



Science - Electricity

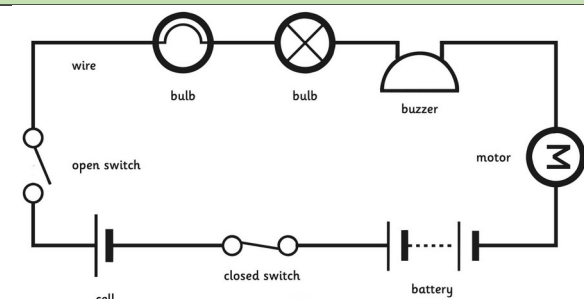


Year 4

What should I already know?

- Electricity can be dangerous.
- Electricity can be used in many ways.
- Some of the every day objects that we use require electricity.

Diagrams



What will I know by the end of this unit?

- Identify the difference between mains and battery sourced electricity.
- How to make a functioning circuit.
- Be able to name all components within a circuit.
- How to successfully plan and carry out an experiment.
- How to record findings from an experiment.
- To be able to draw accurate diagrams.

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.

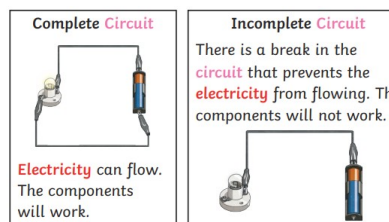
Battery - A device that stores electrical energy as a chemical, also known as a cell. Two or more cells joined together form a battery circuit.

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.

Important Information



To work safely with circuits in the classroom:

- Report any damaged or broken equipment to your teacher.
- Only use equipment as instructed.
- Connect equipment correctly.
- Remember that mains electricity is not needed.

Learning Journey Assessment

- Identify common appliances that run on electricity
- construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- Recognise some common conductors and insulators, and associate metals with being good conductors.

