

ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ
імені В. Н. КАРАЗІНА



ENGLISH BY SPECIALTY

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Навчальний посібник

Міністерство освіти і науки України
Харківський національний університет імені В. Н. Каразіна

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Навчальний посібник
з англійської мови для студентів природничих факультетів

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Навчальний посібник з англійської мови «Англійська мова за фахом» розрахований на студентів 3 курсу природничих факультетів університету. У ньому подано автентичний навчальний матеріал, який охоплює більшість розділів нормативної граматики англійської мови і базовий лексичний мінімум з напрямку екологія, географія, геологія, гідрогеологія. Посібник складено у відповідності до діючої програми з англійської мови для неспеціальних факультетів університету.

Мета посібника – ознайомлення студентів з предметом і значенням фахової дисципліни. Структура посібника дозволяє використовувати його як для аудиторної, так і для самостійної підготовки студентів.

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ПЕРЕДМОВА



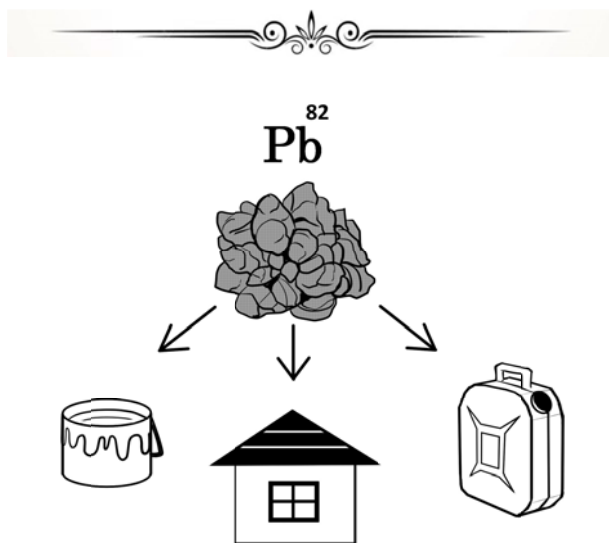
Посібник спрямований на підготовку студентів-бакалаврів природничих спеціальностей до роботи з фаховою літературою англійською мовою.

Його структура допоможе викладачеві обрати оптимальні способи організації роботи для ефективного засвоєння матеріалу та аналітичної обробки інформації. Наявність відповідей дасть студентам можливість самостійно працювати з наданими матеріалами.

Посібник складається з 14 уроків. Кожен урок включає автентичний текст та лексичні вправи до нього, а також граматичний матеріал, спрямований на тренування правильного вживання основних граматичних тем у процесі роботи з фаховою літературою. Тексти за екологічною та геолого-географічною тематикою є базовим матеріалом, на якому будуються лексичні завдання, що дають можливість бакалаврам набутися навичок виконання таких вправ, як True/False activity, Multiple Choice, Matching with Definitions and Determining the Key Message of the Text, etc. без великої витрати навчального часу.

Даний навчальний посібник допоможе студентам краще опанувати англійську мову, сформувати стійкі навички володіння загально-науковою, геолого-географічною, екологічною лексикою та граматикою англійської мови, підготуватися до подальшого вивчення англійської мови та вступного іспиту в магістратуру.

UNIT 1



Pre-text exercises

1. What do you know about the causes of air pollution? Choose the best answers.

1. There are *few* / *many* sources of air pollution.
2. Polluted air *harms* / *has no effect* on our health.
3. The most toxic substances are *platinum* / *zink*.
4. *Paints* / *cements* are the source of lead.
5. Toxic chemicals are released into the *atmosphere* / *ground*.

2. Find the following words in the text.

1. a substance that pollutes something, especially water or the atmosphere.
2. the health, happiness, and fortunes of a person or group.
3. an adjective meaning a substance which is dangerous to health, environment.
4. a noun meaning destruction.
5. a noun meaning proof.
6. an adjective meaning negative.
7. transported by air.
8. the process of wearing or being worn by prolonged exposure to the atmosphere.

3. Read the text, define the key words and write an abstract in English.

SIGNIFICANT OUTDOOR AND INDOOR AIR POLLUTANTS

In recent years, two air pollutants have been recognized as significantly affecting the health and welfare of people: lead and toxic chemicals. The primary sources of lead are gasoline and paint. Lead was added to gasoline for many years

to help engines run more effectively. Recognition that lead emissions were hazardous resulted in the lead additives being removed from gasoline in North America and Europe. As a result, the amount of lead in the atmosphere has declined.

However, most other countries in the world still use leaded gasoline. Another major source of lead is paints. Many older homes have paints that contain lead, since various lead compounds are colorful pigments. Dust from flaking paint or remodeling or demolition is released into the atmosphere. Although the amount of lead may be small, its presence in the home can significantly expose inhabitants, particularly young children who chew on painted surfaces and often eat paint chips.

Air toxics are harmful chemicals released into the atmosphere on purpose or accidentally due to leaks or poorly designed manufacturing processes. Materials such as pesticides are purposely released to kill insects or other pests. However, the majority of air toxics are released as a result of manufacturing processes.

Although air toxics are important to the public, they are most critical for people exposed on the job since they are likely to be exposed often and to higher concentrations. There are literally hundreds of different air toxics.

A growing number of scientific evidence indicates that the air within homes and other structures can be more seriously contaminated than the outdoor air in even the largest and most industrialized cities.

Many indoor air pollutants and pollutant sources are thought to have an adverse effect on human health. These pollutants include asbestos; formaldehyde, which is associated with many consumer products, including certain wood products and aerosols; airborne pesticide residues; chloroform; perchloroethylene (associated mainly with dry cleaning); paradichlorobenzene (from mothballs and air fresheners); and many disease-causing microorganisms.

Smoking is the most important air pollutant source in the United States regarding human health. The Surgeon General estimates that 350,000 people in this country die each year from emphysema, heart attacks, strokes, lung cancer, or other diseases caused by tobacco smoking. Banning smoking probably would save more lives than would any other pollution-control measure.

A recent contributing factor to the concern about indoor air pollution is the weathering of buildings to reduce heat loss and save on fuel costs. Most older homes have a complete exchange of air every hour, meaning fresh air leaks around doors and windows and through cracks and holes in the building. A complete air exchange may occur only once every five hours in a weatherized home. Such a home is more energy efficient but tends to trap air pollutants. Even though we spend almost 90 percent of our time indoors, the movements to reduce indoor air pollution lag behind regulations governing outdoor air pollution. The Environmental Protection Agency is researching in the US to

identify and rank the human health risks resulting from exposure to individual indoor pollutants or mixtures of multiple indoor pollutants.

(Adapted from: Черкашина Н. І., Максименко Н. В. *English Bachelors' course in Ecology. Part 1: підручник*. Харків: ХНУ імені В. Н. Каразіна, 2022. 204 с.)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

- | | |
|-------------------|---------------------|
| 1. air | a. emissions |
| 2. toxic | b. effect |
| 3. run | c. factor |
| 4. lead | d. cities |
| 5. industrialized | e. pollutants |
| 6. adverse | f. chemicals |
| 7. contributing | g. exchange |
| 8. air | h. more effectively |

Activity 2. Are these statements true (T) or false (F) according to the article? Correct any that are false.

1. Lead and toxic chemicals are the only two significant air pollutants.
2. Lead was added to gasoline to help engines run more effectively.
3. All countries in the world have removed lead from gasoline.
4. Paints constitute a significant source of lead.
5. The amount of lead in the atmosphere has increased in recent years.
6. Air toxics are only released accidentally.
7. People exposed to air toxics on the job are less likely to be affected by them.
8. Indoor air pollution is not as severe as outdoor air pollution.
9. Smoking is the most critical air pollutant source for human health.
10. Weatherizing homes tends to reduce indoor air pollution.

Activity 3. Rearrange and write the following sentences in a paragraph that summarizes the text.

1. Many indoor air pollutants have an adverse effect on human life.
2. A complete air exchange may occur once every five hours in a weathered home.
3. The primary sources of lead are gasoline and paint.
4. Smoking is the most important air pollutant source in the US in terms of human health.
5. Air toxics are harmful chemicals released into the atmosphere on purpose.

6. Majority of air toxics are released due to vehicle emissions.
7. The movements to reduce indoor air pollution lag behind regulations governing outdoor air pollution.
8. Pesticides are purposely released to kill insects or other pests.
9. One of the major sources of lead is paints.
10. There are hundreds of different air toxics.

Discussion.

- How can hazardous pollutants impact human welfare?
- What are some adverse health effects associated with long-term exposure to certain pollutants?
- How can we reduce our exposure to indoor air pollutants in our homes and workplaces?
- What measures can be taken to mitigate the negative impacts of outdoor air pollution on public health?
- Are there any natural sources of pollutants, or are they all man-made?

GRAMMAR EXERCISES. PRESENT TENSES**1. Choose the correct or more natural answer in this radio news report.**

Emergency services were bombarded with phone calls from all over the north of the country last night by people who (1) *are reporting* / *reported* seeing blue objects shoot across the sky. Mrs. Helen O'Brian (2) *drove* / *was driving* along the main road at the time. "I (3) *'m usually coming* / *usually came* along that bit of road at about ten. As I (4) *was going* / *I go* past the old barn, I (5) *was seeing* / *saw* a single bright blue light going across the road in front of my car. I (6) *stopped* / *stop* the car and (7) *was watching* / *am watching* it for about fifteen minutes. It (8) *was travelling* / *travels* quite slowly from east to west and then (9) it's suddenly disappearing / *suddenly disappeared*. Until now I (10) *wasn't believing* / *didn't believe* in UFOs, although my son (11) *is forever trying* / *forever tries* to persuade me that they (12) *are existing* / *exist*. But now I (13) *thought* / *'m thinking* that maybe he (14) *was being* / *was right*." Dr Maria Walker, a lecturer in astronomy at Trumpton University, (15) *offers* / *is offering* a simple explanation. "The reports that (16) *were coming* / *come* in last night (17) *are suggesting* / *suggest* that it (18) *was* / *is* a meteor shower. This (19) *is* / *was* not unusual on a small scale, but last night's shower (20) *is seeming* / *seems* to have been very large. In fact, we (21) *were getting* / *are getting* an increasing number of meteor showers, and my department (22) *is currently researching* / *currently researches* possible reasons for this." But many witnesses to the events (23) *believe* / *are believing* that they (24) *are observing* / *were observing* more than a meteor shower, and that last night the Earth was actually visited by beings from outer space.

2. Complete the sentences using either the *present perfect* or *present perfect continuous* form of the verb given. Where both are possible, choose the more likely tense.

1. Alice has competed (*compete*) in the Athens Marathon twice before but hopes to achieve her best time this year.

2. Income from manufacturing exports still provides the largest proportion of the country's export earnings, but the proportion _____ (*drop*) for many years.

3. The house _____ (*belong*) to the Boyle family for over 250 years, but the present owner, Dave Boyle, is selling it.

4. Bryan _____ (*serve*) a life sentence for murder since 1990, but his lawyers are arguing for an early release.

5. A: I'd like a career where I can travel and meet people.

B: _____ (*consider*) becoming a tour guide?

6. A: _____ (*swim*)? You look really exhausted.

B: I am. I did 50 lengths of the pool.

7. A: Did you manage to get in touch with Susan?

B: No, I _____ (*try*) three times in the last hour, but she's always engaged.

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 2



Pre-text exercises

1. What do you know about global warming? Choose the best answers.

1. It is a *natural phenomenon/result* of human activity.
2. The temperature on the Earth is rapidly *rising/stabilizing*.
3. Global warming is related to *climate change/changes in the Solar system*.
4. Summer temperatures in London will be like in Spain in *three/four decades*.
5. Cities in the northern hemisphere will resemble cities more than *600/2000 miles* closer to the equator.

2. Find the following words in the text.

1. causing significant damage.
2. a prolonged period of abnormally low rainfall, leading to a water shortage.
3. a prediction or estimate of future events, especially coming weather or a financial trend.
4. to encounter or undergo (an event or occurrence).
5. an adjective meaning strict or harsh.
6. a verb meaning to put (someone or something) at risk or in danger.

3. Read the text, define the key words and write an abstract in English.

GLOBAL HEATING: LONDON TO HAVE A CLIMATE SIMILAR TO BARCELONA BY 2050

Nearly 80 % of cities to undergo dramatic and potentially disastrous changes, study finds. Barcelona has previously been affected by extreme drought. London could experience the same problems in the future, say researchers.

According to research, London will have a climate similar to that of Barcelona today in three decades, but if that seems a warning: the change could be accompanied by severe drought.

According to a report on the likely impacts of the climate crisis, Madrid will feel like present-day Marrakech by 2050 and Stockholm like Budapest. Around the world, cities that are currently in temperate or cold zones in the northern hemisphere will resemble places more than 600 miles (1,000 km) closer to the equator, with damaging effects on health and infrastructure.

Among other analogues, the study suggests Seattle will feel like San Francisco and New York will be comparable to Virginia Beach. The researchers have created an interactive map showing hundreds of cities and their 2050 counterparts.

Water shortages will affect scores of cities now in temperate climates due to the global heating, which is forecast to be by as much as 3.5C in European cities in summer and 4.7C in winter.

Nearly eight in 10 cities will experience dramatic changes, according to the study of 520 major cities published in the journal Plus One.

Barcelona was affected by extreme drought just over ten years ago, endangering many inhabitants and spending tens of millions of euros importing drinking water.

It is becoming more likely that London and cities in similar latitudes will experience the same problems in the future, say the researchers. Among the most concerning findings is that the residents of about a fifth of cities globally – including Jakarta, Singapore, Yangon and Kuala Lumpur – will experience conditions not seen in any major cities worldwide. This unprecedented change “blew my mind”, said Tom Crowther, founder of the Crowther Lab in Switzerland, which carried out the research. “These are environmental conditions that are not experienced anywhere on the planet at the moment,” he told the Guardian. “That means there will be new political and infrastructure challenges we have not faced before.”

(Adapted from: Harvey F. Global heating: London to have climate similar to Barcelona by 2050. The Guardian: July 10, 2019, URL: <https://www.theguardian.com/environment/2019/jul/10/global-heating-london-similar-climate-barcelona-2050>)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

- | | |
|---------------|------------|
| 1. Global | a. drought |
| 2. disastrous | b. crisis |
| 3. extreme | c. map |

- | | |
|-------------------|---------------|
| 4. climate | d. changes |
| 5. the northern | e. shortage |
| 6. an interactive | f. heating |
| 7. water | g. hemisphere |
| 8. political | h. challenges |

Activity 2. Are these statements true (T) or false (F) according to the article? Correct any that are false.

1. Barcelona has never experienced a severe drought.
2. Only some cities will undergo climatic changes.
3. Cities in temperate or cold zones will have the same climatic conditions.
4. Almost all cities will have a severe shortage of water.
5. Humanity will face a new political reality.

Discussion.

- If you could, what would you do to prevent climate catastrophe?

GRAMMAR EXERCISES. MODALS

1. Anna is talking to Maria just before and after a job interview. Choose the correct verb.

Before the interview

A: What time (1) *have you to / have you got to / must* you be there by?

M: 10.30.

A: You (2) *must / have to / have got to be* really nervous.

M: Terrified! But it doesn't matter, I know I won't get the job.

A: You (3) *haven't got to / mustn't / can't* be sure of that. You've got just the right experience and qualifications.

M: But I feel tense. I'm worried I (4) *can't / couldn't / mightn't* make a good impression in the interview.

A: I'm sure you'll be okay.

After the interview

M: I got it!

A: Congratulations! What (5) *had you got to / must you / did you have to do*?

M: Well, mainly I (6) *had got to / had to / must* tell them why I wanted to work there.

A: And does the job sound good?

M: Fantastic. I'll (7) *have to / must / have got to do* a lot of travelling.

A: Well that (8) *oughtn't to / shouldn't / mustn't be* a problem for you.

M: No, and I *may* (9) *must) have to / have got to* spend some time in Barcelona.

A: Well, I think we should certainly go out for a meal to celebrate.

M: Great idea.

2. A group of geography students are going on a field trip to Iceland. Their teacher is talking about the arrangements. Rewrite the underlined parts using one of the words or phrases from the box. You need to add extra words in each case.

Allow possibility of	are to recommend	compulsory refused	managed succeeded
-------------------------	---------------------	-----------------------	----------------------

“Unfortunately, the authorities (1) won’t allow us (*have refused*) to carry out fieldwork on the glacier. Apparently, because of weather conditions it’s not safe at the moment. Instead, (2) we’ve been able to arrange a boat trip to study coastal features, and (3) we may see whales. So I think (4) you should bring a pair of binoculars if you can. You might want to bring a camera, too. In past years, students have (5) been able to take some excellent photographs during our Iceland fieldwork. Let me remind you, however, that no portable stereos with external speakers (6) should be taken on the trip, although (7) you may bring an MP3 player if you want to. And finally, can you remember that (8) everyone must arrange their own private medical insurance for the trip. I’ll check next week that everyone has done this ...”

(From: Hewings M., Haines S. Grammar and Vocabulary for Advanced. Cambridge University Press, 2015. 278 p.)

