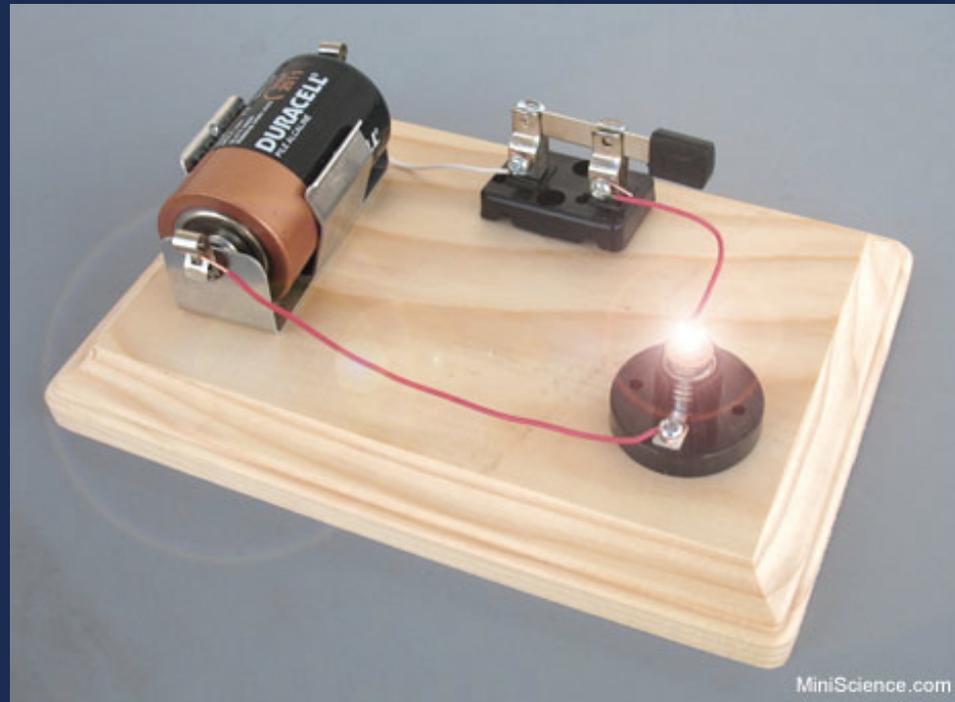


Thursday 21st January 2021

T: Can I label a diagram of an electrical circuit correctly?



MiniScience.com

Electricity

Think about the following questions about electricity to test your knowledge. Click each answer box to reveal the answers!

Can you give an example of how electricity is found naturally?

Lightning, static electricity and bioelectricity.

What is 'current electricity'?

The flow of electrical charge through a material.

Mains electricity is one type of electrical current. Can you name another type?

Battery powered electricity.

Can you name a non-renewable method of generating electricity?

Burning fossil fuels such as coal, oil or natural gas.

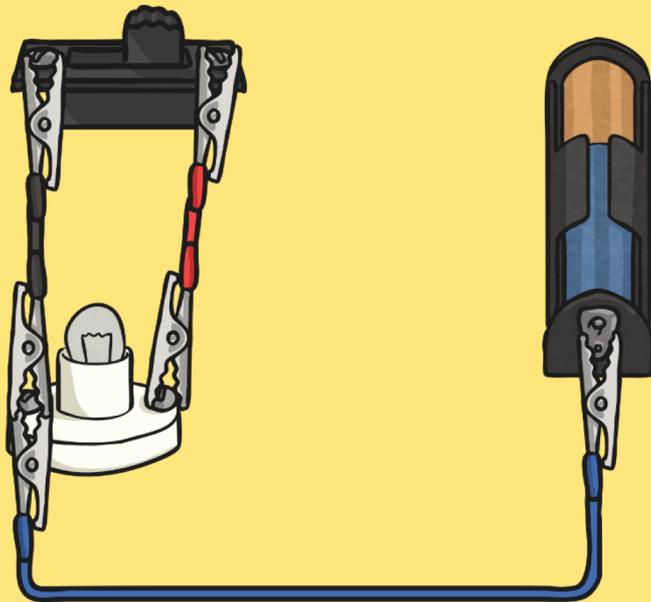
Copy and paste the link below to watch the YouTube clip about electrical circuits.

