

Year 9 KS3 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 electricity is used in various circuits and the factors affecting electrical circuits and components.				
Where have I seen this learning before? Basic use of equipment at KS2, components, building circuits and measuring current and potential difference. What could I use it for? GCSE physics electricity unit, further study at A level.				
In LP1.1, I will know: 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 and explain what they are used for and draw standardised diagrams.		01/09/26 - (WK 1)	Key Vocabulary Variable	Homework Sparx Science
In LP1.2, I will know: how to build circuits from diagrams and describe the function of each component; explain the difference between potential difference and current and why potential difference is measured in parallel; how current and potential difference vary in series and parallel circuits.		07/09/26 - (WK 2)	Key Vocabulary Circuit	Homework Sparx Science
In LP1.3, I will know: how to calculate the resistance of a component and of a circuit; how to calculate the resistance in a circuit in respect to potential difference and current; how to identify materials as metals or non-metals and make links about conductivity. Extended Task.		14/09/26 - (WK 1)	Key Vocabulary Current	Homework Sparx Science
In LP1.4, I will know: how to explain in terms of electrons, why something becomes charged; how insulating materials can become charged and explain in terms of electron transfer; my strengths and areas for development.		21/09/26 - (WK 2)	Key Vocabulary Charge	Homework Sparx Science
In LP1.5, I will know: how to use the idea of an electric field to explain electrostatic attraction and sparking; how to describe the Earth's magnetic field and lines round a magnet in detail; how to change the strength of an electromagnet.		28/09/26 - (WK 1)	Key Vocabulary Electrostatic	Homework Sparx Science
In LP1.6, I will know: how a simple motor works; how to build an electromagnet and test its strength; how to compare the energy in food and fuels with the energy needed for different activities. Extended Task.		05/10/26 - (WK 2)	Key Vocabulary Electromagnet	Homework Sparx Science
In LP1.7, I will know: how to use the equation for work done to solve problems, including changing the subject of the equation; the link between power, fuel use, and cost of using domestic appliances; my strengths and areas for development		12/10/26 - (WK 1)	Key Vocabulary Energy	Homework Sparx Science
Resources to support learning: Knowledge organisers, Booklets on Synergy, KS3 Bitesize				
FFET Award Challenge for this Learning Programme: LP1 Year 9 Science: Which fruit is best for generating an electrical current? research and create a fact file on your findings				

PRT Task 1

PRT Task 2