**Mercury**

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| **Distance From Sun** | 0.3871 AU  57,910,000 km |
| **Atmosphere** | The planet Mercury is too small and has too little gravity to hold onto an atmosphere. Any gases released from the planet quickly escape into space. Also, Mercury is so close to the Sun that any atmosphere is quickly blown away by the Sun's solar winds. That means that there is almost no air or atmosphere on Mercury. |
| **Temperature** | (427° C) day |
| **Size (Diameter)** | 4,878 km (3,031 mi) |
| **History of the Name** | In astronomy mythology, Mercury was the Roman version of the Greek god Hermes. He was the messenger for the other gods, and for this reason Mercury is often depicted in pictures with winged sandals. In addition to delivering messages, he was also the protector of travelers and merchants |
| **How much would you weigh if you moved to this planet?** | If you moved to Mercury you would not weigh as much as you do on Earth. Not because you would lose weight on the spaceship, but because Mercury is smaller, and so has less gravity. If you weigh 70 pounds (32 kg) on Earth, you would weigh only about 27 pounds (12 kg) on Mercury. |
| **Rotation & Revolution** | Because of its close location to the Sun, the planet Mercury has become tidally locked to the Sun, or nearly so. The tidal forces of the Sun have over eons of time slowed down the rotation of Mercury to match its revolution around the Sun. The result is that Mercury rotates very slowly. One day on Mercury is about 58-1/2 Earth days long. But while Mercury's days are very long, its revolution around the Sun is rather fast. Mercury can complete one orbit around the Sun in only 88 Earth days. That's just about 3 months here on Earth. This is why Mercury's name is so appropriate. In mythology, Mercury was a speedy messenger, just like the planet's speedy revolution around the Sun. |
| **Topography & Appearance** | The surface of the planet Mercury is covered with craters. These craters have been created by eons of accidental encounters with asteroids and comets. All celestial bodies within the Solar System are subject to these bombardments. However, many of the planets have the ability to heal themselves through natural geological processes.  Because Mercury's crust is so thick and hard, no volcanic activity can make its way through to the surface of the planet. Since this surface volcanic activity cannot happen, Mercury will forever retain its scars. |
| **Moons & Satellites** | Mercury has no moons |

**Venus**

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| **Distance From Sun** | 0.7233 AU  108,200,000 km |
| **Atmosphere** | The planet Venus has long been one of the most misunderstood of all the inner planets. Like the Earth, Venus has an atmosphere. However, Venus' atmosphere is far thicker than that of the Earth, making it difficult for modern science to penetrate. Interestingly, scientists have recently been able to peek through the thick clouds and get a few glimpses of the surface. There are numerous volcanoes and many mountains that appear misshapen. |
| **Temperature** | 464oC  Venus is a deadly world where the surface temperature is hot enough to cook a meal in mere minutes. There is nowhere to hide from this ever present furnace. And with the atmosphere containing mostly carbon dioxide, it makes Venus a highly toxic place. No living thing would ever be able to survive on Venus. |
| **Size (Diameter)** | 12,102 km (7520 mi) |
| **History of the Name** | In astronomy mythology, Venus was the Roman goddess of love and beauty. In Greek, her name was Aphrodite |
| **How much would you weigh if you moved to this planet?** | Because Venus and the Earth are almost the exact same size, you would weigh almost exactly the same on either planet. If you weighed 70 pounds (32 kg) on Earth, you would weigh 63 pounds (29 kg ) on Venus. |
| **Rotation & Revolution** | If you somehow found a way to survive the scorching heat found on the surface of Venus, you would quickly notice something strange about the days. Aside from the fact that Venus rotates very slowly so that a day on Venus lasts more than 100 Earth days, Venus also rotates in the opposite direction as almost all the other planets.  Instead of the Sun rising in the east and setting in the west, the Sun on Venus would appear to rise in the west and set in the east. |
| **Topography & Appearance** | Venus has many, many volcanoes. We don't know for sure, but it is possible that Venus has more volcanoes than any of the other planets in our Solar System. But unlike the volcanoes on Earth that can sometimes erupt in an explosive manner, the volcanoes on Venus are believed to erupt in a less violent way. In fact, it is believed that they don't erupt at all. Instead, it is thought that the lava just slowly flows out onto the surface.  Venus has a few mountainous areas along with extensive flat areas. There are craters and evidence that the surface long ago moved, much like the surface of the Earth moves today. But unlike the Earth's surface, there is no evidence that Venus has a tectonic plate system. |
| **Moons & Satellites** | Venus has no moons |