<https://www.youtube.com/watch?v=HOFp8bHTN30>

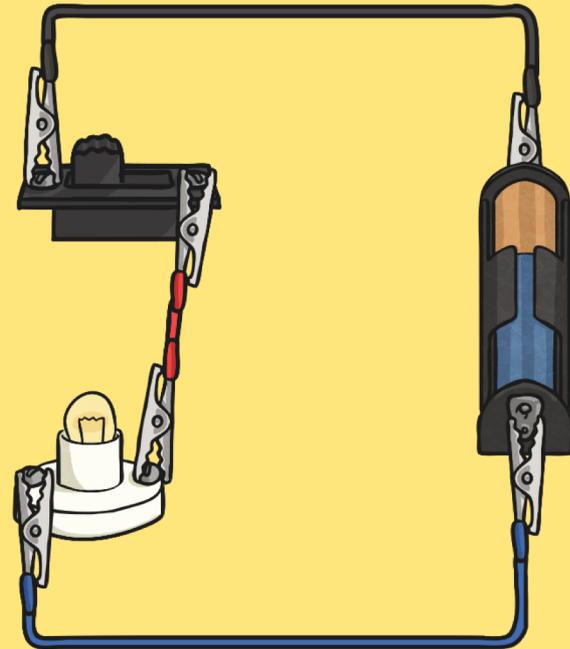
Complete and Incomplete Circuits

An electrical circuit can be complete or incomplete.

Incomplete Circuit



Complete Circuit



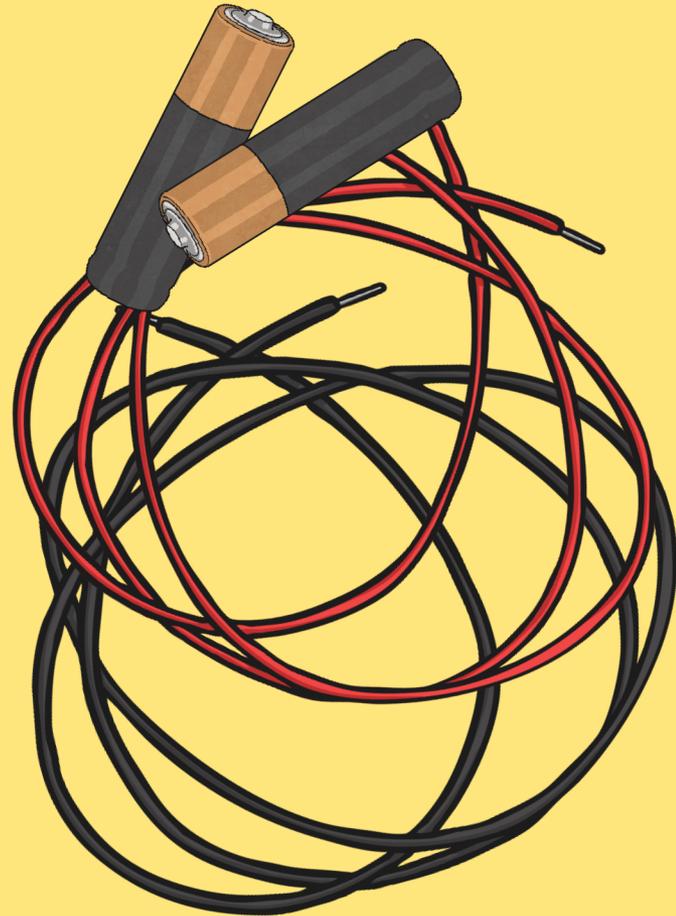
Complete and Incomplete Circuits

Current electricity is the flow of electrical charge through materials.

Every complete circuit must have a power supply. The power supply could be the mains, or it could be a battery.

