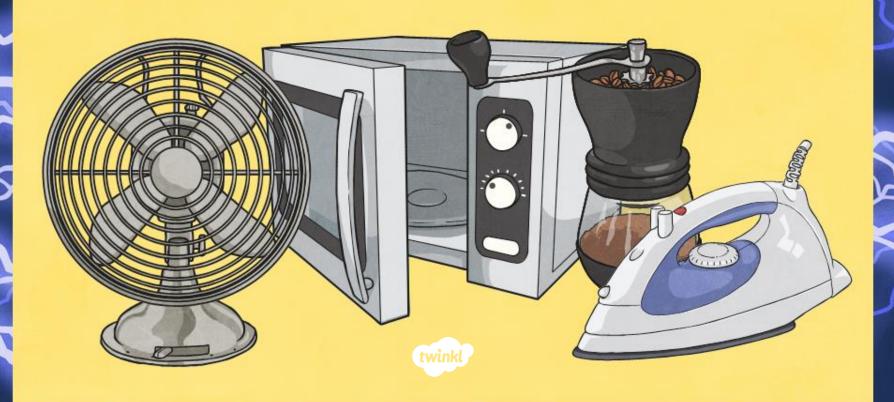
Everyday Electrical Appliances



What is an Appliance?

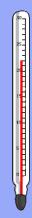
Definition:

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 Answers

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

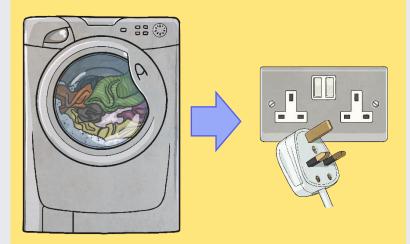
Questions

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



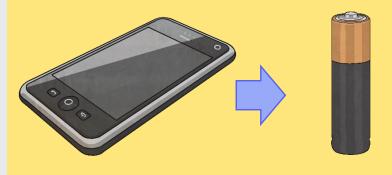
There are two types of electricity:

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.

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



gas power station



nuclear power station

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.



Power stations generate a continuous electric current.

Power Station

An electric current is generated and then sent through wires to a transformer.

Transformer

The second transformer connects to the wires from the pylons and in most cases, these wires are then placed underground.

Home

The wires are taken and then distributed throughout the home. The reason why you don't see them is because they are in the walls! You only see the socket attached to the wires in the walls.

Transformer

The current is sent from transformers along wires that are attached to pylons to cities, towns and villages.

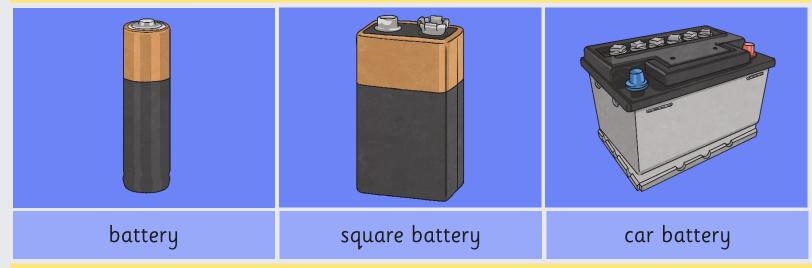
Pylons

Pylons connect the first transformer to the transformers near cities. You see pylons in the countryside.

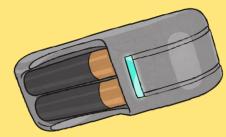
Underground Wires

The underground wires connect the transformer to buildings, including homes.

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



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.



Staying Safe

Mains electricity can be dangerous, causing anything from a minor electric shock, to serious burns and even death!

Do you know how to stay safe in your home?

Click on the house below and let's see.



Task 1.

This week we are going to begin recapping all that you have learnt about Electricity. Think of and sort as many everyday objects as you can think of into two categories- objects that use electricity and those that do not.

Task 2.

- 1. What are the two main types of electricity?
- 2. How is electricity, mainly produced in the UK?
- Think of two different objects that use battery power.Explain why this is.
- 4. What other ways are used to generate electricity?
- 5. What is the difference between solar power and hydroelectric power?