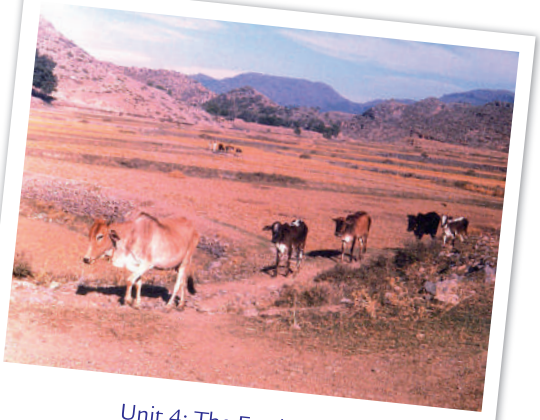
Module 2 Natural world



Unit 4: The Earth at risk
How do we save our planet?



Unit 5: Precious resources
Do you recycle?



Unit 6: Under threat
How do we protect animals?



Focus on:
The Arfaj



Project 2
Writing a leaflet on environmental issues

Outcomes

You will be able to:

- listen to a talk and a description
- give explanations and experiences
- talk about cause and effect
- read for gist and detailed information
- express opinion / make decisions
- present ideas and suggestions
- write an account

Unit 4 The Earth at risk

Grammar
Subordinate clauses of purpose and result
(*in order to, because, to* + infinitive, *so that, to be the cause of, with the result that, to lead to);* prefixes



Discuss

1 Look at the photographs and discuss these questions.

a What kinds of areas do these photos show? What differences can you see?
b How easy do you think life would be for people and animals living in areas like these?
c What environmental problems are associated with these areas? What are the causes of these problems?

2 These words are from the article opposite. Match each word with its correct meaning. Use a dictionary or the glossary at the end of this book to help you check your answers.

a	climate	---------	**1** destroy slowly
b	overcultivate	---------	**2** weather conditions in an area over a period of time
c	erode	---------	**3** what plants need to grow in
d	graze	---------	**4** fire that spreads very quickly
e	soil	---------	**5** put animals in a field so that they can eat the grass
f	wildfire	---------	**6** use land for growing crops so much it can no longer be used

Read

Factfile

- Every year 5 million hectares of land worldwide become desert.
- Since the 1950s, 9 million hectares of land in China have turned into desert.
- Desertification affects 74% of the land of North America.
- In Africa, 73% of the drylands are affected by desertification.
- Dust from African deserts can reach cities in the Middle East and even Europe.
- 5000 years ago, the Sahara Desert was covered with grass and other plants.

3 Now read the article. What are the causes of the problem described in the article?

The spread of the desert

Desertification, which is the process in which productive land changes into desert, is an increasingly serious problem in over a hundred countries worldwide. One billion people, out of a total world population of six billion, endure its effects.

Desertification usually occurs in dry areas where there is no rain and where the climate is harsh. In these places, the top layer of soil is destroyed so that the land can no longer be used for growing crops or grazing animals. This means that people who depend on the land for food have to move to 'greener' areas in order to survive. A proportion of the population may survive by moving, but others may die because of shortages of food and water.

Although natural changes in the climate often precipitate the process, the activities of human beings are often the real cause of desertification. Because there are growing numbers of people to feed, farmers tend to overcultivate their land, with the result that the soil becomes poor and unproductive. Other farmers overgraze their land and this permanently kills off grass and other plants. In addition to the effects of farming, deforestation – the cutting down of trees – also erodes the soil. Trees are usually cut down to make more agricultural land, but once there are no longer trees and plants on an area of land, there is nothing to stop the wind and rain from blowing or washing away the top layer of soil. The dust which this produces can travel long distances and affect the health of people living in cities thousands of kilometres away.

However, this is not the end of the story: desertification can also create conditions which produce strong winds and treacherous wildfires and this leads to even greater pressure on the Earth's most precious resource, water.

Check your understanding

4 Choose the correct endings to the following sentence beginnings.

a Land can no longer be used for growing crops if ...
- **1** the top layer of soil is destroyed.
- **2** animals are grazed on the land.
- **3** people move to greener areas.

b The Earth's most precious resource is ...
- **1** productive land.
- **2** water.
- **3** people.

c Trees and plants ...
- **1** grow well in deserts.
- **2** stop wind and rain from damaging land.
- **3** are a major cause of desertification.

Words to remember

climate, desertification, erode, graze, harsh, increasingly, kill off, overcultivate, permanently, precipitate, productive, proportion, soil, treacherous, unproductive, wash away, wildfire

5 Are the following statements True (T) or False (F)? Justify your answers.

a The actions of human beings are the only cause of desertification. ☐

---

b Almost three-quarters of the drylands in Africa are subject of desertification. ☐

---

c Deforestation is caused by desertification. ☐

Think and speak Expressing opinion

6 Discuss this question with other students.

In some parts of Kuwait, desert areas are becoming green. What can the Public Authority for Agriculture and Fisheries do to speed up this process in Kuwait?

Grammar

• Subordinate clauses of purpose and result (*in order to, because, to* + infinitive, *so that, to be the cause of, with the result that, to lead to*)

Grammar reference pages 123 – 124

1 Which words or phrases in these sentences introduce explanations?

a Some people move to greener areas in order to survive.

b Because there are growing numbers of people to feed, farmers tend to overcultivate their land ...

c Trees are usually cut down to make more agricultural land ...

2 For the three sentences above write questions with *Why*.

Why do some people move to greener areas?

