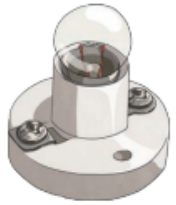
Year 4 - Electricity

Key Vocabulary	
electricity	The flow of an electric current through a material, e.g. from a power source through wires to an appliance.
appliances	A piece of equipment or a device designed to perform a particular job, such as a washing machine or mobile phone.
battery	A device that stores electrical energy as a chemical. Two or more cells joined together form a battery.
circuit	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.

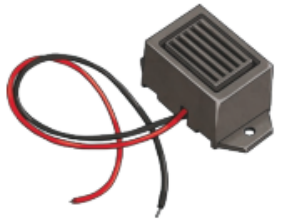
Components (Parts) Vocabulary

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.

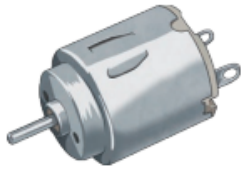


buzzer: Makes a noise in a complete circuit.



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

motor: Produces movement in a complete circuit.

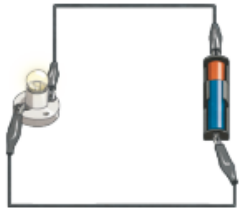


switch: Used to turn other components in the circuit on or off.

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.

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

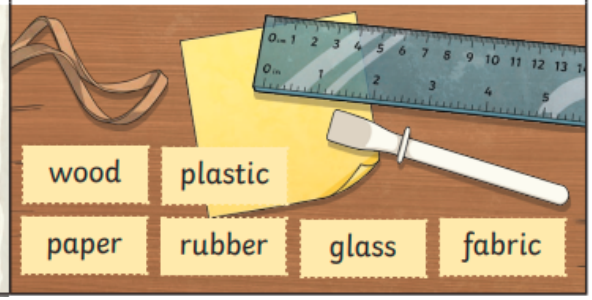
Year 4 - Electricity

Key Vocabulary	
mains electricity	Electricity supplied through wires to a building.
electrical conductor	A conductor of electricity is a material that will allow electricity to flow through it.
electrical insulator	Materials that are electrical insulators do not allow electricity to flow through them.

Key Knowledge

Examples of Electrical Conductors

Examples of Electrical Insulators



Challenge: What do you think will happen when you add either a conductor or insulator to your circuit?