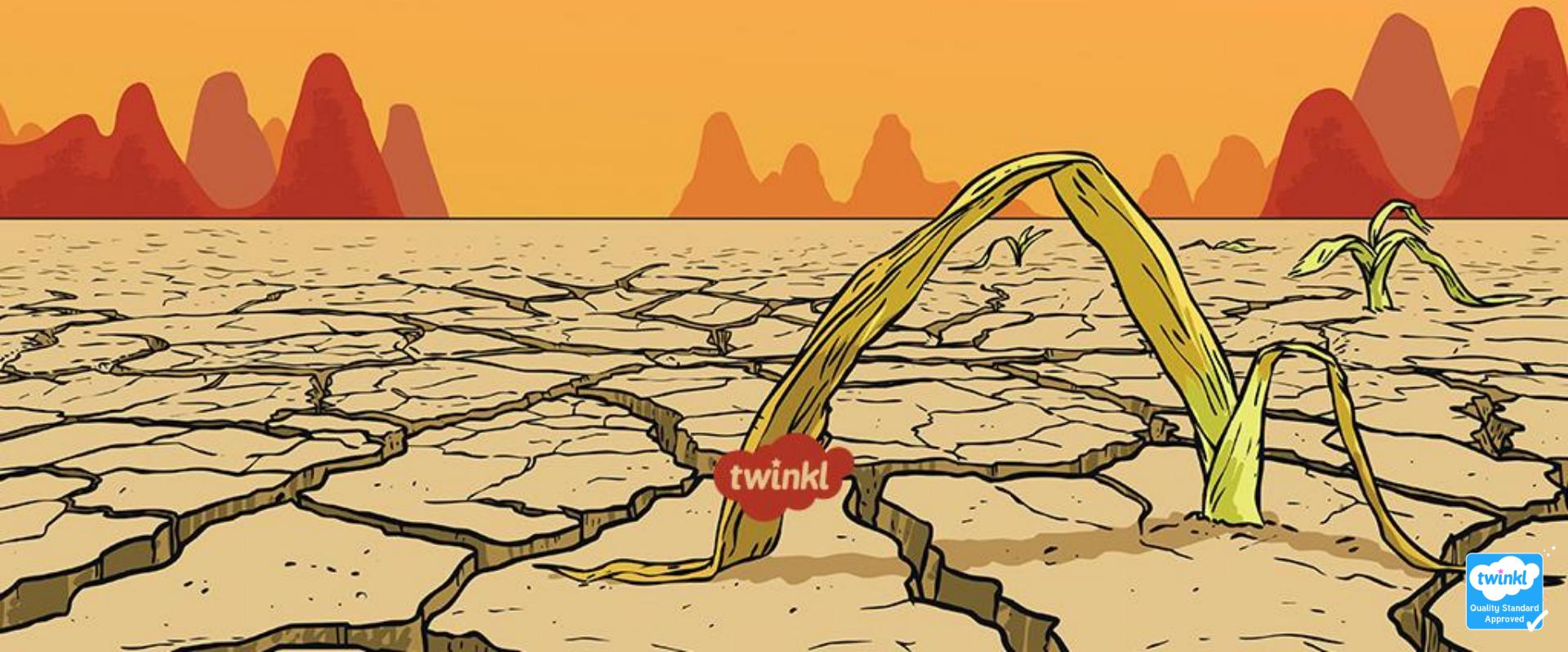


# What Is Climate Change?



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# Aim

- To understand and describe the main aspects of climate change and how it affects the planet.

