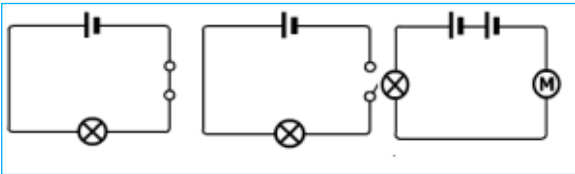


Electricity—Year 6

Previous Learning:

In Year 4, we identified common appliances that run on electricity and constructed a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. We also recognised that a switch opens and closes a circuit. We also learnt to recognise some common conductors and insulators .

A series circuit is a circuit that has only one route for the current to take. If more bulbs or buzzers are added, the power has to be shared and so they will be dimmer or quieter. If just one part of this series circuit breaks, the circuit is broken and the flow of current stops.



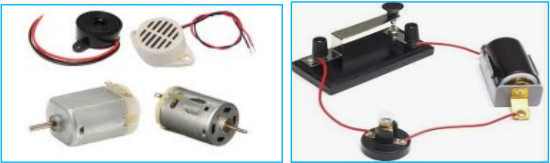
Electrical Circuit Symbols

 lamp (indicator)	 lamp (lighting)	 wire	 ammeter
 motor	 voltmeter	 buzzer	 open switch
 cell	 battery	 closed switch	

Electrical Conductors

Electrical Insulators

The length of wires in a circuit can affect how the components function.



What will make a bulb brighter or a buzzer louder?

- More batteries or a higher voltage create more power to flow through the circuit.
- Shortening the wires means the electrons have less resistance to flow through.

Key vocabulary	Definitions
circuit	A path that an electrical current can flow around.
symbol	A visual picture that stands for something else.
cell/battery	A device that stores chemical energy until it is needed. A cell is a single unit. A battery is a collection of cells.
current	The flow of electrons, measured in amps.
amps	How electric current is measured.
voltage	The force that makes the electric current move through the wires. The greater the voltage, the more current will flow.
resistance	The difficulty that the electric current has when flowing around a circuit.
electrons	Very small particles that travel around an electrical circuit.

Future learning:

You will look at the potential difference, measuring in volts, battery and bulb ratings in secondary school. You will look at differences in resistance between conducting and insulating components.