

Ashwell Primary School

Science Curriculum

Earth and Space Knowledge Organiser



Year 5 – Earth & Space

Core Knowledge / skills to be acquired:

- identify and name the components of the solar system (i.e. Sun, Moon, Earth and other planets)
- locate the Sun, Earth and other planets in the solar system
- recognise that the Earth and other planets orbit the Sun
- recall that the Earth takes one year to orbit the Sun
- recall that the Earth rotates on its' axis and this takes one day
- **describe the movement of the Earth, and other planets, relative to the Sun in the solar system**
- *use simple physical models to explain effects that are caused by the movement of the Earth*
- recognise that the Moon orbits the Earth
- *explain that gravity is a force of attraction and it is what holds the planets in orbit around the Sun and the Moon in orbit around the Earth*
- **describe the movement of the Moon relative to the Earth**
- *explain that the changes in the appearance of the Moon over a period of 28 days arise from the Moon orbiting the Earth once every 28 days*
- **describe the Sun, Earth and Moon as approximately spherical bodies**
- recognise that the Earth, Sun and Moon are spherical and support this with some evidence
- recognise that it is daylight in the part of the Earth facing the Sun
- recall that a shadow from the Sun changes over the course of a day
- explore and describe how a shadow from the Sun changes over the course of a day
- explain in terms of the rotation of the Earth why shadows change and the Sun appears to move across the sky during the course of the day
- **use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky**
- explain why it is night time in Australia when it is day time in England
- *explain how ideas about the solar system have changed over time*

Key Vocabulary:

Earth, Sun, planet, Mercury, Venus, Mars, Jupiter, Moon, Saturn, Uranus, Neptune, solar system, spherical, moon, day and night, celestial body, rotation, hemisphere, orbit, gravity, shadow, daylight

Curriculum Enrichment / Cultural Capital Opportunities

- Astronomy evening
- Planetarium visit