

Space Knowledge Organiser

Key Vocabulary

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| axis | An imaginary line that an object rotates around, like an imaginary pole. | rotate | To spin on an axis. |
| dwarf planet | A celestial body resembling a small planet but lacking certain technical criteria that are required for it to be classed as such. | satellite | An object in space that orbits something else e.g. the Moon is a satellite of Earth. There are also manmade satellites in space. |
| geocentric | The belief that the other planets and the sun orbit the Earth. | solar system | The collection of planets and moons in orbit round the sun, together with smaller bodies in the form of asteroids, meteoroids, and comets. |
| heliocentric | The belief that the planets, including the Earth, orbit the sun – the structure of our solar system. | sphere | A round 3D shape, like a ball. |
| moon | A natural satellite which orbits a planet. | star | A giant ball of gas held together by its own gravity. |
| orbit | To move in a regular, curved path around another object. | Sun | The closest star to our planet which the planets in our solar system orbit. |

Key Facts

The planets in our solar system are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, (Pluto – dwarf planet).

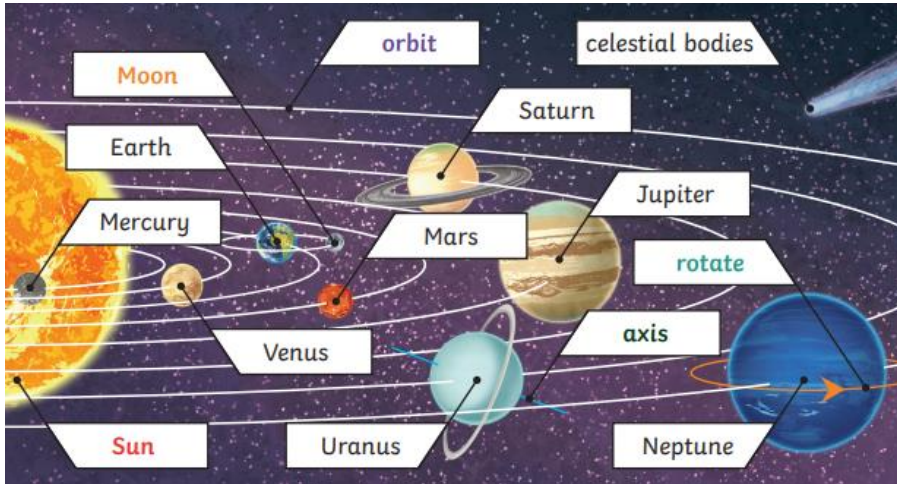
Mercury, Venus, Earth and Mars are rocky planets, they are mostly made of metal and rock. Jupiter, Saturn, Uranus and Neptune are mostly made up of gas (helium and hydrogen) and they are gas planets.

The moon orbits the Earth in an oval-shaped path while spinning on its axis. At various times in a month, the moon appears to be different shapes. This is because the sun lights up different parts of it as it rotates around the Earth.

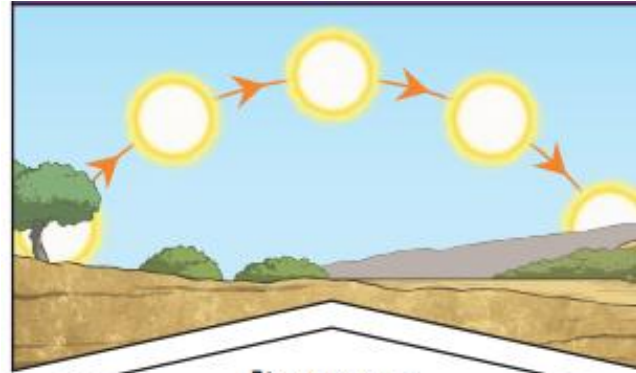
The earth rotates on its axis and completes a full rotation in 24 hours. At the same time, it also orbits the sun completing a full orbit in 365.25 days.

The work and ideas of many astronomers, such as Copernicus and Kepler, combined over many years before the idea of the heliocentric model was developed.

The Solar System



The movement of the sun



It appears to us that the **Sun** moves across the sky during the day but the **Sun** does not move at all. It seems to us that the **Sun** moves because of the movements of Earth.

Heliocentric Model



Geocentric Model



Tier 2 Vocabulary

expand

To make bigger or to explain something more.

ignorance

When someone does not understand something.

research

To study and find out more about something.