# **23** Environmental problems

## The problems and their causes

Home About us A variety of environmental problems now affect our entire world. As globalisation1 continues, local issues become international ones, so today there are few places in the world that do not suffer from environmental problems. Some of the major problems now affecting the world are acid rain<sup>2</sup>, air pollution<sup>3</sup>, global warming<sup>4</sup>, hazardous<sup>5</sup> waste, ozone depletion<sup>6</sup>, smog<sup>7</sup>, water pollution, overpopulation, and rainforest destruction8. People are also worried about the greenhouse effect, where an increase in the amount of carbon dioxide [CO<sub>a</sub>] and other gases<sup>9</sup> in the Earth's



atmosphere 10 causes a gradual warming of the surface of the Earth. This global warming is leading to the thawing of the polar ice caps 11 and all this is causing concern about climate change. Both human behaviour and climate change have led to many animal and plant species 2 becoming endangered<sup>13</sup> or even extinct<sup>14</sup>.

<sup>1</sup> increasing business, cultural and other contacts between countries <sup>2</sup> rain which contains harmful chemicals as a result of burning substances such as oil and coal [acid = a type of liquid that reacts chemically with other materials, sometimes dissolving them] <sup>3</sup> damage caused to the air by harmful substances or waste 4 rise in the world's temperature 5 dangerous 6 reduction in the ozone layer [layer of air above the Earth containing ozone which prevents harmful ultraviolet light from the sun from reaching Earth] <sup>7</sup> air pollution found in cities caused by a mixture of smoke, gases and chemicals (the word has been formed from smoke + fog) 8 destroying (cutting down) forest in a tropical area which receives a lot of rain 9 substance in a form that is neither solid nor liquid <sup>10</sup> the mixture of gases around the Earth 

11 ice covering the areas at the North and South Poles 12 types 13 very few in number, at risk of becoming extinct 14 not existing any longer

## Language help

The prefix over- means too much. Overfishing means that people have fished so much that it is having a serious effect on fish populations. Overpopulated means there are so many people living in an area that life is difficult there.

## Dealing with the problems

Worldwide efforts are being made to improve the situation. Green parties and green or ecological policies are mainly concerned with protecting the environment. Conservation organisations are developing nature reserves where plants and animals are protected. Farmers increasingly produce organic food, which avoids the use of harmful chemicals. More companies try to behave in a way that is environmentally friendly or ecologically sound. Societies attempt to dispose of waste in a more responsible way, by, for example, recycling as much as possible. People aim to reduce their carbon footprint by using cars less so that they cut down on their use of fossil fuels, for example.

## Word families

noun	verb	adjective	adverb
globalisation	globalise	global	globally
environment, environmentalist	(	environmental	environmentally
pollution, pollutant	pollute	polluting	de militare de la company
destruction	destroy	destructive	destructively
disposal	dispose	disposable	
reduction	reduce	reduced	

## 23.1 Answer each question, using a word or expression from the box.

acid rain carbon dioxide endangered species extinct global warming globalisation hazardous waste ozone layer polar ice caps destruction of rainforests smog water pollution

- 1 What happened to dinosaurs about 65 million years ago? They become extinct.
- 2 What is the name for a special layer in the Earth's atmosphere which helps protect our planet?
- 3 What word can be used to describe the increasing contact between countries that has a major impact on life today?
- 4 What causes problems because it is difficult to dispose of safely?
- 5 What have scientists shown to be melting worryingly fast at the North and South Poles?
- 6 What does the chemical symbol CO2 represent?
- 7 What has been happening in the Amazon area and in other tropical areas like Indonesia and Malaysia?
- 8 What problem is a type of air pollution?
- 9 What can cause harm to plant or other life when it falls on the land or sea?
- 10 What is the Siberian tiger an example of?
- 11 What has caused much plant and animal life in rivers in industrial areas to die out?
- 12 What is the term for the phenomenon describing the rise in the Earth's average temperature?

## 23.2 Match words to form compound nouns.

1	acid	fuel	acid rain	6	greenhouse	disposal	
2	carbon	change		7	nature	reserve	
3	climate	party		8	organic	depletion	
4	fossil	footprint		9	ozone	effect	
5	green	rain		10	waste	food	

## 23.3 Choose a word from the opposite page to complete each sentence.

- 1 An environmentalist is a person who does what they can to help protect the environment.
- 2 ......items like plastic cups and paper plates are labour-saving but have a harmful effect on the environment.
- 3 The government says it is aiming for a significant ...... in this country's use of fossil fuels over the next ten years.
- 4 The company plans to ...... part of a nature reserve in order to build its new warehouses.
- 6 The melting of the polar ice caps will have a ...... impact on the environment.
- 7 Staff can ...... of all recyclable items in these green bins.
- 8 Air pollution may ..... the lives of people with respiratory illnesses.
- 9 This company is proud of its ...... friendly policies.

