

The Solar System

Although the sun is not one of the biggest stars, it is by far the most important to us here on Earth. This is because it provides us with both heat and light. Without the sun, life as we know it on Earth would not exist.

The **solar system** consists of the sun, the planets and their moons, the asteroids, and other small objects such as comets and meteors.

The **planets** are nine bodies that circle the sun. Planets appear to move about the sky, whereas the stars seem always to be in the same relative positions. This is how they came to be called planets, from a Greek word meaning 'wanderer'.

The nine planets, in outward order from the sun are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. The first four planets are comparatively small. There is a large gap between Mars and Jupiter, and in this gap are the **asteroids**, or minor planets, which are a large number of very small bodies. Jupiter, Saturn, Neptune and Uranus are called the major planets because of their great size.

It was once believed that the Earth was the centre of the solar system, but a Polish astronomer named Nicolaus **Copernicus** (1473–1543) worked out that the planets revolved around the sun.

Copernicus thought that the planets orbited the sun in perfect circles. However, a later astronomer, Johannes **Kepler**, using the observations of another astronomer, Tycho **Brahe**, proved that planets orbit the sun in a flattened oval called an ellipse.



A. Answer True or False.

1. The sun is the largest of all the stars. T F
2. The Earth produces its own heat and light. T F
3. The asteroids are found between Mars and Jupiter. T F

B. On a sheet of paper draw a diagram of the solar system. Draw the planets the size they are in relation to each other. Beside each planet, write its distance from the sun, its diameter in kilometres, and the time it takes to complete one full revolution of the sun. (Use resources to research this information.)