UNIT 3



Pre-text exercises

1. What do you know about noise? Choose the best answers.

1. Noise is a *pollutant* / *irritant*.
2. Long exposure to noise can cause *hearing* / *memory loss*.
3. *10 %* / *20 %* of Americans suffer from hearing deterioration.
4. Noise is the loudest near *airports* / *stadiums*.
5. A decibel is a *ten* / *fifteen-fold* increase in sound energy.

2. Find the following words in the text.

1. the state of being in a place or situation without protection from something harmful or unpleasant.
2. a general view, examination, or description of someone or something.
3. the surroundings or conditions in which a person, animal, or plant lives or operates.
4. the quality or state of being irritable.
5. a verb meaning to prevent (a process or activity) from continuing or being carried out properly.
6. the process of becoming progressively worse.
7. an adjective meaning widely or constantly encountered or widespread.
8. exceeding a prescribed or desirable amount.
9. a noun meaning ringing or buzzing in the ears.

3. Read the text, define the key words and write an abstract in English.

NOISE

Every year since 1973, the U.S. Department of Housing and Urban Development has surveyed to find out what city residents dislike about their environment.

Every year the same factor has been named the most objectionable. It is not crime, pollution, or congestion; the noise reaches every part of the city daily. We have known for a long time that prolonged exposure to noises, such as loud music or the roar of machinery, can result in hearing loss. Evidence now suggests that noise-related stress also causes various psychological and physiological problems ranging from irritability to heart disease. An increasing number of people are affected by noise in their environment. By age 40, nearly everyone in America has suffered hearing deterioration in the higher frequencies. An estimated 10 percent of Americans (24 million people) suffer severe hearing loss, and the lives of another 80 million people are significantly disrupted by noise.

What is noise? There are many definitions, some technical and some philosophical. What is music to your ears might be noise to someone else. Simply defined, noise pollution is any unwanted sound or sound that interferes with hearing, causes stress, or disrupts our lives. Sound is measured either in dynes, watts, or decibels.

Note that decibels (db) are logarithmic; a 10 db increase represents a tenfold increase in sound energy. City noises come from many sources. Traffic is generally the most omnipresent noise. Cars, trucks, and buses create a roar that permeates nearly everywhere in the city. Near airports, jets thunder overhead, stopping the conversation, rattling dishes, and sometimes even cracking walls. Jackhammers intimidate in the streets; sirens pierce the air; motorcycles, lawnmowers, snowblowers, and chainsaws create an infernal din; and music from radios, TVs, and loudspeakers fills the air.

The sensitivity and discrimination of our hearing are remarkable. Typically, humans can hear sounds from 16 to 20,000 hertz (cycles per second). A young child whose hearing has not yet been damaged by excess noise can hear the whine of a mosquito's wings at the window when less than one quadrillionth (1×10^{-15}) of a watt per cm^2 is reaching the eardrum. Prolonged exposure to sounds above about 90 decibels can permanently damage the sensitive mechanism of the inner ear.

By age 30, most Americans have lost 5 db of sensitivity and can't hear anything above 16,000 Hertz (Hz); by age 65, the sensitivity reduction is 40 db for most people, and all sounds above 8,000 Hz are lost. By contrast, in Sudan, where the environment is tranquil, even 70-year-olds have no significant hearing loss. Deafening sounds – above 130 db, the level of a loud rock band or music heard through earphones at a high setting – can destroy sensory nerve endings, causing aberrant nerve signals that the brain interprets as a high-pitched whine or whistle. You may have experienced ringing ears after exposure to thunderous noises.

Coffee, aspirin, certain antibiotics, and fever also can cause ringing sensations, but they usually are temporary. A persistent ringing is called tinnitus. It has been estimated that 94 percent of the people in the United States suffer some

degree of tinnitus. For most people, the ringing is noticeable only in a tranquil environment, and we rarely are in a quiet place to hear it. About thirty-five out of one thousand people have tinnitus severe enough to interfere with their lives. Sometimes the ringing becomes so loud that it is unendurable, like shrieking brakes on a subway train. Unfortunately, there is not yet a treatment for this distressing disorder.

(Adapted from: Черкашина Н. І., Максименко Н. В. *English Bachelors' course in Ecology. Part 1: підручник*. Харків: ХНУ імені В. Н. Каразіна, 2022. 204 с.)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right-hand column to make expressions from the text.

- | | |
|----------------|------------------|
| 1. prolonged | a. disease |
| 2. hearing | b. increase |
| 3. heart | c. loss |
| 4. hearing | d. exposure |
| 5. tenfold | e. noise |
| 6. excess | f. deterioration |
| 7. quiet | g. disorder |
| 8. distressing | h. environment |

Activity 2. Are these statements true (T) or false (F) according to the article? Correct any that are false.

1. Noise is the most irritating factor of our life.
2. Our hearing is very sensitive.
3. People can hear sounds from 16 hertz to 40,000 hertz.
4. Extremely loud music cannot destroy sensory nerve endings.
5. Coffee and antibiotics can cause ringing sensations.

Discussion.

- How can we preserve our environment in our struggle against noise pollution?

GRAMMAR EXERCISES. NOUNS, AGREEMENT AND ARTICLES

1. Nick has been accepted to the Environmental Science course. Read this email he sent to a friend during a field trip. Fill in the gaps with a *present tense* form of the verbs in brackets.

“Hi, Cathy,

Greetings from Nepal! I'm sending this from an internet café in a small town north of Kathmandu.

The town itself isn't very interesting, but the surroundings (1) _____ (be) beautiful — I can see the Himalayas through the café window!

The lectures here are brilliant. The Politics and Ecology courses are great, but Economics (2) _____ (be) really difficult — although maths (3) _____ (be) certainly not my strong point! I'm really learning a lot about the country and its environmental problems. A lot of Nepal's population (4) _____ (live) in the mountainous parts of the country south of the Himalayas, and the majority of these people (5) _____ (depend) on growing crops and keeping animals. The standards of living in Kathmandu and the other cities (6) _____ (have) risen a lot recently, and the number of people likely to move into the cities (7) _____ (be) expected to increase. It's a real problem here. The Himalayan Times, the local English-language newspaper (9) _____ (have) just published a survey showing that most young people would stay in their home villages if jobs were available.

I was planning on coming home at the end of June, but the college _____ (9) (have) arranged for a few of us to stay during the summer on a WWF conservation project in a region in the north called Helambu — there (10) _____ (be) just a few kilometres between the village where I'll be working and the border with China. Among the various projects that have been set up (11) _____ (be) a scheme for producing biogas locally — that's gas produced from plant and animal waste. All my living expenses (12) _____ (be) being paid for by the WWF. Hope all is well with you. I'll send more news when I can". Nick.

2. Choose one word or phrase from each of the pairs in the box to complete the sentences. In some cases, both words or phrases are correct.

advertising / advertisements	fresh fruit / vegetables	meeting / foreign travel
advice / tips	jobs / work	rubbish / empty bottles
explosives / ammunition	salt / cups of coffee	

1. Her job involves a good deal of *foreign travel*.
 2. Make sure you eat plenty of _____
 3. What I don't like about the magazine is the huge number of _____ in it.
 4. I think you ought to cut down on the amount of _____ you have. It's not good for you.
 5. The Students' Handbook includes a great deal of _____ on study skills.
 6. The police found a rifle and a large quantity of _____ in his apartment.
 7. I have a huge amount of _____ to do at the weekend.
 8. I was shocked by the amount of _____ left behind after the party.
- (From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 4



Pre-text exercises

1. What do you know about the polar regions? Underline the best answer.

1. Polar bears are found in the *Arctic* / *Antarctica*.
2. *Arctic* / *Antarctica* is home to penguins.
3. The wettest / driest continent on Earth is Antarctica.
4. The first person to reach the South Pole was *American* / *Norwegian*.
5. *Three* / *Seven* countries have territories in Antarctica.
6. Ice covers about 68 % to 98 % of Antarctica.

2. Find the following words in the text.

1. An adjective meaning unpleasant and challenging to live in
2. A noun meaning a ship that has sunk.
3. An adjective meaning causing a lot of harm or damage
4. A two-word noun meaning a large area of ice, floating in the sea.
5. An adjective meaning with no people living there.
6. A noun meaning wood used for building
7. An adjective meaning complete and not damaged.
8. A two-word adjective meaning strong and not easily damaged.
9. An adjective meaning extremely good or impressive.
10. A two-word adjective meaning extremely modern and advanced.

3. Read the text, define the key words and write an abstract in English.

ANTARCTIC EXPEDITION TO RENEW SEARCH FOR SHACKLETON'S SHIP "THE ENDURANCE"

Captained by Edward Shackleton, the Endurance was a ship trapped in Antarctic ice that sank in 1915. For many years people thought that finding this symbol of the "heroic age" of polar exploration was impossible because of the

harsh Antarctic environment. Now a major scientific expedition will attempt to locate and film the wreck. Endurance22 will launch early next year in a ship that will brave the dangerous frozen waters, forcing its way through miles of pack ice. However, the effects of climate change will make the expedition a little less complicated, as melting ice will make it easier for the ship to make progress.

Mensun Bound, its exploration director, led the 2019 search for the Endurance that had to be called off because of extreme weather conditions. “I have mixed emotions. On the one hand, there’s great excitement. On the other hand, I’ve been very sad that we didn’t find it last time for the last three years. It’s never far from my thoughts. That ship is always in my imagination,” he said. Bound said global warming in the Antarctic is “absolutely devastating” but that the melting ice “has improved our chances” of discovering the shipwreck. Discussing the dangers, he said that if tourist ships sailed deep the Weddell Sea, they would be ripped open by the ice. Shackleton’s attempt to cross Antarctica is an epic story of bravery and survival.

The Endurance became trapped in ice and drifted for months before being crushed and sinking. The men drifted on ice floes for months. Eventually, they reached the uninhabited Elephant Island, where they lived off penguins and seal meat. Shackleton and five others then headed for the island of South Georgia in a whaleboat, eventually rescuing the others from Elephant Island, with all 28 of the crew returning alive. “The Endurance” is believed to lie more than 3,000 metres deep. Although the ship was crushed, its timbers are likely to be well preserved due to the extreme cold, the absence of light, and the relative lack of oxygen. The ship’s strength of construction may mean that much of it is intact.

The ship for Endurance 22 will set off from Cape Town early next year. It has heavy-duty ice-breakers that will force their way through the pack ice for miles on end. Bound said: “It is a battle. Last time, we became trapped in the ice, not once but several times, just as “The Endurance” did, and those were worrying moments.” The team will use underwater search vehicles equipped with sensors, lights and cameras to bring discoveries to a worldwide audience. John Shears, the expedition leader, said that with the ship, an outstanding crew and cutting-edge technology, “there has never been as good an opportunity to locate Endurance.”

Mr. Bound has been researching the archives for clues to the wreck’s location beyond the famous coordinates recorded by Frank Worsley, the ship’s navigator. “We were close in 2019,” he said. “We covered over half of the search area – up to 9 km across ... But Worsley never took his coordinates on the day the ship sank. His last observation was almost three days before. What was the ship doing in those three days? What was the speed and direction? I have to take all those things into account.” Donald Lamont, Chairman of the Falklands Maritime Heritage Trust, said: “We hope that this effort will bring the story of Shackleton and his ship to a younger generation, inspiring their interest in the science and the environmental importance of Antarctica for all of us.”

(Adapted from: *Alberge D. Antarctic expedition to renew search for Shackleton's ship "the Endurance". The Guardian: July 5, 2021, URL: <https://www.theguardian.com/world/2021/jul/05/antarctic-expedition-renew-search-shackleton-ship-endurance>*)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

- | | |
|-----------------|----------------|
| 1. cutting-edge | a. exploration |
| 2. global | b. vehicles |
| 3. polar | c. conditions |
| 4. climate | d. emotions |
| 5. weather | e. technology |
| 6. extreme | f. change |
| 7. search | g. cold |
| 8. mixed | h. warming |

Activity 2. Are these statements true (T) or false (F) according to the article? Correct any that are false.

1. People always thought it would be easy to find the Endurance.
2. "The Endurance" 22 expedition will progress more slowly because of the effects of climate change.
3. The ice would destroy any tourist ships that sailed deep into the Weddell Sea.
4. The crew of "The Endurance" were killed when the ship sank.
5. The wreck of "The Endurance" is more than 3,000 metres below the surface of the sea.
6. The extreme cold and the absence of light and oxygen have probably preserved the wooden parts of "The Endurance".
7. The 2019 expedition to find the wreck was once trapped in the ice.
8. The leader of the 2022 expedition believes they have a good chance of finding "The Endurance".
9. One problem is that they do not know exactly where the wreck is.
10. Frank Worsley was the captain of "The Endurance".

Discussion

- There is no point in exploring wrecks like "The Endurance".
- Antarctica is the last wilderness so we should leave it that way.

In your own words.

Imagine that you are a member of the crew of "The Endurance" 22 expedition. You sailed from Cape Town and you are now in the Weddell Sea looking for the wreck. Write an email (up to 150 words) to a friend back home

describing your experiences so far. Include details about the journey, the sea and weather conditions, any animal life you have seen, what the coast of Antarctica looks like, and what you are doing to find the wreck. Use some of the vocabulary in the text (e.g., underwater search vehicles).

GRAMMAR EXERCISES. DETERMINERS AND QUANTIFIERS

1. Fill in the gaps using the correct form of the verb in brackets. Sometimes both are possible.

1. Next week, my work colleagues are doing a bike ride across France for charity. They won't cycle the whole way — hey each can _____ (do) 30 kilometres a day and follow by car the rest of the time. That's just as well, because none of them _____ (be) terribly fit. A number of people _____ (have) already agreed to sponsor them, and they hope to raise a lot of money.

2. I think that everything _____ (be) now ready for the party. One of my sisters _____ (have) organized the drinks, and each of the people coming _____ (have) agreed to bring some food.

3. I'm having trouble selling my house. Although a lot of interest _____ (have) been shown in it — I've had lots of phone calls and visitors — the majority of potential buyers _____ (seem) surprised at how small it is. And not everybody _____ (like) the fact that there's no garden.

2. Choose the correct option.

1. The nuclear power station is in an earthquake zone, and it's worrying that there have been *a few* / *few* minor tremors here in the last couple of months.

2. There were four candidates in the election and *every* / *each* got about 5,000 votes.

3. The hurricane will go north of the city, so *little* / *a little* major damage is expected.

4. We *were all* / *We all were* astonished by her exam results.

5. Is there *less* / *fewer* caffeine in green tea than in coffee?

6. These old bookshelves *will all be* / *all will be* replaced by cupboards.

7. It takes me *fewer* / *less* than 30 minutes to walk to work.

8. When I was in hospital, Martha visited me *each* / *every* single day.

9. Although the management said they were going to restructure the company, in fact they made *a few* / *few* changes.

10. Nowadays, *nearly every* / *nearly each* new car is fitted with airbags.

11. When I got on, *all of the* / *the whole* bus seemed to be full of screaming schoolchildren.

12. The company has *fewer* / *less* than 20 employees.

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 5



Pre-text exercises

1. What do you know about the rise of sea levels? Are these statements true (T) or false (F)?

1. The problem of the rise of sea level is not an urgent issue.
2. The process is very slow and won't influence humans for several centuries.
3. The first affected regions will be those in the Indian and Pacific Oceans.
4. The number of directly affected people due to the rising sea level will not exceed 10 million.
5. Our involvement can prevent the threat of the countries disappearing under the water.

2. Find the following words in the text.

1. an adverb meaning once a year.
2. a verb meaning to form an idea of the cost, size, value etc. of something, but without calculating it precisely.
3. in the essential part of something or the center.
4. an adverb meaning to a very high degree.
5. the height of a place, especially above sea level.
6. a verb meaning to say that something will happen in the future.
7. being under the surface of the water.
8. a verb meaning to keep in good condition by checking or repairing it regularly.

3. Read the text, define the key words and write an abstract in English.

WHAT COUNTRIES AND CITIES WILL DISAPPEAR DUE TO RISING SEA LEVELS?

Sea levels are rising rapidly. The rate at which they are rising has more than doubled, from 0.06 inch (1.4 millimeters) annually throughout most of the 20th century to 0.14 inch (3.6 millimeters) per year from 2006 to 2015, according to the National Oceanic and Atmospheric Administration (NOAA).

NOAA predicts that sea levels will likely rise by at least 1 foot (0.3 m) above the levels seen in 2000 by the start of the next century, while the United Nations Intergovernmental Panel on Climate Change estimates that they will rise by 16 to 25 inches (40 and 63 centimeters) by 2100.

Should sea levels rise to this extent, it could wreak havoc around the globe. As many as 250 million people, spanning all continents, could be “directly affected” by 2100, according to a 2019 study in the journal *Nature Communications*.

So, will any of these countries, cities, or states disappear entirely in our lifetime, and can anything be done to avert disaster?

“Whether cities or countries disappear depends on whether we as humans are doing something to counteract the threat,” Gerd Masselink, a professor in coastal geomorphology at the University of Plymouth in the United Kingdom, told *Live Science* in an email. “Most of the Netherlands is already below sea level but is not disappearing because the Dutch are building and maintaining their coastal defenses.”