3 Answer these questions with your own ideas, using explanation words or phrases.

a Why do some farmers overcultivate or overgraze their land?

---

b Why do some countries need more agricultural land?

---

c Why is the problem of desertification getting worse?

---

d Why do some people die in desert areas?

---

4 Which words or phrases in these sentences from the article link an action with a result?

a ... the top layer of soil is destroyed so that the land can no longer be used for growing ...

b ... the activities of human beings are often the real cause of desertification.

c ... farmers tend to overcultivate their land, with the result that the soil becomes poor and unproductive.

d ... this leads to even greater pressure on the Earth's most precious resource, water.

5 Complete these sentences with your own ideas.

a More and more trees are being cut down, with the result that ----------

---

b Dust from Africa which reaches large modern cities is the cause of ----------

---

c Forests are cut down so that ----------

---

d Some areas of land are being reclaimed from deserts. This can lead to ----------

---

6 Discuss one of these two environmental problems in groups. Describe the problem and talk about the results.

- Flooding – caused by rising sea levels
- Pollution – resulting from industry and traffic

Vocabulary Climate

1 Complete this text with appropriate words from the list below.

arid	climate	day-to-day	droughts	equator	forecasting
frigid	humid	planting	prevailing		

How is climate different from weather?

Weather is what happens to the air and atmosphere outside on a (1) ---------- basis, whilst (2) ---------- is the (3) ---------- weather in a particular place over a longer period of time. Countries near the (4) ---------- have (5) ----------, tropical climates, while lands close to the desert, such as Kuwait, have hot and dry climates.
In countries nearer to the (6) ---------- polar regions than Kuwait, the climate is cooler and colder. This does not mean that countries that are normally cold and wet cannot have hot, (7) ---------- weather. Some even suffer from (8) ---------- which are periods of very low rainfall. Information about climate is useful for weather (9) ----------, which can help farmers know the best time for (10) ---------- crops.

2 Discuss these questions in pairs or groups.

a Describe Kuwait's climate. What do you think is the perfect climate?
b What factors affect the world's climate?

Prefixes: *mis-, re- and under-*

3 Match the three prefixes **a–c** below with these meanings:

again	not enough	wrongly or badly

a *re-*
1 I spilt tea on my homework, so I had to ***re****write* it.
2 During the storm three houses were destroyed and had to be ***re****built*.

b *mis-*
1 I ***mis****heard* you. I thought you said we'd meet at 9 o'clock.
2 The children were very good. None of them ***mis****behaved* in any way.

c *under-*
1 Parents do everything they can to help children who ***under****achieve*.
2 I didn't realise at the time, but I was ***under****charged*. The price tag said 200 KWD and I paid only 100 KWD.

Note

A prefix is a word or group of letters which is added to the beginning of a word and changes its meaning. Example: ***over****cultivate* – to cultivate too much or more than you should (*over-* means too much).

Words to remember

arid, atmosphere, equator, flooding, forecasting, frigid, humid, misbehave, planting, prevailing, reclaim

Pronunciation Rhythm

4 (4.1) In spoken English we alternate strong and weak syllables, stressing new or important words. Listen and repeat these two sentences.

The weather's cold today. He doesn't like the rain.

5 (4.2) Listen and underline the stressed syllables in these sentences.

a I'm feeling warmer now.
b They're cutting down that tree.
c Rain can damage crops.
d The climate's better here.
e What's the weather like?
f It's cool again today.

6 (4.2) Listen again and repeat. Stress the underlined syllables.

Speaking Describing photographs

Introduction Note-making

1 Work in pairs.

a Student A: Look at photographs 1 and 2.
Student B: Look at photographs 3 and 4.

b Make notes about your two photographs.

1 What can you see in each photograph?

2 What do your photographs have in common?

3 How are they different?

c Prepare to speak for one minute about your two photographs. Use some of the expressions from the *Useful Language* box below.

2 Describe your photographs to your partner.

a Take turns to speak about your photographs. Look at your notes, but don't read them word for word.

b When your partner has finished speaking, say whether you agree with what he or she has said.



صفوة معلمي الكويت

USEFUL LANGUAGE

Describing photographs

You can see ...
On the left / right of the photo, ... / In the middle ... / At the top / bottom ...
It seems that ... / It's clear that ...
Both photographs / pictures show ...
The photographs / pictures illustrate different aspects of ...
The problems are caused by / are the result of ...

Quote **"Treat the Earth well: it was not given to you by your parents, it was loaned to you by your children."** Ancient proverb

Writing A reply

task

You are going to write a reply to an e-mail about water shortage, suggesting ways of consuming less water.

Read

1 Read this e-mail from a leading expert on water shortages. Then, look at the incomplete spidergram below. Get into groups and complete the spidergram with your own ideas.

Dear ...

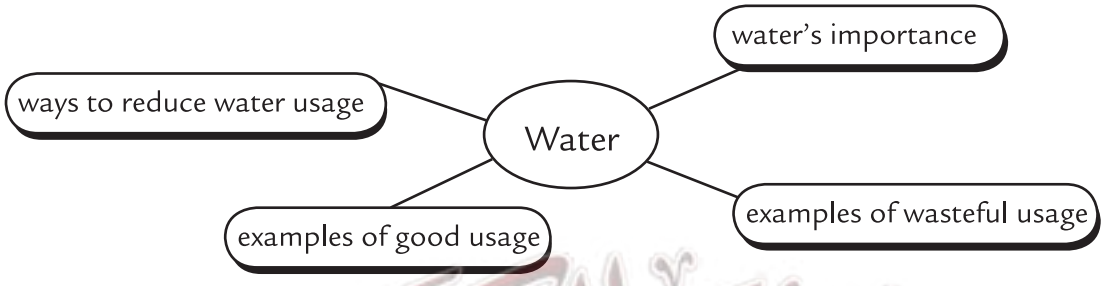
One of the most important issues of the twenty-first century is the scarcity of fresh water. A paucity of water presents major hurdles to human development. Aside from fulfilling our need to drink, fresh water also plays an intrinsic role in agricultural production.

