



SCIENCE

TUESDAY 12TH JANUARY

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

What is an Appliance?

Definition:

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

Examples:

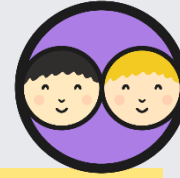


A **washing machine** is an appliance which performs the task of **washing clothes**.














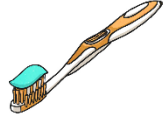




A **thermometer** is an appliance which performs the task of checking the **temperature**.

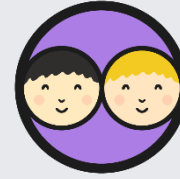
Electrical Appliances



Look at the appliances below. Some of them require electricity to work, and some of them don't. Can you have a think about which of them need electricity?

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 

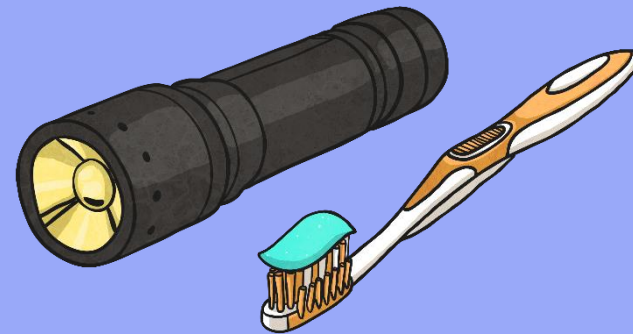
Electrical Appliances Answers



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

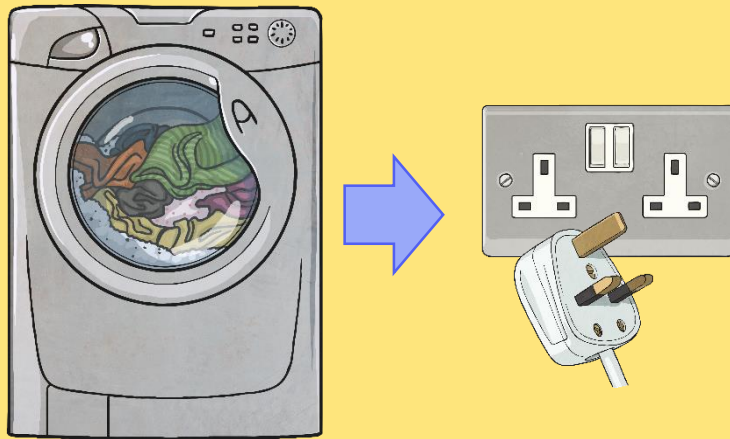
1. Which appliances did you think used electricity?
2. Which did you think did not use electricity?
3. Can you explain why?



Types of Electricity

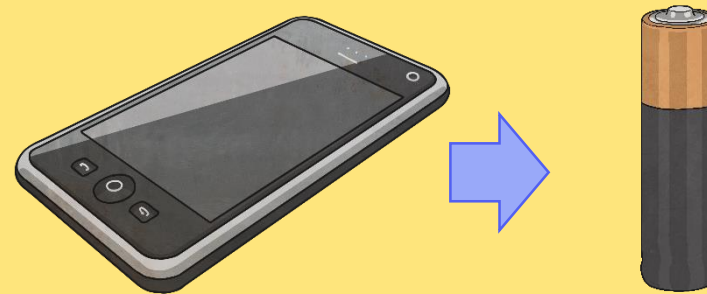
There are two types of electricity:

Mains Electricity



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

Battery Electricity



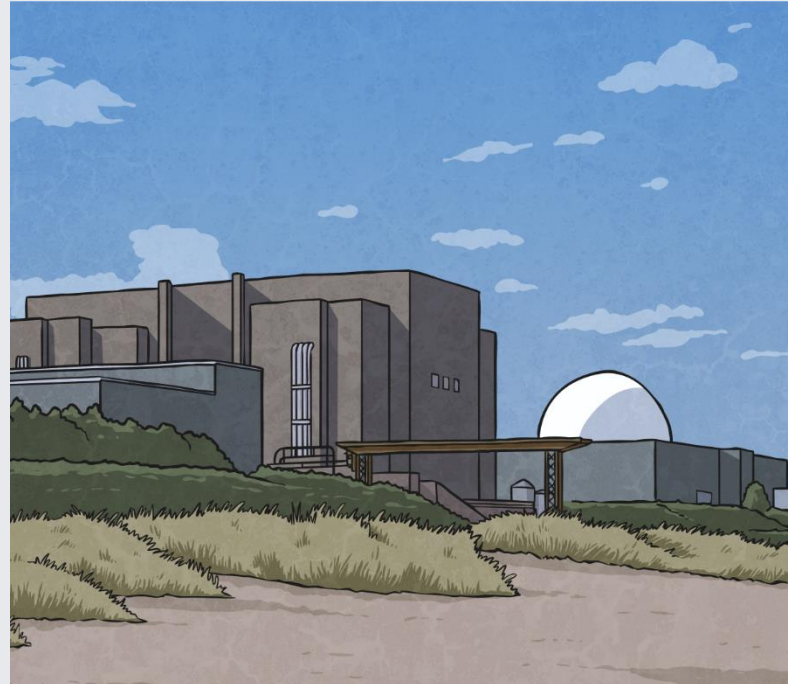
To use this type of electricity, you need to insert a battery into the appliance.

Types of Electricity

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



gas power station



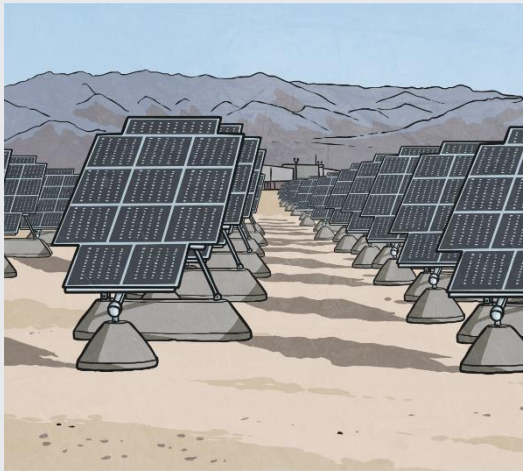
nuclear power station

Types of Electricity

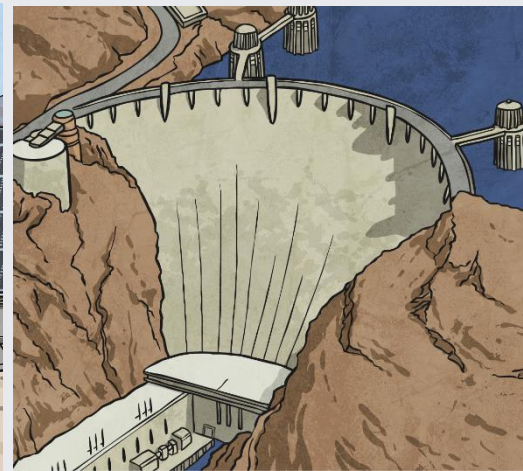
Wind turbines, hydroelectric and solar panel power stations are also used to generate electricity, but to a lesser extent.



wind turbines



solar panels

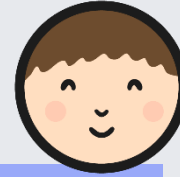


hydroelectric power

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



Mains or Battery?



Mains or Battery?

Using the **Appliances Cards**, decide if each appliance uses mains or battery electricity. One example for each has been done for you.

Mains	Battery
washing machine	mobile phone

Mains or Battery?

Using the **Appliances Cards**, decide if each appliance uses mains electricity, battery or both. One example for each has been done for you.

Mains Electricity
washing machine

Battery Electricity
alarm clock
mobile phone

Mains or Battery?

Using the **Appliances Cards**, decide if each appliance uses mains electricity, battery or both or neither. One example each has been done for you.

Mains Electricity
washing machine

Battery Electricity
alarm clock
mobile phone

pencil

Extension: Can you give your own examples of appliances that fit into these categories?

