
























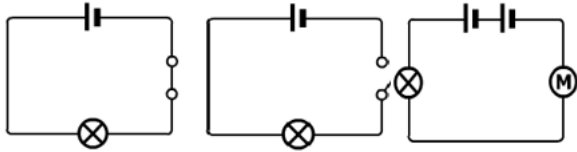














Holy Family Catholic Primary School Cronton

<p>Year 6: Science autumn term 1</p>	<p>Unit: Danger! Low voltage</p>	<p>Theme: Electricity</p>																						
<p>What I should already know: I know some common appliances that run on electricity. I know how to construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. I know 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. I know that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. I know some common conductors and insulators, and associate metals with being good conductors.</p>	<p>What I will know by the end of the unit: I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. I can compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches. I can use recognised symbols when representing a simple circuit in a diagram.</p>	<p>Vocabulary</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Amps</td> <td>A measurement for the movement of electrons through a circuit.</td> </tr> <tr> <td>Battery</td> <td>Provides power for electrical items e.g. mobile phone, torch.</td> </tr> <tr> <td>Cell</td> <td>A synonym for battery.</td> </tr> <tr> <td>Circuit</td> <td>A full journey which an electric current flow around.</td> </tr> <tr> <td>Current</td> <td>Electricity flows through a wire or a circuit.</td> </tr> <tr> <td>Electrons</td> <td>Small pieces of matter and energy flowing around a circuit.</td> </tr> <tr> <td>Fossil fuels</td> <td>Are natural fuels such as coal or gas.</td> </tr> <tr> <td>Resistance</td> <td>The measure of the difficulty electrons have in flowing through a material.</td> </tr> <tr> <td>Symbol</td> <td>A picture which represents or shows a component in a circuit.</td> </tr> <tr> <td>Terminal</td> <td>The + (positive) and - (negative) ends of the battery.</td> </tr> <tr> <td>Voltage</td> <td>electric current applied to a circuit measured in volts.</td> </tr> </table>	Amps	A measurement for the movement of electrons through a circuit.	Battery	Provides power for electrical items e.g. mobile phone, torch.	Cell	A synonym for battery.	Circuit	A full journey which an electric current flow around.	Current	Electricity flows through a wire or a circuit.	Electrons	Small pieces of matter and energy flowing around a circuit.	Fossil fuels	Are natural fuels such as coal or gas.	Resistance	The measure of the difficulty electrons have in flowing through a material.	Symbol	A picture which represents or shows a component in a circuit.	Terminal	The + (positive) and - (negative) ends of the battery.	Voltage	electric current applied to a circuit measured in volts .
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<p>Fact File</p> <p>Electricity is generated by:</p> <p>burning fossil fuels such as coal, gas and oil biomass energy – burning wood chip and domestic and commercial waste nuclear reaction movement of water – tidal flow, wave motion, falling water solar energy wind energy</p>	<p>Key Scientist Nikola Tesla (1856-1943) was a Serbian-American electrical and mechanical engineer. He was a prolific inventor and engineer who made big strides in the areas of electricity, radio and X-rays. Without Tesla's development of a type of electrical circuit (AC) we would not have electric lights in our homes.</p> <div style="text-align: center;">  </div>	<p>How does a circuit work? In a series circuit all the components are joined together and the electricity can only flow in one direction - You must learn the different symbols for the different components. Switches can be used to open and close circuits.</p>																						
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