Water preservation is a major global challenge. Greater development and a perpetually increasing population has led to unprecedented demands on all of our resources, which has in turn led to an increased water shortage. This has prompted Kuwait into spearheading the development of the first desalination plants in the Middle East, as well as implementing several studies by the Kuwait Institute of Scientific Research into improving efficiency in the use of water for agriculture.

Ultimately, we need to curtail the unwarranted consumption of water if we are to prevail over the challenges facing Kuwait today. Do you have any suggestions about how the average Kuwaiti can contribute to cutting back on water? Please let me know your ideas.

Many thanks

Dr Abdulhameed



Planning and writing

2 Using your spidergram, write a reply to the above e-mail, suggesting ways in which Kuwaitis can consume less water in their day-to-day lives. Make the e-mail around 200-220 words and include two or three suggestions.

Check

3 When you have finished writing, read your e-mail carefully.

a Check spelling, grammar and punctuation.

b Exchange e-mails with a partner.

Words to remember

curtail, hurdle, implement, intrinsic, paucity, preservation, prevail over, scarcity, spearhead, unwarranted

Unit 5 Precious resources

Grammar
wish + *would; wish* + past simple;
wish + past perfect; phrasal verbs



glass



rubbish



metal



plastic



paper and cardboard

Discuss

1 Discuss these questions.

a Which of these is the most accurate definition of 'recycling'?
- *using objects and materials more than once*
- *processing objects and materials so they can be used again*
- *refusing to throw away objects and materials*

b Why is recycling becoming such an important issue for many people today? The title of this unit, ***Precious resources***, may give you an idea.

2 Look at the photographs and discuss these questions.

a Which of the waste products in the photos are recycled in Kuwait?
b What happens to the waste products that are not recycled?
c How could these waste products be recycled?

Listen

3 (5.1) You are going to hear a discussion among three school friends. Which of the waste products in the photographs in exercise 2 do they talk about?

Check your understanding

4 (5.1) Which words or phrases are used by speakers to mean the following? Listen again and complete the words or phrases.

a put under the ground
_____ they simply _____ most of their rubbish.

b unwanted, unusable
We take all our _____ glass and paper to special collection points.

c tools / machinery etc.
_____ not everywhere has the _____ to reprocess it.

d these provide electricity for motorists
... places where they recycle almost everything, you know, _____ _____, fridges, wood ...

e crime
I'd pass a law to make it a _____ _____.

f waste from people's homes
... not to recycle 100% of _____ _____.

Words to remember
collection points, concur, crisis, machinery, offence, pass a law, prohibitively, reprocess

5 (5.1) Listen again. According to the speakers, are the following statements True (T) or False (F)? Justify your answers.

a One of the reasons some items aren't recycled is the prohibitive costs. ☐
_____

b In most countries waste is burnt. ☐
_____

c The families of all three speakers recycle their paper. ☐
_____

d There are still plenty of places where rubbish can be buried. ☐
_____

e Burning unwanted rubbish causes pollution. ☐
_____

f In Jim's country it is a criminal offence not to recycle rubbish. ☐
_____

g Homes produce more rubbish than big companies. ☐
_____

Think and speak Talking about recycling and environmental issues

6 Read the short text and discuss these questions in pairs or groups.

There is a unity and balance between man and nature. Caring for the environment, using the world's resources in moderation and protecting endangered species are therefore major concerns. We are all accountable for the damage done to our planet. For all these reasons we bear responsibility for the condition of the world and its ecosystems, all of which are the creations of Allah.

a What are the most precious resources in Kuwait?
b How seriously do people take the problem of waste and recycling in Kuwait?

Grammar

• ***wish + would ; wish* + past simple; *wish* + past perfect** Grammar reference page 124

1 Read sentences **a–e** and answer the following questions:

- In which sentences do the speakers express regret? ----------
- In which sentences do the speakers express criticism or annoyance? ----------

a I wish people would take the problem more seriously.
b I wish we could recycle plastic more easily.
c I wish I had kept my old newspapers.
d I wish I knew more about the enviroment.
e I wish they would stop littering everywhere!

2 Which group of sentences uses *wish + would*? Which group of sentences uses *wish* + past simple or wish + past perfect?

3 Match sentences in exercise **1a–e** with these follow-up sentences.

a But I can't change that now. ---------
b It's so annoying! ---------
c Hopefully, we will be able to eventually. ---------
d In the future I'll know more. ---------
e Maybe one day they will. ---------

4 Look at pictures **a–e**. Are the speakers expressing regret or criticism?



5 Write *wish* sentences which could follow these beginnings.

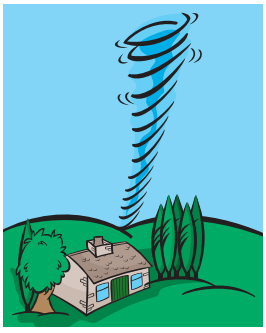
a I'm really tired, but I can't sleep at night. I wish I could sleep at night.
b The weather's too hot at the moment. ----------
c People drive too fast in the city centre. ----------
d The clothes I want to buy are too expensive. ----------
e I forgot my homework and the teacher is angry. ----------

6 Complete these *wish* sentences using the correct tense of the verbs in brackets.

a I wish I ---------- (finish) my work before leaving the office yesterday.
b I wish I ---------- (know) the answer to that quiz question last week.
c I wish I ---------- (go) on holiday with you last year!

