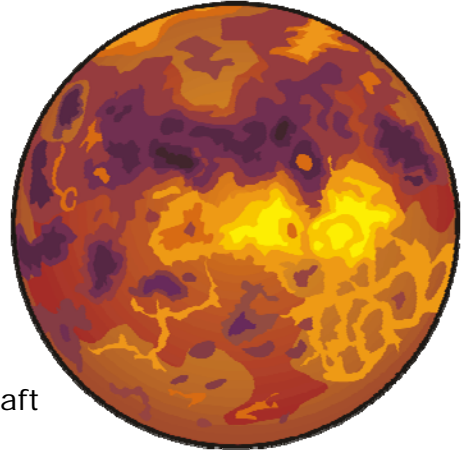


## Planet Venus

Venus is the planet in our solar system that is closest to the Earth and it was the first planet to be explored by spacecraft launched from Earth. Mariner 2, an unmanned U.S. spacecraft, traveled close (in space terms) to Venus in 1962 and in 1967 the Soviet spacecraft Venera 4 reached Venus and dropped instruments that measured Venus' atmosphere. In 1970, the unmanned spacecraft Venera 9 actually landed on Venus, followed by Venera 10 through 15 which probed different areas of Venus' surface. The U.S. has continued exploring Venus through the spacecraft Magellan which began orbiting Venus in 1990.



Venus is about the same size as Earth and it is the second planet away from the Sun while Earth is the third planet. Venus is named for the Roman goddess of love and beauty. Since Venus is close to Earth, it can frequently be seen in the western sky in the evening. Venus travels in a nearly circular orbit around the sun while Earth has an elliptical orbit. Since Venus is closer to the Sun than Earth, it takes Venus just 225 Earth days to complete one revolution around the sun; this is the length of a year on Venus. Venus rotates very slowly on its axis. The Earth completes one rotation every twenty-four hours but it takes Venus 243 Earth days to complete one rotation on its axis.

Planet Venus is surrounded by thick clouds of sulfuric acid. This acid is highly corrosive when it is on Earth. The atmosphere of Venus is filled with carbon dioxide along with some nitrogen, water vapor and small amounts of argon, carbon monoxide, neon, and sulfur dioxide. The surface of Venus is hot and dry, with a temperature of about 870 degrees F. The planet is too hot to have any bodies of water. Astronomers believe that the planet's surface is hot due to a greenhouse effect caused by the heavy clouds of sulfuric acid. Sunlight can enter Venus' atmosphere through the clouds but the heat generated by the Sun cannot come back out, like inside a greenhouse.

Venus has some surface features like those on Earth, such as mountains and impact craters created by collisions with meteors. Venus also has coronae, or crowns, that are round and high like a king or queen's crown with a relatively flat middle.

