

Health of Humans and Animals	Light and Astronomy	Forces and Magnets	Electricity	Our Environment and Living Things	Sound	Material Properties
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Year 5 Science: Can we investigate Earth and beyond?

Work Together Concept: Light and Astronomy

Crucial Knowledge:

- Describe the movement of the Earth, and other planets, relative to the Sun in the solar system.
- Describe the movement of the Moon relative to the Earth.
- Describe the Sun, Earth and Moon as approximately spherical bodies.
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky.

Prior Knowledge

- Observe changes across the four seasons. (Y1 - Seasonal changes)
- Observe and describe weather associated with the seasons and how day length varies. (Y1 - Seasonal changes)

Future Knowledge

- Gravity force, weight = mass x gravitational field strength (g), on Earth $g=10 \text{ N/kg}$, different on other planets and stars; gravity forces between Earth and Moon, and between Earth and Sun (qualitative only). (KS3)
- Our Sun as a star, other stars in our galaxy, other galaxies. (KS3)
- The seasons and the Earth's tilt, day length at different times of year, in different hemispheres. (KS3)
- The light year as a unit of astronomical distance. (KS3)

Vocabulary:

Earth, Sun, Moon, (Mercury, Jupiter, Saturn, Venus, Mars, Uranus, Neptune), spherical, solar system, rotates, star, orbit, planets

Key Learning

The Sun is a star. It is at the centre of our solar system. There are 8 planets (can choose to name them, but not essential).

These travel around the Sun in fixed orbits. Earth takes 365½ days to complete its orbit around the Sun. The Earth rotates (spins) on its axis every 24 hours. As Earth rotates half faces the Sun (day) and half is facing away from the Sun (night).

As the Earth rotates, the Sun appears to move across the sky. The Moon orbits the Earth. It takes about 28 days to complete its orbit. The Sun, Earth and Moon are approximately spherical.

