



Year 5 and 6 Knowledge Organiser - Climate Change

Key vocab

climate:	the long-term expected temperature
weather:	the day-to-day differences in conditions

adapt	change behaviour
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carbon dioxide:	a greenhouse gas
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methane:	a greenhouse
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gas excretion:	getting rid of waste from the body
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deforestation:	cutting down large areas of trees
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carbon emissions	the production and of something, especially gas or radiation
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hybrid vehicles	A vehicle that uses two or more types of power.
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food miles	a unit of measurement of the fuel used to transport food from the producer to the consumer
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predictable	Able to be predicted
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communities	a group of people living in the same place or having a particular characteristic in common
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Climate is the long-term temperature expected in a place. Weather is the day-to-day conditions which change frequently. Climate change (or global warming), is the process of our planet heating up so that temperatures are higher than would be expected. The Earth has warmed by an average of 1°C in the last century, and although that might not sound like much, it has an effect on people and wildlife around the globe. Unfortunately, rising temperatures don't just mean that we'll get nicer weather. The changing climate will make our weather more extreme and unpredictable. As temperatures rise, some areas will get wetter and humans and animals will need to adapt.



Sticky Knowledge

Burning fossil fuels such as coal and oil emits carbon dioxide which acts like an invisible greenhouse, making the Earth warmer.

Farming - methane gas released from 1.5 billion cows worldwide, during excretion, adds to the greenhouse effect.

Deforestation - trees absorb carbon dioxide but many forests are being cut down and so the carbon dioxide is not absorbed.

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

- A warmer climate could:
- increase rainfall
 - change the seasons
 - shrink sea ice
 - rise sea levels

Climate change is already affecting wildlife all over the world.

Polar bears have fewer places to hunt and rest as their habitat (sea ice) is melting.

Orangutans, living in the rainforests of Indonesia, are under threat as their habitat is cut down.

Sea turtles lay their eggs on nesting beaches, many of which are threatened by rising sea levels.

Farming communities in developing countries are facing higher temperatures, increased rain, floods and droughts.

In Kenya, climate change is making rainfall patterns less predictable. Often there will be droughts followed by large amounts of rain, which makes it difficult to grow crops such as tea.

Over recent years there have been many attempts to reduce carbon emissions.

One method to reduce carbon emissions has been the use of low-energy light bulbs.

Another method to reduce carbon emissions has been the use of hybrid and electric vehicles.

Another strategy to reduce carbon emissions has been to use more efficient petrol engines.

There has been a greater emphasis placed on recycling and reusing materials to reduce carbon emissions.

A final strategy used to reduce carbon emissions has been to attempt to reduce 'food miles'.

Over the past 150 years, the average temperature on our planet has increased by just over one degree Celsius.

Exciting books!