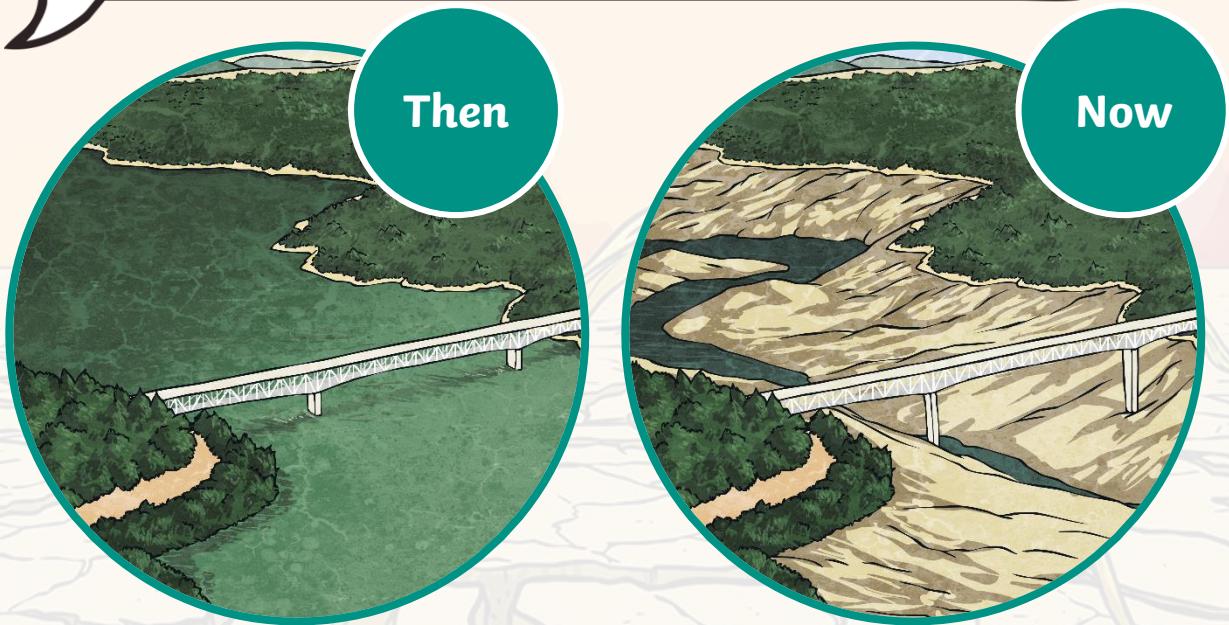
# Success Criteria

- I can identify the reasons that experts believe cause global warming.
- I can explain why climate change is not good for the Earth.
- I can explain what can be done to combat climate change.

# What Is Climate Change?



Climate change is a term used by experts when describing the way that both weather and climate systems are changing as a result of mankind's industrial activity across the world.



# What Is Being Affected By Climate Change?

There are a lot of different environmental changes that are happening as a result of climate change. Some are big and some are small.

These include:



1

Shrinking  
glaciers



2

Plant species  
shifting locations



3

Rising sea  
levels



4



5

Animal species  
becoming  
endangered

Trees and plants  
flowering much  
earlier in the year

# Why Is the World's Climate Changing?

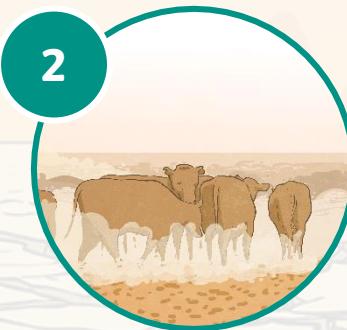
Experts believe that humans are the main reason why the world's climate and weather are changing.

A key contributing factor is the creation of greenhouse gases caused by human activities.

These include:



1  
Burning fossil fuels



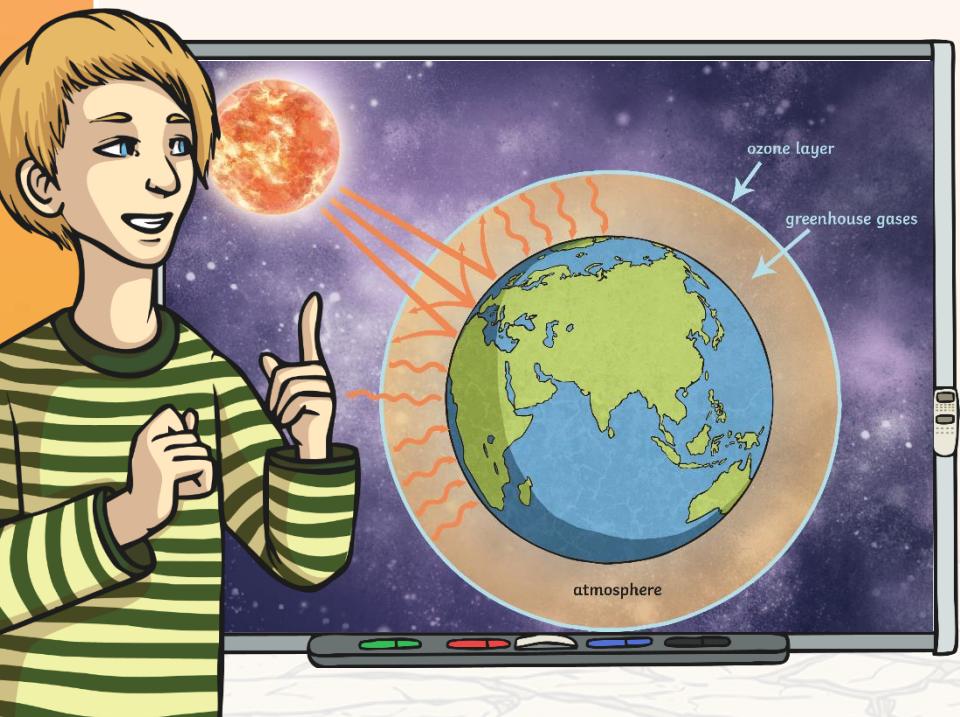
2  
Beef cattle farming



3  
Agricultural fertilisers



# How Do Greenhouse Gases Change the Climate?



Greenhouse gases that get released into the atmosphere prevent heat from escaping the Earth.

The result of this is that whilst the Sun's rays can enter the atmosphere to provide our planet with heat and warmth, not as much can escape.

Therefore, the planet keeps getting hotter and hotter.

Since the Industrial Revolution in the 18<sup>th</sup> Century, the planet's average temperature has increased by around one degree.

# Where Do These Greenhouse Gases Come From?

## Water Vapour ( $H_2O$ )

The most abundant greenhouse gas, created through the heating of water.

## Carbon Dioxide ( $CO_2$ )

Created through the burning of substances containing carbon, such as fossil fuels.

## Methane ( $CH_4$ )

Produced by cattle, chickens and pigs. As the global population increases, the more of these creatures are farmed and the more gas they produce.

## Nitrous Oxide ( $N_2O$ )

Used in rocket fuel, racing cars, hospitals and dentist surgeries. Also found in agricultural fertilisers.

## Hydrofluorocarbons (HFC)

Found in air conditioning and refrigerators.

# How Do Greenhouse Gases Change the Climate?

It is very important to reduce the production of the gases that are creating the greenhouse effect. This is reliant on governments across the world creating laws and strategies to meet certain targets in pollution reduction.

In developed countries, such as those in the European Union, plans and laws are already in place. In developing countries, however, there is still a greater dependency on industries that create greenhouse gases.



# How Do Greenhouse Gases Change the Climate?

Some countries, including the UK, have committed to reducing emissions and finding alternative energy sources, including:



building wind farms, solar farms and other means of creating electricity from renewable energy;



supporting the manufacture and purchase of electric vehicles;



committing to phasing out the manufacture of petrol and diesel powered transport.

# What Is Being Done to Combat Climate Change?



Demonstrations and rallies have always been an important way of people making their voices heard and their opinions known.

In early 2019, young people

became involved in demonstrations in the UK.

Thousands of school-aged children refused to attend school so that they could attend organised demonstrations in major cities.

Many people believed that the children should have faced consequences for missing time from school, but some believed that their protests were important, as it is the younger generation who will feel the impact of climate change more severely.

# What Are the Consequences of Not Doing Enough?

Without global warming slowing down, experts have predicted there are some very serious consequences for our planet.

These include:

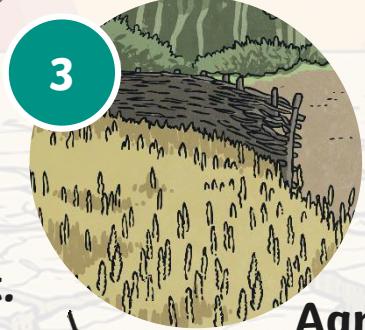


1



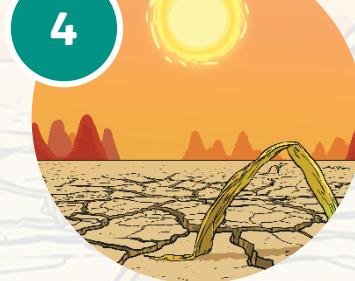
2

Up to 30% of the Earth's wildlife could become extinct.



3

Up to 90% of the ocean's coral reefs will become lifeless.



4

Agriculture dependant on rain will see harvests halved.

