**Venus Facts**

Venus is the second planet from the Sun and the sixth largest. Together with Mercury, they are the only planets without a satellite, even though Mercury is closer to the sun, Venus is the hottest planet.

**Key Facts & Summary**

* Being very close to Earth, Venus was observed by ancient astronomers from different cultures many times. However, the first accurate observation was in 1610 by Galileo Galilei.
* Galileo saw Venus through a telescope and determined it had phases like the Moon. This helped support the Copernican view that planets orbited the Sun and not vice versa as previously believed.
* Though it can easily be seen, its surface is hidden by thick clouds thus it was for a long time believed that it was like Earth.
* When its surface was observed, it was determined that in fact its clouds were made up of sulfuric acid and water vapor, but more importantly, its temperature was measured, having an average of 465 degrees Celsius, 900 degrees Fahrenheit, hot enough to melt lead.
* More than about 62 degrees hotter than Mercury, the closest planet to the sun. It was then concluded that Venus has the hottest surface out of all the planets and the hopes that it resembled Earth were shattered. Its thick atmosphere traps heat in a runaway greenhouse effect greatly contributing to the planet’s high temperatures.
* However, despite this, it is still considered Earth’s sister, and it has other similarities that support this: They have similar sizes and densities, with a similar internal structure and similar mass, volume and atmospheric components of carbon dioxide and nitrogen.
* Venus reflects 70% of all the sunlight it receives, which is why it shines so brightly.
* It has the least eccentric orbit, orbiting nearly in a perfect circle.
* Because of its brightness, Venus has been the most confusing object in the sky. Many have misreported it as an UFO, and many still mistakenly report it as an UFO.
* Venus has a retrograde rotation, moving in the opposite direction than most planets, only Uranus also does this. They both move from East to West, clockwise.
* Venus has mountains, valleys, and tens of thousands of volcanoes. The highest mountain on Venus, Maxwell Montes, is 20,000 feet high / 8.8 kilometers, like the highest mountain on Earth, Mount Everest.
* Venus doesn’t have any moons or ring systems, and its magnetosphere is weak due to its slow rotation.
* It is the most “visited” planet of the solar system with over 40 spacecrafts’ exploring it.

**Plans for Venus**

Venus being so close to us has seen over 40 spacecraft’s landing upon her. Due to its proximity, it will always be a target for future studies and even possible colonization. Scientists have even discussed about “floating cities” in Venus. Missions are still ongoing there, even recently in November 2019, NASA received some designs of a stingray-like-ship that could better observe and analyze Venus by a team at the University at Buffalo.

**Did you know?**

- Temperatures remain the same on Venus regardless of day and night.

- Venus may appear as a white point of light in the sky. It can be seen even in a clear midday sky, and it is more easily visible when the Sun is low on the horizon or setting.

- Earth orbits the sun 8 times for every 13 orbits of Venus.

- Venus has several times as many volcanoes as Earth, and it has 167 large volcanoes that are over 100 km (62 mi) across.

- Though Americans were the first on the Moon, Russian’s were the first to send an unmanned spacecraft to Venus in 1967. The spacecraft was named Venera 4, many other spacecrafts with the same name but different numbers were sent after.

- Spacecrafts sent to Venus didn’t last more than an hour due to the crushing atmosphere and harsh conditions.

- Out of the four terrestrial planets, Venus is the second largest.

- Venus is the first planet in the Solar System to have its orbit plotted in the sky by ancient civilizations.

- Venus has been a primary feature throughout mythology and fiction. Classic poets such as Homer, Sappho and Virgil have written about the planet. It has also been included in The Starry Night by Vincent van Gogh.

- Mercury and Venus orbit the Sun within Earth’s Orbit, this makes them inferior planets.