16. How is climate change affecting all of us?

Requirements: red colouring pencil
Research team: individually
Curriculum: Science, Citizenship
Time: 20 minutes

Look out of your classroom window and answer this question: What is the weather like today?

Weather is the condition of the atmosphere around us over a short period of time. It is about it being hot or cold, wet or dry, stormy or calm, sunny or cloudy. Climate, on the other hand, is the average weather conditions over longer periods of time and over larger areas, like countries and continents.

Colour in red the rectangles on this **Climate Change Contributors** worksheet with the activities that you think will contribute to climate change.

Researcher Learning Activities

Investigate the coral reefs of Belize in more depth

More Information/ Teacher Notes

The earth has a thick layer of air around it called the atmosphere. The atmosphere is made up of greenhouse gases. These gases act like a blanket around us keeping us warm and safe from space. Two of these gases are carbon dioxide and methane. The sun shines on earth. The gases carbon dioxide and methane catch most of this heat and keep it on earth so that we stay warm. However, the more carbon dioxide and methane in the world, the hotter we get! This is known as 'global warming'. Human activity has caused there to be too much greenhouse gases, like carbon dioxide and methane.

- When animals and people breathe, they produce carbon dioxide. When they fart, they produce methane!
- When we chop down trees, the trees release carbon dioxide. This is called deforestation. Deforestation also stops the trees from absorbing carbon dioxide as they grow.
- When we use cars, planes and other transport, carbon dioxide and methane are released as the transport burns petrol to move.
- When we burn oil, gas, coal (we call these fossil fuels) for electricity, carbon dioxide is released into the air.
- When volcanoes erupt, they release carbon dioxide and other greenhouse gases in their smoke.
- When we throw food in the bin it goes to landfill where it releases methane as it rots because it does not get enough oxygen.
- When we grow food, we use fertilisers to help the crops grow. These fertilisers have a greenhouse gas, called nitrous oxide, in them.