

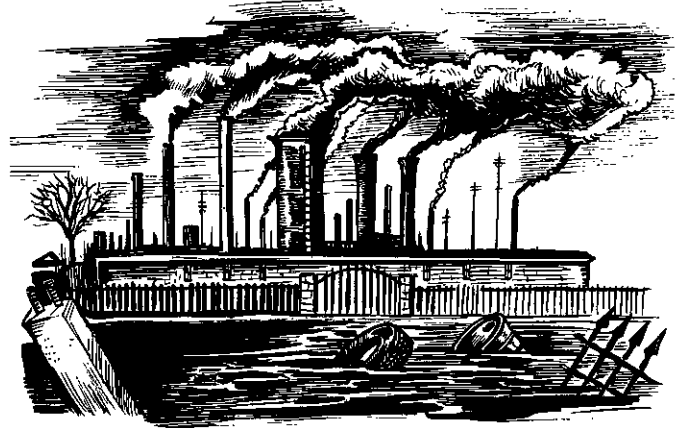
Cause and effect – 1

Cause and effect is when one thing (the cause) makes something happen (the effect). If you want to understand what you read you must be able to work out the cause and effect of the things that happen.

Read the report.

Global warming

1. Global warming is a serious issue which affects every single person on the planet. It may not sound like much, but the Earth's surface temperature has increased by 0.6 °C over the past century. Scientists debate the exact cause of global warming—some suggest it is because of human activity, others say it is a natural occurrence.
2. The Earth is surrounded by atmosphere. This atmosphere is made up of different layers and helps to keep the Earth at the right temperature by letting in heat from the sun and allowing excess heat to escape. One of these layers is made up of greenhouse gases and is like a doona for the Earth, keeping the atmosphere at a comfortable 16 °C. However, when humans make extra greenhouse gases by burning fossil fuels (coal and petrol), cutting down forests and rainforests and increasing the amount of methane produced, the 'doona' becomes too thick and keeps too much of the heat in the Earth's atmosphere. The job of the ozone layer is to protect the Earth from harmful UVB (middle wave ultraviolet light) rays from the sun. Once damaged, this layer can no longer do its job and the harmful rays also contribute to the heating up of the Earth.
3. It has been estimated that in 80 years, the surface temperature of the Earth could be around 1.1 °C warmer than it is today. This warming could in fact be responsible for an increase in sea levels as the water becomes warmer and expands and glaciers and sea ice melt. This would mean that coastal cities would more than likely find themselves in deep water! Some animals and plants could become extinct due to warmer temperatures, and loss of habitat and available food. Cooler environments could become warmer and deserts even warmer. Lakes and rivers would dry up due to the higher temperatures and rates of evaporation. There may be less rainfall, causing more droughts, making crops difficult to grow and leading to a shortage of food. Less rainfall also means less water for drinking and bathing. It is also predicted that severe storms could become more frequent as temperatures rise.



The United Nations (UN) is a worldwide association of governments working together to make sure everyone in the world is kept safe and treated with respect. Part of keeping everyone safe is also making sure global warming doesn't get out of hand. In 1997, the UN met in Kyoto, Japan, to talk about global warming. The *Kyoto Agreement* was devised to try to ensure the amount of gases produced by industry is reduced. The agreement came into force in February 2005. It is believed that we can reduce the amount of greenhouse gases by changing the way we produce power.

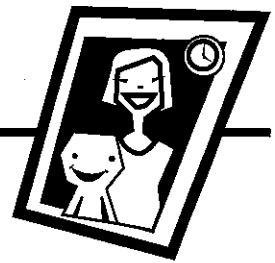
Scientists are looking into 'greenpower' energy sources. Such sources would reduce the amount of greenhouse gases being pumped out into the atmosphere. Greenpower alternatives include wave power, but scientists worry this could cause too much noise in the environment and harm the animals, or wind power, but some people complain the large wind turbines are an eyesore. Other alternatives include water and solar power as well as using the gas produced from rotting rubbish.

We can help with simple measures incorporated into our everyday living. We can recycle and reuse, use vegetable scraps in a compost heap, use less water, reduce electricity use, car pool or cycle and buy products which have minimal packaging. Every little bit that we can do adds up and helps our environment.

By finding a solution to global warming, we can make the Earth a wonderful place to be for many generations to come!

Cause and effect

Practice page



Use similar strategies to those on page 77 to practise working out the cause and effect. (Clues are given to help you.)

1. *What is a possible effect of using wave power?*
 - (a) Surfers wouldn't be able to surf the waves because of the generators.
 - (b) People think it would be too much of an eyesore.
 - (c) The animals would no longer be able to swim in the sea.
 - (d) Scientists worry it would generate too much noise and harm the animals.

The best answer is .

2. *If you walk or cycle to school rather than getting Mum or Dad to drive you, how are you helping the environment?*
 - (a) I would be getting regular exercise.
 - (b) I would be helping to reduce fossil fuels being burnt and reducing the amount of greenhouse gases.
 - (c) I would be able to help Mum and Dad save money on petrol.
 - (d) I would get a chance to spend time in the fresh air.

The best answer is .

3. *If countries follow the Kyoto Agreement, what will be the possible outcome?*

4. *What do scientists debate is the exact cause of global warming?*

5. *What does the writer think the effect of finding a solution to global warming will be?*

Think!

Some answers are downright silly. Read Paragraph 5 and look for the keywords *wave power*.

Think!

All the answers are true, but the question relates specifically to the environment.

Think!

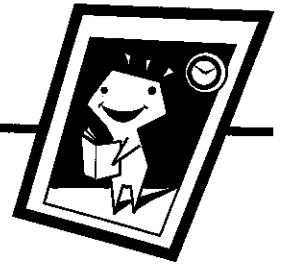
What is the *Kyoto Agreement* all about? Read Paragraph 4.

Think!

Look for the keywords *debate*, *exact cause* and *global warming* in Paragraph 1. Then read on to find the answer.

Think!

Find keywords in Paragraph 7.



Write out the strategies you have been using and work out these answers.

What would cause coastal cities to flood?

- (a) Too much rainfall.
- (b) People leaving their taps running.
- (c) All the extra storms that would be happening because of global warming.
- (d) Higher temperatures causing the water to expand and sea ice to melt.

The best answer is .

What would be the effects of more droughts for farmers?

- (a) There would be less water to bathe in and drink.
- (b) Crops would be difficult to grow, causing a food shortage.
- (c) We would have water restrictions and wouldn't be able to water our lawn.
- (d) Cooler environments would become warmer.

The best answer is .

Explain some possible effects of global warming.

Explain what would happen if more people tried to do 'their bit' for the environment.

What is the cause of some people complaining about wind power?

- (a) They think it costs too much money.
- (b) They think the wind turbines are too tall.
- (c) They think the wind turbines spoil the scenery.
- (d) They think the wind turbines make it windier.

The best answer is .