**Earth**

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| **Distance From Sun** | 1 AU  149,600,000 km |
| **Atmosphere** | The present composition of the atmosphere is 79% nitrogen, 20% oxygen, and 1% other gases.  The earth has an ozone layer which keeps out the UV rays and helps maintain mild temperatures. |
| **Temperature** | average: 15° C (which is about 59° F) |
| **Size (Diameter)** | 12,756 km (7,926 mi) |
| **History of the Name** | In astronomy mythology, her Greek name was Gaea. Earth was the mother of the mountains, valleys, streams and all other land formations. She was married to Uranus. |
| **How much would you weigh if you moved to this planet?** | Exactly your weight! =) |
| **Rotation & Revolution** | 1 rotation=1 day= 24 hours  1 revolution=1 year= 365 days |
| **Topography & Appearance** | There are currently almost 7 billion people living on the Earth. About 30% of the Earth's surface is covered with land, while about 70% is covered by oceans. [Can you recall |
| **Moons & Satellites** | The Earth has one moon.  Its name is Luna |

**Mars**

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| **Distance From Sun** | 1.524 AU  228,000,000 km |
| **Atmosphere** | Mars excites scientists because its mild temperament is more like the Earth's than any of the other planets. Evidence suggests that Mars once had rivers, streams, lakes, and even an ocean. As Mars' atmosphere slowly depleted into outer space, the surface water began to permanently evaporate. Today the only water on Mars in either frozen in the polar caps or underground. |
| **Temperature** | −55 °C |
| **Size (Diameter)** | 6,792 km (4,220 mi) |
| **History of the Name** | Mars was the Roman god of war and agriculture. It may not seem like these two things go together, but they do. Mars protected those who fought for their communities, and stayed home to raise crops for food. In Greek, Mars was known as Ares. |
| **How much would you weigh if you moved to this planet?** | You may sometimes hear Mars referred to as the "Red Planet." This is because the surface of Mars is red. If you stood on the surface of Mars, you would see red dirt and rocks everywhere. |
| **Rotation & Revolution** | revolution=687 days  rotation=24 hr 37 min |
| **Topography & Appearance** | You may sometimes hear Mars referred to as the "Red Planet." This is because the surface of Mars is red. If you stood on the surface of Mars, you would see red dirt and rocks everywhere |
| **Moons & Satellites** | Mars has two moons, their names are Deimos and Phobos. |

**Jupiter**

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| **Distance From Sun** | 777,000,000 km |
| **Atmosphere** | Like the sun, its atmosphere is mainly made of Hydrogen (H) and Helium (He) |
| **Temperature** | -153oC |
| **Size (Diameter)** | 142,982km |
| **History of the Name** | The Roman name for King of the gods |
| **How much would you weigh if you moved to this planet?** | If you traveled to Jupiter on a vacation, you would be very heavy. If you weigh 70lbs (32 kg) on Earth, you would weigh 185 lbs (why do you think this is?) |
| **Rotation & Revolution** | Rotation (1 day) 9hrs 54 mins  Revolution (1 year) 11 years 313 days |
| **Topography & Appearance** | Jupiter is considered as a gas giant because it does not have a solid surface. Jupiter’s great red spot is where a giant storm has been raging for 300 years. |
| **Moons & Satellites** | 50 official and 12 provisional (unofficial) moons. The four largest and the most well-known were discovered by Galileo in the year 1610. |

