The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 8 Science
Learning Programme 2

The LORIC skill focus for his LP is: ORGANISATION

The Moral Virtues focus for this LP are: COMPASSION and HONESTY

Compassion - the quality of feeling pity and concern for the sufferings or misfortunes of others.
Honesty - the quality of being truthful.

What will I be learning about in this Learning Programme?
How different elements react and the products formed, the comprehensive structure of the earth including the different types of rocks found, how the atmosphere has evolved over time and the different material cycles that take place on earth.

Where have I seen this learning before?
Acids and alkalis from KS2, the basic structure of the earth and its atmosphere from KS2.

What could I use it for?
Chemical changes, the earth and atmosphere in GCSE chemistry. The study of the earth and environmental sciences in university. The study of chemistry in university.

Literacy:
- 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

In LP2.1, I will know: 19/10/26 - (WK 2)	Key Vocabulary	Homework
the reactivity of metals according to how they react with oxygen; the reactivity of metals according to how they react with water; that mass is conserved during a chemical reaction.	Exothermic	Complete task on Sparx Science.
In LP2.2, I will know: 02/11/26 - (WK 1)	**Key Vocabulary**	**Homework**
how to describe a chemical reaction as endo or exothermic from temperature change data; how to predict and investigate displacement between metals and metal compounds; how to use the reactivity series to decide which metals can be extracted from their ores by heating with carbon.	Displacement	Complete task on Sparx Science.
LP2 RLW, I will: 09/11/26 - (WK 2)		
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.		Complete task on Sparx Science.
In LP2.3, I will know: 16/11/26 - (WK 1)	**Key Vocabulary**	**Homework**
the three types of rock that make up the crust of the Earth; how weathering breaks up rocks to form sediments; why sedimentary rocks have layers.	Weathering	Complete task on Sparx Science.
In LP2.4, I will know: 23/11/26 - (WK 2)	**Key Vocabulary**	**Homework**
how igneous rocks are formed from molten rock; how metamorphic rocks are formed from other rocks; how to use the rock cycle to explain how the material in rocks is recycled; review and improve my learning through formative assessment and PRT.	Metamorphic rock	Complete task on Sparx Science.
In LP2.5, I will know: 30/11/26 - (WK 1)	**Key Vocabulary**	**Homework**
how to describe and explain the formation of the different rock types; the processes involved in changing the composition of Earth atmosphere; the processes that remove/put out carbon dioxide into the atmosphere. how to complete an assessment in science to review my progress.	Igneous rock	Complete task on Sparx Science.
In LP2.6, I will know: 07/12/26 - (WK 2)	**Key Vocabulary**	**Homework**
a cause and impact of global warming; the advantages and disadvantages of recycling; in terms of particles, how energy is transferred; Extended Task.	Global warming	Complete task on Sparx Science.
In LP2.7, I will know: 14/12/26 - (WK 1)	**Key Vocabulary**	**Homework**
review my attainment in assessments and close gaps in my learning; how to compare the advantages and disadvantages of using renewable and non-renewable energy resources; how to explain the difference between energy and power; the process of thermal conduction within a material.	Renewable	Complete task on Sparx Science.

PRT Task 1

PRT Task 2

Resources to support learning:
Synergy, KS3 bitesize, EPC knowledge organiser, Youtube search: Global warming.

FFET Award Challenge for this Learning Programme:
Design an environmentally friendly product which can recycled. Explain what materials you have chosen to use and why.