Y5 – Earth and Space – How does the Earth fit into our solar system? Lesson 4

Lesson	4 of 6

Learning objective

I can describe the movement of the Earth and other planets relative to the Sun in the solar system.

National Curriculum links

NC Year 5:

Children will:

- describe the movement of the Earth, and other planets, relative to the Sun in the solar system

Working scientifically:

- identifying scientific evidence that has been used to support or refute ideas or arguments

Key lesson question	What is the largest object that orbits Earth?

Resources

- lesson presentation (PPT)
- practical activity ideas
- activity worksheet

Teaching input

- **Scientific enquiry types and skills** – Review the 'scientific enquiry types' and 'working scientifically skills' the children will use in this lesson, highlighted on the slide.
- **How does the Earth fit into our solar system?** – The slide shows the lesson questions the children will answer in this unit. The current lesson's question is highlighted on the slide.
- **Key vocabulary for this lesson** – Go through the key vocabulary for this lesson and their definitions. Have any of the children heard these words before? Did they already know their meanings?
- **Observing** – Introduce Carly. Choose a child to read what Carly says about the scientific enquiry type, 'Observing'. Explain that the next two slides show images captured by space telescopes.
- **Images captured by space telescopes** – The following two slides show images captured by space telescopes.
- **Let's discuss** – Read through the information on the slide. The children are to discuss the question on the slide with their learning partners, in groups, or as a class. Take feedback from the class before the answers are revealed on the following slide. Go through the keyword and definition in the 'New word alert!' box. The children can watch the video about how many artificial satellites have been launched from the ground into space over the years via the link on the slide.
- **Word detective** – Read through the information on the slide. The children are to discuss the questions on the slide with their learning partners, in groups, or as a class. There are sentence starters and some questions to help guide and support their discussions. Take feedback from the class.
- **Natural satellite - the Moon** – Read through the information over the following two slides. Read the fact in the 'Did you know?' box. There are two videos that the children can watch via the links on the slides. Go
- through the keyword and its definition in the 'New word alert!' box.
- **Artificial satellites** – Read through the information on the slide.
- **Word detective** – The children are to discuss the questions on the slide with their learning partners, in groups, or as a class. There are sentence starters to help guide their discussions. Take feedback from the class before the answers are revealed on the following slide.
- **Satellite activity** – The children are to follow the instructions on the slide to take part in the activity with their learning partners.
- **Let's discuss** – The children are to discuss the question on the slide with their learning partners, in groups, or as a class. Take feedback from the class before the answers are revealed on the following slide.
- **Orbit activity** – The children are to follow the instructions on the slide to take part in the activity with their table groups.
- **Activity** – The children will use their activity worksheets to write an explanation of what happens between the Sun, the Earth, and the Moon.
- **Challenge** – The children are to read the statement on the slide with their learning partners, in groups, or as a class, and decide whether it is true or false. Take feedback from the class before the answer is revealed on the following slide.

Main activity

Children are to use their activity sheet to write an explanation about what happens between the Sun, the Earth and the Moon, thinking carefully about the scientific vocabulary that they use. There is a cloze passage option with a vocabulary bank for those who may need extra support.

Challenge

We don't visit the Moon very often, so how have scientists learned so much about it?

Cumulative quiz questions

Name some objects that orbit the Earth.

Add the labels to the diagram to show the orbits of the Sun, Earth and Moon.

The largest object that orbits Earth is… a. the Sun b. the Moon

Self-assessment

- I can name some objects that orbit Earth.
- I can talk about the Moon's orbit around the Earth, stating how long it takes.
- I can explain the relationship between the Sun, the Earth and the Moon.

Key vocabulary

moon – a natural object, often made of rock, ice, or metal, that orbits a planet

orbit – the path that an object takes as it moves around another object in space

Sun – the star at the centre of our solar system

gravity – a force that pulls objects towards each other