**Saturn**

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| **Distance From Sun** | 1,429,000,000km |
| **Atmosphere** | Overall composition of the atmosphere is mainly Hydrogen (H) and Helium (He) with a bit of ammonia (NH4) and Ethane (C2H6) which are found in the upper atmosphere. |
| **Temperature** | -140oC |
| **Size (Diameter)** | 120,536km |
| **History of the Name** | Named after Roman God of agriculture |
| **How much would you weigh if you moved to this planet?** | Because Saturn is bigger than the Earth, you would weigh more on Saturn than on Earth, but not by much. If you weigh 70lbs on Earth, you would weigh 74.5lbs on Saturn [if gravity affects weight, and gravity is affected by mass of an object. Why do you think the gravity of Saturn is not as big as you expect it to be? Read on to see if you are correct!) |
| **Rotation & Revolution** | Rotation- 10hrs 42 mins (Ask yourself-fast or slow?) |
| **Topography & Appearance** | Saturn is most known for its rings, but is NOT the only planet with rings.  Saturn is a light-weight planet—It would float on water if we could get a tub large enough for Saturn! =)  Because Saturn is so light and spins FAST, Saturn is NOT perfectly round like other planets. Like Jupiter, Saturn is wider in the middle and narrower near its top and bottom. |
| **Moons & Satellites** | Saturn has 53 official moons and 9 unofficial moons. The most well-known is Titan. |

**Uranus**

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| **Distance From Sun** | 19.19 AU (2.871 billion km/1.784 billion mi) |
| **Atmosphere** | Like Saturn, the thick atmosphere of Uranus is made up of methane, hydrogen and helium. But Uranus is an extremely cold planet. It has been called the "ice giant” |
| **Temperature** | -224° Celsius |
| **Size (Diameter)** | 51,118 km (31,765 mi) |
| **History of the Name** | In astronomy mythology, Uranus was the lord of the skies and husband of Earth. He was also the king of the gods until he was overthrown by his son Saturn. |
| **How much would you weigh if you moved to this planet?** | It would take you many years to fly a rocket to Uranus. When you arrived you would weigh less because Uranus' gravity is not as strong as the Earth's. If you weigh 70 pounds (32 kg) on Earth, you would weigh 62 pounds (28 kg) on Uranus. |
| **Rotation & Revolution** | rotation= 17.24 hours-- Uranus spins on its side; It is believed that long ago a very large object smashed into this planet. The crash was so powerful that it completely changed the direction of Uranus' planetary rotation  revolution= 84.01 Earth years |
| **Topography & Appearance** | It is believed that Uranus is made up of rock and ice and has a large rocky core. Because of the tremendous planetary pressure of Uranus, there could possibly be trillions of large diamonds in or on the surface of this planet  Uranus also has rings, though they don't stretch out as far as the rings of Saturn. The rings of Uranus are made up of black dust particles and large rocks.  Scientists also believe that on the surface of Uranus there may be a huge ocean. And, interestingly, it is thought that the temperature of this ocean may be extremely hot, maybe even as hot as 5000 degrees Fahrenheit (2760 Celsius) |
| **Moons & Satellites** | Uranus has 27 moons. Five of these moons are large and the rest are smaller. |

**Neptune**

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| **Distance From Sun** | 30.06 AU  (4.497 billion km/2.794 billion mi) |
| **Atmosphere** | In Neptune's atmosphere, there is a large white cloud that moves around rather quickly. The "scooting" of this cloud around the atmosphere has led it to be named "Scooter”  Neptune's atmosphere contains hydrogen, helium and methane.  Neptune is a very windy place. No other planet in the Solar System has winds that are as strong as Neptune's. The winds near the Great Dark Spot were believed to have reached nearly 1,200 miles per hour (approx 1931 km per hour). Perhaps this extremely windy atmosphere contributes to the appearance and disappearance of the great dark spots. |
| **Temperature** | (–220° C) |
| **Size (Diameter)** | 49,528 km/30,775 mi |
| **History of the Name** | At first, Neptune was only the god of water, but later on this was extended to include the sea when he became associated with the Greek god Poseidon. |
| **How much would you weigh if you moved to this planet?** | If you weigh 70 pounds (32 kg) on the Earth, you would weigh 78.5 pounds (36 kg) on Neptune. |
| **Rotation & Revolution** | rotation=16.11 hours  revolution=165 years |
| **Topography & Appearance** | Neptune is a blue gas planet with white clouds and strong winds. Neptune has six rings which circle the planet. These rings are believed to be fairly new. The rings are more irregular than the rings of other planets. There are areas of varying thickness throughout the rings. |
| **Moons & Satellites** | Neptune has 13 moons that we know of. Because Neptune is so far away, it is difficult to see any of these worlds. |