

Year 5: Out of this world



Essential Learning

By the end of this term, you will have learned...

- How to define and distinguish between a **star**, a **planet** and a **moon** (including their spherical shapes).
- What a **solar system** is, how our solar system is arranged, and how each part moves relative to the **Sun**.
- How the moon moves around the **Earth**, the length of time it takes, and how this movement looks to us from Earth.
- Why we have **day** and **night**, and what is actually happening when the Sun seems to be moving across the sky.
- How our ideas about **Space** have developed and changed over time, including what we have learnt following some key events and **discoveries**.
- How to test **variables** to identify whether they have an impact upon the results of an **investigation**.
- To observe and describe the effects of **friction** and **gravity**.
- To **repeat tests** to increase the accuracy of **results** and **findings**.

Hook

- What is a solar system?
- Think about the size and arrangement of the Sun and planets within our Solar System and how big it is
- Explore our solar system inside a planetarium



Block 1

Non chronological report

- Learn to identify and describe the difference between a planet, star and moon
- Describe the phases and cycles of the Moon.
- Describe why we have day and night and seasons on Earth



Block 2

Narrative

- Write your own adventure story about an alien arriving on planet Earth
- Carry out and record the findings of investigations into gravity and friction

Year 5: Ultimate Universe / National Curriculum Links

Science

- 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
- take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- use relevant scientific language and illustrations to discuss, to talk about how scientific ideas have developed over time.
- explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

History

[Cross-curricular with Science]

- use relevant scientific language and illustrations to discuss, to talk about how scientific ideas have developed over time

DT / Art / Geography

Not a focus during this topic.

Key vocabulary:

Science:

Specific terminology:

Space, a star, a planet, a moon, a solar system, the Sun, the Earth, day, night, 'phases of the moon', 'cycle of the moon', friction, gravity.

General scientific terminology:

discoveries, investigations, variables, tests, results, findings.

Key texts

