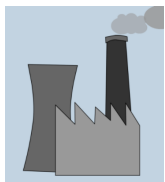


What is electricity?

Electricity is energy that can flow from place to place; this is called a current. It can produce light, sound, movement and heat. Electricity powers all kinds of things, such as computers, lights and televisions.

Where does electricity come from?



Power Stations



Wind Turbines



Solar Power



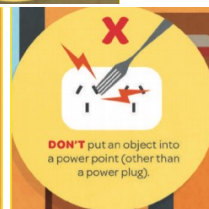
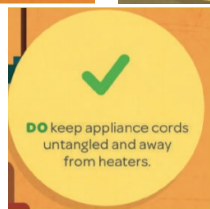
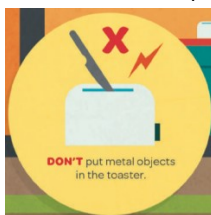
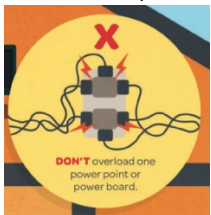
Water Power



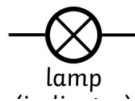
Battery Power

Electrical Safety

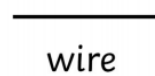
Electricity can be very dangerous so it is essential that you follow these safety rules.



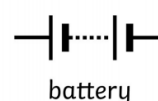
Electrical Symbols



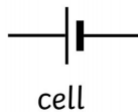
lamp



wire



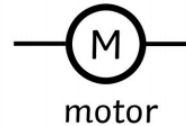
battery



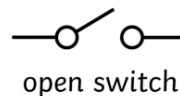
cell



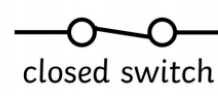
buzzer



motor



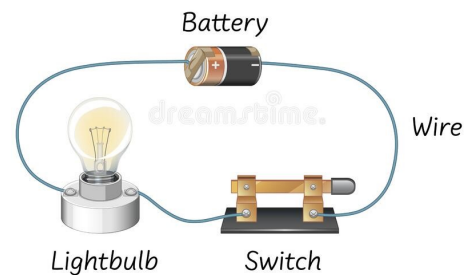
open switch



closed switch

Simple Circuits

Electricity can only flow around a complete circuit that has no gaps. There must be wires connected to both the positive and negative end of the power supply/ battery.



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.

Key Vocabulary

appliance - a device, machine or a piece of electrical equipment.

battery - a battery consists of a number of electrical cells.

buzzer - an electronic device that makes a sound when it is connected to electricity.

circuit - wires connected together to allow electricity to flow through them.

component - a part of a circuit. For example: a battery, light bulb or buzzer.

conductor - a material that allows heat or electricity to pass through it.

insulator - a material that does not allow heat or electricity to pass through it.

switch - a device used to connect and disconnect wires in a circuit.

wires - a piece of thin metal that is covered in plastic.

Conductors and Insulators

A conductor of electricity is a material that will allow electricity to flow through it. Metals are good conductors. Materials that are electrical insulators do not allow electricity to flow through them. Wood, plastic and glass are good insulators.

