

Year 9 KS3 Science Learning Programme 1

The LORIC skill focus for this LP is: LEADERSHIP The Moral Virtues focus for this LP are: COURAGE and HUMILITY. Courage - Acting with bravery and overcoming fears. Humility - Having a modest view of oneself. 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.		Literacy: - 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
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.	01/09/25 - (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.	08/09/25 - (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.	15/09/25 - (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.	22/09/25 - (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.	29/09/25 - (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.	06/10/25 - (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.	13/10/25 - (WK 1) Key Vocabulary Energy	Homework Sparx Science
Resources to support learning: EPC Knowledge organisers, Booklets on Synergy, KS3 Bitesize KS3 Science.		
FEET Award Challenge for this Learning Programme: Which fruit is best for generating an electrical current? Research and create a fact file on your findings.		

