Birches Head Academy

Part of the Frank Field Education Trust

Year 8 Science
Learning Programme 3

Loric for LP3 is Resilience

The values we are learning about are respect and justice

Respect - a feeling of deep admiration for someone or something elicited by their abilities, qualities or achievements
Justice - fair behaviour or treatment

What will I be learning about in this Learning Programme?
Students will be learning about why different places on Earth experience different day light hours to the UK and the importance of gravity. Students will also study how environments interact differently with living and non-living factors.

Where have I seen this learning before?
Students have studies Earth and Space previously in Year 5 and about living things and their habitats in Year 6

What could I use it for?
The contents of this LP contains the foundation for GCSE Physics and Biology throughout KS3 and KS4.

Reading texts that pupils will study during the learning programme

Week 1: Seasons, Week 3: Gravity, Week 5: Food chains and webs

In LP3.1, I will know : 06/01/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
why places on Earth experience different daylight hours; the link between the axis of the Earth and the seasons - RP; why you see phases of the moon.	I will show respect by actively listening to others	Homework tasks are located in the Knowledge Organisers

In LP3.2, I will know : 13/01/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
the structure of our solar system; the difference between mass and weight; how gravitational force varies with mass and distance.	I will show justice by speaking up when something is not right	Homework tasks are located in the Knowledge Organisers

In LP3.3, I will know : 20/01/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
why objects stay on orbit; how our ideas of the solar system have changed over time; how animals and plants can be classified	I will show respect by being punctual and not wasting the time of others	Homework tasks are located in the Knowledge Organisers
Extended Task		

PRT Task 1

In LP3.4, I will know : 27/01/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
how to test my understanding and complete Assessment 1; how to review an assessment and complete a PRT task; the usefulness of a food chain compared to a food web.	I will show justice by being inclusive and accepting everyone regardless of our differences	Homework tasks are located in the Knowledge Organisers

In LP3.5, I will know : 03/02/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
the factors that affect the population of a species including bioaccumulation; how organisms can co-exist within an ecosystem; how plants, animals and environmental conditions interact in a habitat.	I will show respect by taking care of the school property	Homework tasks are located in the Knowledge Organisers

In LP3.6, I will know : 10/02/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
some of the resources that plants and animals compete for; how plants get the resources they need for photosynthesis; the structure and function of the main components of a leaf.	I will show justice by supporting others of seeking help when required	Homework tasks are located in the Knowledge Organisers
Extended Task		

LP3 RLW, I will: 24/02/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
review my learning, recalling and applying key knowledge, focus on closing any gaps in my knowledge and prepare effectively for the upcoming assessments.	I will show respect by actively listening to others	Homework tasks are located in the Knowledge Organisers

PRT Task 2

In LP3.7, I will know : 03/03/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
how to Investigate the factors that affect the rate of photosynthesis -RP; how a plant uses minerals for healthy growth how to test my understanding and complete Assessment 2.	I will show respect by recognising and celebrating the achievements of myself and others	Homework tasks are located in the Knowledge Organisers

Resources to support learning:

Kerboodle, Bitesize, Knowledge Organisers

FFET Award Challenge for this Learning Programme:

Year 8 Challenge: Space
Challenge Title: "The Colony Beyond Earth!"
Imagine Earth has become uninhabitable, and you are tasked with creating a self-sustaining colony on a distant planet or moon.
Task:
Design your colony, considering challenges such as food, water, oxygen, energy, and protection from extreme conditions.
What to Create:
A blueprint or 3D model of your colony (drawn, digitally designed, or built from materials).
A persuasive pitch (150–200 words) explaining why your colony design is the best choice for survival.
Judging Criteria:
Imagination, feasibility based on space science, and the effectiveness of your pitch.