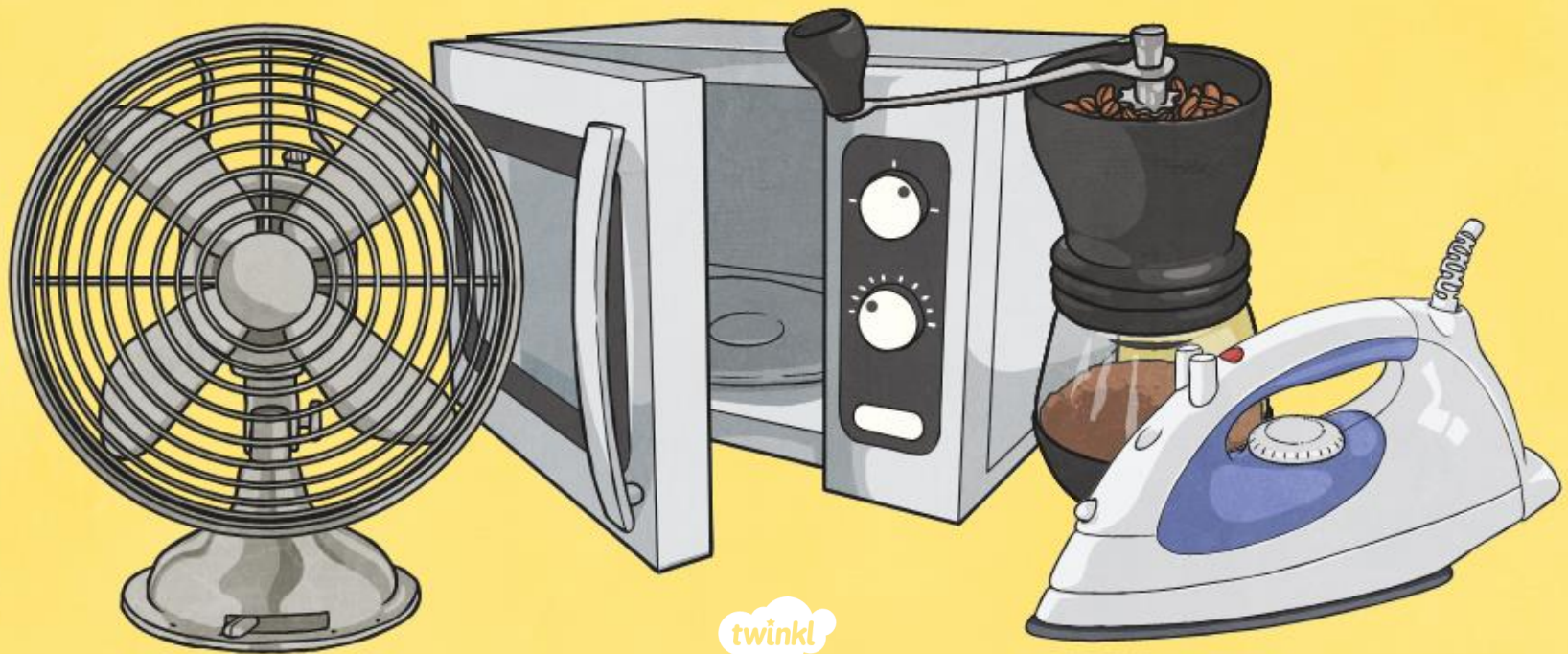




Science

Electricity

Everyday Electrical Appliances



twinkl

Aim

- I can identify electrical appliances and the types of electricity they use.

Success Criteria

- I can identify electrical appliances and non-electrical appliances.
- I can sort appliances based on whether they use mains or battery power.

What is an Appliance?

Definition:

An **Appliance** is a **device**, **piece of equipment** or an **instrument** designed to perform a **task**.

Examples:

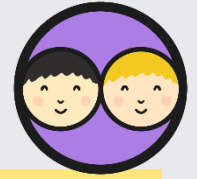


A **washing machine** is an appliance which performs the task of **washing clothes**.






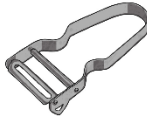







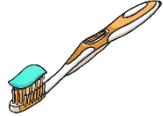




A **thermometer** is an appliance which performs the task of checking the **temperature**.

