Key Vocabulary Overview	
appliance	a device that is powered by electricity and used for a particular function
plug	an object attached to some devices that connects them to an electrical outlet
socket	an electrical device that receives a plug to complete an electrical circuit
cell	a component that converts stored chemical energy to electrical energy
electrocuted	to be injured by an electric shock
circuit	a complete route that electricity can flow around
switch	a circuit component that allows the circuit to open or close
battery	a collection of cells that converts stored chemical energy to electrical energy
buzzer	a circuit component that makes a noise
bulb	a component that produces light
current	the flow of electricity around a circuit

Key Vocabulary Overview	
conductor	a material that allows a type of energy, such as electricity or heat, to pass through it
insulator	a material that does not allow a particular type of energy, such as electricity or heat, to pass through it
metal	a type of material that is usually hard, shiny and malleable
material	what something is made of, such as wood or plastic

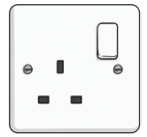
Electricity

Electricity is a type of energy. Energy gives things the power to do work.

Mains Electricity

Some **appliances** use mains electricity. This is electricity that is delivered to homes and businesses through an electric grid.

Appliances that use mains electricity will have a **plug** that connects to a **socket**.

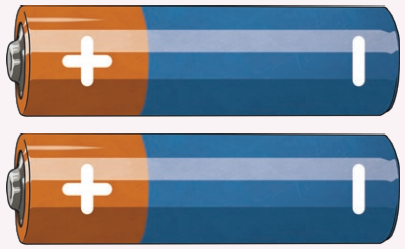


Cells and Batteries

Other **appliances** may use **cells** or **batteries** as their source of electricity.

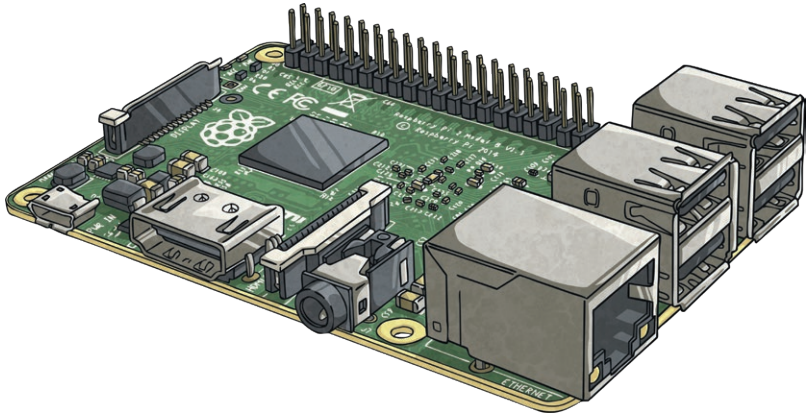
A **cell** is a single unit that contains chemical energy that is converted to electrical energy.

A **battery** is a collection of two or more **cells**.



What Is a Circuit?

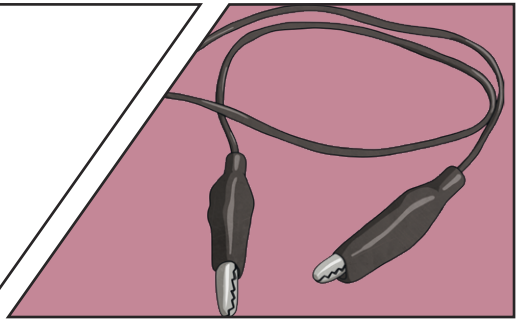
A **circuit** is a complete route or path that electricity can flow around. All electrical **appliances** contain a **circuit**.



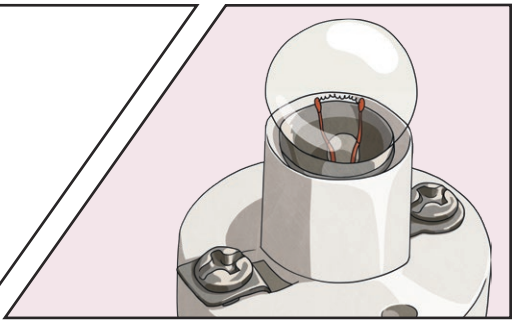
Circuit Components

A **cell** provides the power for the **circuit**.