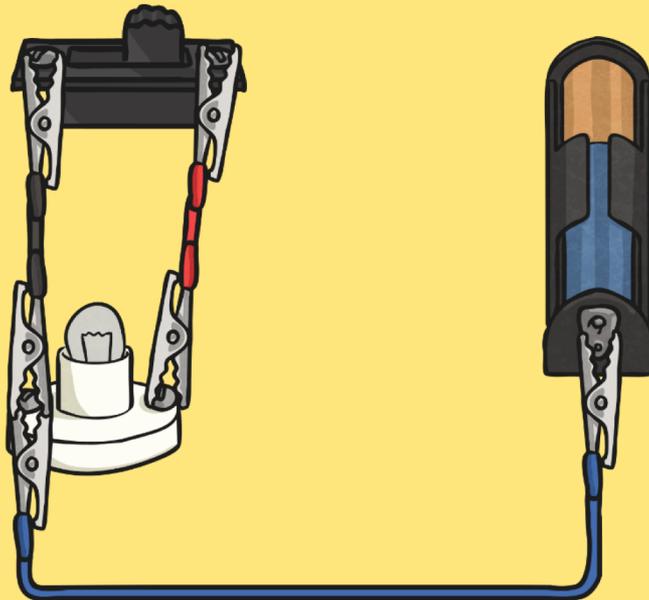
For a circuit to be complete, there must be wires connected to both the positive and negative ends of the power supply.

Electricity can only flow around a complete circuit that has no gaps.



Complete and Incomplete Circuits

Incomplete Circuit



This circuit is incomplete.

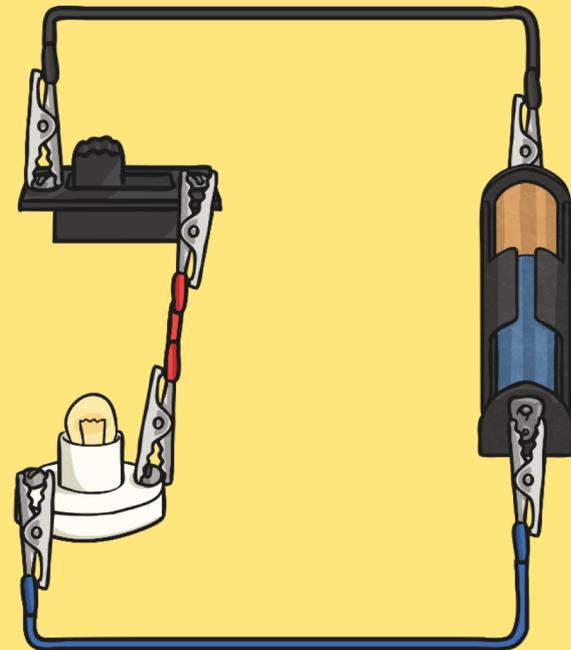
1. There is a gap in the circuit, so the electrical current cannot flow around it.
2. The wires do not connect to the positive and negative ends of the power supply (the battery).

Complete and Incomplete Circuits

This is a complete circuit.

