

# Year 5: Earth and Space

## Changes in Material:



Daytime occurs when that side of the Earth is facing towards the Sun. Night occurs when that side of the Earth is facing away from the Sun.



### Geocentric Model

Years ago people believed that the planets moved around the Earth (geocentric model).

We now know this was **incorrect**.

### Heliocentric Model

astronomers such as Ptolemy, Alhazen and Copernicus correctly recognised that the planets moved around the Sun (heliocentric model).

We now know this is **correct**.

## Properties of Materials:



The Sun is a huge star that Earth and the other planets in our solar system orbit around.

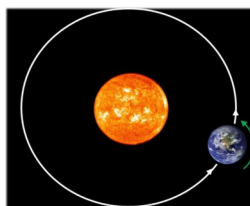
There are 7 planets in our solar system, these are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

The planets are roughly spherical in shape.



The Moon orbits Earth whilst spinning on its axis. At various points in the month, the Moon appears to change shape.

This is due to the Sun lighting up different parts of it as it rotates around Earth.



Earth rotates on its axis once every 24 hours (1 day). At the same time, it is also orbiting the Sun, this takes 365.25 days (1 year).

## Key Vocabulary:



**Orbit:** to move around or travel round in an elliptical path.



**Astronomer:** a scientist who studies space.



**Geocentric:** representing something with the Earth at its centre.



**Heliocentric:** representing something with the sun at its centre.



**Sun:** the star at the centre of the Earth's solar system.



**Earth:** our planet, third from the centre of the sun.



**Moon:** the Earth's natural satellite.



**Axis:** the line through which the rotating earth turns.



**Phases of the Moon:** caused by the light from the sun and the moon's orbit of the Earth.



**Planets:** Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune.