



Brookfield Primary School Knowledge Organiser

Year 5: Science – Earth and Space

Science is the study of the world around us through observation, description, investigation and experimentation.

Key Facts:

- **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.
- **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.
- **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.
- 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.

Where to look:



- BBC Bitesize
- Photographs
- Library



Things to find out about:



Think of a mnemonic to remember the order of the planets from the sun.

General Scientific Words/Phrases:

Enquire, investigate, observe, explore, experiment, describe, record, analyse, compare, evidence, record

Key Vocabulary to use in this topic:

Word:	Definition:
Solar system	The name for the Sun and all planets and objects that orbit it.
Moon	A body which orbits a planet; also called a natural satellite.
Astronomy	The study of space, planets and the universe as a whole.
Orbit	The path of a celestial object around another, such as Moon around the Earth.
Axis	The (imaginary) line which a planet rotates around and tilts on.
Phase	The appearance of a Moon or planet, according to the amount of illumination.
Gas giant	The name given to the four outer planets - Jupiter, Saturn, Uranus and Neptune.
Waxing	The name given to Moon phases when the Moon is becoming brighter.
Waning	The name given to Moon phases when the Moon is becoming darker.
Terrestrial planet	The name given to the four inner rocky planets - Mercury, Venus, Earth and Mars.
Heliocentric	The modern model of the solar system, which places the Sun at the centre.
Geocentric	The old solar system model, which thought the Earth was at the centre.

