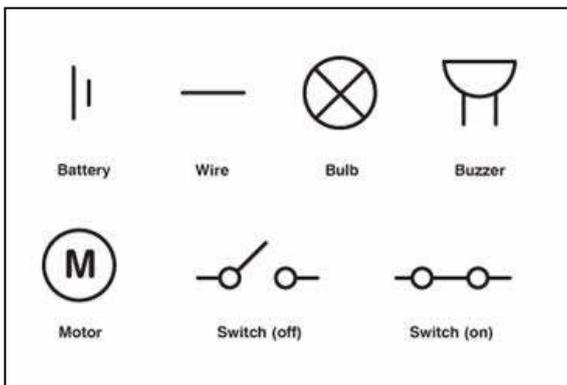




Science Focus:	Electricity	Year 6	Autumn Term 2
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Key Vocabulary	
Spelling	Definition
battery	An electric cell or connected electric cells for providing electric current.
circuit	A path through which an electrical current flows.
component	A part of something (a part of a circuit).
conductor	A substance or body capable of transmitting light, electricity, heat, or sound.
current	The flow of electrical charge.
generator	A machine that make electrical energy.



## ELECTRICAL SAFETY TIPS FOR KIDS

Electricity is helpful. It provides energy that we use to light our homes and operate lots of other things. But electricity can also be dangerous. Lots of people are hurt each year in electrical accidents. We could avoid the accidents by following these simple safety tips...

**NEVER** stick fingers, toys or other objects into an electrical outlet. You might get hurt by electricity.

**NEVER** place a hair-dryer, radio or other electronics near the bathtub or shower. Electricity and water are dangerous partners!

**NEVER** pull a plug from an outlet by its cord. Electricity could jump from the cord and give you a nasty zap.

**NEVER** place your drinks on top of your video games or other electronics. They could easily spill, and get you zapped by electricity.

**NEVER** climb trees near power lines. You might touch one by mistake and get zapped!

**STAY AWAY** from places marked with warning signs. These places are very dangerous, even for adults!

Anytime you need to use something that needs electricity, **ask an adult for help!** Remember, you can never be too safe!

Key Knowledge	
What is electricity?	<ul style="list-style-type: none"> <li>Electricity is created by generators which can be powered by gas, coal, oil, wind or solar.</li> <li>The electrical energy can be converted into other types of energy such as light, heat, movement or sound.</li> <li>Electricity is dangerous, so be careful when using electrical appliances.</li> </ul>

An Electrical Circuit	
A series circuit (One pathway around the circuit)	<ul style="list-style-type: none"> <li>Electricity can flow through the components in a complete electrical circuit.</li> <li>A circuit always needs a power source, such as a battery, with wires connected to both the positive (+) and negative (-) ends (A battery is made from a collection of cells connected together).</li> <li>A circuit can also contain other electrical components, such as bulbs, buzzers or motors, which allow electricity to pass through.</li> <li>Electricity will only travel around a circuit that is complete (that means it has no gaps).</li> </ul>

What is a switch?	<ul style="list-style-type: none"> <li>You can use a switch in a circuit to create a gap in a circuit (this can be used to switch it on and off).</li> <li>When a switch is open (off), there is a gap in the circuit - electricity cannot travel around the circuit.</li> <li>When a switch is closed (on), it makes the circuit complete - electricity can travel around the circuit.</li> </ul>
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How can I increase the brightness of a bulb or the volume of a buzzer?	
<ul style="list-style-type: none"> <li>The more cells that are used in a circuit, the brighter the bulb or louder the buzzer.</li> <li>If one cell is used, the higher its voltage, the more powerful the cell is.</li> </ul>	