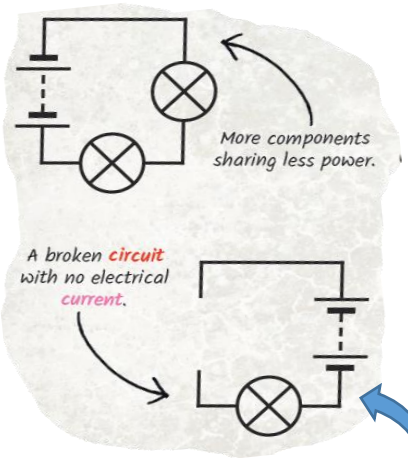
Electricity
Knowledge Organiser



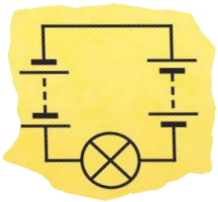
Key vocabulary	
Battery	A container consisting of one or more cells where chemical energy is converted into electricity and used as a source of power.
Bulb	A glass bulb which provides light by passing an electrical current through a filament.
Buzzer	An electrical device that makes a buzzing noise and is used for signalling.
Cell	A device containing electrodes that is used for generating current.
Circuit	A complete and closed path around which a circulating electric current can flow.
Conductor	A material or device which allows heat or electricity to carry through.
Current	A flow of electricity which results from the ordered directional movement of electrically charged particles.
Electrons	Very small particles that travel around an electrical circuit.
Electricity	A form of energy resulting from the existence of charged particles .
Filament	A conducting wire or thread with a high melting point that forms part of an electric bulb .
Motor	A machine powered by electricity that supplies motive power for a vehicle or other moveable device.
Resistance	The difficulty that the electric current has when flowing around a circuit.
Switch	A device for making and breaking the connection in an electric circuit.
Voltage	An electrical force that makes electricity move through a wire, measured in volts. The greater the voltage, the more current will flow.

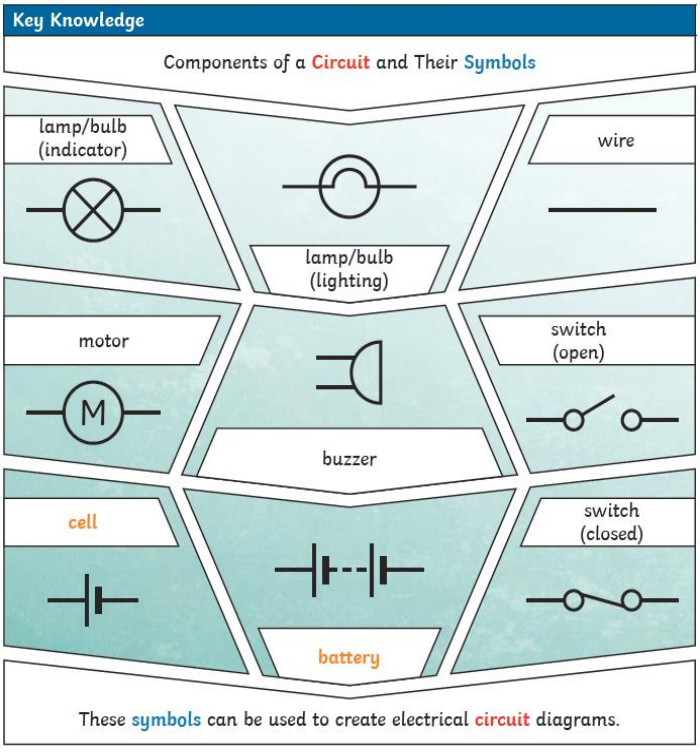
Series Circuit

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.

What will make a bulb brighter or a buzzer louder?

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





What will make a bulb dimmer or a buzzer quieter?

1. Fewer **batteries** or a lower **voltage** give less power to the **circuit**.
2. More buzzers or bulbs mean the power is shared by more components.
3. Lengthening the wires means the **electrons** have to travel through more **resistance**.