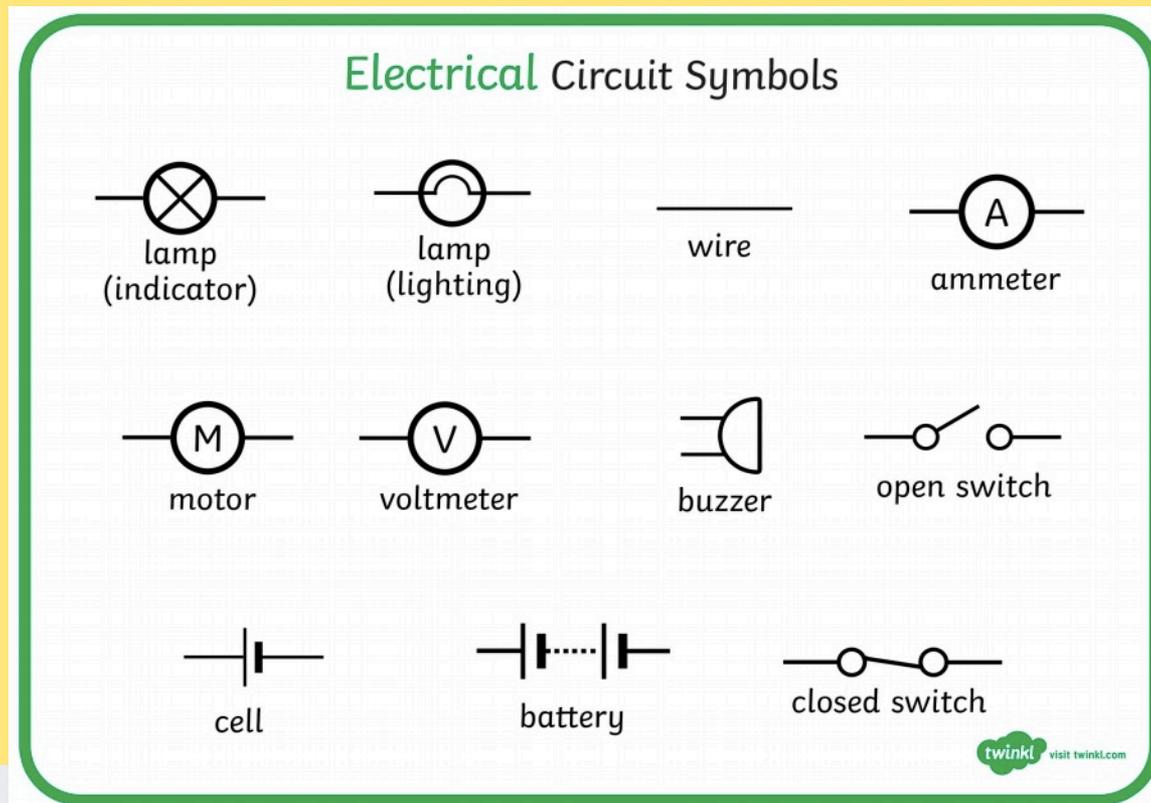
1. There is a power supply (the battery).
2. There are no gaps anywhere, so the electrical current can flow around the entire circuit.
3. The wires connect to both the positive and negative ends of the battery.

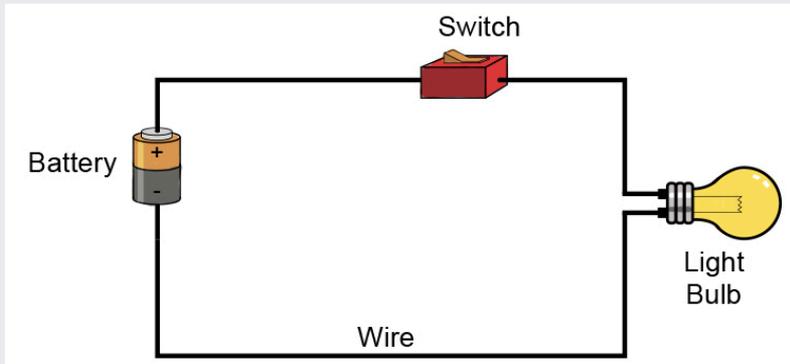
Complete Circuit



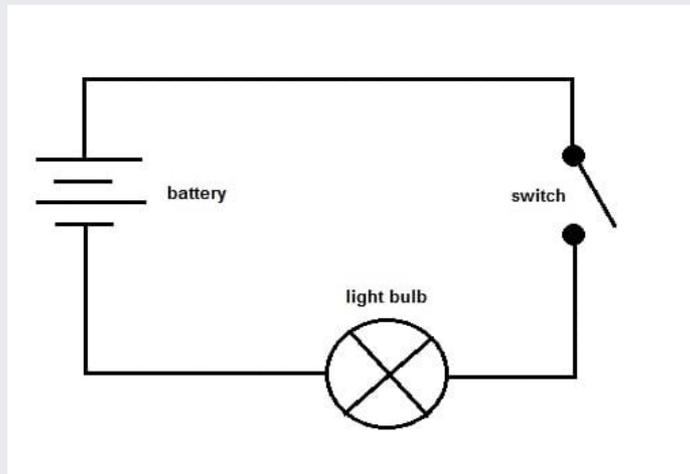
How to draw an electrical circuit

When drawing an electrical circuit, there are different symbols to represent the objects. We will be learning more about these throughout our unit.





This electrical circuit is shown using pictures.



This electrical circuit is shown using symbols.

Today's Task

Today you will be labelling the different parts of an electrical circuit. Your worksheet is available for you.

Unfortunately since we are all working from home, we are not able to build our own electrical circuits today. However, we may be able to when we return to school.