

# Physics: Electricity

## What should I already know?

- Some things need electricity to work.
- Switches are used to turn things on and off.

## What am I going to learn?

- That many common appliances run on electricity.
- How to construct a simple series electrical circuit.
- What is needed to make a simple series circuit successful.
- To identify and name the components in a series circuit, including cells, wires, bulbs, switches and buzzers.
- That a switch opens and closes a circuit.
- To recognise some common conductors and insulators, giving examples of each, and associate metals with being good conductors.

## Vocabulary

Appliance	A piece of equipment designed to perform a job, such as a washing machine or a phone.
Circuit	A pathway that electricity can flow around.
Conductor	A material which energy (in this case, electricity) can flow through.
Insulator	A material which energy (in this case, electricity) cannot flow through easily.

### Conductors

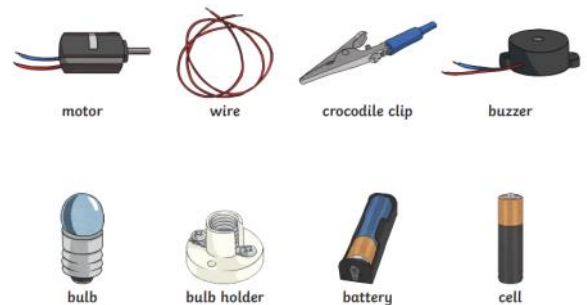


gold silver copper iron aluminium steel

### Insulators



rubber wood fabric air glass plastic



motor wire crocodile clip buzzer  
bulb bulb holder battery cell

Enquiry Types	Observing changes over time	Pattern Seeking	Identifying, Grouping and Classifying	Fair Testing	Research	Problem Solving
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## Working Scientifically

- I will plan how to create a switch of my own considering what materials will complete the circuit.
- I will create several circuits using switches, bulbs and buzzers.
- I will interpret the effectiveness of my circuit and switch based on the brightness of the bulb and consider what I could change.
- I will evaluate the success of my switch and consider how I could make it more successful next time using different materials.

## Connecting Concepts



Plan/perform investigations



Interpret and communicate results



Evaluate