Birches Head Academy

Part of the Frank Field Education Trust

# Year 7 Science
# Learning Programme 5

The LORIC skill focus for this LP is: COMMUNICATION.
The Moral Values foci for this LP are: COURAGE and HUMILITY.

Courage - Acting with bravery and overcoming fears. I will show courage by answering a question in class even when I'm not 100% sure of the answer.
Humility - Having a modest view of oneself. I will show humility by admitting mistakes and asking for help when needed.

**What will I be learning about in this Learning Programme?**

Pupils will learn about how the solar system is structured, including the sizes and distances of planets, how the Sun, Earth and Moon move, and how this causes day, night and the seasons. Pupils will also explore gravity and how it affects movement in space and will learn how living things depend on each other and their environment, including food chains, food webs, competition and the importance of biodiversity in stable ecosystems.

**Where have I seen this learning before?**

Pupils have already learned in KS2 that the Sun is at the centre of the solar system, that the Earth rotates to create day and night, and that animals and plants live in habitats where they depend on each other for survival. Pupils have also studied simple food chains, identified producers and consumers, and learned how forces like gravity act on objects. This Learning Programme builds on these ideas in more depth.

**What could I use it for?**

This learning helps pupils understand both large-scale scientific ideas, like how planets move in space, and life on Earth, such as how ecosystems stay balanced. It will support future topics in KS3 and KS4, including forces, evolution, environmental science and astronomy. It also helps you make sense of real-world issues like climate change, habitat loss and why protecting biodiversity is important.

**Literacy Non-Negotiables:**

- Capital letters must be used at the start of sentences and for the first letter of proper nouns
- Full stops must be used at the end of a sentence
- Question marks must be used at the end of a question
- Apostrophes should only be used for possession or omission
- Days of the week and months must be spelled correctly
- Key words must be spelled correctly
- Vocabulary to be taught using the Frayer model

| **In LP5.1, I will know:** 11/05/26 - (WK 1) | **Frayer Model Words** | **Homework** |
|---|---|---|
| how to carry out a practical to investigate impact craters when learning about Asteroids - IGNITION<br>how to describe the structure of the Universe | Orbit | Sparx Science |
| **In LP5.2, I will know:** 18/05/26 - (WK 2) | **Frayer Model Words** | **Homework** |
| how to describe the model of the solar system and explain why we see objects in the Solar System<br>how to explain the phases of the Earth and Moon | Asteroid | Sparx Science |
| **LP5 RLW, I will:** 01/06/26 - (WK 1) | **Frayer Model Words** | **Homework** |
| review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge. | Universe | Sparx Science |
| **In LP5.3, I will know:** 08/06/26 - (WK 2) | **Frayer Model Words** | **Homework** |
| how to describe what interdependence is and the importance of pollinators<br>how to construct and explain food chains and food webs in ecosystems<br>Extended Task. | Predator | Sparx Science |
| **In LP5.4, I will know:** 15/06/26 - (WK 1) | **Frayer Model Words** | **Homework** |
| how to create an ecosystem and describe how organisms can be suited to their environment<br>how to carry out and complete a knowledge check and PRT | Bioaccumulation | Sparx Science |
| **In LP5.5, I will know:** 22/06/26 - (WK 2) | **Frayer Model Words** | **Homework** |
| how to describe the interaction between predator and prey populations<br>how to explain the importance of interdependence and how species co-exist in an ecosystem | Habitat | Sparx Science |
| **In LP5.6, I will know:** 29/06/26 - (WK 1) | **Frayer Model Words** | **Homework** |
| how to describe the interaction between predator and prey populations and interpret graphs<br>how to explain bioaccumulation and interdependence in populations<br>Extended Task. | Interdependence | Sparx Science |
| **In LP5.7, I will know:** 06/07/26 - (WK 2) | **Frayer Model Words** | **Homework** |
| how to review my learning of ecosystems in preparation for an upcoming assessment<br>how to complete an independent assessment and PRT to demonstrate learning | Competitor | Sparx Science |

PRT Task 1

PRT Task 2

**Resources to support learning:**

Sparx Science

**FFET Award Challenge for this Learning Programme:**

Create a food web poster and explain how competition occurs when two organisms rely on the same food source.