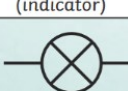


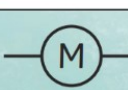

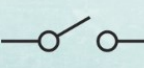

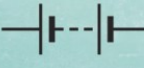
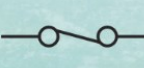


Electricity Year 5/6 Knowledge Organiser

Key Vocabulary	
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.

Key Knowledge

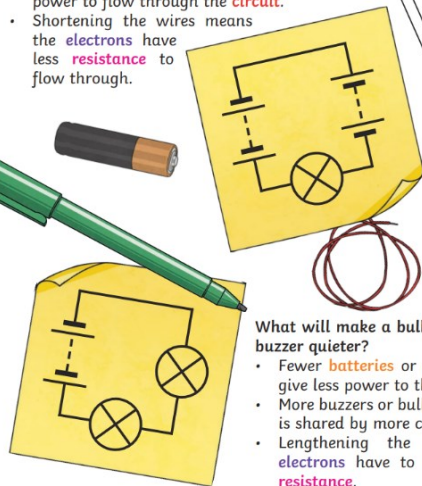
Components of a **Circuit** and Their **Symbols**

lamp/bulb (indicator) 	lamp/bulb (lighting) 	wire 
motor 	buzzer 	switch (open) 
cell 	battery 	switch (closed) 

These **symbols** can be used to create electrical **circuit** diagrams.

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.

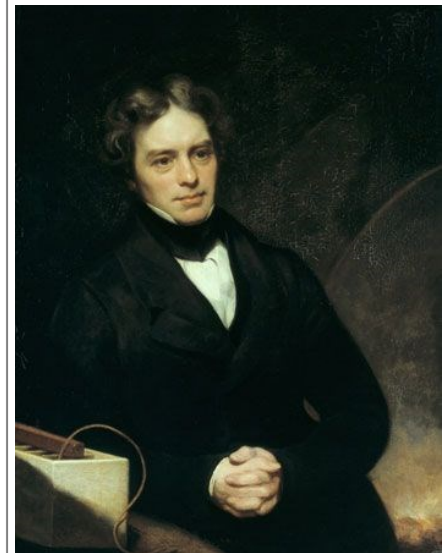
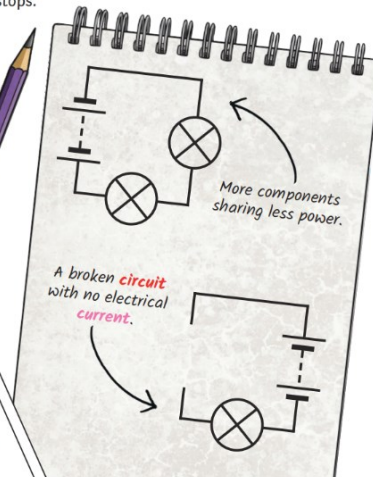


What will make a bulb dimmer or a buzzer quieter?

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

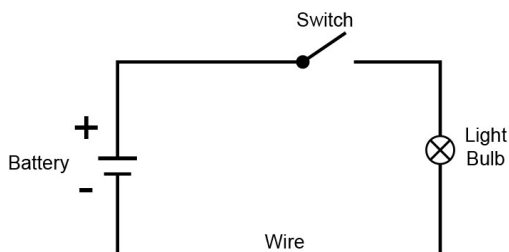
Series Circuit

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.

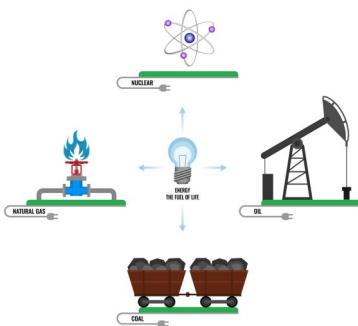


Micheal Faraday

Inventor the electric motor in 1821



NON-RENEWABLE ENERGY



Types of Renewable Energy

Solar	Wind	Biomass	Hydrogen	Geothermal	Ocean	Hydropower
						
Uses: • Solar Power Plant	Uses: • Wind Power Plant	Uses: • Biofuels • Biopower • Bioproducts	Uses: • Fuel Cells	Uses: • Geothermal Power Plant • Heat Pumps	Uses: • Tidal Power • Wave Power • Thermal	Uses: • Hydropower Plant