

Year 6 Electricity

Circuits and Symbols



STEM
GENERATION CHARITY

The logo for STEM Generation Charity features the word "STEM" in large, colorful, block letters: 'S' is pink, 'T' is purple, 'E' is blue, and 'M' is orange. Below it, the words "GENERATION CHARITY" are written in a smaller, black, sans-serif font. The background of the slide includes decorative elements like a green triangle, a purple circle, an orange circle, and a green square.

AIM

I can recognise and draw scientific circuit symbols

SUCCESS CRITERIA

I know the scientific symbols for the main parts
of a circuit

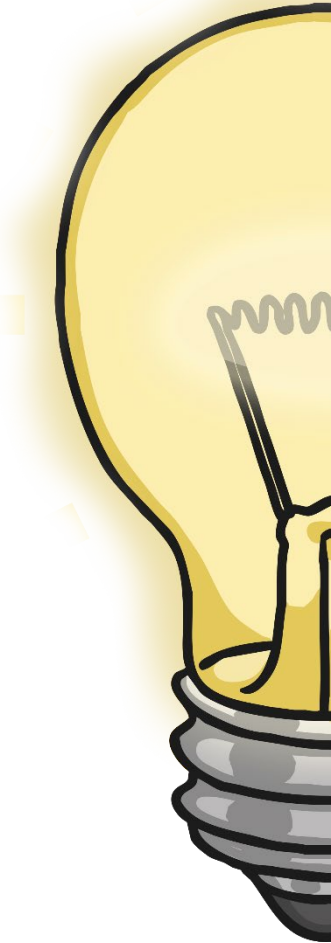
I can create circuit diagrams using scientific symbols

Circuits

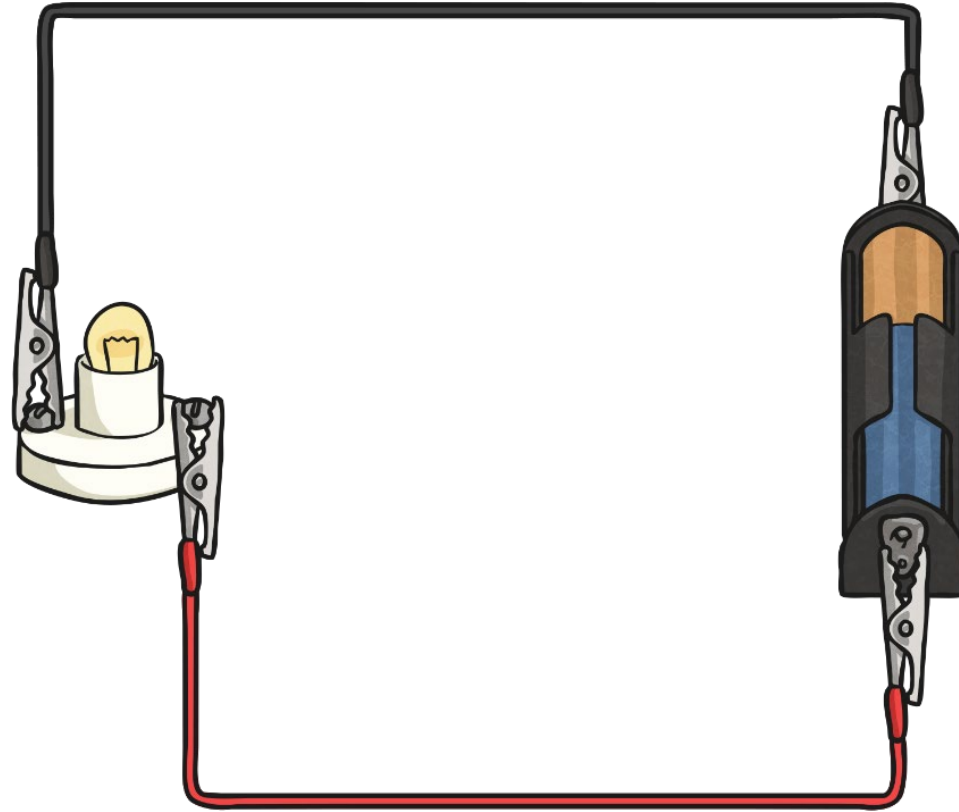
What is a circuit?

What parts do all circuits contain?

Can you draw a circuit which includes a bulb?



Circuit Diagram



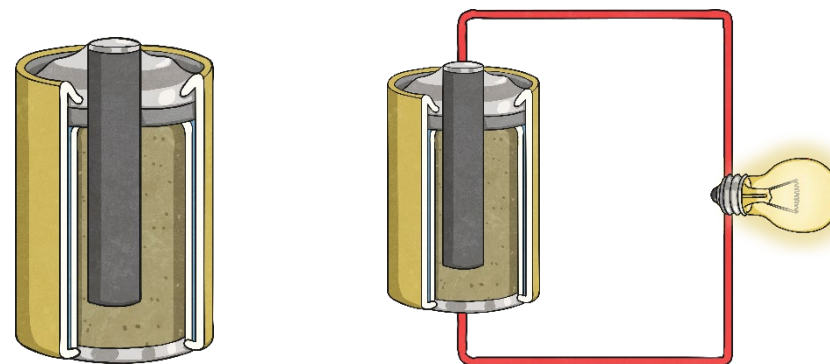
Typical circuit diagram

Battery or Cell

In everyday language we call a single cell a 'battery' but this is not the correct scientific usage.

Scientifically, this is a cell. It is a single unit, containing two electrodes and an electrolyte.

