

Space

Purpose

Exploring space will instil a sense of awe and help the children to understand their place in the universe. Furthermore, this unit provides the children with opportunities to set up their own scientific enquiries focused on gravity and air resistance.

Vocabulary

Spherical

Gravity

Orbit

Rotation

Axis

Mass

Friction

Air resistance

Reflect

Key Facts

Shape of the Earth, Sun and Moon

The Sun, Earth, Moon and the planets in our solar system are roughly spherical. All planets are spherical because their mass is so great that they produce significant gravity. This force of gravity pulls all of a planet's material towards its centre, which compresses it into the most compact shape – a sphere.

The movement of the Earth and other planets

The Solar System is made up of the Sun and everything that orbits around it. There are eight planets in our solar system: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. Earth orbits around the Sun. A year (365 days) is the time it takes for Earth to complete a full orbit.

Gravity

Unsupported objects fall towards the Earth because of the force of gravity acting between Earth and the falling object. We will explore how gravity is caused by mass. Any object with mass will exert a gravitational pull. The greater the mass, the more powerful the pull!

Light

Light travels in straight lines. We are able to see a light source when its light enters our eyes. We are able to see objects that are not light sources when they reflect light from another light source.

Year 5



Prior Learning

Year 3

Forces – Provided an introduction to the concept of friction.

Year 4

Light and Sound – The children learned how shadows are formed and how materials can be reflective or non-reflective.

Useful Links and Media

<https://www.youtube.com/watch?v=Qd6nLM2QIWw>

Excellent video which provides an overview of our solar system.

<https://spaceplace.nasa.gov/what-is-gravity/en/>

Information from NASA about the force of gravity.

<https://www.kidzone.ws/planets/>

Explores the characteristics of each planet. Includes a variety of fun activities.