

Friday 20th May

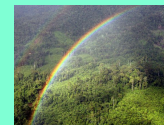
Third reading - question the author

LO: To check my understanding as I read the information text

What have you learnt about Climate Change?

You could:

- draw a mind map
- make a fact-file
- make a poster illustrating how we can look after our environment better



	Glossary
Industrial Revolution	A transfer to new manufacturing processes in Europe and the United States.
Greenhouse Effect	The warming of Earth's surface and the air above it.
greenhouse gas	Greenhouse gases are gases in Earth's atmosphere that trap heat.
decade	A period of ten years.
population	The number of living people that live together in the same place.
eucalyptus trees	Some of the tallest trees in the world which are sometimes known as gum trees.
Fairtrade	Trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.

Read the text out loud with your partner.

Remember:

Use your reading ruler

Look at your partner when they are reading

Sit still

Help your partner if they are stuck on a word

Read to your partner in a voice that only they can hear

Write down any words you don't know the meaning of onto your whiteboard

Once you have finished reading aloud, read silently.

<https://www.natgeokids.com/uk/discover/geography/general-geography/what-is-climate-change/>

Climate Change

We've all heard of it, but what is climate change and what is it doing to our planet?

What is climate change?

Climate change (or global warming), is the process of our planet heating up. Scientists estimate that since the **Industrial Revolution**, human activity has caused the Earth to warm by approximately 1°C. While that might not sound like much, it means big things for people and wildlife around the globe.

Unfortunately, rising temperatures don't just mean that we'll get nicer weather - if only! The changing climate will actually make our weather more extreme and unpredictable. As temperatures rise, some areas will get wetter and lots of animals (and humans) could find they're not able to adapt to their changing climate.

What causes climate change?

1. Burning fossil fuels

Over the past 150 years, industrialised countries have been burning large amounts of fossil fuels such as oil and gas. The gases released into the atmosphere during this process act like an invisible 'blanket', trapping heat from the sun and warming the Earth. This is known as the "**Greenhouse Effect**".

This is a non-fiction text about an important issue that we face in our everyday lives.

We learnt about the Industrial Revolution during our previous topic on the Victorians:

<https://www.bbc.co.uk/teach/class-clips-video/history-ks1--ks2-explain-this-industrialisation/zmmx6v4>



Unfortunately, due to the Industrial Revolution, human activity has had a negative impact on our Earth. We discussed some of the causes and effects of flooding during our Geography topic on Rivers.

As this is an information text, it is set out with useful sub-headings and there are some words in bold font which would be found in the Glossary.

One of the causes of climate change is the burning of fossil fuels such as oil and gas. Can you think of three things which use these fuels?

2. Farming

Believe it or not, cows' eating habits contribute towards climate change. Just like us, when cows eat, methane - a type of **greenhouse gas** - builds up in their digestive system and is released in the form of... a burp! This might sound funny, but when you imagine that there are almost 1.5 billion cows releasing all that gas into the atmosphere, it sure adds up!

3. Deforestation

Forests absorb huge amounts of carbon dioxide - another greenhouse gas - from the air, and release oxygen back into it. The Amazon rainforest is so large and efficient at doing this that it acts like our planet's air conditioner - limiting climate change. Sadly, many rainforests are being cut down to make wood, palm oil and to clear the way for farmland, roads, oil mines, and dams.

How will climate change affect the planet?

The Earth has had many **tropical** climates and ice ages over the billions of years that it's been in existence, so why is now so different? Well, this is because for the last 150 years

It's incredible to think that harmless cows are also adding to the greenhouse gases in our atmosphere.

We know about the importance of trees and the amazing role that they play in releasing oxygen back into the air that we breathe.

Of course, as in everything in life, there are always consequences to our actions.

human activity has meant we're releasing a huge amount of harmful gases into the Earth's atmosphere, and records show that the global temperatures are rising more rapidly since this time.

A warmer climate could affect our planet in a number of ways:

- More rainfall
- Changing seasons
- Shrinking sea ice

How will climate change affect wildlife?

Climate change is already affecting wildlife all over the world, but certain species are suffering more than others. Polar animals - whose icy natural habitat is melting in the warmer temperatures - are particularly at risk. In fact, experts believe that the Arctic sea ice is melting at a shocking rate - 9% per **decade**! Polar bears need sea ice to be able to hunt, raise their young and as places to rest after long periods of swimming. Certain seal species, like ringed seals make caves in the snow and ice to raise their pups, feed and mate.

It's not just polar animals who are in trouble. Apes like orangutans, which live in the rainforests of Indonesia, are under threat as their habitat is cut down, and more droughts cause more bushfires.

Sea turtles rely on nesting beaches to lay their eggs, many of which are threatened by rising sea levels. Did you know that the temperature of nests determines whether the eggs are male or female? Unfortunately, with temperatures on the rise, this could mean that many

Already, we have seen changes in our planet due to climate change. These include: more rainfall, changing seasons and shrinking sea ice.

But what about our precious wildlife? We've all heard about the polar bears but they're not the only animals which are being affected by climate change.

more females are born than males, threatening future turtle **populations**.

How will people be affected by climate change?

Climate change won't just affect animals, it's already having an impact on people, too. Most affected are some of the people who grow the food we eat every day. Farming communities, especially in developing countries, are facing higher temperatures, increased rain, floods and droughts.

We Brits love a good cuppa, (around 165 million cups of the stuff every day!), but we probably take for granted just how much work goes into growing our tea. Environmental conditions can affect the flavour and quality plus it needs a very specific rainfall to grow. In Kenya, climate change is making rainfall patterns less and less predictable. Often there will be droughts followed by huge amounts rain, which makes it very difficult to grow tea.

Farmers might then resort to using cheap chemicals to improve their crop to earn more money, even when long-term use of these chemicals can destroy their soil.

So, will climate change have an impact on humans?

Have a think about how environmental conditions might affect something as simple as a cup of tea.

How are people coping with climate change?

Buying **Fairtrade** products can help make sure a farmer is paid a fair wage. This means they can cover their costs, earn enough money to have a decent standard of living, and invest in their farms to keep their crop healthy, without needing to resort to cheap methods of farming which can further damage the environment.

This support also helps farmers to replace **eucalyptus trees** - which take up a lot of water - with **indigenous trees** that are better for the farmers' soil. They can learn to make fuel-efficient stoves which will not only make them a little extra money, but also reduce the carbon footprint of the community - cool!

How can I help prevent climate change?

Small changes in your own home can make a difference, too. Try switching to energy-saving lightbulbs, walking instead of using the car, turning off electrical items when you're not using them, recycling and reducing your food waste. All these little things can make a difference.

It's hard to imagine that farmers aren't being paid a 'fair wage' for a product (such as tea) that we take for granted.



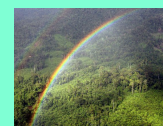
We've looked at eucalyptus trees (which take up a lot of water) before when we read about the Lizard-Man who made a special boomerang using these leaves as well as a few other products.

Discuss with your partner possible changes that may be made in our own lives which would help our environment.

What have you learnt about *Climate Change*?

You could:

- draw a mind map
- make a fact-file
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This same message was sung on Britain's Got Talent (2020):

An important SOS From The Kids: SAVE THE PLANET!

<https://www.youtube.com/watch?v=L-IFA-uB90Q>