Electrical Appliances

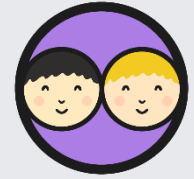


In pairs you will be given cards which will need sorting into those which use electricity and those that don't.

Appliances Cards		Appliances Cards		Appliances Cards		Appliances Cards	
gas oven 	rake 	toaster 	microwave 	bowl 	potato peeler 	cheese grater 	lawn mower 
fan 	coffee grinder 	television 	tablet 	fork 	toothbrush 	pencil 	felt tip 

Remember to take a picture of your cards once you have finished sorting them.

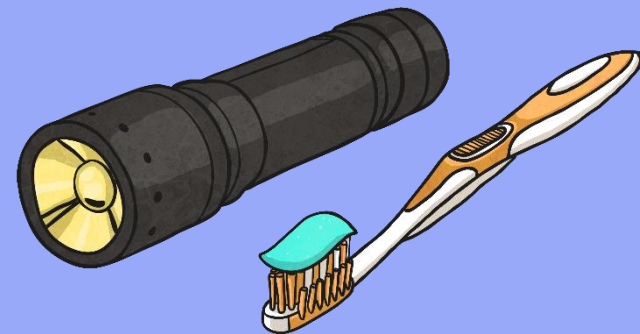
Electrical Appliances Answers



Electrical Appliances	Non-electrical Appliances
washing machine	thermometer
mobile phone	saucepan
lawn mower	cheese grater
toaster	pencil
microwave	felt tip
television	bowl
tablet	potato peeler
fan	fork
sewing machine	toothbrush
torch	gas oven
iron	rake
hairdryer	coffee grinder
	candle
	hammer
	sponge

Questions

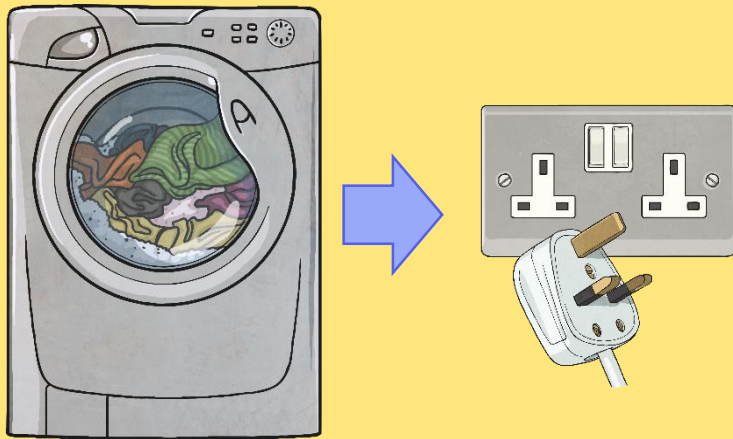
1. Which appliances did you think used electricity?
2. Which did you think did not use electricity?
3. Can you explain why?



Types of Electricity

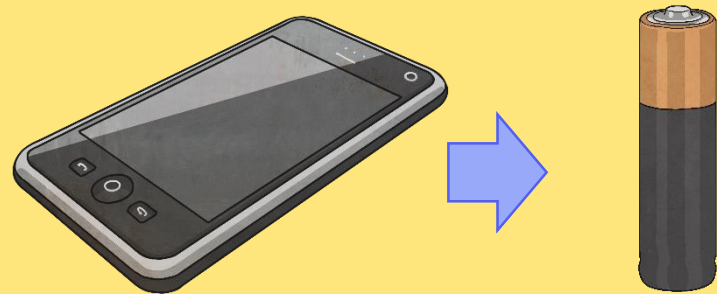
There are two types of electricity:

Mains Electricity



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

Battery Electricity



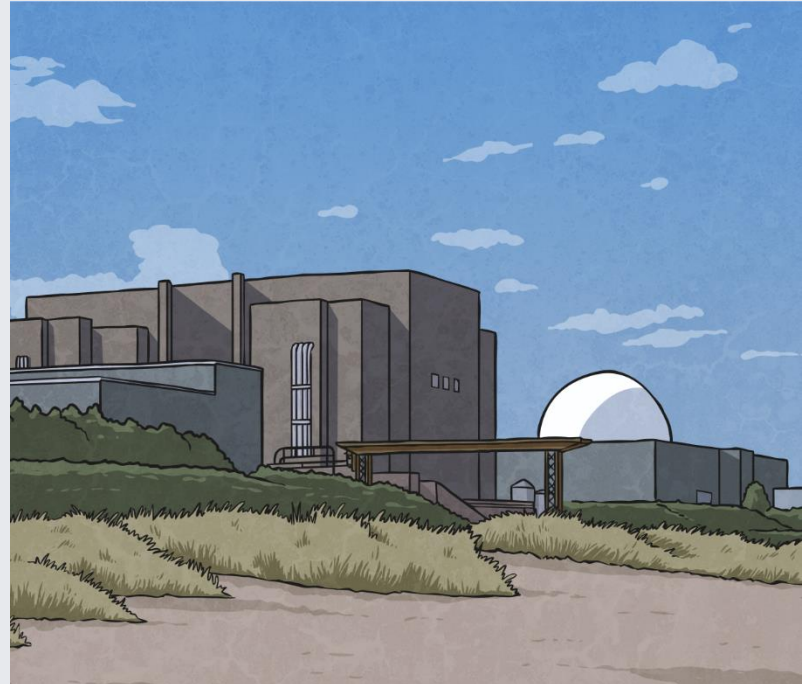
To use this type of electricity, you need to insert a battery into the appliance.

Types of Electricity

In the UK, **mains electricity** is produced mainly by **gas, coal or nuclear power stations.**



gas power station



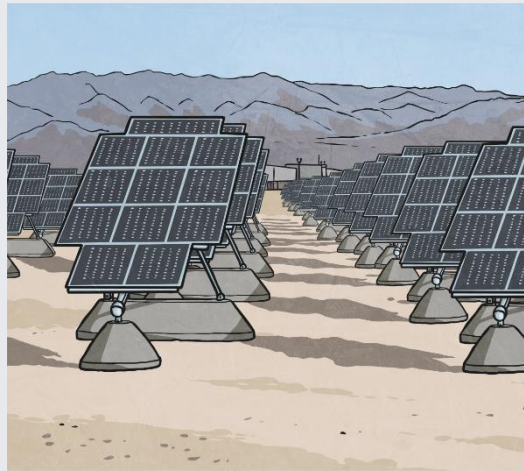
nuclear power station

Types of Electricity

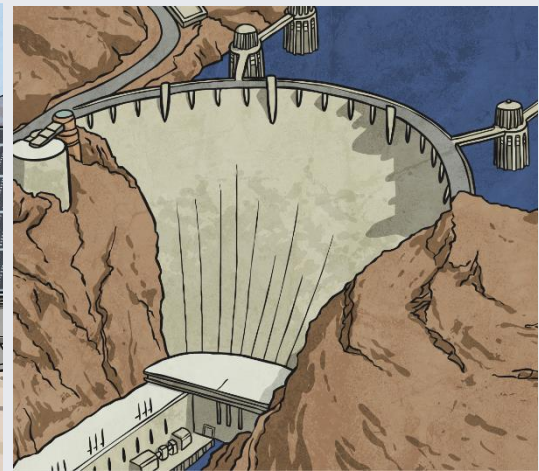
Wind turbines, hydroelectric and solar panel power stations are also used to generate electricity, but to a lesser extent.



