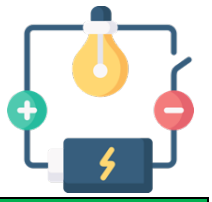
Electricity

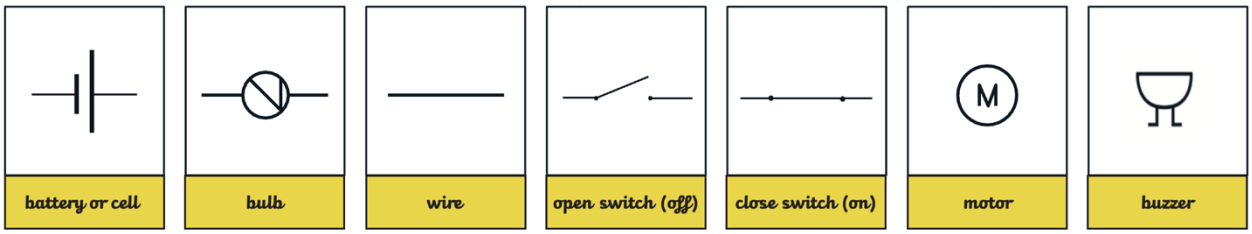


UKS2 Science: Electricity	
Scientific Concepts	
Properties	**A quality that something is known by e.g., characteristic.**
Material	**The matter from which a thing is or can be made.**
Core Vocabulary	
Voltage	The force that pushes electrons through a circuit to produce electricity.
Cells	In terms of electricity, it is a single unit containing electrodes used for generating current. A battery contains many cells.
Electrons	Very small particles that travel around an electrical circuit
Current	The flow of electricity in a circuit. It is measured in amperes (Amps). The larger the value in amperes, the more electricity is flowing in the circuit.

Images/diagrams

Scientific Symbols

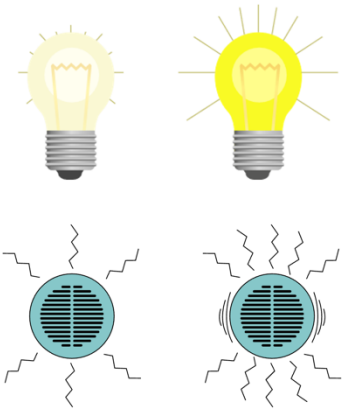
When scientists draw electrical circuits, they use **scientific symbols** to show **different components.**



What happens when we increase the current?

- Increasing the current in a circuit with a bulb (either by adding more cells or using a cell with a higher voltage) will make the bulb brighter. **Be careful though, if you increase the current too much, you risk blowing the bulb!**
- If you increase the current in a circuit with a buzzer, the buzzer will get louder.

If you add more bulbs or buzzers to a circuit but keep the number of cells the same, then the opposite happens – they get dimmer/quieter.



Key Knowledge

1	Electrons are very small particles that travel around an electrical circuit.
2	An electrical current is a flow of electrons, measured in amps.
3	Electricity can only flow around a complete circuit that has no gaps. There must be wires connected to both the positive and negative end of the power supply
4	
5	Voltage is the force that makes the electricity current move through the wires. The greater the voltage, the more current will flow.
6	Switches can be used to open or close a circuit, affecting the flow of electrons.
	A cell is a single unit that stores energy as a chemical. A battery is a collection of cells.