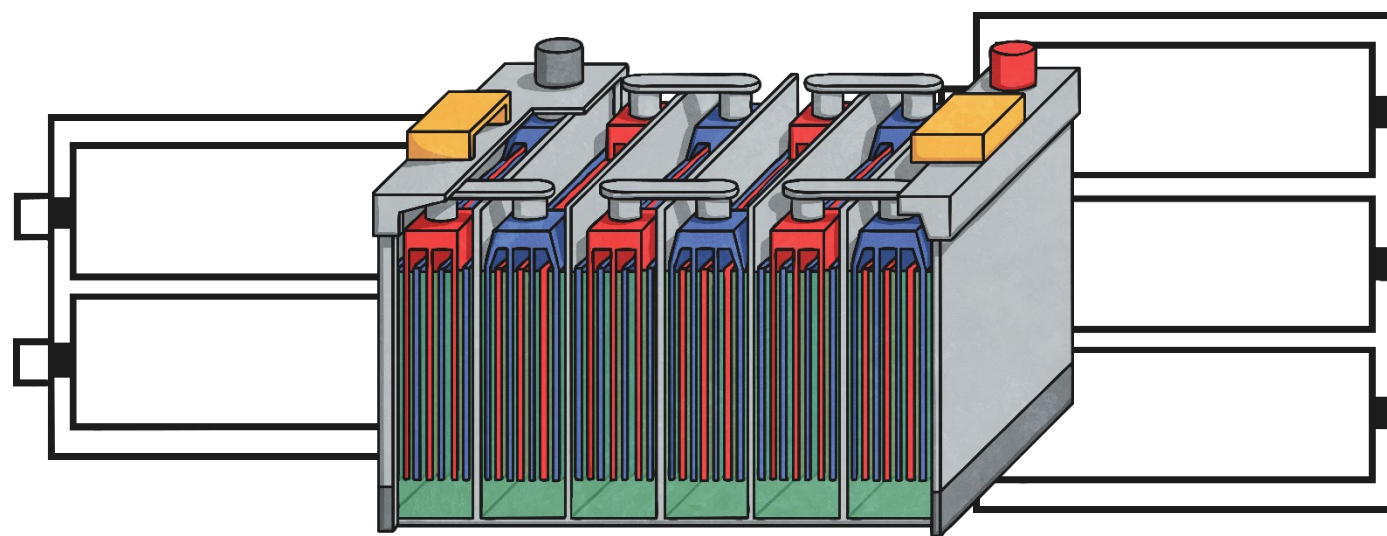
Electrodes are charged electrical conductors inside a cell. Each cell has one positive and one negative electrode.



An electrolyte is a chemical that reacts with the electrodes to produce an electrical current.

Battery or Cell

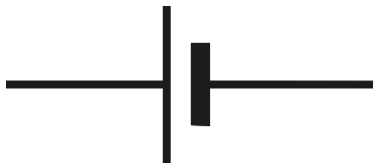
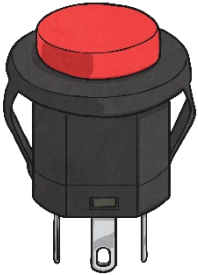
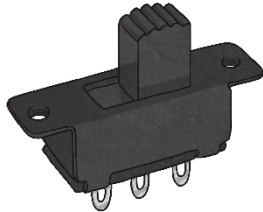
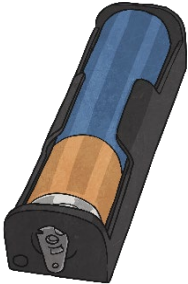
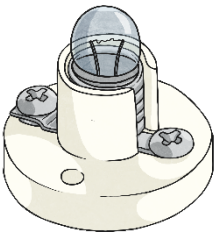
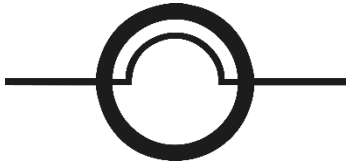
A battery is the scientific name for a collection of cells joined together.



The above diagrams show single cells in individual cases linked together. Some larger batteries, such as car batteries, contain the multiple cells private one case.

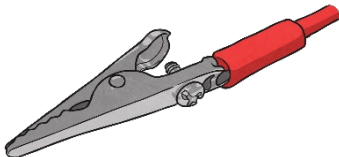
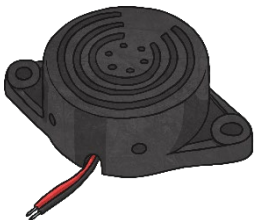
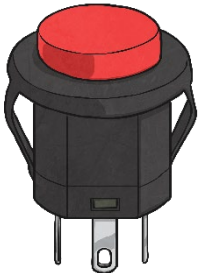
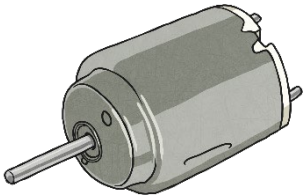
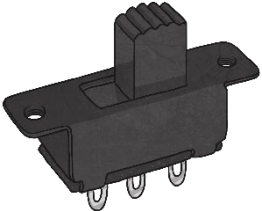
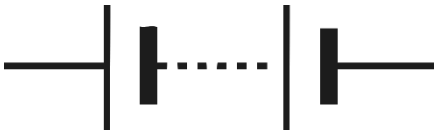
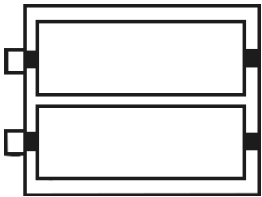
Scientific Circuit Symbols

Match the parts of a circuit with their scientific symbols.
(Sometimes there will be more than one symbol for a circuit part)



Scientific Circuit Symbols

Match the parts of a circuit with their scientific symbols.
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Circuit Symbols Memory Test

You have 1 minute to memorise these symbols, click start and the timer will begin.



Bulb



Bulb



Cell



Battery



Wire



Motor



Buzzer



Open Switch - off



Closed switch - on