Which countries will be most affected? First, let’s look at the countries with the lowest elevations. According to the Union of Concerned Scientists (UCS), the Maldives made up of 1,200 small coral islands and home to around 540,000 people, is the flattest country on Earth, with an average elevation of just 3 feet (1 m). According to the UCS, should the Maldives experience a sea level rise of just 1.5 feet (45 cm), it will lose around 77 % of its land area by 2100.

Another country with an extremely low average elevation — around 6 feet (1.8 m) above sea level — is Kiribati. This small island in the heart of the Pacific, with a population of nearly 120,000, could lose two-thirds of its land if sea levels rise by 3 feet.

(Adapted from: Phelan J. What countries and cities will disappear due to rising sea levels? LiveScience: March 27, 2022, URL: <https://www.livescience.com/what-places-disappear-rising-sea-levels>)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right-hand column to make expressions from the text

1. avert

a. affected

- | | |
|---------------|-------------------|
| 2. disappear | b. all continents |
| 3. coastal | c. entirely |
| 4. directly | d. rapidly |
| 5. wreak | e. geomorphology |
| 6. rise | f. threat |
| 7. span | g. havoc |
| 8. counteract | h. disaster |

Activity 2. Rearrange and write the following sentences so that they summarize the text.

1. A number of countries are the most vulnerable to rising sea levels.
2. The catastrophic effect of the disaster is absolutely real.
3. The threat is not inevitable and can be prevented by humans.
4. Predictions for the future threat say that it will happen by the end of the century.
5. The rate of rising sea levels is frightening.

Discussion.

- How does the rising sea level affect counties, humans, farming and the economy?

GRAMMAR EXERCISES. ADVERBS AND ADJECTIVES

1. Complete the sentences using the adjectives in the box. Use the same adjective in each pair of sentences. If possible, include the adverb given in brackets.

(severely) critical	(highly) original
(very) genuine (rather) odd	(extremely)-particular
(somewhat) technical	(thoroughly) professional
(pretty) wild	

1. a. She's *extremely particular* about what she eats, and never touches processed food at all.
b. There are so many hotels in the city to choose from. Why did you go for that *particular* one?
2. a. The launch of the space shuttle has been delayed due to a _____ fault.
b. The operating instructions were _____ and difficult to understand.
3. a. The vase is a _____ antique not a recent copy.
b. I'm sure Anya wouldn't lie to you — she's a _____ person.
4. a. After protests on the streets, the government had to reconsider its _____ decision to double the tax on petrol.
b. He's admired around the world for his _____ style of guitar playing.
5. a. She is a dedicated teacher, _____ and hard-working.
b. I couldn't fix my computer myself, so I had to get some _____ help.

6. a. As soon as I'd eaten the oysters, I had a _____ feeling in my stomach.

b. All the houses on this side of the street have _____ numbers.

7. a. The strike comes at a _____ time for the company, which has just invested in a major new factory.

b. The report was _____ of the Principal's management of the college, and she was forced to resign.

8. a. The disease was passed on to chickens by _____ birds.

b. It's a _____ area of moorland, a long way from roads and settlements.

2. For questions 1-8, read the text below. Use the word given in capitals at the end of some of the lines to form a word that fits in the gap in the same line. There is an example at the beginning (0).

Sleep patterns

It is estimated that around one in five people have a sleep

(0) disorder of some kind, affecting their ability to get

ORDER

enough sleep. In particular, people who are (1) _____

WEIGH

– an increasing problem around the world – often suffer from sleeping difficulties. Most of the results of this lack of sleep are relatively minor, such as tiredness, irritability and (2) _____

FORGET

effects are not long-lasting. However, longer-term sleep deprivation can have more serious consequences and can be (3) _____

HARM

to physical and mental health. For example, it can result in high blood pressure and can affect a person's (4) _____, reducing

ALERT

their ability to think and respond quickly.

Recent (5) _____ research has shown that people

SCIENCE

need seven to eight hours of sleep on average, although this figure is

(6) _____ on such factors as age and health. For

DEPEND

example, for infants the (7) _____ is much higher, about

REQUIRE

16 hours a day, while older people tend to sleep less deeply and for a shorter time, often needing about the same amount of sleep as they do

in late (8) _____

CHILD

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 6



Pre-text exercises

1. What do you know about the different map styles?

- a. Mercator projection.
- b. Peters projection.
- c. A south-up map.
- d. Pacific-centered map.
- e. Azimuthal polar projection.
- f. Cartograms.

2. Find the following words in the text.

1. represent (something) as being more prominent, better, or worse than it is.
2. give a misleading or false account or impression.
3. show or represent by a drawing, painting, or other art form.
4. become or make smaller in size or amount.
5. diagrammatic representation of an area of land or sea showing physical features, cities, roads, etc.
6. a period in European history marking the transition from the Middle Ages to modernity and covering the 15th and 16th centuries.

3. Are these statements true (T) or false (F)?

1. Greenland is bigger than the United States or Africa.
2. Chile is twice as large as Norway.
3. Sweden is at least three times larger than Spain.
4. Germany is slightly larger than Finland.
5. Iceland fits into Madagascar about five and a half times.
6. The UK and Thailand are about the same size.

3. Read the text, define the key words and write an abstract in English.

THE MAPS THAT WILL CHANGE HOW YOU SEE THE WORLD

Boston public schools recently announced that they would shift to using world maps based on the Peters projection, reportedly the first time a US public school district has done so. Why? Because the Peters projection accurately shows different countries' relative sizes. Although it distorts countries' shapes, this way of drawing a world map avoids exaggerating the size of developed nations in Europe and North America and reducing the size of less developed countries in Asia, Africa and South America.

The same happens with the more commonly used Mercator projection, which exaggerates the size of the Earth around the poles and shrinks it around the equator. So the developed "global North" appears bigger than reality, and equatorial regions, which tend to be less developed, appear smaller. It is especially problematic given that European colonialists produced the first world maps based on the Mercator projection.

Why does this problem occur? Simply put, the world is round and a map is flat. Imagine drawing a world map on an orange, peeling the skin to leave a single piece and then flattening it. It would, of course, rip. However, imagine you could stretch it. As you did so, the map drawn on its surface would distort.

The distortions this introduces are massive. Moreover, different projections distort maps in different ways. The Mercator projection depicts Greenland as larger than Africa. However, in reality, Africa is 14 times the size of Greenland. It alters the way you see the size – and, some people argue, the way you see the importance – of different parts of the world. So this is not just a cartographer's dilemma – it is a political problem.

The Renaissance cartographer Gerardus Mercator did this to preserve the shapes of countries, so the map could be used to calculate compass bearings accurately. Accurate compass bearings are essential if you are a 16th-century seafarer. Nevertheless, if you want a better idea of the relative size of the world's landmasses, you need a map that distorts shape but preserves area, as the Peters projection does.

The difference between the Peters and Mercator projections shows how significant changing the way a map is drawn can be.

(Adapted from: Houston D. Five maps that will change the way you look at the world. Daily Mail Online: March 22, 2017, URL: <https://www.dailymail.co.uk/sciencetech/article-4339250/Five-maps-change-way-look-world.html>)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

1. distort

a. the size

2. cartographer's

b. compass bearings

- | | |
|----------------|----------------------|
| 3. world's | c. exaggerating |
| 4. developed | d. dilemma |
| 5. calculate | e. countries/nations |
| 6. avoid | f. landmasses |
| 7. exaggerates | g. occurs |
| 8. problem | h. shape |

Activity 2. Answer the questions

1. What is the most common world map projection?
2. Why is the world map we all know “incorrect”?
3. What are the advantages and disadvantages of maps based on the Peters projection?
4. Who produced the first world maps based on the Mercator projection?
5. What are the advantages and disadvantages of maps based on the Mercator projection?
6. Why does the size exaggeration of some countries occur on world maps?
7. Give other examples of misconceptions based on Mercator projection.
8. What influence does the map style have on our perception of the “importance” of countries?

Discussion.

- How do maps that depict the world in a certain way affect our perception of different countries and regions?
- Can you think of any examples of maps used to exaggerate or distort information for political gain?
- Do you think it is essential for students to learn about the history and politics of cartography as part of their geography education?
- How can we ensure that maps are created and used ethically without perpetuating harmful stereotypes or biases?
- Have you ever encountered a map that challenged your preconceptions about a particular place or region?
- What role will maps play in shaping our understanding of global issues like climate change and migration in the coming years?

GRAMMAR EXERCISES. ADVERBIAL CLAUSES**1. Complete the sentences *with as, when or while*. Give all correct or likely alternatives.**

1. You wouldn't think it now but ___ *when* ___ I was very young I used to have curly, brown hair.
2. It's more and more important for business people to speak foreign languages _____ business becomes increasingly international.
3. How old were you _____ you got married?
4. I was so tired last night, I went to sleep _____ my head hit the pillow.
5. _____ my children get older, I find they get even fussier about food.

6. She always brings a bunch of flowers _____ she comes to visit.

7. _____ I sat down to take my maths exam, I realised I'd forgotten to bring my calculator with me.

8. _____ the level of pesticides in the potatoes is well below the legal limit, the public have been advised to avoid eating them for the time being.

2. Put in *for* or *during*.

1. It rained for three days *without* stopping.

2. I fell asleep *during* the movie.

3. I went to the theatre last night. I met Sue _____ the interval.

4. I felt really ill last week. I could hardly eat anything _____ three years .

5. The traffic was bad. We were stuck in a traffic jam _____ two hours.

6. Production at the factory was seriously affected _____ the strike.

7. Sarah was very angry with me. She didn't speak to me _____ a week.

8. I don't have much free time _____ the week, but I relax at weekends.

9. I need a break. I think I'll go away _____ a few days.

10. The president gave a short speech. She spoke _____ only ten minutes.

2. Put in *during* or *while*.

1. We met a lot of interesting people *while* we were on holiday.

2. We met a lot of interesting people *during* our holiday.

3. I met Mike _____ I was shopping.

4. _____ I was on holiday, I didn't use my phone at all.

5. I learnt a lot _____ the course. The teachers were very good.

6. There was a lot of noise _____ the night. What was it?

7. I'd been away for many years. Many things had changed _____ that time.

8. What did they say about me _____ I was out of the room?

9. When I fly anywhere, I never eat anything _____ the flight.

10. Please don't interrupt me _____ I'm speaking.

3. Put in *during*, *for* or *while*.

1. I used to live in Berlin. I lived there _____ five years.

2. One of the runners fell _____ the race but managed to get up and continue.

3. Nobody came to see me _____ I was in hospital.

4. Try to avoid travelling _____ the busy periods of the day.

5. I was very tired. I slept _____ ten hours.

6. Can you hold my bag _____ I try on this jacket?

7. I'm not sure when we'll arrive, but it will be sometime _____ the afternoon.

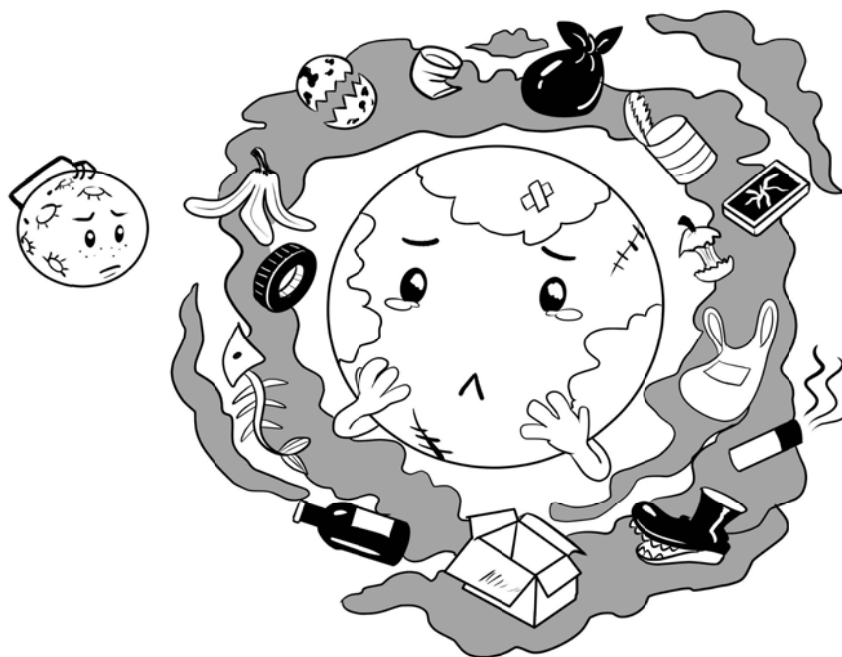
8. I wasn't well last week. I hardly ate anything _____ three days.

9. My phone rang _____ we were having dinner.

10. Nobody knows how many people were killed _____ the war.

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 7



Pre-text exercises

1. Which countries are regarded as developed (a), and which are developing (b)?

Ukraine, Australia, Norway, Japan, Angola, Vietnam, Canada, Peru, Samoa, Egypt, China, and Iceland.

2. Find the following words in the text.

1. express something in words.
2. a prolonged period of abnormally low rainfall, leading to a water shortage.
3. a result or effect, typically unwelcome or unpleasant.
4. a person or thing that corresponds to or has the same function as another person or thing in a different place or situation.
5. refuse to take notice of or acknowledge; disregard intentionally.
6. all people born and living at about the same time and regarded collectively.
7. the long-lasting impact of particular events or actions that took place in the past.
8. in a sufficiently great or important way as to be worthy of attention.

3. Read the text, define the key words and write an abstract in English.

THE NEXT GENERATION IS DETERMINED TO SORT OUT THE PLANET

As past generations have left their legacy by polluting and damaging the environment with little concern for the consequences, the upcoming generation seems to be determined to “sort out the planet”.

A recent global poll of more than 6,000 kids in 47 countries has revealed that pollution is the biggest concern for more than 25 % of children. This was despite the fact that almost one in three 10 to 12-year-olds had experienced natural disasters, including drought, flood or fires. However, 20 % of children named natural disasters their biggest environmental concern.

What is more, there was found to be a difference between developing and developed countries. In the industrialized world, one in three children said pollution was their top concern, and 16 % even singled out global warming. However, the number of children most concerned about pollution in the developing world was significantly lower, with just 26 % naming this as their top concern. Meanwhile, 23 % of kids in these countries cited natural disasters as the environmental thing they were most worried about.

Regional studies made it quite clear that children are more likely to be concerned about the environmental issues that directly affect them. In countries like Africa, which experience severe droughts, children are more likely to be concerned about climatic events rather than pollution. In developed industrial nations like China, children are more likely to be concerned about pollution than natural disasters.

Previous generations of young people had ungrounded fears about ghosts and monsters, but it appears that the upcoming generation has reality-based fears of pollution, global warming and species extinction!

Young people today are starting to voice their concerns for the planet's future to undo some of the damage done by previous generations. Many youth activists' websites are becoming popular with young people. We are starting to see more sites like Kids Vs. Global Warming, appearing regularly. Kids are taking action through social media and trying to convey their message to politicians. It appears that many kids are more informed than their “grown-up” counterparts.

In the future, the next generation of leaders will be chosen because of their environmental policies. Young people today are disappointed by the current trend of leaders ignoring environmental concerns.

(Adapted from: Citizen J. Next Generation Determined to Sort Out the Planet. Planet Earth Herald Environment News RSS. URL: <https://planetearthherald.com/next-generation-determined-to-sort-out-the-planet/>)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

- | | |
|-------------------|---------------|
| 1. species | a. concerns |
| 2. youth | b. affect |
| 3. industrialized | c. policies |
| 4. current | d. generation |
| 5. environmental | e. trend |
| 6. directly | f. fears |
| 7. voice | g. extinction |
| 8. upcoming | h. world |
| 9. ungrounded | i. activists |

Activity 2. Are these statements true (T) or false (F) according to the article? Correct any that are false.

1. The younger generation is more concerned about environmental issues than past generations.
2. The study results showed that the answers from children worldwide were approximately the same.
3. By using social media, young people strive to repair some of the damage caused by earlier generations.
4. About 30 % of children who live in industrialized countries said pollution was their top concern.
5. The fears of the previous generation are more based on real things than imaginary ones.
6. In Africa, children are more concerned about pollution rather than climatic events.

Discussion.

- Are you concerned about the future of the planet? If so, what do you mostly worry about?
- Do you believe that earlier generations should be held accountable for their actions? If so, how?
- Can the country of living determine the biggest concerns of the population? If so, give examples.
- What actions must be performed to begin resolving the problem of pollution?
- What cannot be counted as natural disasters: drought, wildfires, oil spills, or floods?

GRAMMAR EXERCISES. VERB PATTERNS

1. For questions 1-6, complete the second sentence so that it has a similar meaning to the first sentence, using the word given. Do not change the word given. You must use between three and six words, including the word given.

Here is an example (0).

0. If there is a fire, you must not use the lift to leave the building.

(EVENT)

In the event of a fire, you must not use the lift to leave the building.

1. Nina was driving the car at the time of the accident, but I don't think it was her fault.

RESPONSIBLE

Nina was driving the car at the time of the accident, but I don't hold _____ it. 2. Jack has such a vivid imagination that it's possible that he invented the whole story.

