



What should I already know?

- 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.

Scientific Skills

- To associate the brightness of a lamp or the volume of a buzzer with the number and **voltage** of **cells** used in the **circuit**
- To compare and give reasons for variations in how components function, including the brightness of **bulbs**, the loudness of buzzers and the on/off position of **switches**
- To use recognised **symbols** when representing a simple **circuit** in a diagram.

Vocabulary

amps	How electric current is measured.
bulb	A light bulb in a series circuit is used to determine whether or not electricity is flowing
cell/battery	A device that stores energy as a chemical until it is needed. A cell is a single unit. A battery is a collection of cells .
circuit	A path that an electrical current can flow around.
current	The flow of electrons , measured in amps .
electrons	Very small particles that travel around an electrical circuit .
resistance	The difficulty that the electric current has when flowing around a circuit .
series circuit	A circuit that has only one route for the current to take. If more bulbs or buzzers are added, the power has to be shared. If just one part of this series circuit breaks, the circuit is broken and the flow of current stops.
switch	A switch is a device used to interrupt the flow of electrons in a circuit .
symbol	A visual picture that stands for something else.
voltage	The force that makes the electric current move through the wires. The greater the voltage , the more current will flow.

Electrical Symbols