7 Complete these sentences with your own ideas, then compare your sentences with other students.

a I wish I were ----------
b I wish I could ----------
c I wish people would ----------



Vocabulary

Colour idioms

1 Replace the underlined phrases in these sentences with the correct form of one of the colour idioms in this list.

out of the blue *red tape* *to be in black and white* *to see red*
to give the green light *to put someone on the black list*

a When he accused me of being wasteful, I got very angry.
b He's been dumping rubbish. The recycling society should tell everyone what he has done and ban him.
c They've said yes to the building of a new incinerator.
d The rules clearly say that we must not leave rubbish outside our homes. Look, it's printed here clearly.
e It's almost impossible to get a passport quickly. There is so much paperwork and administration; it is bureaucracy gone mad!
f I heard this morning, unexpectedly, that I'd won a writing competition.

2 Discuss these questions in pairs.

a What makes you see red?
b In what areas of life in Kuwait is there a lot of red tape?
c Which organisations would you put on an environmental black list?

Three-part phrasal verbs

3 In this conversation two speakers use three-part phrasal verbs.

We're *running out of* space to use as landfill sites.

I'd *go along with* that, but ...

Note
The three parts of these phrasal verbs always stay together.

Find the three-part phrasal verbs in these sentences, then match each verb with one of the meanings below.

a Things are moving so fast – it's impossible to keep up with the changes.
b Supermarkets should cut down on packaging.
c We've come up against serious problems in our plan to recycle rubbish.
d I'm looking forward to the day when 100% of our rubbish is recycled.
e People living near the incinerator have to put up with a burning smell.
f We must get rid of some stuff.

Meanings

1 accept / stand / tolerate (something unpleasant)
2 know the latest information about
3 meet / face
4 reduce
5 wait with pleasure for something to happen
6 take action so as to be free of

Words to remember

administration, annoyance, bureaucracy, come up against, criticism, cut down on, get rid of, go along with, incinerator, irritation, keep up with, packaging, paperwork, put up with, red tape, run out of

4 Now discuss these questions with a partner.

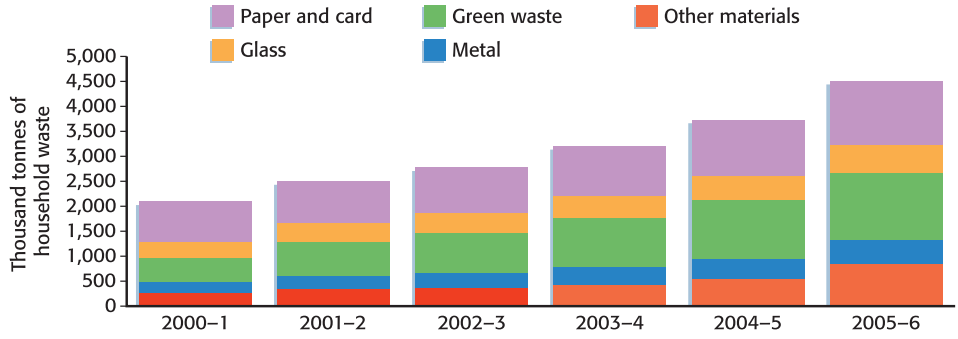
a How do you keep up with news about Kuwait?
b What are you looking forward to at the moment?
c What irritations do you have to put up with in your daily life?

Reading A report based on statistics

Interpret and discuss

1 Look at this bar chart. What does it tell you? Discuss your ideas with a partner and write down three key facts illustrated in the chart.

In 2005–2006, a total of 4.5 million tonnes of household waste was recycled.



Read and analyse

2 Read this report based on the chart in exercise 1. Then answer the following questions.

a Does it contain any of the key facts you wrote down?

b One key fact in the report is incorrect. Can you find it?

Waste and recycling 2000–2006

Introduction

This report examines the trends in recycling between 2000 and 2006. It looks at the amounts recycled of five different kinds of waste.

Key facts

- During the year 2005–2006, 4.5 million tonnes of household waste was recycled.
- This is more than twice the amount of waste recycled in the year 2000–2001.
- Five different types of waste were measured: ***paper and card***, ***glass***, ***green waste***, ***metal*** and ***other materials***.
- In the first year of the survey, more ***paper and card*** was recycled than any other material, but by 2005–2006, ***green waste*** was the largest constituent with about 30 per cent of the total.
- In 2005–2006, the second largest component was ***metal***, 28 per cent, then ***glass***, 20 per cent.
- There was also an upsurge in the amount of ***other materials*** recycled.

Conclusion

The figures show that, for the duration of the period 2000–2006, there was a constant increase in the quantity of waste which was recycled. This waste came from two main sources: collections from people's homes, and collection points.

Recommendations

Whilst the increase in waste being recycled is heartening, it also reveals just how much work there is left to do. Not only do we need to get more things recycled but, perhaps more importantly, we should try to create less waste to begin with.

task

You are going to write a report based on waste and recycling statistics.