MADE

Jack has such a vivid imagination that he might _____ the whole story.

3. I had only just got home when the phone rang.

SOONER

No _____ the phone rang.

4. She is proud of being able to write clearly.

ABILITY

She prides _____ to write clearly.

5. Once the lecturer had given us a clear explanation of the procedure, we were able to go ahead with the experiment.

EXPLAINED

Once the lecturer had _____, we were able to go ahead with the experiment.

6. The government has banned all exports to the country except for food and medicine.

EXCEPTION

7. The government has banned all exports to the country _____ food and medicine.

2. For questions 1-8, read the text below and decide which answer (A, B, C or D) best fits each gap. There is an example at the beginning (0).

ORIGAMI

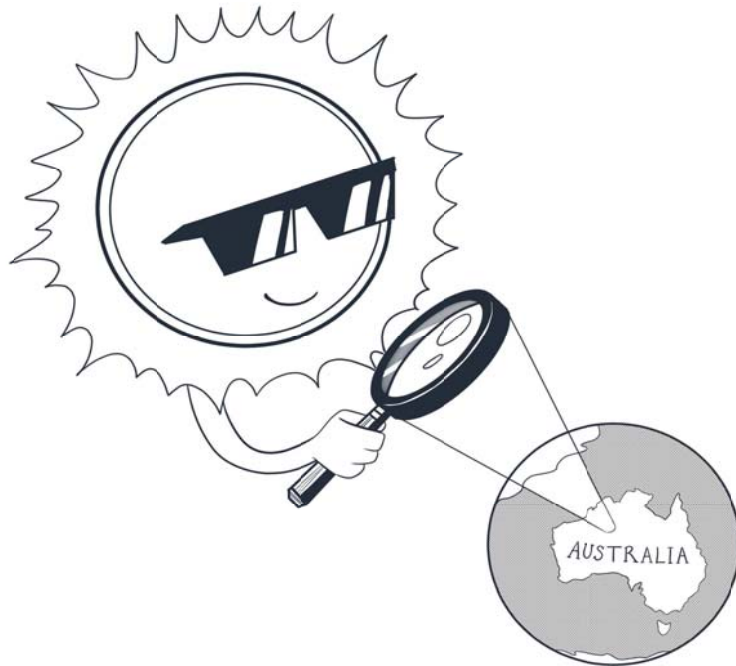
Origami is the art (0) _____ B _____ paper folding, the aim of (1) _____ is to make objects using folds and creases. Although other shapes are possible, in (2) _____ objects begin with a square sheet of paper (3) _____ sides

may be different colours. This is usually folded without cutting. The origins of origami are not known for (4) _____. Some are of the (5) _____ that it began in Japan, others that it originated in China, from where it was taken to Japan in the seventh century. It may also have developed independently in the West. What is (6) _____ is that it reached its greatest development in Japan. Probably the most famous modern origami artist was Akira Yoshizawa, who died in 2005. He pioneered origami as a creative art, as well as (7) _____ up with a symbolic method of representing paper folding. In all, he created more than 50,000 models, only a few hundred (8) _____ which were shown in his books.

- | | | | | |
|----|-------------|---------------|---------------|-------------|
| 0. | A. for | B. of | C. to | D. with |
| 1. | A. what | B. which | C. whose | D. how |
| 2. | A. all | B. addition | C. time | D. general |
| 3. | A. who | B. whose | C. who's | D. that |
| 4. | A. certain | B. definitely | C. conclusive | D. positive |
| 5. | A. idea | B. viewpoint | C. opinion | D. theory |
| 6. | A. admitted | B. final | C. clear | D. decided |
| 7. | A. coming | B. turning | C. ending | D. keeping |
| 8. | A. with | B. in | C. by | D. of |

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 8



Pre-text exercises

1. What do you know about the effect of wildfires on sustainable development? Choose the best answers.

1. Climate change and global heating are *increasing* / *slowing down* the likelihood and intensity of wildfires.
2. Extreme heat in *Australia* / *Iceland* leads to multiple mega-fires.
3. *The poor* / *the rich* are often hit hardest by global heating.
4. Smoke from wildfires *causes air pollution* / *has no impact on your health*.
5. Air pollution *causes* / *contributes to* acidification of lakes.

2. Find the following words in the text.

1. the state or fact of something's being likely; probability.
2. dependent on someone or something.
3. originating or occurring naturally in a particular place; native.
4. be extremely distressed about something.
5. combustible.
6. able to be maintained at a certain rate or level.
7. not damaged or impaired in any way; complete.
8. excessive richness of nutrients in a lake or other body of water.

3. Read the text, define the key words and write an abstract in English.

THE EFFECT OF WILDFIRES ON SUSTAINABLE DEVELOPMENT

With only 10 years left to achieve the Sustainable Development Goals, world leaders in September 2019 called for accelerated action in the next decade to deliver at the scale and speed required. However, climate change and global heating are increasing the intensity of wildfires, which could have a growing impact on achieving the Sustainable Development Goals.

For example, the 2019–2020 Australian bushfire season came at the end of the second hottest year on record, with multiple record-high temperatures experienced across Australia at the beginning of its wildfire season. This has created far more flammable conditions than usual, leading to multiple megafires and a total burned area of over 18 million hectares (186,000 square kilometres, an area bigger than England and Wales).

In addition to the widely reported impact in terms of immediate loss of life, homes and animals in developed parts of the world, the growing scale of wildfires around the world can also severely impact several of the Sustainable Development Goals.

The poor are often hit hardest by global heating. They are the ones least able to adapt; they also tend to be more heavily reliant on natural resources, such as firewood, forest-based plant food and medicines. Forests provide food and medicines for indigenous peoples and many others. Many people's livelihoods, especially in developing countries, depend on intact forest resources, and an abnormally large wildfire can be disastrous.

Smoke from wildfires causes air pollution and is bad for your health no matter where you live. Wildfires release harmful pollutants into the atmosphere, including particulate matter and toxic gases such as carbon monoxide, nitrogen oxides, and non-methane organic compounds. Wildfires can cause displacement, stress and anguish to people who have to flee them, beyond those who suffer direct impacts.

Particulates and black carbon from forest fires are carried in the air and enter water courses. Researchers have quantified and characterized the black carbon flowing in the Amazon. "In aquatic ecosystems, effects of acidity, nitrogen, and mercury on organisms and biogeochemical processes are well documented. Air pollution causes or contributes to the acidification of lakes, eutrophication of estuaries and coastal waters, and mercury bioaccumulation in aquatic food webs," says a study titled *Effects of Air Pollution on Ecosystems and Biological Diversity in the Eastern United States*.

(Adapted from: UNEP. The effect of wildfires on sustainable development. January 23, 2020. URL: <https://www.unep.org/news-and-stories/story/effect-wildfires-sustainable-development>)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

- | | |
|----------------------|---------------|
| 1. growing | a. monoxide |
| 2. indigenous | b. processes |
| 3. carbon | c. peoples |
| 4. biogeochemical | d. impact |
| 5. aquatic | e. waters |
| 6. coastal | f. lakes |
| 7. harmful | g. food webs |
| 8. acidification of | h. estuaries |
| 9. eutrophication of | i. pollutants |

Activity 2. Are these statements true (T) or false (F) according to the article? Correct any that are false.

1. World leaders called for accelerated action in the next decade to deliver the Sustainable Development Goals in September 2020.

2. The accomplishment of the Sustainable Development Goals is unaffected by wildfires.

3. Exceptionally hot conditions brought on the Australian bushfire season of 2019–2020.

4. Australia's 2019–2020 bushfire season burned an area larger than England and Wales.

5. For many people, including indigenous people, forests provide a source of food and medicine.

6. Wildfires do not impact people's livelihoods in developing countries.

7. Smoke from wildfires is terrible for your health no matter where you live.

8. Wildfires do not release harmful pollutants into the atmosphere.

9. Wildfires can cause displacement, stress, and anguish to people forced to evacuate.

10. Lake acidification and eutrophication in estuaries and coastal waterways are not caused by or associated with air pollution.

Activity 3. For questions 1-5, decide which answer (A, B, C or D) best fits each gap

1. In Australia in 2019, the total area burned was _____:

- A. 25 million hectares
- B. 18 million hectares
- C. 10 million hectares
- D. 32 million hectares

2. Which sections of the population are most often affected by global heating?

- A. middle-class population
- B. the population of developed countries
- C. the poor
- D. independent people

3. Wildfires release harmful pollutants including_____:

- A. animals and leaves
- B. particulate matter and toxic gases
- C. Pesticides
- D. carbon monoxide

4. Air pollution causes or contributes to the acidification of_____.

- A. lakes, eutrophication of estuaries and coastal waters
- B. Farmland and pets
- C. water bodies
- D. psyche

5. Forest fires affect pollution of:_____.

- A. Water
- B. Soil
- C. Air
- D. All answers are correct

Discussion.

- Why are some areas more susceptible to wildfires?
- In what ways can sustainable development practices help prevent or mitigate the effects of wildfires?
 - What steps can be taken to reduce the risk of wildfires in areas with high levels of eutrophication?
 - How can governments balance economic development with sustainable forest management to prevent wildfires?
 - What role can individuals play in reducing the likelihood and impact of wildfires through sustainable lifestyle choices?

GRAMMAR EXERCISES. COMPARISON

1. Complete the sentences with an appropriate comparative or superlative form of the adjective in brackets. Give alternative forms where possible.

1. Redbacks are among *the commonest* / *most common* spiders in this part of the country. Unfortunately, they're also the _____ (*common, venomous*).

2. The road seemed to be getting _____ as we drove _____ into the forest. (*narrow, deep*)

3. I know coffee isn't good for me, and certainly _____ than tea, but I'm at my _____ early in the morning after a couple of cups of coffee, and I would find it difficult to give it up. (*harmful, alert*)

4. It was the _____ I had ever come to a fully grown elephant, and I was terrified. But even then I realised that I was in the presence of one of the _____ creatures on earth. (*close, magnificent*)

5. The head of Presto Stores argued that without supermarkets to provide cheap and fresh food, we would all be _____ and _____. (*poor, unhealthy*)

6. When Emily saw Liam at the party, she thought he was the _____ man she had ever seen and went over to speak to him. But she soon realised that he was _____ with looking good than talking to her. (*handsome, concern*)

7. I couldn't have been _____ when Professor Park agreed to meet me to discuss my research. He's one of the _____ scientists in his field. But I was _____ than angry when he phoned to say that he couldn't meet me after all. I realise that he's a very busy man. (*thrilled, respected, sad*).

2. For questions 1-8, read the text below. Use the word given in capitals at the end of some of the lines to form a word that fits in the gap in the same line. There is an example at the beginning (0).

Cycling is good news – so what's stopping us?

The government's recent campaign, providing (0) *encouragement* to leave our cars at home and get on our bikes, has been (1) _____ to some extent, with a **SUCCESS** slight increase in the numbers cycling to work. We all now know that cycling is (2) _____ ; cyclists have fewer **BENEFIT** health problems than non-cyclists, they have higher levels of (3) _____ and they don't damage the environment. **FIT** But we won't become a nation of cyclists until we (4) _____ two major barriers. First, exhaust **COME** fumes in (5) _____ congested streets can be as **HEAVY** (6) _____ to the lungs as cigarette smoke. So there **HARM** must be a greater (7) _____ of cars and bikes in towns. **SEPARATE** Perhaps more importantly, town planners must (8) _____ **SURE** that destinations for daily needs, such as schools, work and shopping, are within convenient cycling distance from home.

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 9



Pre-text exercises

1. What do you know about sustainability? Are the statements true or false?

1. Sustainability is an issue of the national level, not of an individual.
2. Sustainability deals with an environmental concept only.
3. Japan is ranked as one of the most sustainable countries in the world.
4. Sustainability has an essential role in daily living.
5. When traveling, you can support sustainability by choosing a destination, hotel, or restaurant where to eat.

2. Find the following words in the text.

1. a large round stone, wooden or metal post used as a support for a building or as an ornament or monument.
2. the phenomenon whereby certain places of interest are visited by excessive numbers of tourists, causing undesirable effects for the sites visited.
3. a place where people come to worship because it is connected with a holy person or event.
4. able to be reached or entered.
5. insufficient for the demand.
6. a building for religious worship, especially in religions other than Christianity.
7. an advantage or profit gained from something.
8. the process of adapting something to modern needs or habits.

3. Read the text, define the key words and write an abstract in English.

UNDERSTANDING SUSTAINABILITY IN JAPAN AND ITS ROLE IN TRAVEL

When asked what “sustainability” is, most will answer “eco-friendly” or something related to the environment. Well, that is just one aspect of sustainability. However, this is an important topic to discuss.

As defined, sustainability is a concept that promotes environmental, social, and economic practices that meet our own needs and future generations. The goal is to live a lifestyle that benefits people, the economy/profit, and the environment in the long term. When people are aware of sustainability, they make sure to limit the harmful impacts on all three pillars.

Japan is one of the top countries that embraces sustainability. Sustainability has been embedded in Japanese culture since the Edo period (1603–1868) when resources were scarce. The Japanese mentality of “Mottainai” (wasteful) was valued. As a result, Japanese people took good care of everything they had, making them a sustainable society without waste.

After World War II, Japan experienced rapid industrialization and possessed some technologically advanced sectors in the global economy. It was criticized in the past because of the environmental challenges that came with modernization. However, over the years, Japan changed its international image by implementing laws on recycling and balancing its status as a highly industrial nation that prioritizes sustainability. Currently, it is ranked as the 11th most sustainable country globally.

Japan hosted the Kyoto Conference in 1997, where the Kyoto Protocol was developed. It was an international treaty for developed nations to reduce greenhouse gas emissions and a time when Japan provided aid to support global warming programs in developing countries. Now, the country is considered a leader in promoting environmental initiatives in Asia.

Sustainable travel aims to maintain and enhance the vitality of tourist destinations for years to come. The modernized world is almost accessible, and this has numerous harmful effects, such as over-tourism. Overtourism is an issue that causes undesirable effects on the region’s environment and residents’ quality of life.

Fortunately, Japan is now applying sustainability in all aspects of travel. As a popular destination for years, Japan organizes activities that benefit the three pillars. As a responsible traveler, consider these activities for your next journey:

- *Economic pillar* – promotes local tourism and businesses contributing to the local economy. Examples are staying at family-owned guesthouses, *ryokan* (inn), farm stays, eating at *izakayas*, restaurants, and buying local produce and sustainable brands sold at *michi-no eki* (road stations)

- *Social pillar* – Pay respect to local customs and culture. Interact with the locals. Support local projects. Explore off-the-beaten places. Visit temples and shrines. Celebrate local festivals. Book a local tour guide.

- *Environmental pillar*– preserving natural attractions by going on hikes, walking tours, cycling, minimizing carbon footprint by using public transportation, and reducing waste and single-use plastics.

Now that you’ve learned about sustainability, you can do your part by adopting good practices to preserve the environment, benefit the community, and support the economy for years to come.

(Adapted from: Arigato Travel. *Understanding Sustainability in Japan and its role in travel*. December 29, 2022. URL: <https://arigatojapan.co.jp/understanding-sustainability-in-japan-and-its-role-in-travel/secondary-cities>)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

- | | |
|--------------------|-------------------|
| 1. single-use | a. footprint |
| 2. off-the-beaten | b. treaty |
| 3. embrace | c. emissions |
| 4. harmful | d. advanced |
| 5. carbon | e. plastics |
| 6. international | f. sustainability |
| 7. technologically | g. places |
| 8. greenhouse gas | h. impacts |

Activity 2. Rearrange the following headlines to match the order of paragraphs in the text.

1. Sustainability in travel and tourism.
2. A country that has a long history as a sustainable country.
3. Three pillars of supporting sustainability as a responsible traveler.
4. A simple definition of sustainability.
5. Japan’s way of preserving the environment.

Discussion.

- Characterize “a responsible traveler” in the view of sustainability
- What tourist activities correspond to the three mentioned pillars: economic, social, and environmental?
- Think of other good practices to preserve the environment as a tourist.
- What sustainable brands do you know?

GRAMMAR EXERCISES. MAKE AND DO

1. Complete each sentence with the correct form of *make* or *do*.

1. So I said to my son, "If you're bored watching TV, why don't you _____ some exercise? That would _____ a nice change. You could _____ some of the housework, like _____ the beds or the cleaning." Suddenly he was very keen to _____ his homework!

2. Can I _____ an appointment with the College Principal? I'd like to _____ a different course next year and I need to _____ a decision about which one as soon as possible.

3. If you want to _____ well in a job interview, it's crucial to _____ a good first impression.

4. A: Are you _____ much progress with selling your house?

B: Nobody's even _____ any arrangements to view it yet. I don't think the agents are _____ much of an effort with it. Every time I call, they _____ another excuse.

5. I'm really sorry, but I can't _____ the shopping today. I've got too much work to _____. Could you _____ me a huge favour and _____ it for me? Thanks!

I _____ a big mistake when I agreed to _____ business with friends. Never again!

2. Complete this interview by writing the verbs in brackets in the correct form.

Interviewer: So Jessica, here you are in New Zealand – a long way from home. (0) How long you (be) here?

Jessica: Three weeks.

