## Rolvenden Primary School – Knowledge Organiser



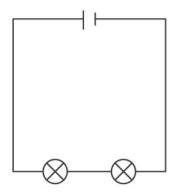
## Circuit Symbols

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.

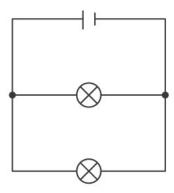
-&-	lamp / bulb
_M_	motor
<u> </u>	wire
	motor
<del>-</del> o' o	open Switch (Off)
<del></del>	closed Switch (On)
<u> </u>	cell
<b>⊣⊩</b>   <b>⊢</b>	battery

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 composed 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 from 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

