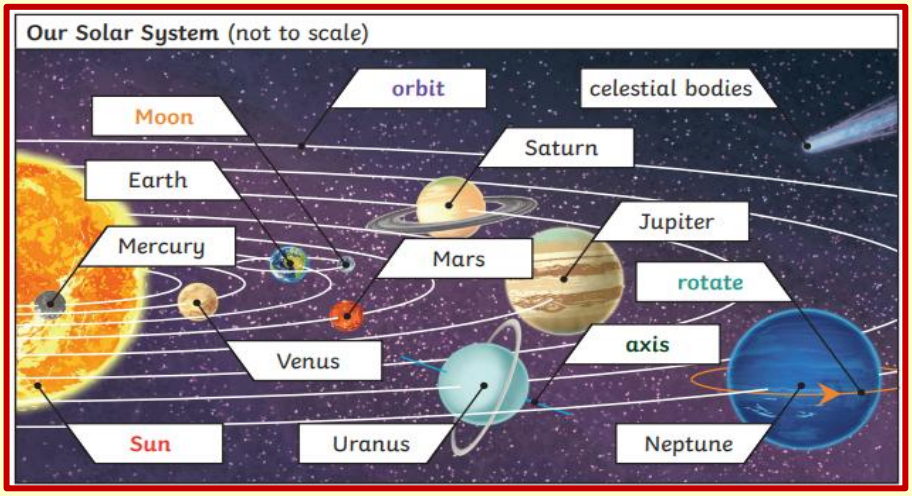
Year 5 Science Knowledge Organiser Spring Term 2026

This term, in Science, we will learn about Earth and Space. We will discover that the Sun is a star at the centre of our Solar System and that it has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. We will gain an understanding of the movement of spherical bodies movements in the Solar System and also the moon's movement which will enable us to explain how we have day and night.



Key Vocabulary

Sun star moon
planet sphere
orbit rotate axis
astronomer satellite
spherical bodies
geocentric model
heliocentric model

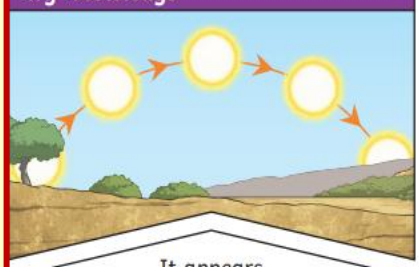
Key Knowledge

Mercury, Venus, Earth and Mars are **rocky planets**. They are **mostly made up of metal and rock**.

Jupiter, Saturn, Uranus and Neptune are **mostly made of gases** (**helium and hydrogen**) although they do have cores made up of rock and metal.

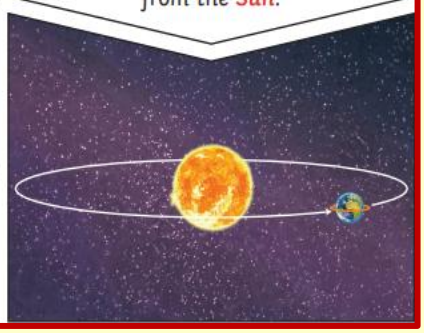
The **Moon orbits Earth** in an oval shaped path while **spinning on its axis**. At various times in a month, the **Moon appears to be different shapes**. This is because as the **Moon rotates round Earth, the Sun lights up different parts** of it.

Key Knowledge

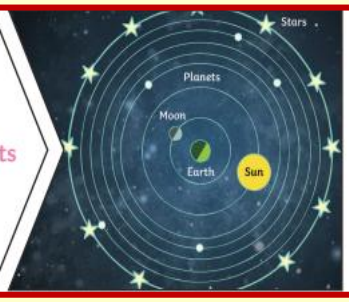


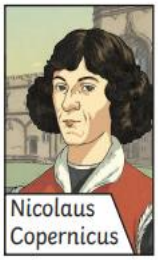
It appears to us that the Sun moves across the sky during the day but the Sun does not move at all. It seems to us that the Sun moves because of the movements of Earth.

Earth rotates (spins) on its **axis**. It does a full rotation once in every 24 hours. At the same time that Earth is rotating, it is also orbiting (revolving) around the Sun. It takes a little more than 365 days to orbit the Sun. Daytime occurs when the side of Earth is facing towards the Sun. Night occurs when the side of Earth is facing away from the Sun.



Geocentric model
Years ago people believed that planets moved around the Earth.





Nicolaus Copernicus

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. Galileo's work on gravity allowed astronomers to understand how planets stayed in orbit.