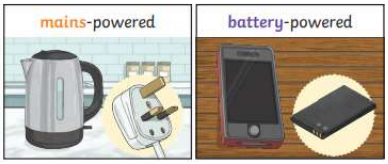
Electricity

Unit Vocabulary – Join them up with the correct definition once you have learned it,

electricity	Electricity supplied through wires to a building.
circuit	A pathway that electricity can flow around. It is based around wires and a power supply
cell	Materials that do not allow electricity to flow through them.
battery	A device that stores electrical energy as a chemical.
component	The flow of an electric current through a material, e.g. from a power source through wires to an appliance.
Electrical conductor	a material that will allow electricity to flow through it.
Electrical insulator	Two or more cells
mains	Parts you can add in to a circuit such as buzzers, motors, bulbs, cells.

Appliances

Many everyday appliances rely on electricity for them to work. Some appliances use mains electricity (are plugged into a socket) and others have a battery to make them work. Examples of mains-powered appliances include toasters and televisions. Battery-powered appliances can include mobile phones and torches.



Components (Parts) Vocabulary

cell: Normally, we would call this a battery but scientifically, this is a cell. Two or more cells joined together form a battery.

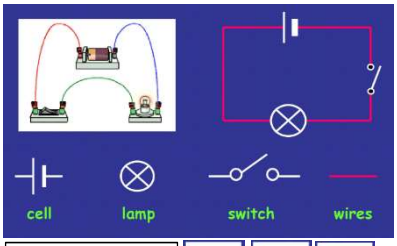
bulb: Lights up in a complete circuit.

buzzer: Makes a noise in a complete circuit.

wires: Used to connect the different components in the circuit together.

motor: Produces movement in a complete circuit.

switch: Used to turn other components in the circuit on or off.



Circuit diagram using symbols for components.

Series Circuit

A circuit where the components are connected in a loop. Electricity flows through each component in a single pathway.

Complete Circuit

Electricity can flow. The components will work.

Incomplete Circuit

There is a break in the circuit that prevents the electricity from flowing. The components will not work.

Switches can be used to open or close a circuit. When off, a switch 'breaks' the circuit to stop the flow of electricity. When on, a switch 'completes' the circuit and allows the electricity to flow.

push button switch

slide switch

Key Knowledge

Examples of Electrical Conductors

Materials can be tested in a circuit to see if they are **electrical conductors** or **electrical insulators**.

10p = metal = **electrical conductors**

test circuit

ruler = plastic = **electrical insulators**

Examples of Electrical Insulators