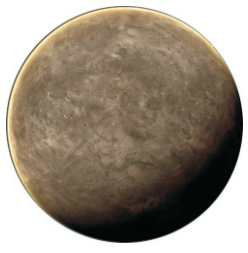
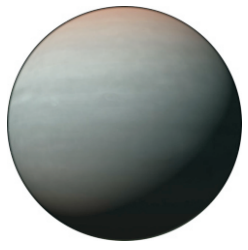
PLANETARY INTERACTION



Barren

Barren planets are archetypical "dead terrestrials": dry, rocky worlds with a minimal atmosphere and an unremarkable composition. They are commonly etched with flood channels, which are often broad enough to be visible from orbit; most such worlds have accumulated significant quantities of ice over their lifetimes, but cannot retain it on their surface. Generally surface liquid evaporate rapidly, contributing to the thin atmosphere, but occasionally it will seep back into the ground and refreeze, ready for anothe breakout in future when the local temperature rises.

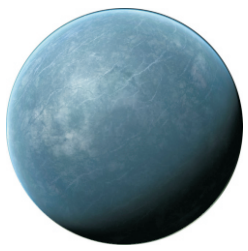
Carbon Compounds
Micro Organisms
Base Metals
Aquenous Liquids
Noble Metals



Gas

Gas planets are characterized by a deep, opaque upper atmosphere, usually composed primarily of light elements such as hydrogen or helium. Simple chemicals can add a range of hues and shades in the visual spectrum, and the interaction between upwellings and rapidly circulating pressure bands result in a huge variety of visible surface structures. A similar level of diversity can be found beneath the cloud-tops: the inner composition of a given gas planet might belong to any one of a dozen broad groups, with no two planets entirely alike in this regard.

Base Metals
Aquenous Liquids
Ionic Solutions
Noble Gas
Reactive Gas



Ice

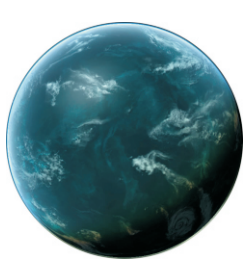
The majority of icy planets went through a period of being barren terrestrials, before being surfaced with ice over the course of many millennia. The exact process for this varies from case to case, but the end result is both common and visually uniform - a bright, reflective planet scored by countless fractures and crevasses. A few icy planets are hypothesized to have been warmer, liquid-bearing planets in the past that have subsequently frozen, as a result of either stellar cooling or failed terraforming projects.

Heavy Metals
Base Metals
Aquenous Liquids
Ionic Solutions
Noble Metals

Lava

So-called "lava planets" (properly "magmatic planets") fall into one of three groups: solar magmatics, which orbit sufficiently close to their star that the surface never cools enough to solidify; gravitational magmatics, which experience gravitational shifts sufficiently strong to regularly and significantly fracture cooling crusts; and magmatoids, which are for largely-unexplained reasons simply incapable of cooling and forming a persistent crust. All three types generally exhibit the same external phenomena - huge red-orange lava fields being a defining feature - but the latter two types are sometimes capable of briefly solidifying for a period measured in years or perhaps decades.

Heavy Metals
Non-CS Crystals
Felsic Magma
Suspended Plasma
Base Metals



Oceanic

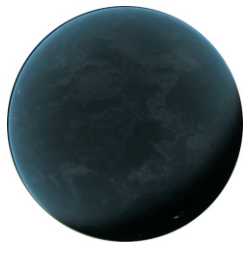
Oceanic worlds are a class of terrestrial world covered entirely by liquids, usually in the form of mundane water. While the liquid surface is exceptionally smooth, the ocean floor on most worlds of this type exhibits significant topographic variety. It is this subsurface irregularity which causes the formation of complex weather systems, which would otherwise revert to more uniform patterns.

Carbon Compounds
Micro Organisms
Aquenous Liquids
Planktic Colonies
Complex Organisms

Plasma

The aptly-named "plasma planets" have captured the imagination of countless artists and inspired innumerable works, yet the physics behind them are surprisingly mundane by cosmological standards. A rocky terrestrial with the right kind of atmosphere and magnetic field will, when bombarded with solar radiation, generate sprawling plasma storms as specific atmospheric elements are stripped of their electrons. Over time these storms will generally scorch the surface rock black, adding to the visual impact.

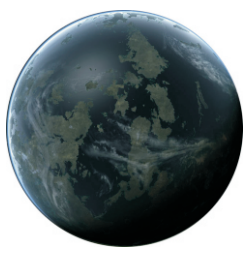
Heavy Metals
Non-CS Crystals
Base Metals
Suspended Plasma
Noble Metals



Storm

Storm worlds are usually considered terrestrial planets, although to a casual eye they may appear more similar to gas planets, given their opaque, high-pressure atmospheres. Geomorphically, however, the distinctions are clear: compared to a gas world, the atmosphere of a storm world is usually considerably shallower, and generally composed primarily of more complex chemicals, while the majority of the planet's mass is a rocky terrestrial ball. Their name is derived from the continent-scale electrical storms that invariably flash through their upper atmospheres.

