

Year 10 Biology

Learning Programme 4

Reading texts that pupils will study during the learning programme

Logic 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

Week 1: Photosynthesis, Week 3: Homeostasis, Week 5: The eye

What will I be learning about in this Learning Programme?

Students will learn about the role of glucose in plants and how the human body controls its internal environment.

Where have I seen this learning before?

Students have previously learnt about Photosynthesis in Year 8 LP2 and the Human body in Year 7 LP3.

What could I use it for?

Students will greatly benefit from this LP if they study biology beyond GCSE. It will also be of great use for careers in Health care.

In LP4.1, I will know:	11/03/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to explain the different factors affecting the rate of photosynthesis; how to explain the chemistry of aerobic respiration; how to describe how your body meets increased demands for energy during exercise.			Photosynthesis, glucose, oxygen, carbon dioxide.	Checkpoint quiz B4 1
In LP4.2, I will know:	18/03/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to explain why less energy is transferred during an aerobic respiration; how to describe that metabolism is the sum of all reactions in the body.			Aerobic, exothermic, glycogen	Checkpoint quiz B4: 2
In LP4.3, I will know:	08/04/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to explain why it is important to maintain your internal environment; how to describe why you need a nervous system and investigate the effect of a factor on human reaction time how to explain why reflexes are important in your body. Extended Task			Homeostasis, temperature, water, salt levels. Glucose	Checkpoint quiz B4: Practice 3
In LP4.4, I will know:	15/04/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to describe the main areas of the brain and their function; how to explain the main parts of the eye and how the structure is related to its functions.			Cerebral cortex, cerebellum, medulla,	Checkpoint test B4: test 3
In LP4.5, I will know:	22/04/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to describe what happens in short sightedness and long sightedness; how to explain the main organs of the endocrine system.			Myopia, lens, hyperopia, nerve	Checkpoint test B4: test 1
In LP4.6, I will know:	29/04/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to describe the role of the pancreas in controlling blood glucose concentration; how to explain the differences in type 1 and type 2 diabetes. Extended Task			Insulin, glucagon, glucose, glycogen	Checkpoint test B4: test 2
In LP4.7, I will know:	06/05/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to explain the importance of negative feedback systems; how to describe the role of hormones during puberty.			Increase, decrease, negative feedback, adrenaline, thyroxine.	Checkpoint test B4: practice 3
In LP4.8, I will know:	13/05/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to describe the role of the main human reproductive hormones; how to compare different methods of hormonal and non hormonal contraception.			Oestrogen, progesterone, LH FSH	Checkpoint test B4: test 3
Resources to support learning:	Kerboodle, CGP Revision Guide, Knowledge Organiser			
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