Science Knowledge Organiser

Glossopdale School

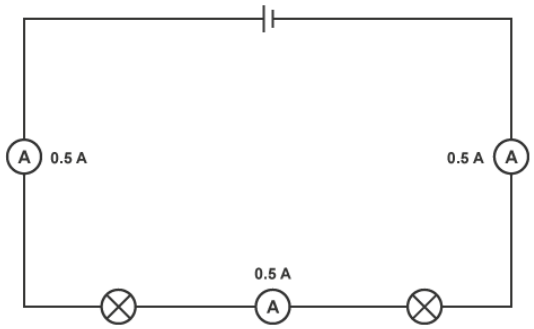
Y7 Electromagnets: Voltage and Resistance

Key equation

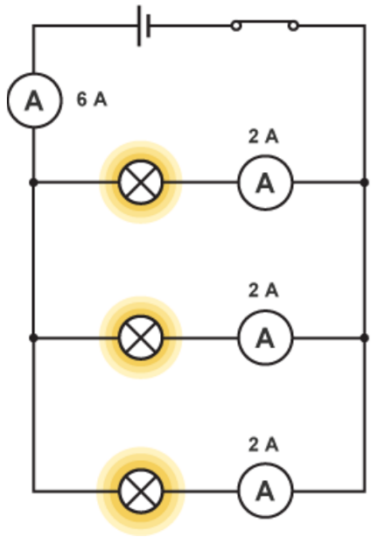
$$I_{A} = \frac{V_{V}}{R_{\Omega}}$$

I = current (A), V = potential difference (V), R = resistance (Ω)

Current in a series circuit



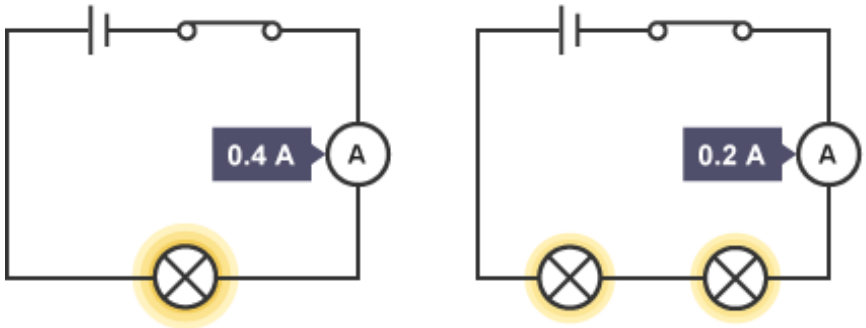
Current in a parallel circuit

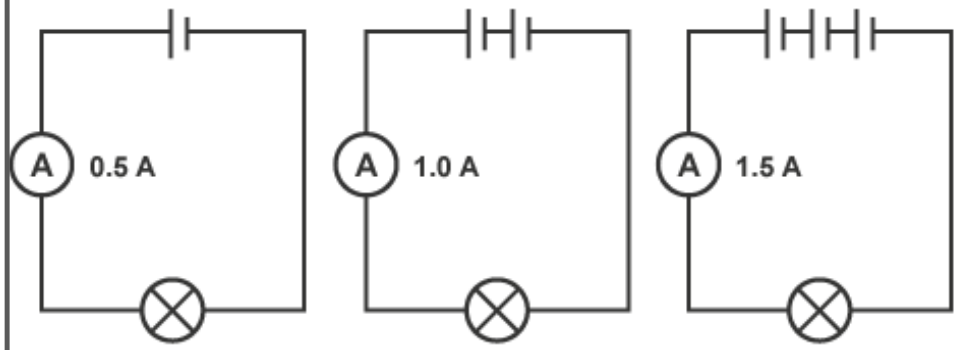


Key words

Charged up	When materials are rubbed together, electrons move from one surface to the other.
Current	Flow of electric charge, in amperes (A).
Electrons	Tiny particles which are part of atoms and carry a negative charge.
Electrostatic force	Non-contact force between two charged objects
Field	Area where other objects experience an electrostatic force
In parallel	If some components are on separate loops.
In series	If components in a circuit are on the same loop.
Negatively charged	An object that has gained electrons as a result of the charging process.
Positively charged	An object that has lost electrons as a result of the charging process

Current in series with increasing number of components





Current in series with increasing number of cells