Interviewer: How long (1) you (travel)?

Jessica: Six months. I'm having the time of my life!

Interviewer: And what (2) (be) your best experience since you left home?

Jessica: I think it's what I'm doing now. I'm learning to skydive.

Interviewer: Really? (3) you (always like) doing dangerous things?

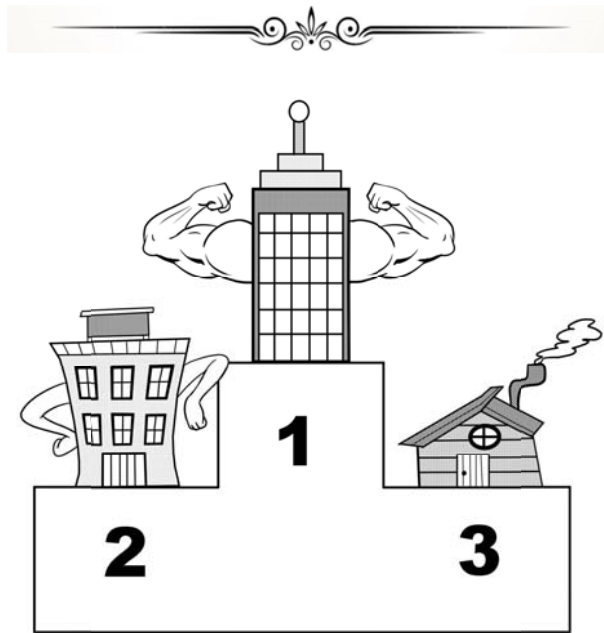
Jessica: Yes, I guess since I was a small child I (4) (always want) to push myself, and this is a great opportunity.

Interviewer: Any bad experiences since you left home?

Jessica: People warned me about crime and illness but I (5) (be) lucky so far – nothing bad (6) (happen) to me, and I hope it won't in the next six months.

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 10



Pre-text exercises

1. What do you know about secondary cities? Are the statements true or false?

1. Secondary cities have the same benefits as the largest city in the country
2. Only cities having less than 1 000 000 of the population can be considered secondary.
3. Half of them are located in Africa and Asia.
4. Secondary cities in China are not comparable to those in Ethiopia
5. Secondary cities will be crucial in promoting localized production and services between national and global systems of cities.

2. Find the following words in the text.

1. a large round stone, wooden or metal post used as a support for a building or as an ornament or monument.
2. the phenomenon whereby certain places of interest are visited by excessive numbers of tourists, causing undesirable effects for the sites visited.
3. a place where people come to worship because it is connected with a holy person or event.
4. able to be reached or entered.
5. insufficient for the demand.
6. a building for religious worship, especially in religions other than Christianity.
7. an advantage or profit gained from something.
8. the process of adapting something to modern needs or habits.

3. Read the text, define the key words and write an abstract in English.

THE SYSTEMS OF SECONDARY CITIES: THE NEGLECTED DRIVERS OF URBANIZING ECONOMIES

We inhabit a world where an increasing number of people live in cities, all of which are becoming intricately connected to a global system of cities. Modern cities are part of a new economic geography which makes them increasingly dependent on fast communications, trade, finance, and investment systems to support their development. However, many parts of the global and national systems of cities are not benefiting significantly from the “new age” and economic geography of cities.

Most of these are secondary and small cities of less than a million people. Many of these are struggling to create or retain jobs; have high levels of unemployment; and find it difficult to diversify and revitalize their economies, retain capital and attract investment. Others are rapidly growing cities which do not have the capacity to manage urbanization. Many of these face a huge backlog in demand for infrastructure, housing and other essential urban services.

Globally, there are more than 2,400 cities in the world with populations between 150,000 and 5 million which could be loosely described as secondary cities. Nearly two thirds of these are located in Africa and Asia.

The term “secondary city” was popularized by Rondinelli (1983) in the 1970s. His definition characterized secondary cities as urban settlements with a population of at least 100,000 but not including the largest city in the country. His research was originally intended to help develop policies to stimulate the economies of rural areas surrounding secondary cities.

A secondary city today can have a population of several million people. In China, some secondary cities have populations of over five million. These cities are not comparable to secondary cities in Ethiopia, which have urban populations of less than 200,000. Other authors suggest secondary cities as not so much defined by hierarchy, but as part of an integrated functional system of national or global system of cities.

Secondary cities fall into three broad spatial categories:

1. **Sub-national cities** that are centers of local government, industry, agriculture, tourism and mining;
2. **City clusters** associated with expanded, satellite and new town cities which surround large urban metropolitan regions;
3. **Economic trade corridors** that are urban growth centers or poles planned or developing along major transport corridors.

Secondary cities will play an essential role as catalysts and secondary hubs in facilitating the localized production, transportation, transformation, or transfer of goods, people, trade, information, and services between sub-national, metropolitan, national, regional, and global systems of cities. They will likely demonstrate the presence of industry agglomeration and clusters; a system of

well-developed, localized supply chains and networks; a diversified economic and employment base; and a broad housing mix.

(Adapted from: *Ciudades Sostenibles. The Systems of Secondary Cities: The neglected drivers of urbanizing economies. September 13, 2018. URL: <https://blogs.iadb.org/ciudades-sostenibles/en/sec>*)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

- | | |
|-----------------|------------------|
| 1. attract | a. areas |
| 2. urban | b. jobs |
| 3. rural | c. investment |
| 4. industry | d. agglomeration |
| 5. retain | e. backlog |
| 6. facilitating | f. settlements |
| 7. huge | g. economy |
| 8. revitalize | h. production |

Activity 2. Answer the questions and rearrange them in order their answers appear in the text.

1. Which nation has secondary cities with more than 5 million population?
2. What are some of the problems that the secondary cities can have?
3. What function can secondary cities have?
4. What do modern cities rely on?
5. What major geographic categories can secondary cities be divided into?
6. Who made the term “secondary city” popular?

Discussion

- Give examples of secondary cities in your country and decide to what category it belongs.
- What do they lack in development and how can they be supported?

GRAMMAR EXERCISES. ADJECTIVES WITH -ING AND -ED

1. Correct any mistakes with the adjectives in bold in these sentences. Three adjectives are correct.

0. I get really irritating with people who use mobiles in the cinema irritated.

1. My brother-in-law just phoned with some *excited* news: my sister's just had a baby! _____

2. Remember that book you lent me? I hate to say it, but it was so *boring* I couldn't finish it. _____

3. I went for a walk by the river with Sally. You'll be *amusing* to hear I managed to fall in. It was so embarrassing! _____

4. You look a little *confusing*. Can I help? _____

5. Isn't it *astonished* how *exhausting* it can be travelling around the city at rush hour? _____

6. I was *disappointing* by the attitude of the shop assistant when I took my broken computer back. _____

7. Do you think people are *motivating* mostly by money or is it more complicated than that? _____

2. For questions 1–8, read the text below. Use the word given in capitals at the end of some of the lines to form a word that fits in the gap in the same line. There is an example at the beginning (0).

Invasion of the snails

The US state of Florida is fighting an (0) *invasion* of gigantic snails! (INVADE). Over 1,000 of the huge molluscs are being trapped weekly in the area around Miami. The (1) (MASS) African land snail, which can grow to an (2) (EXCEPTION) size – sometimes as big as a rat – represents a (3) (CONSIDER) danger to local plant life. Experts met last week in Gainesville, Florida, for the Giant African Land Snail Science Symposium, to try and discover the most (4) (SUCCEED) ways to eliminate the snails (5) (SAFE). A spokesperson said investigators were attempting to learn where the snails had come from originally, though an (6) (RESPONSE) pet owner is the main suspect. Scientists are (7) (CONCERN) that Florida will experience the same problems as some Caribbean countries, where snails crossing the roads cause accidents and make sidewalks covered in slime (8) (DANGER) to walk on.

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 11



Pre-text exercises

1. In pairs, discuss why the following might be effective ways to measure the importance of looking after the environment.

- Volume of carbon in the air
- Centimetres of increase in ocean levels
- Dollar value of natural resources
- Degrees of change in global temperatures

2. Complete the definitions using these words taken from the article. Find the key words in the article to see them used in context. They appear in the same order.

1. relating to money and financial matters, especially taxes.
2. valuable resources that are not money, such as houses.
3. a change in something, for example, in someone's ideas or opinions.
4. participating in activities to achieve political or social change.
5. the variety of plant and animal life types in a particular region.
6. something extremely important and urgent.
7. substances, especially gases, that go into the air.
8. able to quickly become healthy or strong again after a problem.
9. calculate the size of something when not all the facts are available to you.
10. work that involves doing many calculations.
11. the factors affecting the world's weather so that it is becoming warmer.

3. Read the text, define the key words and write an abstract in English.

CAN WE SAVE THE ENVIRONMENT WITH ECONOMICS?

Why we need to put a number on our natural resources.

People find it easier to consider nature worth protecting when we assign a financial value to it.

Economists at the mighty International Monetary Fund used to joke that the institution's acronym should actually stand for "It's Mostly Fiscal." No wonder: the IMF is (in)famous for fretting about countries' budget plans, tax policies, growth strategies and capital flows. Last week, however, the IMF's managing director Kristalina Georgieva discussed how some of its employees have branched into an unlikely pastime: whale-watching. "We have economists studying whales," she told a panel organized by the Paulson Institute, which often champions environmental causes. One of these economists is Ralph Chami, an IMF official who has studied how whales sequester CO₂, removing it from the atmosphere, as part of an IMF analysis of the value of natural capital — the world's stock of natural resources. (Whales sequester 33 tonnes of CO₂ over a lifetime.) Does this matter? Some mainstream economists might mutter about mission creep. However, the initiative is worth noting. It reveals a subtle but striking shift in the global green debate that is now underway. In the past few years, the world has woken up with a vengeance to the problem of carbon emissions, thanks in part to activists such as Greta Thunberg, who has inspired a generation to campaign against fossil fuels.

Nevertheless, now it is part of efforts to expand the focus of this activism from a narrow debate around emissions towards a wider one around biodiversity and natural capital. Quite apart from the moral and spiritual imperative behind the drive to protect nature, people argue that there are two additional points: destroying nature hurts the economy and makes it harder to combat the emissions we are now trying to reduce. Conversely, protecting nature makes the planet more resilient to environmental shocks and negative changes. With that messaging in mind, the Paulson Institute and the IMF are now scrambling to put some tangible numbers around the contribution of natural capital.

A report from the Paulson Institute, the Nature Conservancy and others suggests that 30-50 percent of the planet's species will vanish by the middle of the century without action — and that the bill to prevent this would be \$600bn - \$820bn a year. It also points out that the World Economic Forum has guesstimated that \$44tn — about half — of the global gross domestic product depends on natural capital, while the value of forests in terms of carbon capture alone could be \$100tn.

Some observers might argue that affixing dollar signs to nature is ridiculous, not to mention immoral, since it implies that the only things that matter are those that carry a price. In any case, these numbers entail so much guesswork that they are apt to seem fantastical. However, Paulson insists that

number crunching is needed: “The problem is that people assume that natural capital is a free good, and if you don’t put a value on it, they will value it as zero.” What is really interesting is that this new drive to quantify the issue reflects another imperative: the topic of biodiversity might yet turn into a tool that could forge some modicum of consensus on “green”. While the issue of climate change and carbon emissions tends to be politically polarizing, particularly in countries such as the US, talking about biodiversity is often less contentious. Some Republicans, for example, find it far easier to embrace policies labelled as “environmental protection” than “climate change”.

So too, on the international stage. Discussions about climate change often spark a blame game between countries such as the US and China since they raise questions about who is responsible for emissions — previous high polluters or nations busily developing now — and thus who should curb them most aggressively.

(Adapted from: Business news lessons. Can we save the environment with economics? URL: <https://docplayer.net/205509513-Business-news-lessons-can-we-save-the-environment-with-economics.html>)

Glossary

tangible (adj) — essential and noticeable

mitigation (n) — a reduction in the harmful effects of something

orthodoxy (n) — an idea or practice that most people accept as being correct or usual

Comprehension check

Activity 1. Key language

Write the correct verb next to its definition. You can look back at the article to see the words in context.

1. to develop a successful relationship, especially in business or politics, with another country, organization, or person _____

2. to damage something so severely that it no longer exists or can never return to its normal state _____

3. to control or limit something that is harmful _____

4. to take action in order to try to stop something bad from happening or a bad situation _____

5. to publicly support or defend a set of beliefs, political aims, or a group of people _____

6. to start doing something new or different _____

7. to completely accept something such as a new belief, idea, or way of life _____

8. to make something happen, especially something involving violence or angry feelings _____

9. to try to achieve political or social change by persuading other people or the government to do something_____

10. to hurry or try very hard to get something, often competing with other people_____

Activity 2. Are these statements true (T) or false (F) according to the article? Correct any that are false.

1. When we give nature a monetary value, people are likelier to think it is valuable enough to protect.

2. The IMF is only concerned with countries' budget plans and tax policies.

3. IMF official Ralph Chami has investigated how whales store CO₂.

4. A whale's lifetime sequestration of CO₂ is 30 tonnes.

5. The world has only recently woken up to the problem of carbon emissions.

6. The focus of environmental activism is only on carbon emissions.

7. Damage to the environment only harms the economy.

8. When nature is protected, the world becomes more resistant to environmental shocks.

9. The annual cost to stop the extinction of 30–50 % of all species on Earth would be between \$600–\$820 billion.

10. The value of woodlands for carbon sequestration alone might reach \$44 trillion.

Activity 2. Choose the best answer for the questions from the options given.

1. What have economists from the IMF recently been studying?

A. activism

B. whales

C. politics

2. What is "natural capital"?

A. the value of the world's natural resources

B. the greenest place on Earth

C. the money that the environment could generate

3. How do Henry Paulson and Kristalina Georgieva want to change environmental activism?

A. They want activists to stop talking about carbon emissions.

B. They want activism to focus more on biodiversity and natural capital.

C. They want to end it.

4. How much is it estimated to cost in order to save 30-50 percent of the Earth's species?

A. \$100tn

B. \$44tn

C. \$600bn-\$820bn

5. What could help political parties agree on green issues?

A. talking about “environmental protection” rather than “climate change”

B. talking less about biodiversity

C. investigating who is responsible for emissions

6. Which of the following statements is Henry Paulson’s opinion:

A. He thinks that people can agree on the causes of climate change.

B. He thinks people don’t care enough about the storms and forest fires happening now.

C. He thinks people want to work together to prevent the natural disasters happening now.

Activity 3. In pairs, ask and answer the questions below using the verbs from above.

- How do you forge new business relationships?

- Which new areas do you think your company should branch into?

- What is the best way to combat negative behaviour in a team?

- How should a company curb any excessive spending?

Discussion questions

- Do you think it is possible to put a price on nature?

- How can talking about “environmental protection” be more effective than talking about “climate change”?

(From: Business news lessons. Can we save the environment with economics? URL: <https://docplayer.net/205509513-Business-news-lessons-can-we-save-the-environment-with-economics.html>)

GRAMMAR EXERCISES. VERB PATTERNS

1. Describe each situation using They + verb + (with)+ each other. Choose from the verbs in the box.

agree	blame	compete	disagree	miss	resemble	respect	trust
-------	-------	---------	----------	------	----------	---------	-------

1. “We look alike”: *They resemble each other.*

2. “You were right!” _____

3. “I always like to be better than you!” _____

4. “I admire your character.” _____

5. “I believe that you’re honest.” _____

6. “I’m sorry you’re not here.” _____

7. “It was your fault” _____

8. “You were wrong!” _____

2. Complete the participle clause at the start of each sentence using the information in brackets.

1. Swimming strongly, she was able to cross the river in just a few minutes. (*She swam strongly.*)

2. _____ in oil, Cohn got out from under the car. (*He was covered in oil*)

3. _____ in Latin, the two letters were sent in 1406 to the French king. (*They were written in Latin.*)

4. _____ them twice this year already, Bayern Munich are favourites to win again against Real Madrid. (*They have beaten them twice this year already.*)

5. _____ how to use the software, I found it easy to design my own website. (*I was shown how to use the software.*)

6. _____ eaten anything for hours, I was starting to feel a bit faint. (*I hadn't eaten anything for hours.*)

7. _____ her glasses, she began to read her speech. (*She put on her glasses.*)

8. _____ Portuguese, I found travelling in Brazil difficult. (*I can't speak Portuguese.*)

(*From: Hewings M., Haines S. Grammar and Vocabulary for Advanced. Cambridge University Press, 2015. 278 p.*)

UNIT 12



Pre-text exercises

1. Answer the following questions.

1. What economic impacts of climate change can you think of?
2. What is *market adaptation*?
3. How can the economy adapt to climate change?
4. Does the underlined sentence in the text below mean the economy will improve or decline?
5. Name some of the Southern states of the USA.
6. What does *climate migration* mean?
7. What industries are directly impacted by climate change?

2. Find the following words in the text.

1. to be important or significant.
2. perform in a particular situation or over a particular period.
3. accept or admit the existence or truth of.
4. make structural changes to.
5. say or estimate that something will happen in the future.
6. act in such a way as to affect each other.
7. a lecturer responsible both for teaching undergraduates and conducting research.
8. a new method, idea, or product.

