

Year 11 Science

Learning Programme 4

Reading texts that pupils will study during the learning programme

Loric for LP4 is Initiative

The values we are learning about are integrity and gratitude

Week 1 - Giant Covenant Structures, Week 3 -
Extracting Metals from their Ores, Week 5 -

Integrity - Being honest and having strong moral principles

Gratitude- the quality of being thankful and showing appreciation

What will I be learning about in this Learning Programme?

This LP is a major part of the combined GCSE so following this LP closely is imperative, organic chemistry a large part of the chemistry course so a good understanding of the topic is important. The waves section of the LP involves lots of calculations

Where have I seen this learning before?

This LP develops knowledge of organic chemistry, chemical analysis and waves which has previously been studied in year 7 and in year 8.

What could I use it for?

Those wishing to go on and study science beyond GCSE will greatly benefit from this LP, careers working in engineering, building and all of the healthcare field are just some of the roles which use this learning.

In LP4.1, I will know :	10/03/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
how to differentiate and explain the properties of graphene and fullerenes; how to explain the term "cracking" with reference to hydrocarbons and how the products are utilised.		I will show integrity by expressing gratitude to others.	Homework tasks are located in the Knowledge Organisers
In LP4.2, I will know :	17/03/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
how to extract metals from their ores; how to extract aluminium and copper; how to generate electricity from wind and solar.		I will show gratitude by showing my appreciation when someone does something nice.	Homework tasks are located in the Knowledge Organisers
In LP4.3, I will know :	24/03/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
how to generate electricity from a range of renewable resources; know energy production can contribute towards global warming and the environment; how to explain the changes in energy stores. Extended Task		I will show integrity by taking responsibility for my actions whether they be good or bad.	Homework tasks are located in the Knowledge Organisers
In LP4.4, I will know :	31/03/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
how energy is dissipated by particles; how to insulate and heat buildings; how to use the energy efficiency equation.		I will show gratitude by completing a random act of kindness.	Homework tasks are located in the Knowledge Organisers
In LP4.5, I will know :	21/04/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
how to explain Life Cycle Assessments; how to reduce, reuse and recycle resources.		I will show integrity by being reliable and trustworthy.	Homework tasks are located in the Knowledge Organisers
In LP4.6, I will know :	28/04/2025 - (WK 1)	Behaviour to support the values: STEPS/SLANT	Homework
how to differentiate and explain the properties of graphene and fullerenes. how to explain the term "cracking" with reference to hydrocarbons and how the products are utilized. Extended Task		I will show gratitude by being respectful.	Homework tasks are located in the Knowledge Organisers
In LP4.7, I will know :	05/05/2025 - (WK 2)	Behaviour to support the values: STEPS/SLANT	Homework
how to extract metals from their ores. how to extract aluminum and copper		I will show integrity by showing patience and flexibility when obstacles get in the way.	Homework tasks are located in the Knowledge Organisers
Resources to support learning:			
Kerboodle			
FFET Award Challenge for this Learning Programme:			
Create an A3 mindmap of all the major topics found on Paper 1.			

PRT Task 1

PRT Task 2