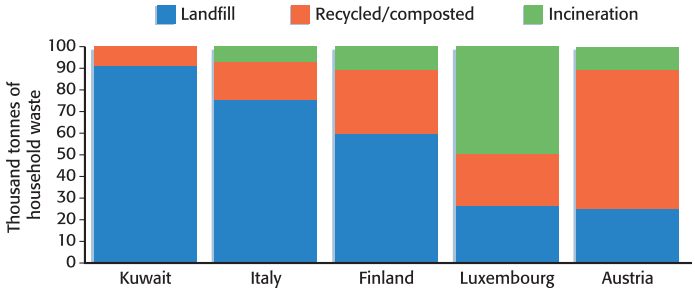
Writing A report

1 Read the report again and discuss these questions with a partner.

a What do you notice about many of the verbs in this report?
b Why does the writer use bullets [♻] in the ***Key facts*** part of the report?
c Which information in the ***Conclusion*** is not illustrated in the chart?

Planning and writing

2 Look at the bar chart below.



a What does the chart tell you? Discuss your ideas with your partner and write down four or five key facts.
b How do the five countries compare with each other? For example, which country recycles the most material? Which country buries most waste in landfill sites?
c What conclusions can you draw from this chart? (You can include ideas of your own that are not given in the chart.)

3 Write your report in about 200 words. Use the headings: ***Introduction, Key facts, Conclusions*** and ***Recommendations,*** and expressions from the *Useful Language* box below. Keep your language simple and your sentences short. Use bullets [◗] to separate points.

Check

4 When you have finished writing, read your report carefully.

a Check spelling, grammar and punctuation.
b Exchange reports with a partner. As you read what your partner has written, ask yourself these questions:
- ◗ Has he / she included all the most important key facts? (Refer back to the chart.)
- ◗ Are the conclusions sensible and correct?

c Return your partner's report and exchange thoughts and ideas.

Words to remember

component, compost, constant, constituent, duration, heartening, household waste, incineration, material, quantity, trend, upsurge

USEFUL LANGUAGE

Reporting quantity
X per cent of waste material was recycled / burnt / buried in a landfill site.
Of all the countries, Kuwait buries the most waste in landfill sites.
Austria burns 10 per cent of its waste, whereas Luxembourg burns 50 per cent.
In comparison with Austria, Luxembourg recycles ... half / a quarter / twice / three times as much / much more / less than ...
Expressing recommendations: It would (also) help if people ...; It would be better if ...; I suggest that ...; It would be a good idea to ....; It would be sensible for people to ...; I don't think motorists should ...
Expressing criticism and annoyance: Frankly, it's ridiculous that we ...; We shouldn't do this, it's causing huge problems.; This situation is unacceptable / unbelievable / inconceivable ...
Expressing regret: I wish we had recycled more ...; We should have ...; If only we had ...; Things should never
Making conclusions: In conclusion, it is clear that / it can be seen; I would suggest / believe it is important to / would argue that ...; Ultimately / Finally / Primarily, we must ...

Unit 6 Under threat

Grammar
Explaining possibilities:
Modals + infinitive / Modals + past participle;
Passive verb form (revision); prepositions

Discuss

1 Answer as many of these quiz questions as you can.

PANDA QUIZ

a Which country is the natural habitat of the giant panda?
A Japan **B** China **C** India **D** Malaysia

b What kind of food does the giant panda mainly eat?
A bamboo **B** fish **C** grass **D** small animals

c How many hours a day does the giant panda spend eating?
A 4 hours **B** 8 hours **C** 12 hours **D** 16 hours

d How tall is a male giant panda?
A 1m **B** 1.5m **C** 2m **D** 2.5m

e How much does a male giant panda weigh?
A 80kg **B** 100kg **C** 120kg **D** 140kg

f How many giant pandas are there left in the wild?
A 16 **B** 160 **C** 1600 **D** 16000

g What is the greatest threat to the survival of the giant panda in the wild?
A the destruction of its natural habitat
B people hunting it for its black and white fur
C shortage of food
D disease

Read

2 Before you read the article about giant pandas, match these words with their meanings. Check your answers in a dictionary or the glossary at the back of the Student's Book.

a	extinction --------	**1**	sleep during the winter
b	habitat --------	**2**	the process of ceasing to exist
c	hibernate --------	**3**	easily frightened / timid
d	sanctuary --------	**4**	safe place where animals are protected
e	reticent --------	**5**	natural living area or environment of an animal

3 Read the article about giant pandas. How many of your answers to questions **1a-g** were correct?

The Bamboo Bear

A **Although it is one of the best-known, best-loved and most fascinating wild mammals in the world, the panda is also one of the most reticent, and lives a solitary life. Pandas were originally found in several parts of Asia, including Vietnam and Tibet, but now survive only in certain parts of China.**

B Pandas spend about 12 hours every day feeding and the remaining time sleeping or resting. The average weight of a panda is 120 kg. Pandas usually live in cold, damp conditions but are protected by their thick, warm, black and white fur. A typical panda is one metre and a half tall. Unlike **some members** of the bear family, pandas do not hibernate.

C Despite their size and weight, pandas are very good at climbing. If they are being threatened by their natural enemies, such as brown bears or leopards, they climb up the nearest tree for refuge. Their acute hearing also helps them to avoid their enemies.

D Pandas mainly eat the leaves, stems, shoots and roots of bamboo plants. An adult can consume as much as 20kg a day. They also eat fruit, other plants, eggs and sometimes fish.