3. Read the text, define the key words and write an abstract in English.

TRADE AND MIGRATION WILL AFFECT HOW STATES AND COUNTRIES ADAPT TO CLIMATE CHANGE

When people talk about adapting to climate change, they often refer to innovations — a new crop variety that can withstand more extreme heat or building underwater pumps to cool coral reefs. However, Gary Lyn, an assistant professor specializing in international trade and economic geography at Iowa State University, says trade, migration, and job options will also affect how individual states and countries fare over the next 100 years.

Lyn is part of a research team that developed an economic model to better understand these three market adaptations. He co-authored a working paper and presented its findings on October 28 at a joint seminar with Washington University St. Louis and the Federal Reserve Bank of St. Louis.

“Most models do not take into consideration that geographic locations are linked in particular ways through trade and migration and that people may change jobs,” said Lyn. “Our model shows that these linkages really matter when trying to think about the economic impacts of climate change, and we should not ignore them.”

The researchers’ model predicts the global economy will take more than a 20 % hit by 2100. Countries with colder regions will be better positioned to buffer some of the impacts. In the U.S., migration will shift from the south — states like Texas, Arizona, and California — to the Upper Midwest and Northeast. Michigan, Wisconsin, and Minnesota are expected to see the largest increases as people seek refuge from higher temperatures.

“Florida is predicted to get unbearably hot in 100 years, but people do not have to stay there. They can move, which is a form of adaptation,” said Lyn. The model also shows that the Upper Midwest and Northeast will play a much more significant role in producing goods in the U.S. as jobs, especially in agriculture and manufacturing, shift north. Southern states are expected to experience economic losses with this change and rely more heavily on trade over time.

States with more options for people to change jobs if they work in an industry directly impacted by climate change may be able to slow migration and economic losses. Lyn says the model indicates trade between states will have a bigger role than migration and job switching in the U.S. economy as it adapts to climate change, but the “combination of all three is greater than the sum of their parts.”

The researchers acknowledge that their model is working within certain limitations. Innovations or new policies in the next 100 years could alter the climate change trajectory or help communities adapt in ways that are impossible to predict now. Nevertheless, by isolating the impacts of certain factors and seeing how they interact, the researchers show that trade, migration, and job options need to be part of the discussion.

(Adapted from: *Phys.org. Trade and migration will affect how states and countries adapt to climate change. November 1, 2022. URL: <https://phys.org/news/2022-11-migration-affect-states-countries-climate.html>*)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

- | | |
|-------------------|--------------------|
| 1. withstand | a. findings |
| 2. climate change | b. variety |
| 3. experience | c. the impact |
| 4. crop | d. paper |
| 5. shift | e. economic losses |
| 6. buffer | f. north |
| 7. working | g. trajectory |
| 8. present | h. extreme heat |

Activity 2. Are the statements true or false? Rearrange them in order their answers appear in the text.

1. Migration in the U.S. will shift from the South to the Upper Midwest and Northeast.
2. The Upper Midwest and Northeast will play a minor role in producing goods in the U.S.
3. The global economy will take a 20 % hit by 2100.
4. Lyn's research team developed an economic model to understand the impact of climate change on trade, migration, and job options.
5. Gary Lyn is an assistant professor at Washington University St. Louis.
6. Innovations are the only way to adapt to climate change.
7. States with more options for people to change jobs may be able to slow migration and economic losses.
8. Countries with colder regions will be worse off than countries with warmer regions.
9. Trade between states will have a more significant role than migration and job switching in the U.S. economy as it adapts to climate change.
10. Florida is predicted to get unbearably cold in 100 years.

Activity 3. Answer the questions.

1. What factors besides innovations will affect how states and countries fare in the face of climate change?
2. What is the economic model developed by Lyn's research team meant to understand better?

3. How do geographic locations impact the economy regarding climate change?

4. Which U.S. states are expected to see the most significant increases in migration as people seek refuge from higher temperatures?

5. Why might southern states experience economic losses due to climate change?

6. How might job options help slow migration and economic losses in industries directly impacted by climate change?

7. Which factor will be more prominent than migration and job switching in the U.S. economy as it adapts to climate change?

8. What limitations does the research team acknowledge about their model?

Discussion.

- How does trade matter in the context of adapting to climate change?
- In what ways can migration alter a country's ability to cope with climate change?
- Why is it important to acknowledge the role of job options in climate adaptation?
- What innovative solutions have been proposed for adapting to climate change?

GRAMMAR EXERCISES. CONDITIONALS

1. For questions 1-8, read the text below and think of the word which best fits each gap. Use only one word in each gap. There is an example at the beginning (0).

Life in Spain

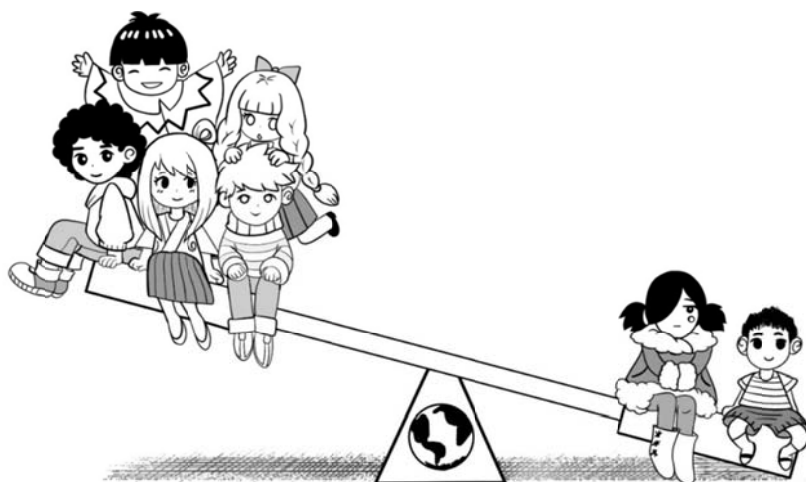
Spain is a vast and varied country, and its people have (0) _____ *few* things in common (1) _____ for their friendliness, sociability, and hospitality. Spaniards have a reputation for not letting work get in the way of enjoyment, and for spending as (2) _____ time and energy as possible on their social lives. Their frequent use of the word *manana* – leave things (3) _____ tomorrow – is seen as being characteristic of this tendency. While this may be a stereotypical view of Spanish life, it is true that many people organize their working hours (4) _____ as to make the most of their free time. Spaniards are sociable (5) _____ that they like nothing better than spending time with friends and relatives. Eating together is an important part of social life, and large groups often (6) _____ up for dinner. Not (7) _____ Spain is thought to have more restaurants per head of population than any (8) _____ European country.

2. Underline the correct answer(s) in (b) to make a second sentence with a meaning as close as possible to the sentence in (a).

1. a. With a student card you can get a discount at the bookshop.
b. If you *will have* / *have* a student card you can get a discount at the bookshop.
2. a. I didn't know you were a vegetarian, otherwise I wouldn't have cooked lamb.
b. If *I'll know* / *had known* you were a vegetarian, I wouldn't have cooked lamb for dinner.
3. a. By using more efficient light bulk, there could be a 5 % reduction in electricity consumption.
b. If we *used* / *have used* more efficient light bulbs, there could be a 5 % reduction in electricity consumption.
4. a. You can borrow my e-reader as long as you promise to bring it back soon.
b. If you *promise* / *promised* to bring it back soon, you can borrow my e-reader.
5. a. I don't have a reliable car, so I probably won't drive to France.
b. If I *had* / *have* a reliable car I will I would probably drive to France.
6. a. I wasn't promoted, so I didn't have to move to our head office in Madrid.
b. If I *am promoted* / *had been promoted*, I had to I would have had to move to our head office in Madrid.
7. a. You'll have to leave the house by 7.00 to catch the 8.30 train.
b. If you *leave* / *will leave* the house by 7.00, you will be able to catch / are able to catch the 8.30 train.
8. a. I didn't study hard, and that's why I have such a poorly paid job now.
b. If I *studied* / *had studied* harder, I won't have/ I wouldn't have such a poorly paid job now.

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

UNIT 13



Pre-text exercises

1. Answer the following questions.

1. How many people are there in the world?
2. Do you see yourself to be in the minority or the majority in such categories as education and income?
3. What global issues are you aware of?
4. What is usually meant by “global village”?
5. What global issues can be connected to the idea of a world being a “global village”?
6. What is the proportion of men and women in the world?
7. Do most people live in the northern or southern hemisphere?
8. What percentage of people worldwide live on less than £3 a day?
9. How many Internet users are there in the world?

2. Find the following words in the text.

1. give support, confidence, or hope to someone.
2. to ignore or treat it as if it is not important or serious.
3. very intense and hard to deal with, something that makes people worried and stressed out.
4. an area in or near a town where poor people live in tiny houses built of wood, metal and cardboard.
5. to become smaller, especially when washed in too hot water.
6. be more numerous than something.
7. by means of or with respect to numbers.
8. existing only in small numbers and therefore valuable or exciting.

3. Read the text, define the key words and write an abstract in English.

THE WORLD CAN BE OVERWHELMING

There are 8 billion people on the planet today, a number so vast as almost unimaginable. In a world this complex, it is easy to shrug off the global issues and focus on our own lives and what is in front of our faces.

Back in 2021, I was thinking about a different way to approach this. What if our global population could be shrunk down to a size that we can all get our heads around? I was drawn to the idea of the world as a “global village”, which is the sort of phrase you often hear without thinking much about, and I wondered: what if the whole world was an actual village?

A village of 100 people. I think most of us can get to grips with that. If each of those 100 residents represents 80 million people in the real world, we have a model that is simple and numerically easy to scale. That was the beginning of what became “If the World Were 100 People”, the book for which the illustrator Aaron Cushley and I have amazingly just won the Royal Society’s young people’s book prize.

I began with the basics. How many men and women are there? It is about 50/50. And how many children? Roughly 26: one in four of us is a child. About 750 million people live in Europe and 4.8 billion in Asia, which is valuable data, but the numbers make my head swim. Yet I can grasp the idea that 10 of our villagers are European, five are North American, while 60 are Asian. More importantly, children can too.

How many of us have brown, blond or red hair? What are the most common eye colours? If, like me, you grew up in Ireland, you may think the world is full of people with red hair and green eyes; but it turns out we are as rare as unicorns, globally speaking. People in Britain may think blue eyes are as common as brown, but our brown-eyed global villagers outnumber them nine to one. Facts like these, universal and immediate, can help children realise that the world is much bigger than the place where they find themselves. And not just children.

There is something about numbers that prompts all sorts of questions in a child’s mind, encouraging a spirit of inquiry. Simple questions include: why do most of our villagers (75) live in the northern hemisphere? Because it is where most of the land is. Tough questions, too – most children who will have a chance to read my book have a roof over their heads and a bed to sleep in, but the terrible truth is that 20 of our villagers do not have a safe home.

The word “safe” here needs a little unpacking. An unsafe home has not been zoned or planned and is not legal. It may not have electricity or clean, running water. One in five of us live in these shantytowns, favelas and city slums, and theirs is the district of our village that most children and adults do not see.

More alarming is that 89 of us have enough food, while 11 do not. Think about that – 11 people in our village are at risk of starvation or starving. At the same time, one-third of the food we produce goes to waste.

The solution may seem simple for a child: use the over-produced food to feed the hungry 11 rather than throw it away. As adults, we know the complexity of the factors that create this situation, and sometimes that complexity allows us to forget how grotesque it is: the stark simplicity of the numbers reminds us.

If this sounds heavy, let me reassure you that there are many reasons to be cheerful. Take technology, for example. In the 34 years since the invention of the world wide web, 59 of our villagers have gained internet access, while it is estimated that the number will rise to 90 by the time this decade is out. Or take literacy. Two hundred years ago, only 12 % of adults worldwide could read and write; today, 86 of our adult villagers are literate.

Another tricky question, left till last: is there enough money for everyone? The numbers are still breathtaking even when we know they are coming: 10 lucky inhabitants own 82 % of all the wealth in the village, meaning the other 90 own the remaining 18 % between them. In total, 23 live on less than £3 a day. Just knowing these bare facts should prompt questions in the classroom about how this can be, whether it is fair, and what can be done about it.

Ultimately, this is a way to introduce children to a different way of thinking about the world. Numbers, data and maths underpin the writing. Adults use numbers all the time. We collect numbers, analyze, interpret and present them as data: the science we call statistics. My book shows children that when we interrogate numbers and data, information and stories unfold that tell us so much about our world.

(Adapted from: McCann J. The world can be overwhelming for children – that's why I've reduced it to 100 people. The Guardian: March 13, 2023. URL: <https://www.theguardian.com/commentisfree/2023/mar/13/world-children-100-people-scary-statistics>)

Comprehension check

Activity 1. Key language

Match the words in the left-hand column with those in the right to make expressions from the text.

1. unsafe
2. city
3. at risk of
4. valuable
5. easy to
6. vast
7. grasp
8. over-produced

- a. data
- b. starvation
- c. the idea
- d. food
- e. number
- f. slums
- g. home
- h. scale

Activity 2. Are the statements true or false? Rearrange them in order their answers appear in the text.

1. The book “If the World Were 100 People” received International Dublin Literary Award.
2. Red hair and green eyes are common globally.
3. There are more people in Asia than in Europe and North America combined.
4. Ten inhabitants own 90 % of all the wealth in the village.
5. The idea of the world as a “global village” is often mentioned.
6. The author’s book is about a different way of thinking about the world.
7. Over half of the villagers have gained internet access since the invention of the world wide web.
8. 20 % of the food produced in the world goes to waste.
9. One in four people in the world is a child.
10. Twenty of the global villagers do not have a safe home.

Activity 3. Answer the questions.

1. What is the concept behind “If the World Were 100 People”?
2. How does the author use a village of 100 people to make global issues more understandable?
3. What are some basic demographic facts about the world that can be easily understood using the village model?
4. Why does the author believe that numbers and data can encourage inquiry in children’s minds?
5. What are some examples of positive trends highlighted in the book?
6. What is the distribution of wealth like in the village, and how does it compare to the real world?
7. How many villagers live in unsafe homes, and what does this mean?
8. How many villagers do not have enough food, and what percentage of food produced goes to waste?
9. What questions might reading this book prompt in a classroom setting?
10. What is the main message or goal of “If the World Were 100 People”?

Discussion.

- If you could shrink the world’s population to a more manageable size, how many people would be ideal?
- How do you usually react when faced with global issues that seem too big to tackle? Do you tend to shrug them off or try to find ways to encourage change?
- Have you ever visited a shanty town or heard about one in the news? What was your impression of it?
- In what ways do you think being outnumbered can affect an individual or group?

- Have you ever felt like your own problems were insignificant compared to the larger issues facing the world? How did you deal with those feelings?

GRAMMAR EXERCISES. THE PASSIVE

1. Complete these text with the appropriate form, active or passive, of the verb.

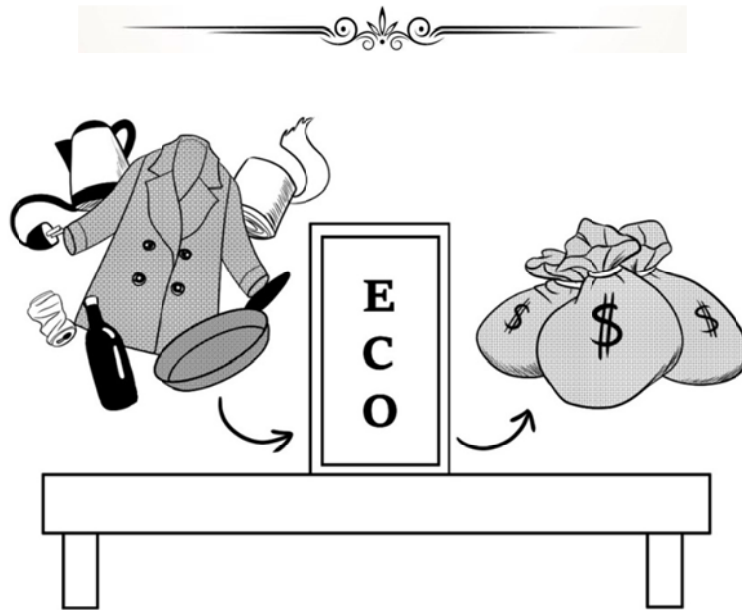
The first mobile phones (1) _____ (construct) in Stockholm in the 1950s — but were not very mobile! They could only (2) _____ (use) in cars because the receiver and transmitter (3) _____ (weigh) over 40 kilos and had to (4) _____ (carry) in the boot. But technology (5) _____ (advance) so quickly that by the 1990s mobiles (6) _____ (hold) in the hand and people talking (7) _____ (become) a familiar sight. Of course, not everyone welcomed mobiles, and in the mid-1990s their use (8) _____ (ban) in many schools. Even recent research which (9) _____ (suggest) that prolonged exposure to emissions from mobiles might be a health hazard (10) _____ (not discourage) their use, and analysts now (11) _____ (predict) that by 2025, 95 % of all electronic communication (12) _____ (conduct) by mobile phone.

