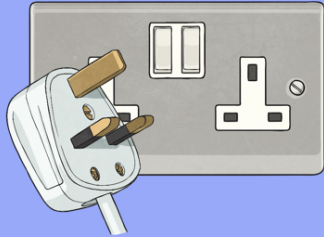
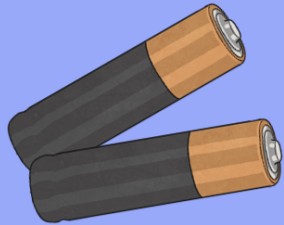


Science: Electricity.

There are two types of electrical current that we use to power appliances:



Mains electricity: which is an alternating current (AC).



Batteries: which generate a direct current (DC).

Where Does Electricity Come From?

Fossil Fuels

Coal, oil and natural gas are fossil fuels. Burning them produces heat, which generates electricity.

Hydro and Wind

Water is used in dams, and wind is used to turn windmills. These both generate electricity.

Solar

The sun's rays shine on special panels, which convert its energy into electricity.

Nuclear

This is the energy that is created when atoms are either combined or split, creating heat. This can be converted into electricity.

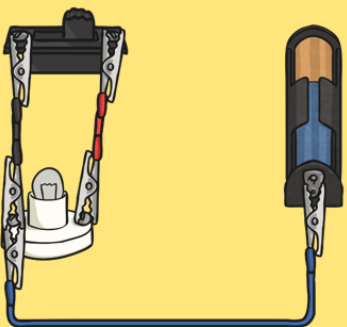
Geothermal

Geothermal energy is heat from the Earth, which can be converted into electricity.

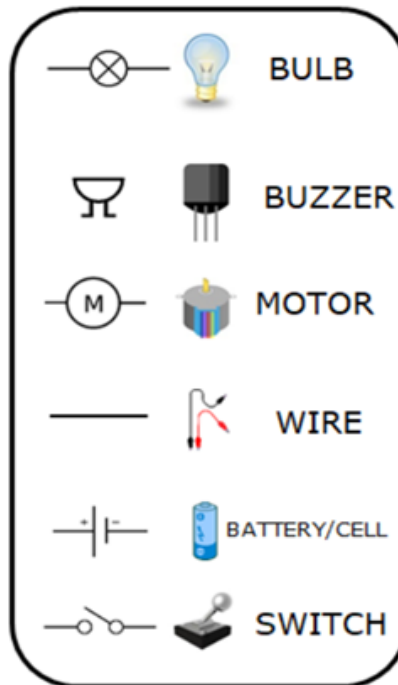
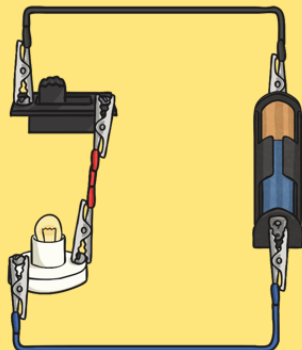
| Renewable | Non-renewable |
|---|---------------|
| Solar Nuclear Geothermal Hydro Wind | Fossil fuels |

An electrical circuit can be complete or incomplete.

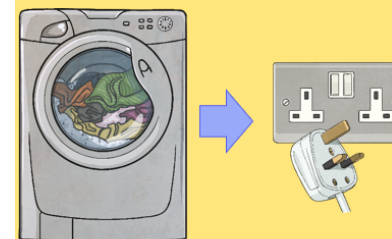
Incomplete Circuit



Complete Circuit



Mains Electricity



To use this type of electricity, you need to plug the appliance into a socket.

Battery Electricity



To use this type of electricity, you need to insert a battery into the appliance.