

Key Knowledge

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.



Series Circuit

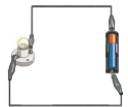
A **circuit** where the components are connected in a loop.

**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.



battery-powered



I need to know:

- Working with electricity is dangerous and I know that I should never touch electrical appliances with wet hands and I should always turn the switch off before I unplug an electrical item.
- 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.
- I know the parts of a circuit ((located on the diagram).
- I know that copper and steel are examples of electrical conductors.
- Wood, plastic, paper, rubber, glass and fabric are electrical insulators.

Key Vocabulary

<b>appliances</b>	A piece of equipment or a device designed to perform a particular job, such as a washing machine or mobile phone.	<b>electricity</b>	The flow of an electric current through a material, e.g. from a power source through wires to an appliance.
<b>battery</b>	A device that stores electrical energy as a chemical. Two or more cells joined together form a battery.	<b>electrical conductor</b>	A conductor of electricity is a material that will allow electricity to flow through it.
<b>circuit</b>	A pathway that electricity can flow around. It is based around wires and a power supply. Examples of components (parts) you can add in to a circuit are bulbs, switches, buzzers and motors.	<b>electrical insulator</b>	Materials that are electrical insulators do not allow electricity to flow through them.
		<b>Mains electricity</b>	Electricity supplied through wires to a building.