

## *The solar system*

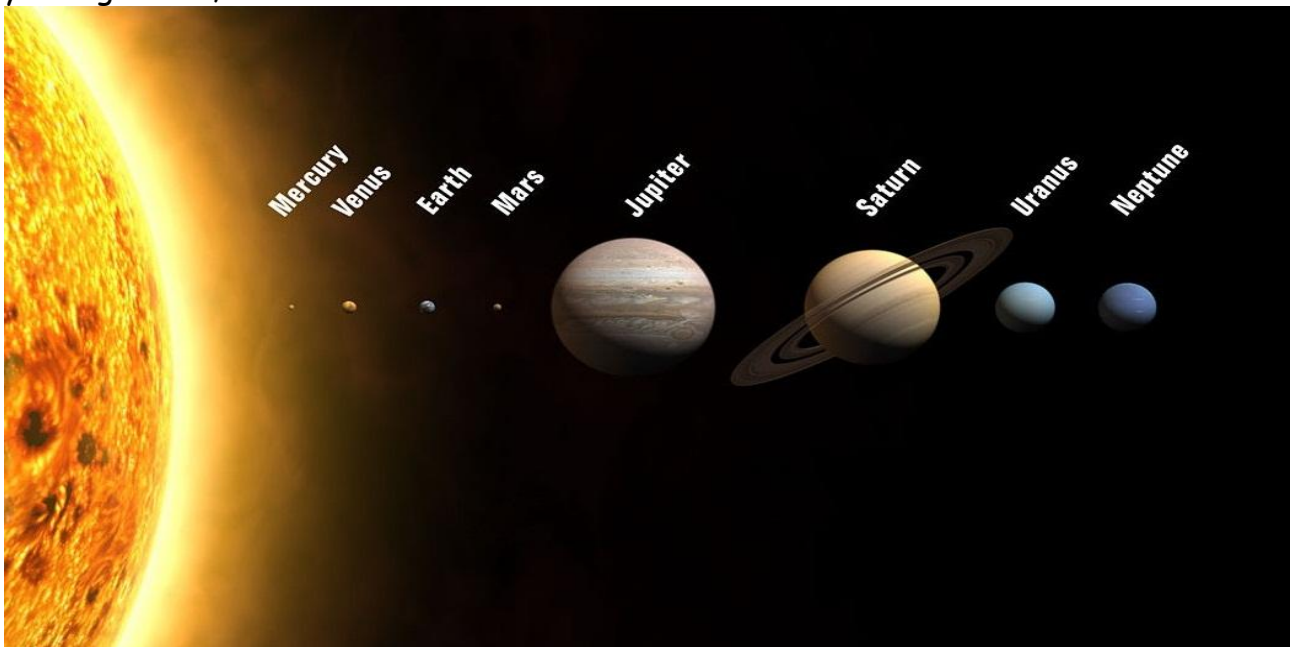
### What is the solar system?

The solar system is formed by 8 planets of which the earth, about sixty moons, comets and asteroids. This system is called solar because all these planets, these moons, turn around the sun. The direction of rotation of planets around the sun is inverse in that of clock hands.

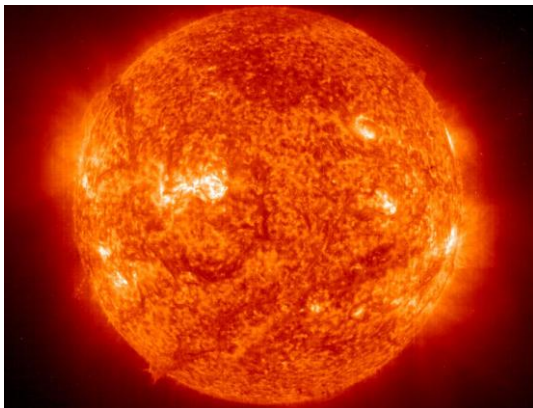
The solar system belongs to the galaxy of the Milky Way. We are taken away from 27,000 years lights of the center of the Milky Way and turn all around in a 250 km / second speed.

One year light is the distance traveled by the light in 1 year.

As the light travels 300,000 km in one second, one hour light equals 1 billion km, one year light is 9,500 billion km.



### What are the 8 planets of the solar system?



The 8 planets of the solar system are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

**THE SUN :** It is a ball of hot gases. At the heart of the sun, the temperature is 15 million degrees, on the surface, it is 6 thousand degrees. The surface of the sun looks like a peel of orange.

The sun is 1,392,000 km in diameter, that is 109 times the diameter of the Earth. It

weighs 33,000 times more than our planet.

It is difficult to observe the sun without burning eyes, except when the moon passes in front of it. We call it a solar eclipse. When it is a total eclipse, we can observe gases on the surface of the sun.



**MARS :** Smaller than the Earth, Mars is a big desert of pebbles. Its red color is due to its rocks which contain some rusty iron. We find the biggest volcano of the solar system there: 25 kilometers in height, 3 times as high as the biggest ground mountain. This volcano is faded for a very long time.

**JUPITER :** The big, the giant Jupiter ... It is enormous, we could hide the Earth 1300 times in it! We can even see it with naked eye ... It is surrounded by very fine rings. Nobody will ever walk on Jupiter because it is an enormous ball of gas without ground.



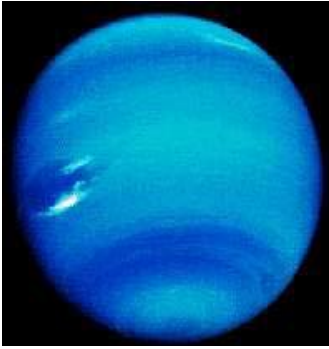
**SATURNE :** In size, Saturn is the second planet after Jupiter. The strips we see on its surface are long coats of clouds.

It's a little dense gaseous planet.

If there was a rather big ocean to welcome it, Saturn would float there ...

**Uranus :** Uranus looks like Jupiter and Saturn but is smaller. It's the methane of its atmosphere which gives it its blue-green color. These rings also consist of dusts and ice cubes.

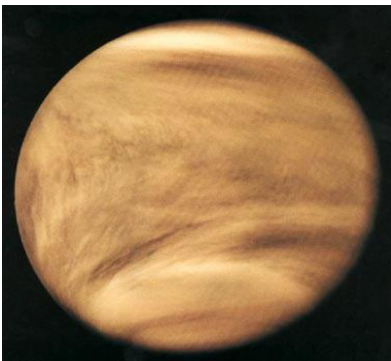




**NEPTUNE :** Neptune is the last planet of the solar system. It is 4 times as big as Earth, it is the smallest of the big planets. It is also the farthest from the sun, 4,5 billion kilometers. It takes it 165 years making its rotation around the sun.



**MERCURY :** It is the closest planet to the sun. It is hardly bigger than the Moon which it looks like a lot. It turns around the sun in 88 days. On Mercury, it is very hot in the daytime (400 °) and very cold at night (170 °).



**VENUS :** A little smaller than the Earth, Venus is covered with a coat of clouds 10 times more thick than on the Earth and which imprison the heat. It is shaken by violent cyclones and the sunlight penetrates there with difficulty to the ground, the temperature is very high, it is more than 450°C.

**EARTH :** It is the third planet of the solar system and the one that you know best!!!. It is 150 million kilometers from the sun. It needs one year to make the complete laps in a 30 km / second speed (it is 100 times as fast as an Airbus plane at full speed). On Earth, there is water in great quantities and an atmosphere (the air which you inhale) that is rich in oxygen, it is what distinguishes it from other planets.

