

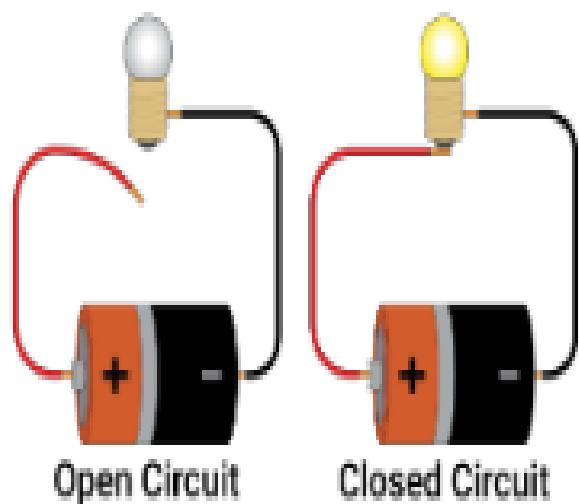
Key Vocabulary

Appliance, complete, device, flow, function, manual, plug, socket, wire, battery, bulb, motor, buzzer, circuit, closed circuit, open circuit, mains, switch, electricity, electrical conductor, electrical insulator, electrical appliance, electrical component

Working Scientifically

- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.
- Recording findings using [simple scientific language,] drawings, [labelled diagrams, keys, bar charts, and tables].
- Using results to [draw simple conclusions,] make predictions for new values, suggest improvements [and raise further questions].
- Identifying differences, similarities or changes related to simple scientific ideas and processes.

Diagram:



Must – know knowledge

Electrical devices are objects that need electricity to make them work. Some electrical devices use mains electricity, typically large household appliances. Some electrical devices use batteries, typically smaller items such as children's toys. Some electrical devices use batteries which can be charged by plugging them into the mains electricity.

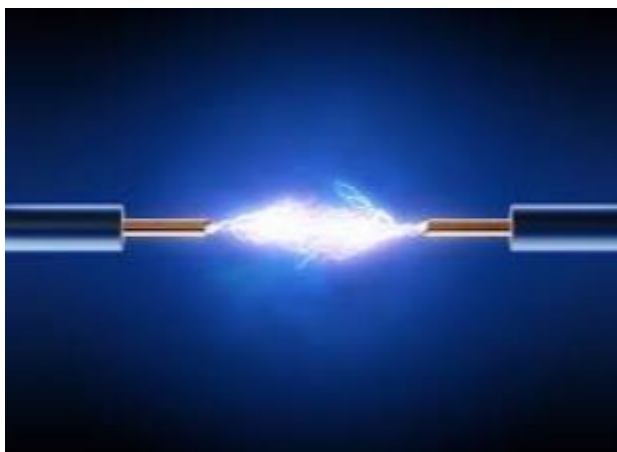
An electrical circuit (closed circuit) is the flow of electricity through a bulb, motor or buzzer. For this to happen, all the components must be connected in a loop, known as a circuit. All circuits must contain a battery to create the flow of electricity.

An open circuit is a circuit where the path has been 'opened' at some point so that current will not flow.

A switch is a component that controls the circuit to be open or closed.

A battery is made up of one or more cells, and will have a voltage which is a multiple of 1.5V. A cell has a positive terminal and a negative terminal

Diagram:



Experiments: **Which materials conduct electricity?**