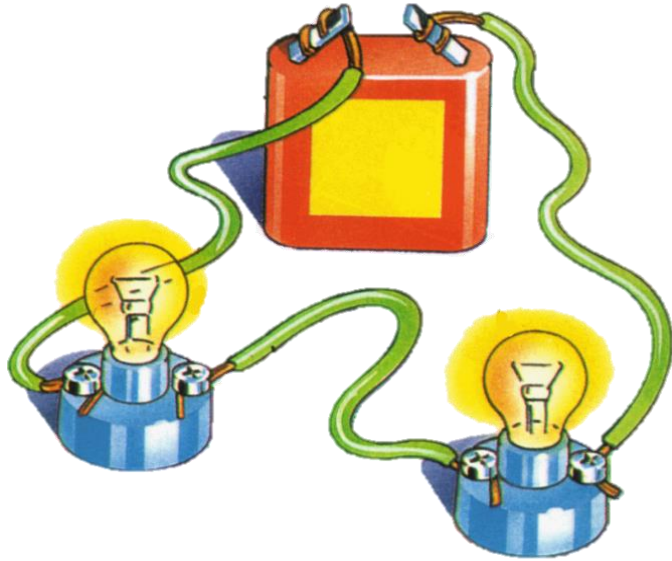


ELECTRICITY

Recap/overview



Electricity is a type of **energy**.

Electricity (electrons) can flow through wires and cables, and can be stored in **batteries** (sometimes called **cells**).

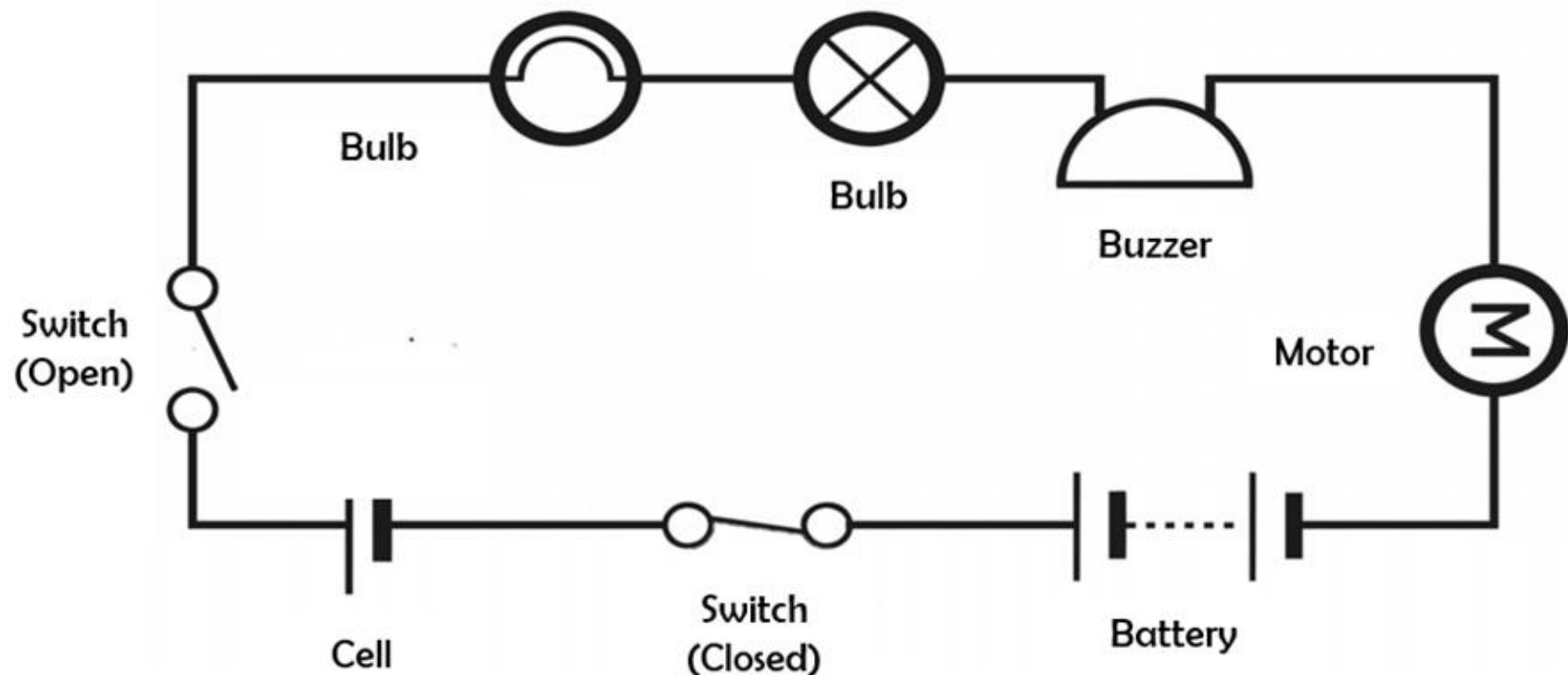
Electricity can flow in simple series electrical **circuits**.