2. Correct any mistakes with the passive in the sentences. Some sentences are correct.

0. I think my car was *make* in Sweden. _____ *made*
1. This part of Paris, which is known as the Latin Quarter, is famous for its intellectual life. _____
2. The juice is squeezed from the oranges and filtered before it packed in cartons. _____
3. The police would like to speak to these two men, who were caught on camera leaving the shop. _____
4. Archaeologists think the buildings may have built by the Romans in the fifth century. _____
5. Ellie's photos of the school play have posted on the school website. _____
6. Why didn't you lock your bike? It can have been stolen! _____
7. We bought the house last year. It had previously own by a Spanish family. _____
8. I was in a film once, but my part cut and you can't see me anywhere on the screen. _____
9. Mikey has allergic to bees ever since he has been bit by one as a young boy. _____

(From: Brook-Hart G. *Complete First Second Edition*. Cambridge University Press, 2014. 200 p.)

UNIT 14



Pre-text exercises

1. What do you know about Sweden? Choose the best answers.

1. Sweden is a *monarchy* / *republic*.
2. Sweden is a *unitary state* / *federation*.
3. The country is divided into 20/50 counties.
4. The official language of Sweden is *English* / *Swedish*.
5. It is a *EU member* / *non-member state*.

2. Find the following words in the text.

1. a person who has defeated or surpassed all rivals in a competition, especially in sports.
2. a person who lives somewhere permanently or on a long-term basis.
3. an insoluble substance that is the main constituent of plant cell walls and vegetable fibers such as cotton. It is a polysaccharide consisting of chains of glucose monomers.
4. a place to dispose of refuse and other waste material by burying it and covering it with soil, especially as a method of filling in or extending usable land.
5. a system or organization in which people or groups are ranked one above the other according to status or authority.
6. a city or town that has corporate status and local government.
7. the envelope of gases surrounding the earth or another planet.
8. relating to or denoting a metal other than iron or steel.

3. Read the text, define the key words and write an abstract in English.

HOW SWEDEN TURNS ITS WASTE INTO GOLD

1. Sweden, one of the wealthiest countries in Europe, has become the absolute champion in waste recycling. It buys garbage in other countries, and its residents do not hesitate to wear old things and take bottles to collection points.

According to the local waste management association Avfall Sverige, more than 99 % of household waste is recycled in Sweden, one of the world's highest rates. The waste recycling system in Sweden works so well that almost all developed countries that care about their own ecology take an example from it.

2. Garbage is an expensive pleasure in another sense: without recycling it, we send to landfills not only cellulose and plastic, which are worth something, but also non-ferrous metals and even gold. In 2015, Apple mined almost a ton of gold and about three tons of silver from some iPhones and iPads, handed over by their owners in exchange for newer devices. The Swedes have learned how to turn waste into energy efficiently. Almost half of the waste in the country is incinerated – but only after careful sorting. Plastic, paper, and food waste are recycled or biogas is produced. Recovery of valuable qualities of waste is a priority. Above all, the Swedes seek to reuse, recycle or turn them into a source of energy. Landfill occupies the last place in the hierarchy – only the garbage that nothing more can be done from it ends up in the landfill.

3. What Sweden does with its waste: recycles – 50.6 %, burns for energy production – 48.6 %, sends to landfills – 0.8 %. Everyone is involved in waste management. The areas of responsibility are clearly separated. Ordinary Swedes are responsible for sorting household waste and delivery to the nearest collection points. Residents of the country separately collect paper, plastic, metal, glass, and batteries. Municipalities are responsible for all collection of urban waste produced not only by ordinary citizens, but also by restaurants, shops and offices. In addition, the city is engaged in its transportation to processing plants.

4. Each municipality has a detailed waste management action plan. It spelled out the details of how it intends to reduce the amount of waste and the danger they pose. Preparation for waste recycling is also part of the municipal responsibility. Manufacturers are responsible for the disposal of packaging as well as end-of-life products, including electrical goods, tires, automobiles, batteries, and pharmaceutical products. This encourages them to develop products that are easier to recycle and contain fewer substances harmful to the environment.

5. The Swedes themselves admit that burning garbage is not ideal: it takes more energy and resources to burn an old thing and make a new one from scratch than to recycle it. In addition, even in the most environmentally friendly way, burning garbage will still release CO₂, a greenhouse gas that causes climate change, into the atmosphere.

Therefore, the population is strongly encouraged to sort and recycle waste. We can add the growing popularity of all kinds of sharing services,

where instead of buying things and proudly owning them alone (and bearing all the costs alone), people share everything they can, from cars and housing to skis and bicycles.

In early 2016, Sweden even launched the #sharewear hashtag for sharing clothes: just take a picture of a boring thing you are ready to give away and find a new owner. To support the project, the most fashionable Swedish designers have released special collections, items you can get for free – provided that you pass them on in a week.

A bright green future in Sweden is the so-called circular economy. Traditional “linear” production now, in fact, takes resources from the environment and eventually returns them there, but already as garbage in landfills. A circular economy hopes to make a donut out of this pipe: recycle all or almost all waste, reuse this raw material to produce things or energy – and so on ad infinitum, as long as it works.

(Adapted from: Innovative Techs. How Sweden turns its waste into gold. You-Tube: November 5, 2022. URL: https://youtu.be/p71xuG_dP7M)

Comprehension check

Activity 1. Key language

Match (1-10) with their definitions (a-j).

- | | |
|----------------|-----------------------------|
| 1. drawback | a. rapid, quick |
| 2. fast | b. reprocess |
| 3. to discover | c. disadvantage |
| 4. global | d. to make known or visible |
| 5. disposal | e. city |
| 6. incinerated | f. the weather conditions |
| 7. recycle | g. dumping |
| 8. municipal | h. burned |
| 9. hierarchy | i. worldwide |
| 10. climate | j. social order |

Activity 2. Choose the most suitable heading from the list (A-G) for each part (1-5) of the text. There are two extra headings, which you do not need to use.

- A. What the Swedes do with their rubbish.
- B. Disposal of packaging.
- C. Our expensive waste.
- D. A champion in waste recycling.
- E. Planning waste management.
- F. The place of landfills in the economy.
- G. Drawbacks of rubbish burning.

Activity 3. For statements (1-10) choose “True” if the statement is true according to the text, “False” if the statement is false:

1. Sweden is one of the wealthiest countries in Europe.
2. Other countries sell their rubbish to Sweden.
3. 100 % of rubbish is recycled in Sweden.
4. Municipalities are responsible for all urban waste collection produced only by ordinary citizens.
5. Residents of the country separately collect paper, plastic, metal, glass, and batteries.
6. Almost half of the waste in the country is incinerated.
7. Burning garbage is ideal: it does not take much energy.
8. People are encouraged to share things.
9. CO₂ does not cause climate change, does it?
10. The slogan of the circular economy is: recycle all or almost all waste.

Activity 4. For questions (1-5) choose the correct answer (a, b, c or d).

1. Sweden has become the absolute champion in _____
 - a) irrigation
 - b) waste recycling
 - c) pollution control
 - d) population growth
2. It buys _____ in other countries
 - a) fertilisers
 - b) drinking water
 - c) minerals
 - d) garbage
3. Waste management action plan includes the details of _____
 - a) the suppliers
 - b) how much it will cost
 - c) logistics
 - d) how it intends to reduce the amount of waste the suppliers
4. Burning garbage will still release _____
 - a) carbon monoxide
 - b) greenhouse gas CO₂
 - c) nitric acid
 - d) CFCs
5. The population is strongly encouraged to _____
 - a) save the money
 - b) sort and recycle waste
 - c) burn their rubbish
 - d) share their rubbish with neighbours.

GRAMMAR EXERCISES. PARTICIPLE AND INFINITIVE CLAUSES

1. Read this extract from a blog about a visit to London. Rewrite the underlined parts, using a participle clause, to-infinitive or reduced clause.

(1) While I was in London I just had to go to the British Museum. There's so much to see and I only had time to spend a few hours there. First, I went to the collection of clocks and watches. (2) When I saw the pocket watches, I was reminded of the old watch my grandfather used to wear. I don't think I ever saw him without it. Then I went to the Money Gallery. They've got an incredible collection of coins (3) and some of them are over 2,000 years old. Next stop was the Chinese collection. (4) Because I'd lived in Hong Kong for so many years, I was very interested in this. Some of the jade objects were stunning. (5) After I looked at the Chinese collection, I had hoped to see the Mexican collection. Unfortunately, (6) when I got there I found that it was closed. (7) Because I'd spent the whole morning walking around the museum, I decided that I wanted to do something very different in the afternoon. So I went to the London Eye (8) in order that I could get a bird's-eye view of the city. (9) When they are looked at from the top of the Eye, some of the biggest buildings appear quite small — even St Paul's Cathedral, across the river. After that (10) because I was tired from all the walking I went back to my hotel room and slept for a couple of hours (11) before I went out to have dinner.

2. For questions 1-8, read the text below. Use the word given in capitals to form a word that fits in the gap. There is an example at the beginning (0).

(1) Water is a precious resource

Access to a clean (0) **RELY...** *reliable* water supply is essential to our survival. (1) **COVER...** over 70 percent of the earth's surface, water is apparently (2) **PLENTY** But in fact, less than 1 percent of all the water on earth is accessible for human use in lakes, rivers and reservoirs. (3) **NEW** by rain and snowfall, this water supply is available to us as a finite but (4) **SUSTAIN** resource. As the demand for access to this limited supply increases, it is thought that as many as 3.5 billion people could experience water (5) **SHORT** by 2025.

A worldwide water management plan is vital. An International campaign must be introduced both to raise public (6) ... **AWARE** of the importance of conserving and (7) **CYCLE** this precious resource. Furthermore, industry and agriculture must be made to reduce their water (8) **CONSUME** Only in this way, can water-related international conflicts be avoided.

(From: Hewings M., Haines S. *Grammar and Vocabulary for Advanced*. Cambridge University Press, 2015. 278 p.)

FINAL TEST

1. Circle the correct item (10 marks)

1. Water _____ at □ 100 Celsius.
A. is boiling B. boils C. has boiled D. has been boiling
2. My aunt is always ready to _____ an ear when I have a problem.
A. borrow B. lend C. offer D. give
3. Today in Havana, it will be hot, dry and _____,
A. snowy B. rainy C. sunny D. freezing
4. If you _____ careful, you will fall.
A. won't be B. will be C. aren't D. are
5. Ben is _____ with the old part of the city.
A. familiar B. eager C. expert D. knowledgeable

2. Fill in the correct word (10 marks)

1. The ozone _____ is slowly being destroyed by pollution.
2. She is _____ old to play in the children's park.
3. People live longer today _____ they used to.
4. Don't forget to do _____ your coat. It's very cold outside.
5. Everyone should help protect our natural _____.
6. Fossil _____ such as oil, are not renewable sources of energy.
7. Tennis is _____ exciting than golf.
8. I was so nervous, I had _____ in my stomach.
9. The rainforest is home to many rare _____ of birds.
10. We'll go to the beach _____ it rains.

3. Complete the second sentence using the word in bold. Use two to five words including the word given. Do not change the word given (10 marks)

1. If we don't protect the environment, many animals will die.
unless Many animals will die _____ environment.
2. He managed to stick to his diet for a whole month.
Succeeded He _____ his diet for a whole month.
3. I couldn't eat the pizza because it was very hot.
too The pizza was _____ eat.
4. He didn't make any noise as he entered the house.
without He entered _____ any noise.
5. I'll make some sandwiches so that you can eat later on.
case I'll make some sandwiches _____ to eat later on.

4. Read the text. If a line is correct, put a tick. If it has a word which should not be there, write this word on the line (5 marks)

1. Museo del Prado in the Spain is one of _____
2. the world's most largest museums. Every room is _____
3. filled with priceless works of art. Here you will _____
4. find everything from ancient Egyptian mummies, _____
5. to modern sculptures they made of wire and glass. _____

5. Fill in the correct word derived from the word in bold (5 marks)

1. Pandas are considered to be a(an) _____ species. **DANGER**
2. She has always had (a) _____ with China's culture.
FASCINATE
3. We must try to use _____ sources of energy. **ALTERNATE**
4. There are many _____ birds and flowers in the rainforest.
COLOUR
5. One of the reasons for _____ warming is the hole in **GLOBE**
ozone layer.

APPENDICES



APPENDIX I

Table of irregular verbs

Infinitive	Past Simple	Past Participle	Translation
1	2	3	4
Be	was, were	been	Бути
Beat	beat	beaten	Бити
become	became	become	Ставати
Begin	began	begun	Починати
Bleed	bled	bled	Кровоточити
Blow	blew	blown	Дути
Break	broke	broken	Ламати
Bring	brought	brought	Приносити
Build	built	built	Будувати
Burn	burnt	burnt	Горіти
Burst	burst	burst	Вибухати
Buy	bought	bought	Купувати
Catch	caught	caught	Зловити, піймати
choose	chose	chosen	Вибирати
Come	came	come	Приходити
Cost	cost	cost	Вартувати
Creep	crept	crept	Повзати
Cut	cut	cut	Різати
Do	did	done	Робити
Draw	drew	drawn	Малювати, тягнути
dream	dreamt	dreamt	Мріяти, дрімати
Drink	drank	drunk	Пити
Drive	drove	driven	Водити (машину), везти
Eat	ate	eaten	Їсти
Fall	fell	fallen	Падати
Feed	fed	fed	Годувати
Feel	felt	felt	Відчувати
Fight	fought	fought	Боротися

1	2	3	4
Find	found	found	Знаходити
Fit	fit	fit	Підходити за розміром
Fly	flew	flown	Літати
forget	forgot	forgotten	Забувати
forgive	forgave	forgiven	Прощати
freeze	froze	frozen	Замерзати
Get	got	got	Отримати
Give	gave	given	Давати
Go	went	gone	Йти
Grow	grew	grown	Рости
Hang	hung	hung	Вішати
Have	had	had	Мати
Hear	heard	heard	Чути
Hide	hid	hidden	Ховати
Hit	hit	hit	Попадати в ціль
Hold	held	held	Тримати
Hurt	hurt	hurt	Спричинити біль
Keep	kept	kept	Тримати (зберігати)
Kneel	knelt	knelt	Стояти на колінах
Know	knew	known	Знати
Lay	laid	laid	Покласти
Lead	led	led	Вести, очолювати
Lean	leant	leant	Нахилятися
Learn	learnt	learnt	Вчити
Leave	left	left	Залишати
Lend	lent	lent	Позичати (гроші)
Let	let	let	Дозволяти
Lie	lay	lain	Лежати
Light	lit	lit	Освітлювати
Lose	lost	lost	Втрачати
Make	made	made	Виробляти, робити
Mean	meant	meant	Означати
Meet	met	met	Зустрічати
mistake	mistook	mistaken	Помилятися
Pay	paid	paid	Платити
prove	proved	proven	Доводити
Put	put	put	Покласти

1	2	3	4
Quit	quit	quit	Покидати (кинути)
Read	read	read	Читати
Ride	rode	ridden	Їздити верхи
Ring	rang	rung	Дзвеніти, дзвонити
Rise	rose	risen	Підніматись
Run	ran	run	Бігти
Say	said	said	Говорити, казати
See	saw	seen	Бачити
Seek	sought	sought	Шукати
Sell	sold	sold	Продавати
Send	sent	sent	Посилати
Set	set	set	Ставити, встановити
Sew	sewed	sewn	Шити
shake	shook	shaken	Тиснути, трясати
Show	showed	shown	Показувати
shrink	shrank	shrunk	Скорочуватися
Shut	shut	shut	Закривати
Sing	sang	sung	Співати
Sink	sank	sunk	Тонути, затопити
Sit	sat	sat	Сидіти
Sleep	slept	slept	Спати
Slide	slid	slid	Ковзати
Sow	sowed	sown	Сіяти
Speak	spoke	spoken	Говорити
Spell	spelt	spelt	Вимовляти по буквах
spend	spent	spent	Тратити
Spill	spilt	spilt	Проливати
Spoil	spoilt	spoilt	Псувати
spread	spread	spread	Розстилати
spring	sprang	sprung	Стрибати
Stand	stood	stood	Стояти
Steal	stole	stolen	Красти
Stick	stuck	stuck	Липнути, приклеювати
Sting	stung	stung	Жалити
sweep	swept	swept	Вимітати
Swell	swelled	swollen	Набухати, опухати
Swim	swam	swum	Плавати

1	2	3	4
swing	swung	swung	Гойдати
Take	took	taken	Брати, взяти
Teach	taught	taught	Навчати
Tear	tore	torn	Дерти
Tell	told	told	Розказувати
Think	thought	thought	Думати
Throw	threw	thrown	Кидати
understand	understood	understood	Розуміти
Wake	woke	woken	Будити
Wear	wore	worn	Бути одягненим
Weep	wept	wept	Плакати
Wet	wet	wet	Мочити
Win	won	won	Вигравати
Wind	wound	wound	Витися
Write	wrote	written	Писати

