



Y6 Science: Earth & Space

- 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 Learning

- Explore the natural world around them. (Reception – Earth and space)
- Describe what they see, hear and feel whilst outside. (Reception – Earth and space)
- 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 Learning

- 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)

What Pupils Need To Know Or Do To Be Secure

- Show understanding of a concept using scientific vocabulary correctly

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 365¼ 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.

Possible Evidence

- Can create a voice over for a video clip or animation
- Can show, using diagrams, the movement of the Earth and Moon
- Can explain the movement of the Earth and Moon
- Can show using diagrams the rotation of the Earth and how this causes day and night
- Can explain what causes day and night

Key Vocabulary

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

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