Planets are celestial bodies orbiting a star, located in orbit around it. Inside planets, no thermonuclear reactions occur. They shine with reflected light. Solar planets orbit the Sun counterclockwise. They rotate on their own axis and have a shape close to a sphere. Two types of planets can be distinguished - inner (rocky) and outer. Inner planets have a rocky or rocky-icy crust. They are characterized by high density, have no more than a few moons, have an atmosphere, and are made of minerals with high melting temperatures. Outer planets, on the other hand, are objects whose orbit is located at a greater distance from the star. They are largely made of gases and have numerous moons.

Mercury

A rocky planet located closest to the Sun and characterized by the smallest surface area of all planets - its diameter is 4879 km. Mercury is made up of 70% metals and 30% silicates. The distinguishing feature of this planet is huge temperature fluctuations, which average 167 degrees Celsius, but can range from minus 173 to 427 degrees.

Venus

Venus is a rocky planet whose name comes from the Roman goddess of love. It is the closest planet to Earth in terms of mass and size, which is why it is called Earth's sister or twin planet. It has the densest atmosphere of all planets, with a mass 93 times greater than Earth's, consisting mainly of carbon dioxide with a nitrogen admixture. However, it has a much weaker magnetic field than Earth.

Earth

Earth is the largest of the rocky planets and the fifth largest of all planets. It is also the only one where the presence of living organisms and tectonic movements has been confirmed so far. The atmosphere consists of 21% oxygen, 78% nitrogen, about 0.9% argon, and 0.04% carbon dioxide. Earth has one natural satellite, the Moon.

Mars

A rocky planet whose radius is about half the radius of Earth. Its name comes from the Roman god of war. It has a largely rarefied atmosphere, so it is not well protected from solar wind or cosmic radiation. The main component of the atmosphere is carbon dioxide. Mars's surface is covered with numerous volcanoes and valleys of tectonic origin. This planet is distinguished by its red color. This color was formed due to iron oxides, which are abundant in the soil. The surface of the planet consists mainly of basalt. Mars has two moons.

Jupiter

Jupiter is the largest of all the planets in the Solar System - its mass is 2.5 times greater than all the others combined. It has as many as 79 moons, and one of them, Ganymede, is considered the largest natural satellite in the entire Solar System. This gas giant consists of 75% hydrogen and 25% helium. Its shape resembles a flattened ellipsoid. It is the second most sunlight-reflecting planet after Venus. Its atmosphere thickness is estimated at over 5000 kilometers, making Jupiter the planet with the largest atmosphere.

Saturn

Saturn is an outer planet classified as a gas giant, second in size only to Jupiter. Its mass compared to Earth is 95 times greater. It has 82 natural satellites and characteristic rings made of ice, rock fragments, and cosmic dust. Saturn has strong winds reaching speeds of 1800 km/h. The magnetic field of this planet is only slightly smaller than that of Earth. Saturn has a dense atmosphere, with pressure being almost 50% greater than on Earth.

Uranus

The seventh planet from the Sun, whose mass is 14 times greater than Earth's. It orbits the Sun in a lateral position. The name Uranus comes from the Greek god Uranus. This planet has a dense atmosphere composed mainly of hydrogen and helium. Uranus has a lot of ice - much more than the other gas giants. It has the lowest temperature of all objects in the Solar System - it reaches minus 224 degrees Celsius. Uranus has 27 moons, with the largest being called Titania. This planet has a layered structure formed, among others, by methane, water, and ice. Uranus has characteristic rings that can be observed from Earth with a telescope. Wind on Uranus blows at speeds up to 900 km/h. One orbit around the Sun takes Uranus 84 years.

Neptune

The furthest planet from the Sun, whose mass is 17 times greater than Earth's. Neptune has an atmosphere with a composition similar to Uranus - it consists mainly of hydrogen and helium, with traces of nitrogen, hydrocarbons, ammonia, and water. Its interior consists of rocks and ice. Its characteristic blue color is due to the presence of methane in its outer structures. Wind on Neptune blows at the highest speed of all the planets in the Solar System - it reaches a maximum of 2100 km/h. The temperature is about minus 226 degrees Celsius.