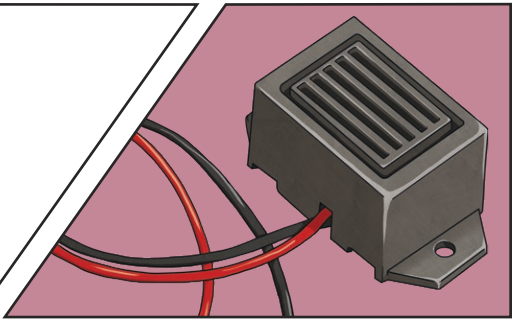
A wire provides the path that electricity can travel on.



A **bulb** uses electricity to emit light.

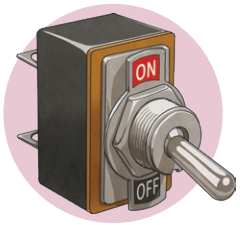


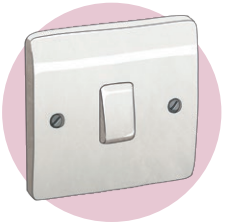
A **buzzer** uses electricity to emit sound.

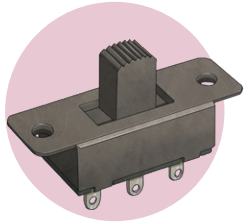


Switches

Switches can be used to open and close **circuits**. There are many different types and styles of **switch**.

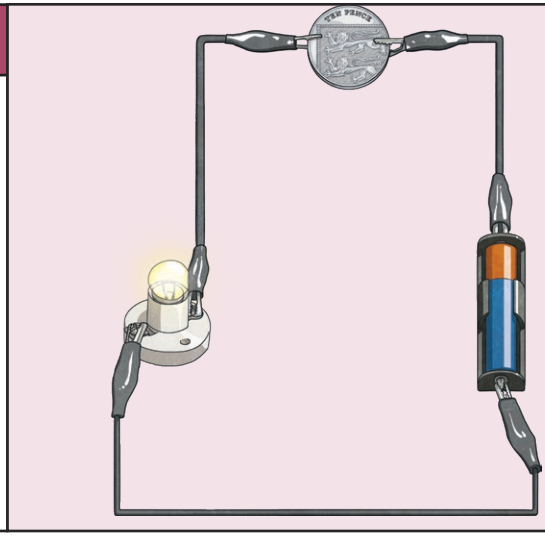






Electrical Conductors

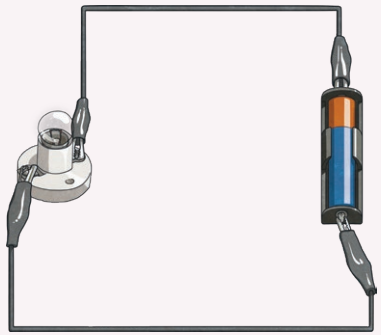
Electrical **conductors** are **materials** that allow electricity to pass through them.



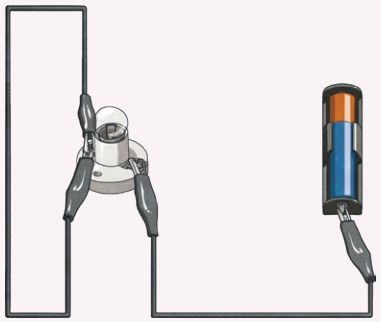
Complete or Incomplete Circuits

In order for electricity to travel around a **circuit**, the **circuit** must be complete.

This **circuit** is complete. Can you explain why?



This **circuit** is incomplete. Can you identify why?



Electrical Insulators

Electrical **insulators** are **materials** that do not allow electricity to pass through them.