

## Year 11 Science Learning Programme 4

Reading texts that pupils will study during the learning programme

Loric for LP4 is Initiative

The value we are learning about is **Justice and Integrity**:

**Justice** - Fair behaviour or treatment

**Integrity** - Being honest and having strong moral principles

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

Students will be learning about ecology, using resources and electromagnetism.

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

Students have previously learnt about ecology in Year 7.

**What could I use it for?**

Students will benefit greatly from this LP if they study science beyond GCSE. It will also be of great use in careers such as Chemical engineer or ecologist.

Week 1: sampling, Week 3: carbon cycle, Week 5: radioactivity

In LP4.1, I will know:	11/03/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
the relationship between communities and ecosystems; how to find the mean, median and mode using random sampling techniques; how plants and animals are adapted to survive.			mean, mode, median, interdependence	Checkpoint quiz 9.2
<b>In LP4.2, I will know:</b>	<b>18/03/24 - (WK 2)</b>	<b>PR Focus</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how plants and animals compete for resources; how the numbers of predators and prey in a community are related; the importance of decay.			predators, prey, communities, quadrat, abundance, transect	Checkpoint quiz 10.2
<b>In LP4.3, I will know:</b>	<b>08/04/24 - (WK 1)</b>	<b>PR Focus</b>	<b>Key Vocabulary</b>	<b>Homework</b>
the processes that remove and return carbon dioxide to the atmosphere; the effects of human population on the Earth and its resources.  Extended Task			carbon cycle, decomposers, consumer, biodiversity	Homework 11.3
<b>In LP4.4, I will know:</b>	<b>15/04/24 - (WK 2)</b>	<b>PR Focus</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how human activities pollute the air and water; the effect of the destruction of peat bogs; the effects of global warming and ways to reduce human impact.			peat bogs, global warnings, deforestation	Homework 12.2
<b>In LP4.5, I will know:</b>	<b>22/04/24 - (WK 1)</b>	<b>PR Focus</b>	<b>Key Vocabulary</b>	<b>Homework</b>
renewable and non-renewable resources; methods of purifying water; how to evaluate biological methods of metal extractions.			renewable, non-renewable, Phyto mining, finite, potable,	Homework 12.5
<b>In LP4.6, I will know:</b>	<b>29/04/24 - (WK 2)</b>	<b>PR Focus</b>	<b>Key Vocabulary</b>	<b>Homework</b>
the life cycle of different materials and products; the shape of the magnetic field on a bar magnet; how to use an electromagnet.  Extended Task			magnetic field, bar magnet, core,	Checkpoint quiz 12.6
<b>In LP4.7, I will know:</b>	<b>06/05/24 - (WK 1)</b>	<b>PR Focus</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to make a motor; the properties of alpha, beta and gamma radiation; how the nuclear model of the atom was established.			motor, magnetic field, force, current	Checkpoint quiz 12.7
<b>In LP4.8, I will know:</b>	<b>13/05/24 - (WK 2)</b>	<b>PR Focus</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to represent the emission of a particle from a nucleus; how to calculate the half life of a radioactive source;			alpha, beta, gamma, ionising.	
<b>Resources to support learning:</b>				
Kerboodle, science text books, BBC bitesize, YouTube.				
<b>FFET Award Challenge for this Learning Programme:</b>				
Attend an extra-curricular club, represent the academy at an event, attend an enrichment day, receive a subject praise postcard, attend a day trip, attend a head of year breakfast or afternoon tea, achieve 100 positive points on class charts, receive a letter of commendation from SLT, be invited to a wonderful Wednesday, receive a principals letter or be invited to a principals lunch, attend a residential trip, achieve the Duke of Edinburgh bronze award.				

PRT Task 1

PRT Task 2