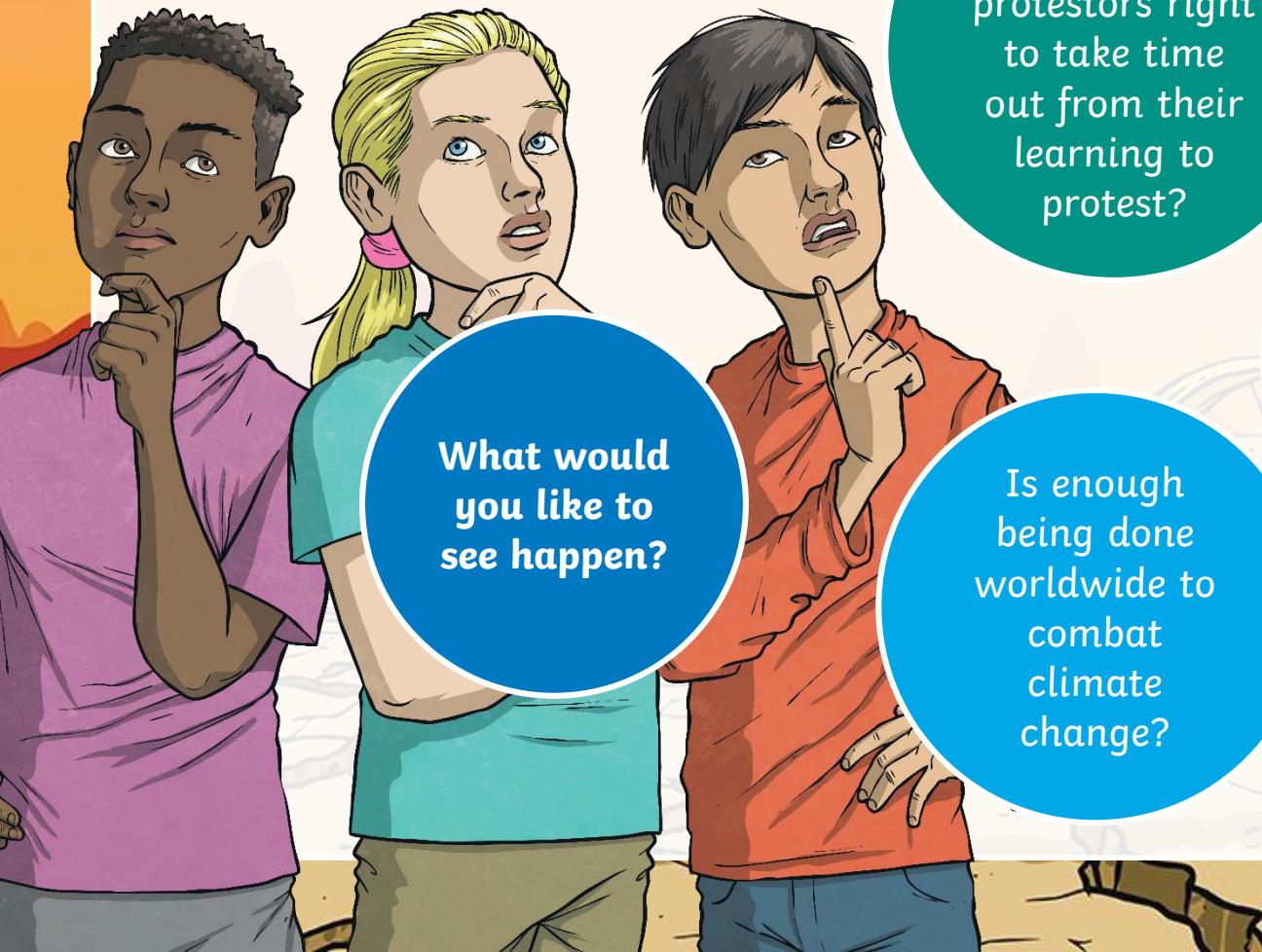


5

Low-lying settlements and ecosystems could be lost due to rising sea levels.

Droughts and storms become more frequent and extreme.

# What Do You Think?



**What would  
you like to  
see happen?**

Were the  
young  
protestors right  
to take time  
out from their  
learning to  
protest?

Is enough being  
done worldwide to  
combat  
climate  
change?

Is enough being  
done in this  
country to  
combat climate  
change?

# Keywords

greenhouse  
gas

carbon  
dioxide

water  
vapour

climate  
change

environment

government

methane

nitrous  
oxide

carbon

drought

agriculture



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