E There are only about 1600 pandas left in the wild. Until the 1960s pandas were being hunted for their skins, so humans posed the biggest threat to their survival. Now **their** main problem is the disappearance of their habitat, **which** is caused by the increasing use of land for farming and building. Anyone who is caught hunting pandas is severely punished. The Chinese authorities have also set up special permanent reservations which are expansive enough for 500-600 animals.

Check your understanding

4 Read the article again and match these headings with the correct paragraph A-E of the article.

a Eating habits .....
b Typical lifestyle .....
c Saving the panda .....
d Basic information .....
e Special abilities .....

5 Complete these sentences with information from the article.

a In the past, pandas were found in various .....
b Their thick fur .....
c Pandas are good climbers even though .....
d Pandas know when their enemies are near because .....

6 Read the following extracts from the text. What do the words in bold refer to?

a Now **their** main problem is the disappearance of their habitat, **which** is caused by the increasing...
b Unlike **some members** of the bear family, pandas do not hibernate.

Words to remember

acute, avoid, damp, expansive, extinction, fascinating, hibernate, permanent, pose, refuge, reservation, reticent, solitary, stem, threatened, timid

Think and speak Supporting opinion

7 Discuss these questions with other students.

a Is it right for people who hunt rare animals to be punished?
b What sacrifices would you be willing to make to protect an endangered species? Why?
c Should protection of an endangered species be a problem for the government or charity organisations? Support your opinion.

Grammar

• **Explaining possibilities: Modals + infinitive / + past participle**
Grammar reference page 124

1 What are the differences in meaning between these pairs of sentences? Match the sentences in each pair with one of the meanings given.



a
- It can't be an interesting place to work.
- It must be an interesting place to work.

1 You feel sure it is.
2 You feel sure it isn't.

b
- The crowds might have spoiled it for me.
- The crowds might spoil it for me.

1 You think it is possible in the future.
2 You think it was possible in the past.

c
- Some people might have come from Africa.
- Some people must have come from Africa.

1 You think it was possible.
2 You feel sure it was possible.

2 Work in pairs. Look at the photo above and say what you think happened just before and just after the photo was taken. Make sentences using *must have* or *can't have,* if you feel sure that something happened, and *might have*, if you are not sure.

• **Passive verb form (revision)** Grammar reference pages 124 – 125

3 Circle the passive verbs in these sentences.

a Pandas were originally found in several parts of Asia.
b Pandas are protected by their thick, warm coats.
c If pandas are being threatened by enemies, they climb up the nearest tree.
d Until the 1960s pandas were being routinely hunted for their skins.
e Anyone they catch hunting pandas is severely punished.
f Panda sanctuaries have been set up by the Chinese authorities.

4 **a** In what tenses are the passive verbs in **3a–f**? Write the names of the tenses and the verbs in each sentence.

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b Discuss these questions with a partner.

1 In which sentences, **3a–f**, do we know who or what does the actions?
2 Who or what do you think does the actions in the other sentences?
3 Why do you think the writer does not mention who or what does the actions in these sentences?

5 Rewrite sentences 3a–f using active verbs. You will have to think of a subject for some of the active verbs. For example:

3a Pandas were originally found in several parts of Asia.
People originally found pandas in several parts of Asia.

Quote "To sit in the shade on a fine day and look upon the verdant green hills is the most perfect refreshment." Jane Austen

Vocabulary Environmental words

1 Read the text. Then, using a dictionary or the glossary at the end of this book, give definitions for these words from the text.

Are you aware of the importance of plants? In addition to providing nourishment, plants enrich the soil, protect it from erosion and produce the oxygen we need to breathe. They are also of immense value because they provide us with medicines, oils, perfumes, waxes, fibres, timbers and fuel.

The Prophet Mohammed (peace and blessings of Allah be upon him) says that any Muslim who plants or cultivates vegetation and eats from it, or allows another man, animal or bird to eat from it, will receive recompense from Allah. He (peace and blessings of Allah be upon him) also said that anyone who plants a tree under which people can seek shade or shelter from the sun will have his reward with Allah.

Therefore, the cutting down of trees for illegitimate reasons encroaches on the bounty of all, and disturbs the beauty of the environment which Allah has created.

Bounty ----------

Cultivate ----------

Recompense ----------

Illegitimate ----------

Encroach ----------

Nourishment ----------

2 Now match the words from exercise **1** with words in the box with the same meaning.

reward *grow* *unsanctioned* *sustenance* *wealth* *trespass on*

Prepositions

3 Complete these sentences with the correct prepositions from the box. There is one extra preposition.

for *from* *in* *of* *on* *with*

a Human beings are dependent ---------- plants.
b Pandas climb trees to escape ---------- their enemies.
c Eating plants provides us ---------- nourishment.
d The panda is found ---------- the forests ---------- China.

Words to remember

aware, bounty, cultivate, encroach, grow, illegitimate, nourishment, recompense, reward, trespass on, unsanctioned, wealth

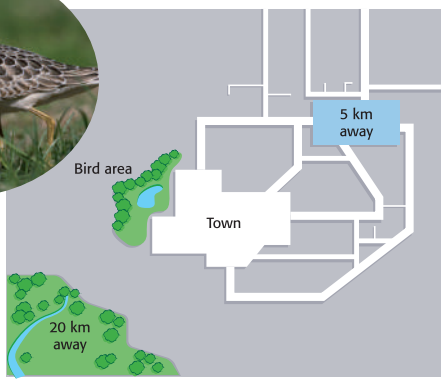
Pronunciation Rhythm (2)

4 Work with a partner. Read sentences **1–4** aloud, then find a sentence from **5–8** with the same rhythm.

1 Pandas live alone.
2 Pandas never hibernate.
3 The Chinese panda's under threat.
4 Pandas eat berries and various plants.
5 Leopards don't eat grass or leaves.
6 People made belts out of crocodile skin.
7 A vulture is a type of bird.
8 Eagles fly at night.

