

Year 5 Science – Earth and Space



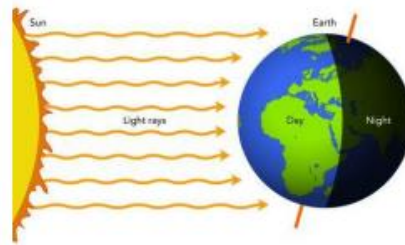
In this exciting **science** topic, we look at the movement of the Earth and other planets and the movement of the Moon relative to the Earth. We describe the Sun, Earth and Moon as approximately spherical bodies and explain day and night and the apparent movement of the sun across the sky.

What I Should Already Know

- I recognise light from the sun can be dangerous and can find ways to protect my eyes.
- I recognise that we need light in order to see things and that dark is the absence of light.

Day and night

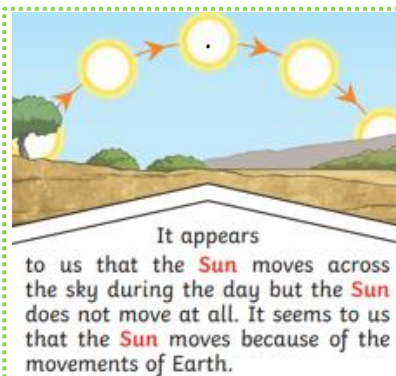
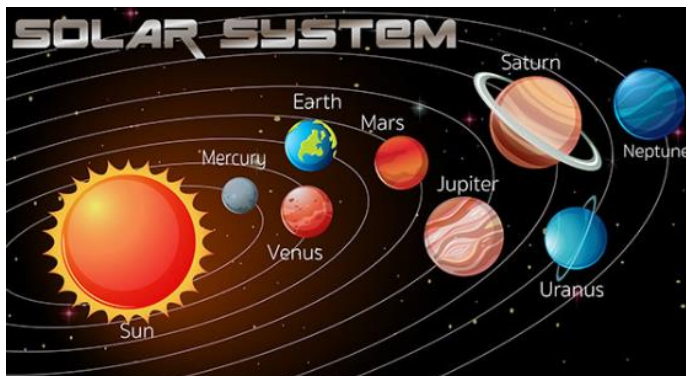
The Earth rotates one complete turn every 24 hours to give us day and night. Daytime occurs when the side of the Earth is facing the sun and night occurs when the side of the Earth is facing away from the sun. When Britain faces the Sun it is daytime in Britain but the other side of the world is in darkness. So, in Australia it is the middle of the night.



Earth rotates on an axis. During the winter, the North Pole is tilted away from the Sun's rays. As Earth travels around the Sun, the tilt of Earth changes. By June, the North Pole is tilted towards the Sun and the days become very long. Earth takes a year to orbit the Sun and it is the tilt which creates the seasons.

An easy way to remember the names of planets in order is:

My Very Easy Method Just Speeds Up Naming

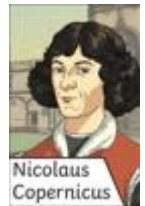


Key Vocabulary

Sun	A huge star that Earth and other planets in our solar system orbit around.
Moon	A natural satellite which orbits Earth or other planets.
orbit	To move in a regular, repeating curved path around another object.
rotate	To spin eg. Earth rotates on its own axis.
axis	An imaginary line that a body rotates around.
geocentric model	A belief people used to have that other planets and the sun orbited around Earth,
heliocentric model	The structure of the Solar System where the planets orbit around the sun.

Our scientist for this topic is Nicolaus Copernicus

The work and ideas of astronomers like Copernicus combined over many years before the idea of the heliocentric model was developed.



The Moon orbits the Earth anti-clockwise and takes **approximately 28 days**. The Moon spins once on its axis every time it orbits Earth. This means that we only see one side of the Moon. The Moon has different phases depending on where it is in its orbit. At different times, the Moon appears to be different shapes because the sun lights up different parts of the Moon as it moves around the Earth. The Moon's gravity causes high and low tides.