Aquenous Liquids
Base Metals
Suspended Plasma
Ionic Solutions
Noble Gas



Temperate

Life-bearing worlds are often referred to as "temperate", as their mild temperatures are one of their defining features. Planets with existing, stable ecosystems are prime targets for colonization efforts as they are generally easier to make fully habitable; as a result, the majority of highly populated worlds are of this type. Indeed, it is not altogether uncommon for detailed surveys to reveal signs of previous settlements from various stages of New Eden's history.

Carbon Compounds
Autotrophs
Aquenous Liquids
Micro Organisms
Complex Organisms

Base Industry Reactions

SCHEMATICS

6000 units → 20 units

Aqueous Liquids (0,02 m3) → Water (0,04 m3)

Autotrophs (0,02 m3) → Industrial Fibers (0,04 m3)

Base Metals (0,02 m3) → Reactive Metals (0,04 m3)

Carbon Compounds (0,02 m3) → Biofuels (0,04 m3)

Complex Organisms (0,02 m3) → Proteins (0,04 m3)

Felsic Magma (0,02 m3) → Silicon (0,04 m3)

Heavy Metals (0,02 m3) → Toxic Metals (0,04 m3)

Ionic Solutions (0,02 m3) → Electrolytes (0,04 m3)

Micro Organisms (0,02 m3) → Bacteria (0,04 m3)

Noble Gas (0,02 m3) → Oxygen (0,04 m3)

Noble Metals (0,02 m3) → Precious Metals (0,04 m3)

Non-CS Crystals (0,02 m3) → Chiral Structures (0,04 m3)

Planktic Colonies (0,02 m3) → Biomass (0,04 m3)

Reactive Gas (0,02 m3) → Oxidizing Compound (0,04 m3)

Suspended Plasma (0,02 m3) → Plasmoids (0,04 m3)

5 units

Biofuels (0,04 m3) + Precious Metals (0,04 m3)	40 units + 40 units	Biocells (0,06 m3)	
Reactive Metals (0,04 m3) + Toxic Metals (0,04 m3)	40 units + 40 units	Construction Blocks (0,06 m3)	
Toxic Metals (0,04 m3) + Chiral Structures (0,04 m3)	40 units + 40 units	Consumer Electronics (0,06 m3)	
Electrolytes (0,04 m3) + Water (0,04 m3)	40 units + 40 units	Coolant (0,06 m3)	
Precious Metals (0,04 m3) + Toxic Metals (0,04 m3)	40 units + 40 units	Enriched Uranium (0,06 m3)	
Bacteria (0,04 m3) + Proteins (0,04 m3)	40 units + 40 units	Fertilizer (0,06 m3)	
Proteins (0,04 m3) + Biomass (0,04 m3)	40 units + 40 units	Genetically Enhanced Livestock (0,06 m3)	
Proteins (0,04 m3) + Biofuels (0,04 m3)	40 units + 40 units	Livestock (0,06 m3)	
Reactive Metals (0,04 m3) + Precious Metals (0,04 m3)	40 units + 40 units	Mechanical Parts (0,06 m3)	
Industrial Fibers (0,04 m3) + Silicon (0,04 m3)	40 units + 40 units	Microfiber Shielding (0,06 m3)	
Chiral Structures (0,04 m3) + Silicon (0,04 m3)	40 units + 40 units	Miniature Electronics (0,06 m3)	
Bacteria (0,04 m3) + Reactive Metals (0,04 m3)	40 units + 40 units	Nanites (0,06 m3)	
Oxidizing Compound (0,04 m3) + Oxygen (0,04 m3)	40 units + 40 units	Oxides (0,06 m3)	
Oxidizing Compound (0,04 m3) + Industrial Fibers (0,04 m3)	40 units + 40 units	Polyaramides (0,06 m3)	
Biofuels (0,04 m3) + Industrial Fibers (0,04 m3)	40 units + 40 units	Polytextiles (0,06 m3)	
Plasmoids (0,04 m3) + Electrolytes (0,04 m3)	40 units + 40 units	Rocket Fuel (0,06 m3)	
Oxidizing Compound (0,04 m3) + Silicon (0,04 m3)	40 units + 40 units	Silicate Glass (0,06 m3)	
Plasmoids (0,04 m3) + Water (0,04 m3)	40 units + 40 units	Super Conductors (0,06 m3)	
Oxygen (0,04 m3) + Biomass (0,04 m3)	40 units + 40 units	Supertensile Plastics (0,06 m3)	
Electrolytes (0,04 m3) + Oxygen (0,04 m3)	40 units + 40 units	Synthetic Oil (0,06 m3)	
Bacteria (0,04 m3) + Water (0,04 m3)	40 units + 40 units	Test Cultures (0,06 m3)	
Plasmoids (0,04 m3) + Chiral Structures (0,04 m3)	40 units + 40 units	Transmitter (0,06 m3)	
Bacteria (0,04 m3) + Biomass (0,04 m3)	40 units + 40 units	Viral Agent (0,06 m3)	
Reactive Metals (0,04 m3) + Water (0,04 m3)	40 units + 40 units	Water-Cooled CPU (0,06 m3)	