Some materials **conduct** electricity, and others do not (**insulators**).

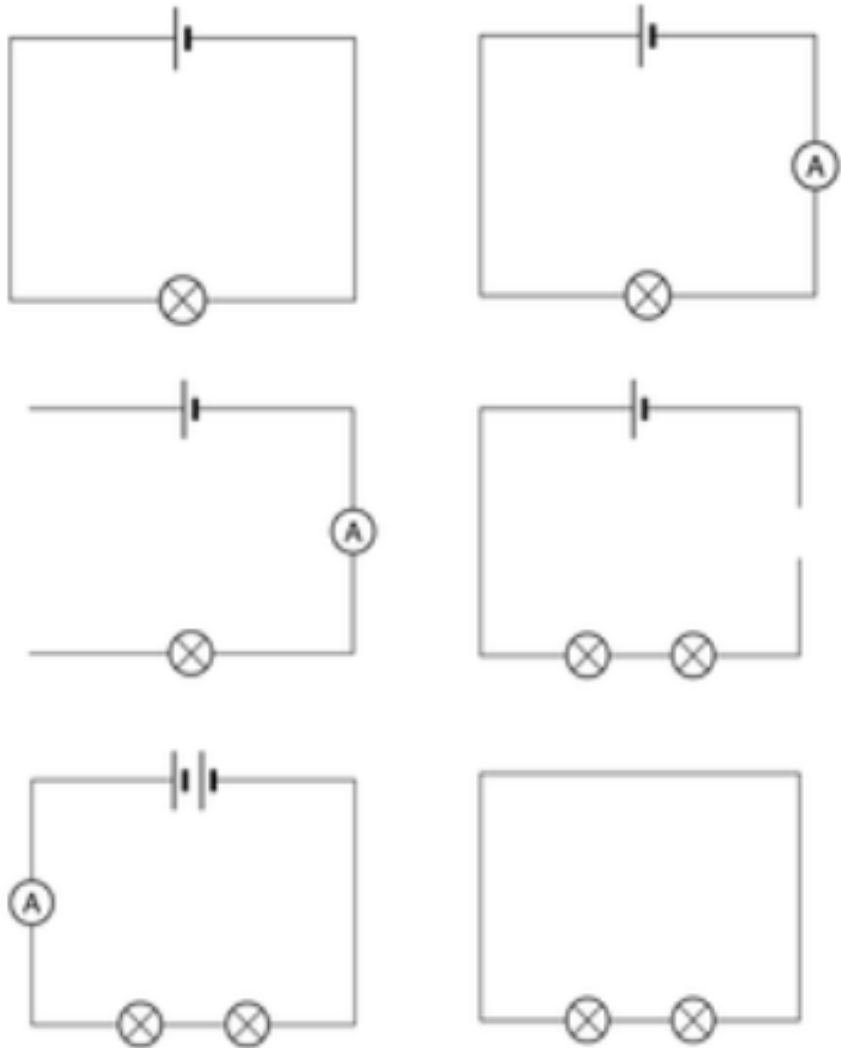
Electrical resistance of an electrical conductor is a measure of the difficulty of passing an electric current through a substance.

Circuit Diagrams

When drawing electrical circuits, you should use the standard symbols to show the different components.



Series Circuits



When changes are made to **circuits, components** can function differently:

When switches are open or wires are removed from a circuit (so that it is no longer a closed circuit), bulbs and buzzers will turn off. You can use crocodile clips to investigate adding and removing wires.

When more batteries or cells are added (or batteries or cells are included with a higher **voltage**) the brightness of bulbs and the volume of buzzers will increase.

When more bulbs are added to a simple circuit, they will be dimmer than if there were one bulb. This is because the electricity is shared between the two bulbs. More voltage would be needed to make them brighter.

You should be able to look at circuits like those on the left, and work out what would happen.

Key Electrical Vocabulary

Switch

Bulb

Voltage

Motor

Battery

Buzzer

Cell

Circuit

Components

Wire