



Electricity – Year 6 Unit – Year B

<p>Retrieval vocab: Electricity, electrical appliance/device, mains, plug, electrical circuit, complete circuit, component, cell, battery, positive, negative, connect/connections, loose connection, short circuit, crocodile clip, bulb, switch, buzzer, motor, conductor, insulator, metal, non-metal, symbol</p> <p>New Vocab N.B. Children do not need to understand what voltage is, but will use volts and voltage to describe different batteries. The words “cells” and “batteries” are now used interchangeably.</p>	<p>Previous learning</p> <p>Identify common appliances that run on electricity. (Y4 - Electricity) • Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. (Y4 - Electricity) • Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. (Y4 - Electricity) • Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. (Y4 - Electricity) • Recognise some common conductors and insulators, and associate metals with being good conductors. (Y4 - Electricity)</p>	<p>Links with Vision and Values.</p> <p><i>Stimulate in every child a sense of curiosity and excitement about the world</i></p>
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	Working scientifically/ enquiry focus	Curriculum Strand/ Focus	Small step objective	Previous learning within the unit.	Lesson content	Outcome
1	Ideas over time/ research	Electricity	Be able to explain the importance of the major discoveries in electricity by carrying out research.	N/A	How was electricity discovered? How did it change the world we live in?	The children can: Recognise how electricity has changed the world we live in. Name important discoveries/ scientists
2	Identifying and classifying	Electricity	Be able to use symbols when drawing a simple circuit diagram.	<i>Recognise how electricity has changed the world we live in. Name important discoveries/ scientists</i>	How do I draw a scientific diagram of a circuit?	The children can: Construct and draw a variety of circuits using scientific symbols to represent each component. They will be able to look at a drawing of a circuit and work out if it will work or not.



Class 2

Madron Daniel Science Small Step Progression

3	Pattern seeking Fair testing	Electricity	To investigate how the brightness of a lamp is affected by the number and voltage of cells used in the circuit	<i>As above Construct and draw a variety of circuits using scientific symbols to represent each component. They will be able to look at a drawing of a circuit and work out if it will work or not.</i>	How does voltage in a circuit affect the brightness of a bulb?	The children can: Investigate the effect that increasing the voltage in a circuit has on the brightness of a bulb. They will be able to describe this relationship and draw conclusions.
4	Fair testing	Electricity	Be able to investigate variations in how components function.	<i>As above Investigate the effect that increasing the voltage in a circuit has on the brightness of a bulb. They will be able to describe this relationship and draw conclusions</i>	How do I plan a fair test experiment to investigate variations in how components function?	The children can: Plan and conduct a fair test to determine variations in how components function in a circuit.
5	Identifying and classifying Research	Electricity	To name and research renewable and non-renewable sources of energy.	<i>As above Plan and conduct a fair test to determine variations in how components function in a circuit.</i>	What is renewable and non-renewable energy?	The children can: Produce a leaflet to explain renewable and non-renewable energy.