wind turbines



solar panels



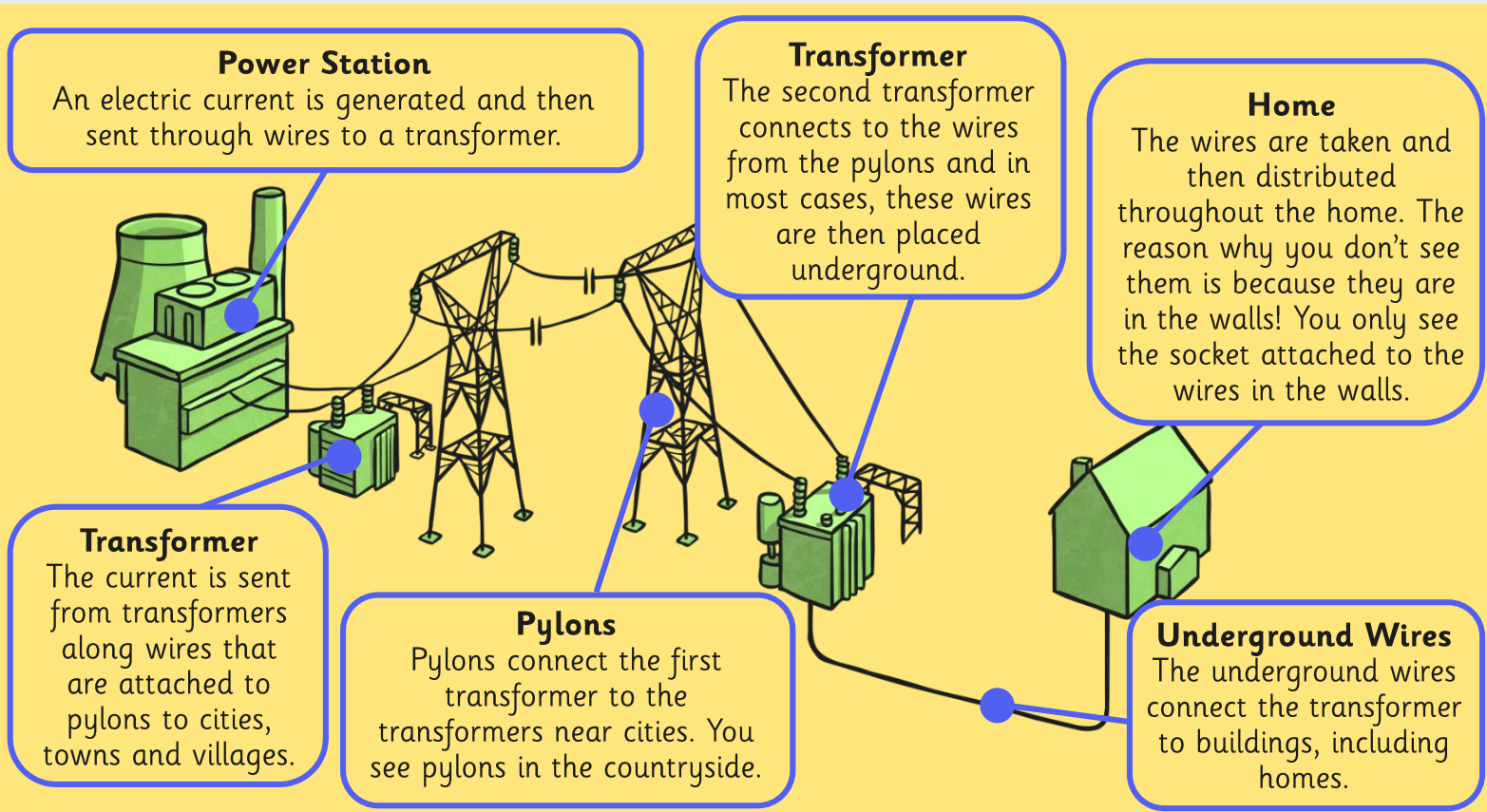
hydroelectric power

A small number of homes have **solar panels** attached to their roofs to provide mains electricity.



Types of Electricity

Power stations generate a continuous electric current.

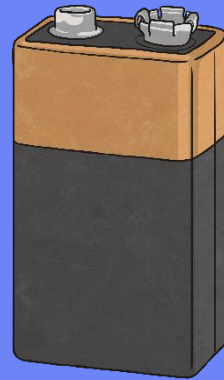


Types of Electricity

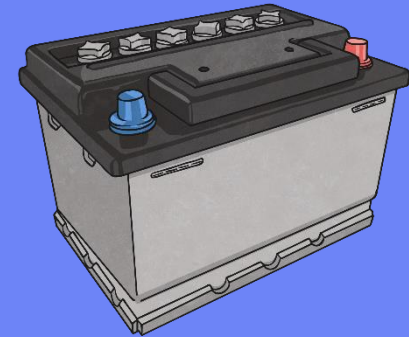
Batteries store chemicals which produce an electric current. They eventually stop working as the chemicals stop being able to produce an electric current.



battery



square battery



car battery

Rechargeable batteries are ones where the chemical reaction can be reversed so that the battery is able to create an electric current again. However, even rechargeable batteries will eventually stop producing an electric current.

