

# 1000 word essay on planets

[Environment](#), [Earth](#)



The only planetary system that is known to man is our solar system. It is made up of nine planets. The nine major planets in our solar system are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. There are also many other minor planets, which are also in our solar system, but they are unimportant compared to the nine major planets. Mercury, which is the planet that is closest to the sun, is the first and smallest of the inner planets. It is speculated that the heat from the sun made it impossible for the gases present to become part of the planetary formation. The surface of Mercury is extremely hot. It is approximately 470 degrees Celsius on the surface and is thought to be even hotter at the two hot spots. These hot spots are on opposite ends of the equator. It is the heat of the surface that makes it impossible for Mercury to have any type of atmosphere. Mercury orbits the sun once every 88 days and has a true rotation period of 58.6 days. Venus is the second closest planet to the sun and is said to be the most closely resembles to Earth in size, density, and distance from the sun. Most scientists know Venus as the sister planet to the Earth. It is called this because it closely resembles the Earth's mass, density and diameter. The only thing different is that Venus is shrouded in thick clouds that completely hide the surface of the planet. The surface temperature is also much warmer than that of Earth. Venus completes one revolution around the sun in 224.7 days. This makes the Venusian day equal to 117 earth days. It is thought that this slow rotation may be the reason why Venus has no magnetic field. The atmosphere of Venus is made up of 98% carbon dioxide and 2% Nitrogen. This atmosphere also has the presence of helium, neon and argon. Mars is the fourth furthest away from the sun and is recognized by its

reddish colour. Mars is also very much like the Earth. More than any other planet in the solar system, Mars has characteristics that make it an Earthlike world. One thing that is very similar to Earth is the rotation period. Mars rotation period is only thirty-seven minutes longer than the Earth's. This would explain why Mars has significant seasonal changes just as Earth does. Mars is extremely hard to understand due to the effect of blurring that is caused by the two atmospheres of Mars. It is also known that dust storms are prevalent and leaves the surface of Mars covered by a red haze. Jupiter is the fifth planet and is the most massive of all the planets in this solar system. Its mass represents more than two-thirds of the total mass of all the planets, or 318 times the mass of the Earth. Jupiter's density is quite low at 1.3 g/ cubic cm. The atmosphere of Jupiter contains water, ammonia, methane and carbon. It is thought by scientists that there are three cloud layers. The wind activity on Jupiter is quite fierce and moves in jet streams parallel to the equator. The weather on Jupiter is still very hard for scientists to understand. There is not enough information to truly understand how the weather is on this planet. Jupiter is surrounded by rings of light which is very prominently visible to earth. The ring particles must generally be about as big as the wavelength of light, that is, only a few microns. That is why these rings are faint or diffuse. The rings are what Jupiter is known for. Saturn is a planet which is also known for its rings and when viewed has a yellow or greyish color. The color is from the gaseous atmosphere and the dust particles in that atmosphere. The atmosphere is mostly a clear hydrogen-helium atmosphere. There are also traces of methane, phosphine, ethane, and acetylene. This atmosphere is much different than that of the Earth's.

Saturn orbits the sun with a period of 29. 4577 tropical years. It is 1. 427 billion Km away from the sun and is therefore a cold planet. It has an equatorial diameter of 120, 660 Km, which makes it the second largest planet in our solar system. The next planet is Uranus. The main problem scientists have with Uranus is that, die lack of visible surface features means that it is difficult to measure the rotation period of Uranus (Hunt/Moore, 388, 1983). Uranus has an equatorial diameter of 51, 000 Km, which is almost four times as much as Earth. The atmosphere is made up of mostly methane gas and therefore the planet has a red tint or a bluefish green color. Uranus also has rings but unlike Saturn these rings have almost no small particles. Neptune is the last of the gaseous planets in our solar system. Its atmosphere is much like Uranus's because it is mostly helium and hydrogen. It also contains methane. Neptune has a diameter of 49, 500 km and a mass 17. 22 times that of the Earth. It has an average density of 1. 67 /cm<sup>3</sup>. Neptune also has rings like its other gaseous partners, but they are very faint. Not a great deal is known about Neptune. The final planet, which is also the smallest and the furthest away from the sun is Pluto. This planet is very hard to see therefore not a lot is known about its physical characteristics. Scientists do know that it has a thin methane atmosphere. Little is known about this planet because it is so far away from die Earth and the sun. Scientists are always learning new things and more data will arise in the future.