

Year 10 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

wk. 1: Drug trials Wk. 3: The greenhouse effect
Wk. 5: water treatment

What will I be learning about in this Learning Programme?

This LP is a major part of Synergy GCSE, so following this LP closely is imperative. Lifestyle and Health and preventing, treating and curing disease forms a large part of the interactions with the environment topic which leads in learning about Earth's atmosphere, eco systems and biodiversity.

Where have I seen this learning before?

This LP develops knowledge of how the environment can influence our health and human impact is affecting the Earth. This builds on knowledge gained in KS3.

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 health care, Earth sciences, sustainability and ecology are just some of the roles which use this learning.

In LP4.1, I will know:	11/03/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how medicinal drugs are developed and tested; some of the risk and benefits of genetic technologies; the function, medical uses and research in stem cells.			double-blind trial, placebo, genetic technology, stem cell, clinical trial	Checkpoint quiz 3.4
In LP4.2, I will know:	18/03/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
some of the benefits, risks, social and ethical issues around the use of stem cells; how to evaluate theories in the Earth's early atmosphere; the main changes in Earth's atmosphere over time, with possible causes.			embryonic, ethical, atmosphere, photosynthesis, composition	Checkpoint quiz 3.5
In LP4.3, I will know:	08/04/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
the role of microorganisms in the cycling of materials; the processes that remove carbon dioxide from the atmosphere and return it again; how the greenhouse effect works.			decay, decomposers, respiration, photosynthesis, carbon cycle, combustion	Homework 3.1
Extended Task				
In LP4.4, I will know:	15/04/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to evaluate evidence for human influences on climate change; the effects of increases in greenhouse gases in the atmosphere; problems that can be caused by atmospheric pollutants.			mitigate, carbon footprint, biofuel, sulphur dioxide, acid rain, particulates,	Homework 3.2
In LP4.5, I will know:	22/04/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
the importance of the water cycle to living organisms; method to produce potable water; how wastewater is made safe to release into the environment.			distillation, potable water, desalination, sewage	Homework 3.5
In LP4.6, I will know:	29/04/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
the relationship between communities and ecosystems; how the biotic and abiotic factors that affect populations in an ecosystem; how to measure population size using sampling techniques.			communities, habitat, interdependence, biomass, consumer, producer, predator, prey	Checkpoint quiz 3.5
Extended Task				
In LP4.7, I will know:	06/05/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
what is biodiversity and the human impact on biodiversity; the impact of deforestation and peat bog destruction; some of the ways people can reduce the human impact on ecosystems.			biodiversity, deforestation, peat bog, industrial waste, fertiliser.	Checkpoint quiz 3.6
In LP4.8, I will know:	13/05/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
kerboodle; bitesize; GCSE Pod.				
Resources to support learning:				
Kerboodle, science text books, BBC bitesize, YouTube.				
FFET Award Challenge for this Learning Programme:				
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