

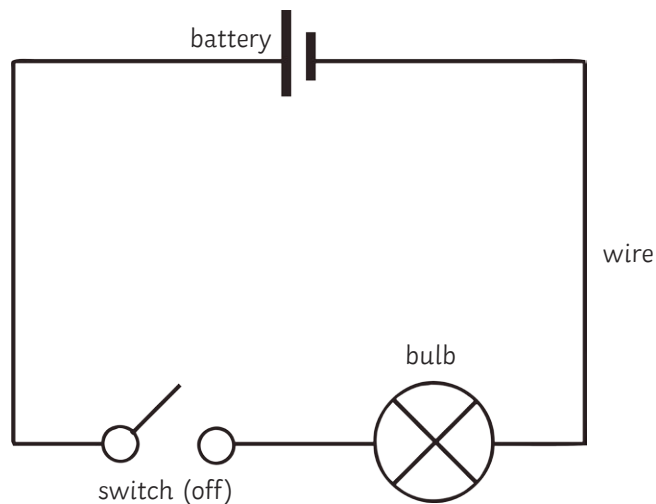
Electricity and Magnetism

Key Revision Facts

- Atoms are made up of:

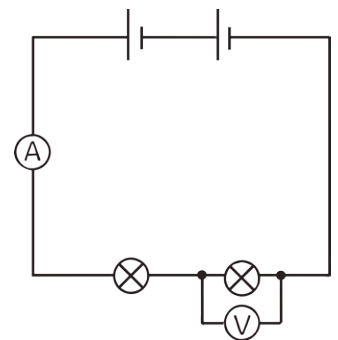
Name	Charge
proton	+
neutron	0
electron	-

- Current is the amount of charge per second, measured in amps, unit A.
- Potential difference (voltage) informs about the size of force, measured in volts, unit



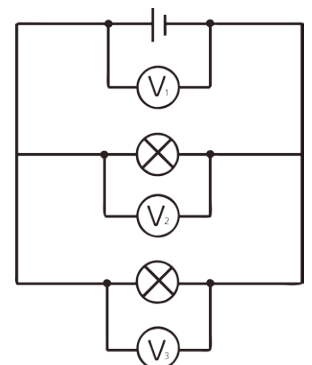
Series Circuit

- In a series circuit, the more bulbs added the dimmer each bulb becomes.
- The current is the same everywhere in the circuit shown.
- The voltage across the components adds up to the voltage of the battery.



Parallel Circuit

- The voltage is the same everywhere in the circuit.
- Each part of the circuit carries a different current, but the sum of these currents adds up to the total current supplied by the source/battery.



Parallel Circuit

- Like poles repel; opposite poles attract.
- Iron, steel, nickel and cobalt are all magnetic materials.

Electromagnets

- An electromagnet can be made from a wire, and iron core and with a current passing through the wire.
- The strength of an electromagnet can be altered by:
 - increasing the current;
 - using an iron core;
 - wrapping wire around the iron core.

Common Uses

- Electric doorbells;
- lifting and moving cars in scrapyards;
- hospital doors.