Science	Earth and Space	Year 5/6

Key Vocabulary

WORD	DEFINITION
axis	The (imaginary) line which a planet rotates around and tilts on.
gas giants	The name given to the four outer planets – Jupiter, Saturn, Uranus and Neptune.
geocentric	The old solar system model, which thought the earth was at the centre.
heliocentric	The modern model of the solar system, which places the sun at the centre.
moon	A body which orbits a planet; also called a natural satellite.
orbit	The path of a celestial object around another, such as Moon around the Earth.
phase	The appearance of a moon or planet according to the amount of illumination.
terrestrial planet	The name given to the four inner rocky planets – Mercury, Venus, Earth and Mars.
waning	The name given to the moon phases when the moon is becoming darker.
waxing	The name given to the moon phases when the moon is becoming brighter.

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 up of gases (helium and hydrogen). They do not have cores made of rock and metal
- It appears to us that the sun moves across the sky during the day but the sun does not move at all. It seems this way due to the Earths movement
- Pluto was once known as a planet but was reclassified as a dwarf planet in 2006
- Years ago, people believed the planets moved around the Earth

The Solar System

Mercury
Venus
Earth
Mars
Jupiter
Saturn
Uranus
Neptune

Copernicus developed the heliocentric theory that the sun was at the centre of the solar system. The planets orbit the sun in a circular pattern. Each planet has its own characteristics and features. The four inner planets are the rocky terrestrial planets. The four outer planets are the gas giants.

Spy Magnus

Observing over time

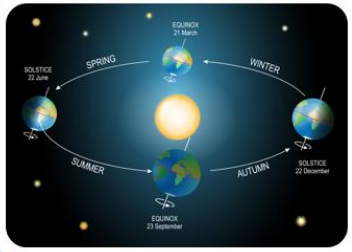
Billy Bookhead

Researching

The Sun

The Sun is a burning ball of gas which appears to move across the sky during the day. However, this movement is actually due to the Earth's orbit around the sun.

Moon Phases



The moon orbits Earth in an oval pattern whilst spinning on its axis. The sun illuminates the Moon. The shadow of the Earth creates the moon's phases.

Earth's movement

The Earth spins on its axis and completes a full rotation every 24 hours. The Earth is constantly rotating and orbiting the Sun - which takes 365 days. As the Earth rotates, it faces towards and away from the Sun. This creates the day and night cycle.