



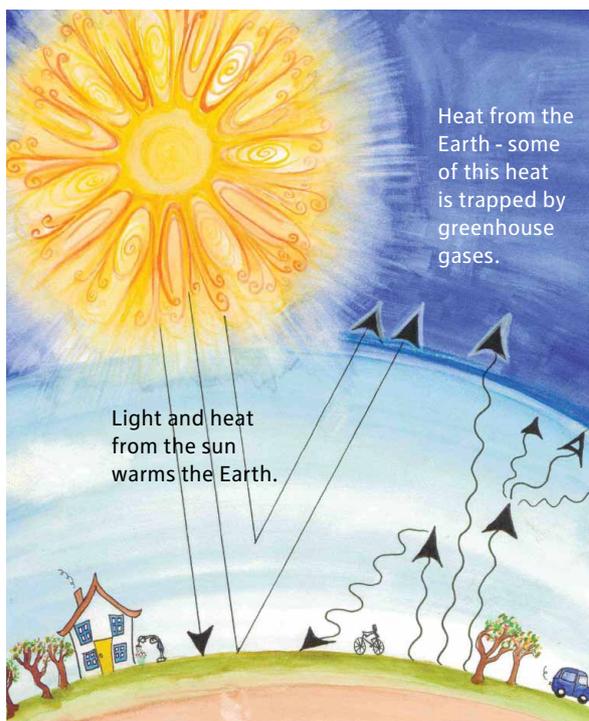
KEY STAGE 2 FACT SHEET – CLIMATE CHANGE

What is climate change?

The Earth's weather is being changed by greenhouse gases (especially carbon dioxide) that we are putting into the atmosphere. This is called climate change.

The greenhouse effect

- The natural greenhouse effect keeps the Earth's climate warm and habitable.
- Greenhouse gases, such as carbon dioxide, in the atmosphere trap some of the heat from the sun that would otherwise escape into space.
- Without the greenhouse effect, the Earth's temperature would be much colder and even the oceans would be frozen.
- Humans are increasing the amount of carbon dioxide in the atmosphere, mainly by burning fossil fuels and chopping down forests.



- This is making the greenhouse effect stronger, causing global warming and climate change.
- Another important greenhouse gas is methane. This is given off by rubbish as it breaks down in landfill sites. A lot of methane is also released through farming, especially keeping cows.

Some of the effects of climate change are:

- melting ice on mountains and around the north and south poles;
- bigger storms and droughts;
- rising sea levels.

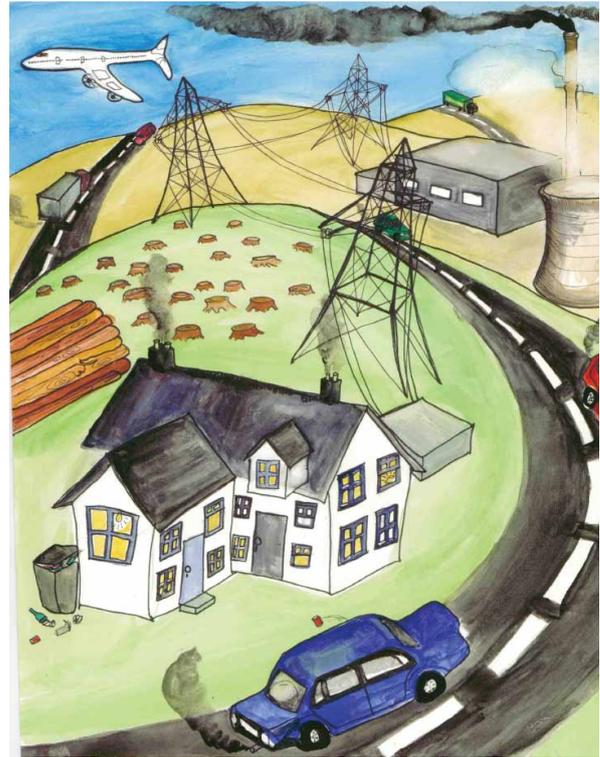
CLIMATE CHANGE CONT...

Fossil fuels (coal, oil and gas) were formed millions of years ago from dead plants and animals that got buried deep under the earth or the sea.

Plants get energy to grow from the sun, so fossil fuels are a kind of stored solar energy.

Fossil fuels are a non-renewable source of energy, which means that one day they will run out because we are using them a lot faster than they are being created.

Most of our energy comes from fossil fuels, which are burned in power stations to make electricity, or used as fuel to drive cars and heat our homes.



The future effects of climate change

If we do not reduce the amount of fossil fuels we are burning then climate change will cause increasingly serious disasters all over the world:

- billions of people are likely to not have enough water to drink because rivers will dry up;
- droughts will mean people do not have enough food to eat;
- lots of animals and plants will become extinct because their habitats are destroyed.

To stop this from happening, we need to greatly reduce the amount of greenhouse gases that we produce. This means we have to use less energy and get more of our energy from clean renewable energy sources.



In many parts of the world droughts are increasing.



Polar bears are losing their home as ice melts around the North Pole