5 (6.1) Now listen and check your answers.





Speaking Role play

Introduction The situation

1 Read this situation. Who should decide where to build the new homes?

- The population of your region is growing rapidly and in a few years there will be a serious dearth of housing.
- There is an area very near your town where new homes could be built, but this area is a wetland and is protected – it is the habitat of a rare type of bird.
- There are two other possible areas:

1 5 kilometres away from the town.
2 20 kilometres away from the town. A new town and new roads would have to be built here.

Preparing for the role play

2 Your class has the job of deciding where the new homes should be built, but first you are going to discuss the problem in groups of three.

a Each student should play one of the roles **A–C** described below.
b Read your role card and decide where you think the new homes should be built. Make notes about your choice of area.

Role A – Environmentalist
- You believe in preserving animal habitats.
- You believe that too much new building will damage the countryside.
- Your brother's family want to move to the area.

Role B – University student
- You are soon going to graduate from university and will need a home in this area.
- Your family live in the town and you would like to live near them.
- You don't think birds are very important.

Role C – Town resident
- Your family have lived in the town all their lives.
- You think your town already has enough inhabitants.
- Animal conservation is not a priority for you.

Role play

3 Work in groups of three – A, B, C.

a First, each 'character' should say where he / she thinks the new homes should be built. Give as many reasons as you can.
b When everyone has expressed their opinions, have a general discussion. Try to persuade the others in your group that you are right.
c Organise a vote. What is your group's conclusion?
d Compare your vote to the vote of the other groups in the class.

USEFUL LANGUAGE

Giving reasons for a choice
There are two reasons why I think we should build the houses here ...
Firstly, ... / Secondly, ...
The main reason I would choose this area is because ...
The purpose of this report is to comment on the projected housing project …
New houses near to the town will ...
Equally, we are concerned …
This group strongly supports …

Persuading others
Can you see what I mean?
Look at it this way: if we build the houses there, ...
If you build them there, it will mean ...

Quote "Animals are such agreeable friends - they ask no questions, they pass no criticism." George Eliot

task

You are going to write a report to the council making recommendations about where to build houses.

Writing A formal report

1 This is a report by a group of local businesses who are in favour of the new houses being built on the wetlands near the town.

Read the report and fill in the text with suitable titles for the headings.

Organisation of small businesses and the council housing project

1 _____

The purpose of this report is to comment on the projected housing development for the local area, with respect to the business community in particular.

2 _____

We recognise the needs of the burgeoning population and so, by consensus, are convinced of the need to utilise undeveloped wetlands for construction purposes.

As a result:

- building here will increase demand for services, which the members of our organisation provide.
- any windfall from them will have a knock-on effect on the town and will help to improve the local economy.

3 _____

Equally, we are concerned that building the new houses out of town may represent a missed opportunity for this town to expand and modernise. Out-of-town housing will:

- require new shops and so increase competition for local businesses.
- direct investment away from our town at a time of economic recession.

4 _____

This group vociferously supports the building of new houses on local wetlands. Whilst we are aware of environmental concerns, the town's economic vitality must precede environmental issues.

2 Now plan a report to the town council from your group.

- Decide what your section headings will be.
- Take into account the views of your classmates in the speaking exercises and the ideas put forward in the report above.
- Make recommendations to the council about where to build the houses.
- Use the *Useful Language* box below.

Words to remember

burgeoning, consensus, dearth, graduate, housing, knock-on, utilise, vociferously, wetland

3 **a** Write your report in about 200 words, using your plan and the business report.

b Check spelling, grammar and punctuation carefully.

USEFUL LANGUAGE

Expressing Possibilities

We are concerned that ... may / might / could represent …

Perhaps / Possibly / Probably, this will mean that ...

In all likelihood ...

Focus on



The Arfaj

Have you heard of the Arfaj? Have you ever seen one? The Arfaj, scientific name *Rhanterium Epapposum Oliv*, is the national plant of Kuwait. The selection of the national flower was not at random, the choice being the result of a long process, which took into account the historical roots, symbolism and the fame of the flower. The Arfaj was chosen as the Kuwaiti national flower because of its historic significance to Kuwaitis. Traditionally, the Arfaj was used as a natural medicine, as a source of bedding and firewood, and as a food source for sheep. In the past, the Arfaj was recorded as covering up to thirty percent of Kuwait's land, a phenomenal figure for a single species. French botanist Renato Desfontaines recorded the Arfaj in his encyclopaedia "*Flora Atlantica.*" In this work he noted that, whilst rare in many countries, the Arfaj seemed abundant in Kuwait. He was especially taken with the plant's bright orange flowers and beautiful fragrance.

Unfortunately, the Arfaj is one of 370 species of plants that are facing potential extinction because of human activity and environmental degradation. Many people have commented on the dwindling number of Arfaj in Kuwait. Dr Jose Kaitharath, an Indian botanist, notes that when he pointed out the Arfaj to students very few of them knew what it was, or even that it was the national flower of Kuwait. He puts this down to the fact that the Arfaj is no longer visible in many areas.

