

Year 8 Science

Learning Programme 1

The LORIC skill focus for his LP is: LEADERSHIP The Moral Virtues focus for this LP are: COURAGE and HUMILITY. Courage - Acting with bravery and overcoming fears. I will show courage by answering a question in class even when I'm not 100% sure of the answer. Humility - Having a modest view of oneself. I will show humility by admitting mistakes and asking for help when needed.			Literacy Non-Negotiables: • 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 • Vocabulary to be taught using the Frayer model
What will I be learning about in this Learning Programme? How organisms rely on photosynthesis and respiration to survive; how to investigate and construct equations to describe the reactions of acids and alkalis and metals. Where have I seen this learning before? Basic understanding of photosynthesis and acids and alkalis from KS2. Understanding of cells, the periodic table and formulae and equations from year 7. What could I use it for? When you are studying the following topics in year 11; GCSE biology organisation and bioenergetics topics, GCSE chemistry periodic table and chemical changes.			
In LP1.1, I will know:	01/09/26 - (WK 1)	Key Vocabulary	Homework
about consistency across the college and classroom expectations; how to recognise potential hazards in the lab and identify variables within an investigation; how to identify scientific equipment, explain what they are used for and draw standardised diagrams.		Variable	Sparx Science task.
In LP1.2, I will know:	07/09/26 - (WK 2)	Key Vocabulary	Homework
the organs of a plant and state the functions and understand the process of photosynthesis; how to explain the importance of photosynthesis in the food chain; how the structures of the leaf make it well adapted for photosynthesis.		Photosynthesis	Sparx Science task.
In LP1.3, I will know:	14/09/26 - (WK 1)	Key Vocabulary	Homework
the importance of stomata and guard cells to diffusion; what starch is used for in a plant discuss the importance of storing it; how to describe how a plant uses minerals for healthy growth and explain the result of deficiencies. Extended Task.		Stomata	Sparx Science task.
In LP1.4, I will know:	21/09/26 - (WK 2)	Key Vocabulary	Homework
how to explain the process of aerobic respiration; how to describe anaerobic respiration and compare with aerobic respiration; how to describe the products formed from anaerobic respiration of yeast.		Aerobic	Sparx Science task.
In LP1.5, I will know:	28/09/26 - (WK 1)	Key Vocabulary	Homework
how to plan and write a method to complete an investigation on yeast respiration; how to conduct a practical investigating yeast respiration and analyse the results; the different particles found in acids and alkalis.		Anaerobic	Sparx Science task.
In LP1.6, I will know:	05/10/26 - (WK 2)	Key Vocabulary	Homework
how indicators categorise solutions as acidic, alkaline, or neutral; how to describe how pH changes in neutralisation reactions and give examples; how to predict the salts that form when acids react with metals or bases and construct word equations for the reactions. Extended Task.		Acid	Sparx Science task.
In LP1.7, I will know:	12/10/26 - (WK 1)	Key Vocabulary	Homework
how to compare the reactions of different metals with dilute acids, use word equations and describe the test for hydrogen gas; how to explain the reactivity of metals according to how they react with oxygen; my strengths and weaknesses.		Alkali (base)	Sparx Science task.
Resources to support learning: EPC Knowledge Organiser, BBC bitesize KS3 science, exercise book, Synergy.			
FFET Award Challenge for this Learning Programme: Grow a plant and research the conditions it will need to grow. Keep a journal of your observations on how your plant grows.			

PRT Task 1

PRT Task 2