

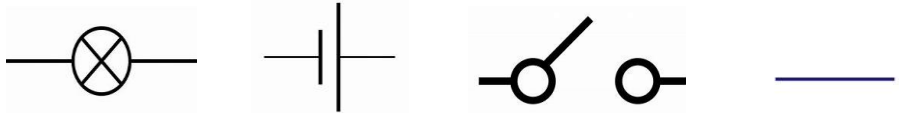
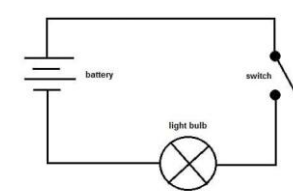


Leamington Primary Science Knowledge Organiser

Year 2 – Electricity

Strand – Physics



What I should already know	What I will learn	Important words to help me. (vocabulary)	Ideas for Scientific Enquiry																		
<p>Interesting Facts</p> <ul style="list-style-type: none"> - Electricity travels at 6,696,000 miles per hour. - Electricity plays an important role in the way your heart functions. - If a bird sits on only one power line it is safe. If the bird touches any part of its body to another line, it creates a circuit, causing electrocution. - William Morrison invented the first electric car in 1891. 	<p>What is electricity?</p> <ul style="list-style-type: none"> - I will learn which objects need electricity to work and which do not need electricity to work. - I will be able to talk about that electrical items need to be plugged into a mains socket or use batteries to work. <p>Where does electricity come from?</p> <ul style="list-style-type: none"> - I will learn that electricity is made in power stations, wind turbines, batteries and solar panels. It is then stored and carried along wires to where it needs to be used in schools, homes, hospitals and factories. <p>How can we stay safe around electricity?</p> <ul style="list-style-type: none"> - I will learn about how dangerous electricity can be if it is not used correctly. - I will explore examples of electrical safety using pictures, and be able to point out the dangers and talk about what could be done instead to keep safe. <p>What are circuit symbols?</p> <ul style="list-style-type: none"> - I will learn that circuit symbols represent different electrical components in a circuit. - I will learn the symbols of a bulb, battery, switch and wires. - I will be able to draw a simple circuit. <p>How can we make a complete circuit?</p> <ul style="list-style-type: none"> - I will be able to set up a simple circuit using a bulb, battery, a switch and 4 wires. - I will be able to make a bulb light up using the switch. 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Electricity</td> <td>The flow of electrical power or charge.</td> </tr> <tr> <td>Battery</td> <td>A container that stores energy until it is needed.</td> </tr> <tr> <td>Mains</td> <td>Electricity supplied to a building through wires.</td> </tr> <tr> <td>Component</td> <td>One of the parts or units of a combination, mixture, or system.</td> </tr> <tr> <td>Circuit</td> <td>Complete flow of electricity.</td> </tr> <tr> <td>Dangerous</td> <td>Something that may cause injury or harm.</td> </tr> <tr> <td>Safety</td> <td>Something that keeps you safe and unharmed.</td> </tr> <tr> <td>Electrical Power</td> <td>Electrical power is the rate, per unit time, at which electrical energy is transferred by an electric circuit.</td> </tr> <tr> <td>Electrical Current</td> <td>The amount of electricity flowing through the circuit.</td> </tr> </table> <div style="text-align: center; margin-top: 20px;">  <p style="display: flex; justify-content: space-around; margin-top: 5px;"> Bulb Battery Switch Wire </p> </div> <div style="text-align: center; margin-top: 20px;">  </div>	Electricity	The flow of electrical power or charge.	Battery	A container that stores energy until it is needed.	Mains	Electricity supplied to a building through wires.	Component	One of the parts or units of a combination, mixture, or system.	Circuit	Complete flow of electricity.	Dangerous	Something that may cause injury or harm.	Safety	Something that keeps you safe and unharmed.	Electrical Power	Electrical power is the rate, per unit time, at which electrical energy is transferred by an electric circuit.	Electrical Current	The amount of electricity flowing through the circuit.	<p>Classifying and Grouping</p> <ul style="list-style-type: none"> - Explore the types of electrical and non-electrical objects around a classroom. - Sort different types of electrical items based on if they are battery powered, mains powered or both. <p>Fair / Comparative Testing</p> <ul style="list-style-type: none"> - Explore and test how circuits work. - Compare different types of power sources by saying what is similar and what is different using scientific vocabulary. <p>Secondary Sources</p> <ul style="list-style-type: none"> - Research and explain why different electrical power sources are used for different purposes based on properties such as size. - Research electrical dangers and keeping safe around electricity.
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