

Introduction

This unit is the only Astronomy related science unit in the primary science curriculum. The aim is to give children a basic overview of Earth and its place in our Solar System.



Health & Safety

Pupils should be warned that it is not safe to look directly at the Sun, even when wearing dark glasses.



Home Learning

Waxing of the Moon Activity Sheet

Year 5 Science Earth and Space Word Search

To look at all the resources in the Earth and Space unit

To find out more about PlanIt download our

Assessment Statements

By the end of this unit...

...all children should be able to:

- Describe a sphere.
- Identify scientific evidence with support.
- Name the planets in the solar system with support.
- Explain how the planets orbit the Sun.
- Explain how night and day occur.
- Make predictions about night and day in different places on Earth.
- Report and present findings from enquiries with support.
- Explain that the Moon orbits the Earth not the Sun.

...most children will be able to:

- Describe the Sun, Earth and Moon as spherical.
- Name the planets in the solar system independently.
- Distinguish between heliocentric and geocentric ideas of planetary movement.
- Explain that day and night is due to rotation of the Earth.
- Support the idea that different places on Earth experience night and day at different times with evidence.
- Report and present findings from enquiries.
- Explain how the Moon moves relative to the Earth.

...some children will be able to:

- Name at least two different shapes the Earth was thought to be.
- Identify scientific evidence that has been used to support or refute ideas.
- Describe some features of the planets.
- Place the planets in the solar system in the correct order.
- Explain theories of planetary movement in the solar system using evidence.
- Explain using evidence how night and day occur.
- Explain why night and day occur at different times in different places on Earth.
- Write a conclusion which explains my findings.
- Explain how the Earth and Moon move relative to the Sun.

Lesson Breakdown

Resources

1. Spherical Bodies

Describing the Sun, Earth and Moon as approximately spherical bodies by understanding how this knowledge has been attained.

- I can explain why we know the Sun, Earth and Moon are spherical.

Identifying scientific evidence that has been used to support or refute ideas or arguments in the context of how ideas changed from a flat earth view.

- I can identify scientific evidence which does or does not provide evidence for an idea or argument.



2. The Planets

Describing the movement of the Earth, and other planets, relative to the Sun in the solar system by learning the order of the planets and how they move in the solar system.

- I can name and describe features of the planets in our solar system.
- I can order the planets in our solar system.

- Bell/instrument/online timer
- Blank A3 sheets of paper
- Colour Pencils



3. Geocentric Versus Heliocentric

Describing the movement of the Earth, and other planets, relative to the Sun in the solar system by examining the geocentric and heliocentric theories.

- I can explain how planets move in our solar system.

Identifying scientific evidence that has been used to support or refute ideas or arguments in the context of the shift from heliocentric models of the solar system to geocentric models.

- I can identify scientific evidence which does or does not provide evidence for an idea or argument.

- Video recording equipment – camera/tablet



4. Night and Day

Using the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky by examining why the sun appears to move and the arguments for the Earth's rotation.

- I can explain day and night and the apparent movement of the sun across the sky.

Identifying scientific evidence that has been used to support or refute ideas or arguments in the context of the evidence for the Earth's rotation.

- I can identify scientific evidence which does or does not provide evidence for an idea or argument.

- Video recording equipment – camera/tablet



5. Night and Day International

Using the idea of the Earth's rotation to explain day and night and the apparent movement of the Sun across the sky by predicting night and day in different places on Earth.

- I can investigate night and day in different parts of the Earth.

Reporting and presenting findings from enquiries, including conclusions, in oral and written forms such as displays and other presentations in the context of investigating night and day.

- I can report and present findings from enquiries.

- Globes



6. Movement of the Moon

Describing the movement of the Moon relative to the Earth by explaining how the Moon orbits the Earth.

- I can explain the movement of the Moon.

- Globes
- Black card
- Split pins
- Scissors
- Glue

