion, six primary cultures and democracy.
- 6-7** Population less than 5 billion, eight primary cultures, and monarchy.
- 8-9** Population less than 10 billion, fourteen primary cultures, and capitalism.
- 10-J** Population less than 10 billion, fifteen primary cultures, and democracy.
- Q-K** Population greater than 10 billion, twenty primary cultures, and capitalism.
- A** Population greater than 10 billion, twenty primary cultures, and democracy.

PUTTING IT ALL TOGETHER

Once the basic characteristics for the new planet have been defined, it is time together as a cohesive collection that properly defines enough aspects of the planet to send a landing party and know what to expect.

Once the planet has come together, there may be conflicting characteristics. One choice is to explain it away with terraforming, bio-engineering, or native evolution. Another choice is to redraw one of the cards and reconfigure the planet.

Some combinations may seem odd, but are quite plausible. Planets with an acidic atmosphere could still contain populations in the billions as they have either adapted or evolved, live in protected cities, live underground away from the acidic air, or are simply immune to its effects.

When considering atmosphere, and possibly other characteristics, it is pertinent to note that the description is in the eyes of the mercenaries and not the native species that live there. A toxic environment to the mercenaries may be non-toxic to native species. Maybe the native species breathe methane or sulfuric gasses, maybe the poisons in the air do not affect them, or maybe they live in areas where the toxic gasses do not reach (such as under the water or under the ground).

The random planet building toolkit can assist in creating a plausible planet, but it is still up to the Game Master and maybe the players to populate that planet with species that can tolerate and thrive within its environment.