#### 23.4 Over to you

### Answer these questions.

- 1 Which of the environmental problems in A exist in your country?
- 2 Do you think climate change is having any impact in your country?
- 3 How much support do green parties have in your country?
- 4 What could power cars instead of petrol or diesel?
- 5 Suggest three things people can do to reduce their carbon footprint.

# Global problems

## Disasters/tragedies









earthquake [the earth moves/trembles] [too much rain]

flood

drought /draut/ [no rain]

volcano /vpl'kempu/ [hot liquid rock and gases pour from a mountain]

famine /'fæmɪn/ [no food] landslide [rocks and earth moving suddenly down a slope] epidemic [disease affecting large numbers of people] explosion (e.g. a bomb) major accident / incident (e.g. a plane crash)

hurricane / tornado /tɔːˈneɪdəu/ typhoon / tropical storm [violent wind / storm] war / civil war [civil war is war between people of the same country Disasters not caused by human beings can be called natural disasters.

## Language help

Injure /'Ind3a/ is used about people. Damage /'dæmid3/ is used about things. 200 people were injured. Many buildings were damaged.

### Verbs connected with these words

A volcano has erupted in Indonesia. Hundreds are feared dead. The flu epidemic spread rapidly throughout the country. Millions are starving as a result of the famine. A big earthquake shook the city at noon today. The area is suffering its worst drought for many years. Civil war has broken out in the north of the country. A tornado swept through the islands yesterday.

## Words for people involved in disasters/tragedies

The explosion resulted in 300 casualties. /ˈkæʒjuəltiːz/ [dead and injured people] The real victims of civil war are children left without parents. [those who suffer the results] There were only three survivors /sə'vaɪvəz/. All the other passengers were reported dead. [people who live through a disaster]

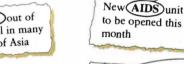
Thousands of refugees /refju'd3i:z/ have crossed the border looking for food and shelter. During the battle, the dead and wounded /'wu:ndid/ were flown out in helicopters. [wounded: injured in a battle / by a weapon]

## Headlines

Here are some headlines from newspapers all connected with diseases and epidemics. Explanations are given.







acquired immune deficiency syndrome; often caused by sexual contact or contact with contaminated blood

/ma'learia/ asually caught because of mosquito bites



/'kplara//taifoid/ diseases causino sickness, diarrhoea, etc. caused often by infected hood and water

## **Exercises**

- 13.1 What type of disaster from the list in A opposite are these sentences about? Why?
  - 1 The lava flow destroyed three villages. Volcano love is the hot liquid rock from the mountain
  - 2 The aftershock struck at 3.35 pm local time.
  - 3 People had boarded up shops and houses during the day before, and stayed indoors.
  - 4 Gunfire could be heard all over the town.
  - 5 Witnesses said they saw a fireball fall out of the sky.
  - 6 People had to stay in the upper floors and sometimes on the roofs of their homes.
  - 7 The earth is cracked and vegetation has dried up.
  - 8 They quite often happen in this area of the mountains and it can take some time for the roads to be cleared, especially if trees have been brought down too.
- Complete the missing items in this word-class table, using a dictionary if necessary. Where the space is shaded, you do not need to write anything.

verb	noun: thing or idea	noun: person		
explode	explosion	James of Research Teple way the		
		survivor		
injure		a where it would be a		
starve		the case their right that we not live		
erupt		del Universe will be being		

13.3 In these headlines, say whether the situation seems to be getting worse or better, or whether a disaster has happened or has been avoided/prevented.

1	Poison gas cloud spreads	IL SLICK ECEDES	5	All survive jumbo emergency landing
	getting worse		ps.	
2	POLICE DEFUSE TERRORIST BOMB	warn of		lood warnings heeded in time

13.4 Fill the gaps with a suitable word from B opposite. Try to work from memory.

- 1 Another 50 people died today, all victims of the famine.
- 2 The government agreed to allow 3,000 ..... to enter the country.
- 3 It was the worst road accident the country has ever seen, with over 120.
- 4 A: Were there any .......when the ship sank? B: I'm afraid not.
- 5 The ...... and ..... were left lying on the battlefield; it was a disgrace.
- 13.5 Which diseases are these? Try to do this from memory.
  - 1 One that can be caused by a mosquito bite. malaria
  - 2 One you can get by drinking infected water.
  - 3 One you can get from an animal bite.
  - 4 One caused by a virus which destroys the body's immune system.