Rolvenden Primary School – Knowledge Organiser



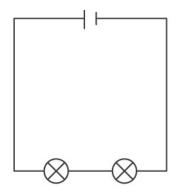
Circuit Symbols

Circuit symbols is a pictogram which is used to replace various electrical and electronic devices in a circuit. These are used universally around the world and are therefore internationally recognised.

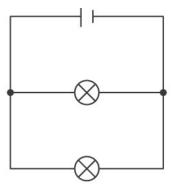
-&-	Lamp / Bulb
<u>—M</u> —	Motor
	Wire
	Motor
- o' o	Open Switch (Off)
	Closed Switch (On)
<u> </u>	Cell
⊣⊦ ⊢	Battery

A cell is a single unit which powers a circuit. Whereas a battery is a group of several cells.

Series vs Parallel Circuits



A series circuit is made up of a single path along which the whole current flows through every component.



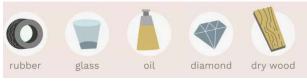
A parallel circuit is made up of multiple branches in which current flows down before re-joining at the battery or cell.

Conductors and Insulators

A conductor is a material which allows electricity, heat or sound to flow through it. An object which is a good electrical conductor allows electricity to flow through it easily.



An insulator is a material which does not allow electricity, heat or sound to flow through it. An object which is a good electrical insulator stops electricity passing through it.



A good conductor has very low resistance. A good insulator has very high resistance — the best insulator would have infinite resistance.

Electricity