Unfortunately, because of human development, many important species are disappearing from Kuwait. The Arfaj, as the country's national flower, may be one of the better known examples, but it is by no means the only casualty. However, with commitment, determination and hard work many groups are attempting to save these species, by protecting them for generations to come. Indeed, Kuwait's natural heritage is worthy of protection. Dr Kaitharath makes this clear when he says, "The plants unique to Kuwait are strong in nature as they have to brave the harsh weather conditions. But once damaged by human activities, it could take years and years to resurrect it, and that's only if their seeds are still available in the soil ... the 370 plant species in Kuwait cannot be found in other places in the Middle East."

In protecting these rare plants, we are not only protecting a valuable part of nature; we are protecting a part of Kuwait itself.

Rhetorical questions

1 The article begins with two questions. What is the purpose of the two questions? Is the author expecting answers?

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2 Explain what a speaker means when he/she says:

a 'How much longer must people endure this injustice?'

---

b 'How many times do I have to tell you to stop walking into the house with mud on your shoes?'

Project 2

task

As part of a campaign for a local botanical park, which aims at both attracting visitors and making people more environmentally aware, you are going to design and write a leaflet for teenagers.

Writing a leaflet on environmental issues

Stage 1 Read and discuss

a Read the leaflet below about Kew Gardens.
- **1** Which environmental issue is the subject of the leaflet?
- **2** Which group of people is the leaflet trying to persuade?
- **3** What ideas are the writers using to persuade these people?

b What has the writer done to make the message of the leaflet clear to readers?

c What do you think about the design and layout of the leaflet? Here are some things to think about:
- The headlines / slogans
- The amount of text
- The use of separate boxes
- The use of illustrations
- The use of quotations



What is Kew Gardens?

Kew Gardens is a 300-acre park in West London dedicated to educating the public about plants from all over the world. It combines stunning gardens with giant greenhouses that allow the continuing existence of many species of plants that would otherwise be unable to survive in England. Kew Gardens combines beautiful, relaxing surroundings with a commitment to education and scientific endeavour.

Millennium Seed Bank

Kew Gardens is not only a place to see rare plant life. In partnership with its sister site, Wakehurst Place, Kew Gardens has created the world's largest seed bank, aiming to catalogue, protect and bank 75,000 plant species by 2020. This is one of the most important conservation projects in the world, allowing us to better understand the floral life around us and, ultimately, to protect bio-diversity for future generations.

Kew Gardens Around the World

The scientific knowledge developed at Kew Gardens has already helped countless people around the world. By helping survey plant life in Cameroon, Kew was instrumental in the creation of the Bakossi National Park. The expertise Kew has helped to develop in propagation and germination also helped to reintroduce plant life and restore environments in Australia, Madagascar, the UK and South Africa, along with many other countries. Kew Gardens also holds some of the most impressive botanical reference materials in the world. Every year thousands of researchers from all over the world come to Kew Gardens to use the famous Herbarium and Library.

A visit to Kew Gardens is not simply a trip to one of the most impressive gardens in the world. It is also a life-changing experience through which you can become part of the commitment to protect the diverse life of planet Earth.

On July 3rd, 2003, Kew Gardens was officially made a World Heritage Site, and therefore acknowledged as a site of important cultural and scientific value. As Kew Garden's director, Professor Peter Crane, said, the title "recognises the importance of Kew's uninterrupted contributions to botanical and environmental science since 1759, together with its unique collection of plants from all over the world, and its international influence on the history of landscape and garden design."

Stage 2 Discuss

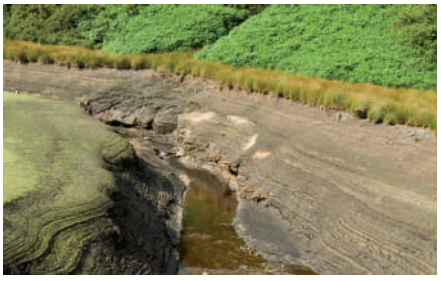
Discuss these questions with your partner/s. Write notes about main points of agreement.

a What is the importance of preserving our natural plant life for future generations?

b What roles do plants play in our lives? Here are some ideas.

- Plants and trees absorb carbon dioxide. Every time a tree is chopped down, more carbon dioxide remains in the air, contributing to global warming.
- Photosynthesis is the most important chemical process in the world. Through this, plants and trees convert carbon dioxide to oxygen.
- Plants and trees provide habitat for the millions of creatures that we share the Earth with.







c Why is it important to make people aware of these facts? What role do botanical gardens play in raising awareness?

d How could you get involved? Here are some ideas:

- Volunteer at local gardens
- Fundraise for the gardens
- Become a member

Stage 3 Make your decisions

Decide the following points:

- The issue your leaflet will highlight, and how this affects people of your age in Kuwait and around the world.
- Suggestions for action people can take.
- Ideas which you can use to persuade young people that they should do something.

Stage 4 Write your leaflet

a Share the tasks. For example, one student could work on an interesting design, find illustrations, etc.; another could think of suitable headlines or slogans; a third could write the text.

b Each student in the group shows or tells the rest of the group what he / she has done. The group as a whole can comment on this and suggest improvements.

c Each student revises his / her ideas and produces a final version of the leaflet.

Stage 5 Present your leaflet

a Groups take turns to present their leaflets to the rest of the class. (Leaflets can be displayed on the classroom walls.)

b Talk about how effective each leaflet is. How persuasive is it?
Try these websites for information:

TRY THESE WEBSITES FOR INFORMATION

- www.en.wikipedia.org/wiki/global_warming
- www.findarticles.com/p/articles/mi_m1310/is/ai_17943143