APPENDIX II

List of chemical elements used in scientific literature

Ar	argon	Аргон
Ac	actinium	Актиній
Ag	silver	Аргентум (срібло)
Al	aluminium	Алюміній
An	actinon	Актиній
As	arsenic	Арсен (миш'як)
At	astatine	Астат (астатин)
Au	gold	Аурум (золото)
B	boron	Бор
Ba	barium	Барій
Be	beryllium	Берилій
Bi	bismuth	Бісмут
Bk	berkelium	Берклій
Br	bromine	Бром
C	carbon	Карбон (вуглець)
Ca	calcium	Кальцій
Cd	cadmium	Кадмій
Cl	chlorine	Хлор
Cm	curium	Кюрій
Co	cobalt	Кобальт
Cr	chromium	Хром
Cu	copper	Купрум (мідь)
F	fluorine	Фтор
Fe	iron	Ферум (залізо)
H	hydrogen	Гідроген (водень)
He	helium	Гелій
Hg	mercury	Меркурій (ртуть)
I	iodine	Йод
In	indium	Індій
K	potassium	Калій
Li	lithium	Літій
Mg	magnesium	Магній
Mn	manganese	Манган (марганець)
N	nitrogen	Нітроген (азот)
Na	sodium	Натрій
Ni	nickel	Нікель
O	oxygen	Оксиген (кисень)
P	phosphorus	Фосфор

Pb	lead	Плюмбум (свинець)
Pt	platinum	Платина
Pu	plutonium	Плутоній
S	sulphur	Сульфур (сірка)
Sb	antimony	Стибій (сурма)
Si	silicon	Силіцій (кремній)
Sn	tin	Олово
Sr	strontium	Стронцій
Ta	tantalum	Тантал
Ti	titanium	Титан
U	uranium	Уран
V	vanadium	Ванадій
Wn	tungsten	Вольфрам
Zn	zinc	Цинк

APPENDIX III

Useful collocations for scientific literature

A

above all
in accord with
accordingly
of no account
on account of
on no account
on one's account
on this account
to leave (put) out of account
to take into account
after all
after a while
after the fashion
well after
all along
all in all
all but
all over
all the more
all through
first of all
all along
along with
alongside
altogether
and so on
in any (anything)
anyhow
anyway
as...as
as distinct from
as far as...is concerned
as far back as
as for
as good as
as if, as though
as it is, as it does

перш за все, передусім, насамперед

згідно з
незначний
у результаті, унаслідок
ні в якому разі, у жодному разі
самостійно
ось чому
не брати до уваги
враховувати
урешті-решт
через деякий час
методом
значно пізніше
весь час
узагалі
усі крім
усюди, навкруги
тим більше, тим паче
протягом
перш за все, насамперед
весь час
разом
разом з тим
у цілому, загалом
і так далі, тощо
якщо взагалі
так чи інакше
узагалі
такий як
на відміну від
відносно
ще
відносно
фактично
нібито
фактично

as often as not
 as soon as
 as well as
 as yet
 at all
 at all events
 at any rate
 at best
 at large
 at most
 at once
 at a time
 at times

in behalf
 on behalf
 at best
 best value
 to the best of our knowledge
 to do one's best
 both...and...
 by and large
 by degree
 by virtue of
 by way
 for and by

the case is
 as the case may be
 in case
 in any case
 in no case
 this is far from being the case
 for certain
 to make certain
 to come into being
 to come into force
 in comparison with
 beyond comparison
 to bring to a conclusion

нерідко, часто
 як тільки, щойно
 а також
 ще
 узагалі
 у кожному разі
 у кожному разі
 у найкращому разі
 детально
 найбільше
 відразу
 за один раз
 деколи

В

заради
 за дорученням
 у найкращому разі
 оптимальна величина
 наскільки нам відомо
 робити все можливе
 як... так...
 узагалі
 поступово
 дякуючи, завдяки
 з допомогою
 узагалі кажучи

С

річ у тім, що
 за обставинами
 на випадок, коли...
 у кожному разі
 ні в якому разі, в жодному разі
 справа зовсім не в цьому
 упевнено
 упевнитись
 виникати
 набувати чинності
 порівняно з
 понад усяке порівняння
 закінчувати

to arrive at a conclusion
to reach a conclusion
as a consequence
on no consideration
to take into consideration
contrary to
by contrast to (with)
in due course
during the course of

due to
to be due to

at the end of
in the end
to this end in view
with this end in view
at all events
in any event
ever since
ever so if ever
hardly ever
to the extent of
to a certain extent
to such an extent

the fact is
in fact
far and away
far reaching
as far as it goes
by far
so far
this is far from

in general
generally speaking
to give credit for
given that

зробити висновки
дійти висновку
у результаті, унаслідок
неістотний, незначний
взяти до уваги
на противагу
порівняно з
коли треба
протягом

D

як результат
бути обумовленим

E

у кінці чогось
урешті-решт
маючи на увазі
маючи на увазі
у кожному разі
урешті-решт
з тих пір
якщо це взагалі (сталось)
рідко
до, в межах
певною мірою
настільки

F

справа в тому, що
насправді
без сумніву
багатонадійний
відносно
значно
до цього часу
це зовсім не так

G

узагалі, звичайно
узагалі кажучи
віддати належне
за умови

hence
henceforth
hereafter
hereat
herein
hereinafter
heretofore
hereupon
herewith

if any
if ever
for a while
for good
for lack of
for one thing
for the first time
for the sake
for the time being
for want of
in as much
to draw an inference
in so much

to keep in mind
to keep in touch
to keep pace with
to keep with

lack
for lack of
not in the least
to say the least
at length
lest
let alone
long before

Н

отже
на майбутнє, із цього часу
потім
далі
таким чином
у цьому, до цього
попередній
до цього часу
вслід за цим

І

якщо взагалі
з погляду на
на деякий час
назавжди
через відсутність
по-перше
уперше
заради
поки що
за відсутності
висновок
робити висновки
настільки, що

К

враховувати
підтримувати зв'язок
не відставати
відповідно до

Л

відсутність
за відсутності
зовсім
найменшою мірою
принаймні
щоб... не
не кажучи про
задовго до

as long as
in the long run
long-term

поки, відносно
урешті-решт
довгостроковий

a matter of dispute
form and matter
as a matter of fact
as a matter of record
no matter how
it does not matter
by any means
by means of
by no means
by some means or other
more often than not
more than once
the more so
much more likely
it is more than enough

предмет суперечок
форма та зміст
фактично
на основі отриманих даних
немає значення, як
це не має значення
неодмінно
з допомогою
ні в якому разі, в жодному разі
так чи інакше
нерідко
неодноразово
тим більше, що
вірогідно
більш ніж потрібно

no longer
no matter
notwithstanding
now and again
now and then
from now on
up to now

більше не
неважливо
незважаючи на
тепер
час від часу
у подальшому
до цього часу

once again
onwards
onwards or else
in order to
over and above
over and over
well over

ще раз
уперед
або
для того щоб
крім того
багато разів, повторно
значно вище (більше)

M

N

O

par
on a par
par excellence
part and parcel
per
per sem
the point is
once more
more or less
all the more so, as
moreover
as much as
much the same
in as much as
so much for
at all points
in point of
in point of fact
off the point
to the point
prima facie
pro et contra
pro forma
pro rata

rather than
by reason of
for reason given
as regards
with due regard for
in the last resort
in respect of
with respect to
in no respect

for the sake of
the same as
just the same

P

рівність
with поряд з
переважно
невід'ємна частина
в, на, за
сам по собі
справа в тім, що
ще раз
більш-менш
тим більше, ніж
крім того
стільки ж
майже так
тому що
це все, що стосується
відносно всього
відносно
насправді
не по суті
по суті
на перший погляд
за і проти
проформа, для виду
пропорційно

R

замість того, не раніше ніж
услід
на основі цього
відносно
враховуючи
як останній засіб
відносно
відносно
ні в якому разі, в жодному разі

S

заради
таким же чином
такий самий

set forth
set forward
set to
and so forth
and so on і так далі

викласти
висунути
починати
наскільки

to take into account
to take for granted
thereafter
thereabouts
thereby
therefore
thereof
theretofore
therewith
through and through
time and again
from time to time
this time

враховувати
скористатись
з того часу
поблизу
тим самим
тому що
із цього
до того, до цього часу
разом з тим
досконально
часто
час від часу
на цей раз

via
in view of

через
з погляду на

in one way or another
in this way
the other way round
whatever
whenever
whereas

так чи інакше
таким чином
навпаки
будь-який
усякий раз, коли
тоді як

T

V

W

APPENDIX IV

Glossary

Unit 1

adverse
air pollutant
air toxics
banning
contaminated
crack (n)
decline (v)
demolition
dry cleaning
dust (n)
emission
energy efficient
engine
estimate (v)
expose (v)
gasoline
hazardous
lag behind
lead (n)
lead additives
lead compounds
leaded gasoline
leak (v)
literally
mothball
pest
primary source
rank (v)
recognition
run
significantly
stroke (n)
toxic chemicals
weatherized home
welfare

шкідливий, несприятливий
забруднювач повітря
повітряні токсичні речовини
заборона
забруднений
тріщина
знижуватись
знесення
хімчистка
пил
викиди
енергоефективний
двигун
оцінювати, визначати
піддаватись впливу
бензин
небезпечний
відставати
свинець
свинцеві добавки
сполуки свинцю
етилований бензин
просочуватися
буквально
нафталінова кулька
шкідник
основне джерело
класифікувати, давати оцінку
визнання
діяти, працювати
значно
удар
токсичні хімічні речовини
утеплений будинок
добробут

Unit 2

blow one`s mind
counterpart
drought
inhabitant
latitude
northern hemisphere
shortage
temperate climates
undergo
unprecedented

сильно вразити
аналог
засуха
мешканець
широта
північна півкуля
дефіцит
помірний клімат
зазнавати
безпрецедентний

Unit 3

chainsaw
congestion
disrupt
distressing disorder
eardrum
exposure
hearing deterioration
higher frequencies
high-pitched
infernally
interfere
irritability
jackhammer
lawnmower
objectionable
permeate
prolonged
rattling
roar
shrieking brakes
survey (v)
tenfold
thunderous
tinnitus
tranquil
unendurable
whine

бензопила
затори
порушувати
тривожний розлад
барабанна перетинка
контакт, вплив
погіршення слуху
більш високі частоти
високий тон
пекельний гомін
заважати
дратівливість
відбійний молоток
газонокосарка
небажаний
проникати
тривалий
деренчання
рев
вереск гальм
опитувати
десятикратно
громоподібний, громовий
шум у вухах
спокійний
нестерпний
скрегіт

Unit 4

attempt (v)
brave (v)
call off
cutting-edge
devastating
harsh
heavy-duty
ice floes
intact (adj)
live off
search vehicle
timber
trapped
wreck

пробувати, намагатися
безстрашно зустрічати
скасовувати, відкликати
передовий
руйнівний
суворий
надпотужний
крижини
неушкоджений
жити за рахунок
пошуковий апарат
деревина
в пастці
уламки, розбитий корабель

Unit 5

coastal geomorphology
counteract (v)
elevation
extent
maintain
rapidly
rate (n)
wreak havoc

геоморфологія узбережжя
протидіяти
висота
ступінь
підтримувати
швидко
швидкість
сіяти хаос

Unit 6

alter
announce
colonialist
compass bearings
distort
equatorial regions
essential
exaggerate
landmass
occur
peel (v)
preserve (v)
relative size
reportedly

змінювати
оголошувати
колонізатор
пеленги компаса
викривляти
екваторіальні області
важливий
перебільшувати
суходіл, суша
траплятися
очищати
зберігати
відносний розмір
як повідомляється

seafarer
shrink (v)
tend

мореплавець
зменшувати
мати тенденцію

Unit 7

concern (n)
consequences
convey
counterpart
determined
flood
legacy
severe
single out
species extinction
undo
ungrounded fear
voice (v)

занепокоєння, хвилювання
наслідки
передавати
колега, товариш
рішучий
повінь
спадщина
сильний
виділяти
вимирання видів
виправляти
необґрунтований/безпідставний страх
висловлювати

Unit 8

accelerated
acidification
anguish
bushfire
carbon monoxide
direct impact
disastrous
estuary
eutrophication
firewood
flammable
flee
food web
harmful pollutant
impact
in terms
indigenous
intact
livelihoods
loss
mercury

прискорений
підкислення
страждання
лісова пожежа
чадний газ
прямий вплив
катастрофічний
лиман
евтрофікація
дрова
легкозаймистий, пожежонебезпечний
тікати
харчова мережа
шкідливий забруднювач
вплив
з точки зору
корінне населення
недоторкані
засоби існування
втрата
ртуть

nitrogen oxides
on record
particulate matter/ particulates
reliant
scale (n)
sustainable
wildfire

оксиди азоту
за всю історію спостережень
тверді частинки
залежний
масштаб
сталий
лісова пожежа

Unit 9

accessible
advanced
aware of
benefit (v)
carbon footprint
destination
do your part
embedded (adj)
embrace (v)
enhance
gas emissions
guesthouse
implement (v)
interact
off-the-beaten
pillar
profit (n)
promote
scarce
shrine
sustainability
temple
treaty
vitality

доступний
розвинутий, передовий
усвідомлювати
приносити користь
вуглецевий слід
напрямок
робити свій внесок
вбудований, невід'ємна частина
дотримуватися (принципів)
покращувати, підвищувати
викиди газу
гостьовий будинок
реалізувати
взаємодіяти
який знаходиться в стороні, в глибинці
стовп
прибуток
сприяти
обмежений
святиня
сталий розвиток
храм
договір
життєздатність

Unit 10

backlog
capacity
catalyst
city clusters
comparable
diversify

відставання
потенціал
каталізатор
міські кластери
порівнянний
урізноманітнити

facilitate
inhabit
intend
intricately
loosely
mining
neglected
retain
revitalize
rural area
satellite city
secondary
spatial
surround
urban

сприяти
населяти
мати намір
хитромудро
вільно
видобуток корисних копалин
знехтуваний, занедбаний
втримувати, зберігати
оживляти
сільська місцевість
місто-супутник
другорядний
широкий
оточувати
міський

Unit 11

acronym
affix (v)
apt
assign
assume
bill
capital flow
combat (v)
contentious
contribution
conversely
curb (v)
drive (n)
entail
expand
fossil fuel
fretting
gross domestic product
guesstimate
immoral
mighty
mutter (v)
pastime
resilient

аббревіатура
прикріпляти
схильний
призначати
припускати
рахунок
рух капіталу
боротися
суперечливий, спірний
внесок
навпаки
стримувати
прагнення
спричиняти, потребувати
розширяти
викопне паливо
хвилювання
валовий внутрішній продукт
припускати, вгадувати
аморальний
могутній
бурмотіти
проведення часу
стійкий

reveal
ridiculous
scramble (v)
sequester
subtle
tangible
vanish
with a vengeance

розкривати
безглуздий
намагатися
поглинати
ледь помітний
відчутний
зникати
з подвоєною силою, різко

Unit 12

community
crop (n)
fare (v)
job option
job switching
linkage
matter (v)
pump (n)
refuge
withstand

громада
урожай
розвиватися
варіант роботи
зміна роботи
зв'язок
мати значення
насос
притулок
витримувати, протистояти

Unit 13

alarming
amazingly
approach (v)
breathtaking
city slums
fair (adj)
get one's heads around
get to grips
immediate
interrogate
literate
outnumber
over-produced
overwhelming
prompt (v)
rare
reassure
shantytowns
shrink down

тривожний
дивовижно
наближатися
захоплюючий
міські нетрі
справедливий
зрозуміти, сприйняти
розбиратися
негайний
ставити під сумнів, допитувати
грамотний
переважати
надлишок
приголомшливий
підказувати
рідкісний
заспокоювати
нетрі, халупи
зменшуватися

shrug off
solution
spirit of inquiry
stark simplicity
starvation
tough
tricky question
ultimately
underpin
vast

відмахуватися, відволікатися
рішення
дослідницький дух
різка/ сувора простота
голод
складний
складне питання
зрештою
лежати в основі
величезний

Unit 14

ad infinitum (lat.)
admit
circular economy
collection point
disposal
efficiently
engage
from scratch
greenhouse gas
hesitate
incinerate
landfill
launch (v)
non-ferrous metals
processing plant

до нескінченності
допускати, визнавати
циркулярна економіка
пункт збору
утилізація
ефективно
здійювати, займатися
з нуля
парниковий газ
вагатися
спалювати
звалище
запускати
кольорові метали
переробний завод

ANSWER KEYS



Keys to Pre-text exercise 2

Unit 1. 1. pollutant, 2. welfare, 3. hazardous, 4. demolition, 5. evidence, 6. adverse, 7. airborne, 8. exposure.

Unit 2. 1. affecting, 2. drought, 3. forecast, 4. experience, 5. extreme, 6. endanger.

Unit 3. 1. exposure, 2. evidence, 3. environment, 4. irritability, 5. interfere, 6. deteriorate, 7. omnipresent, 8. excess, 9. ringing sensation.

Unit 4. 1. harsh, 2. shipwreck, 3. devastating, 4. ice floes, 5. uninhabited, 6. timber, 7. intact, 8. heavy-duty, 9. outstanding, 10. cutting-edge.

Unit 5. 1. annually, 2. predict, 3. in the heart, 4. extremely, 5. elevation, 6. forecast, 7. submerged, 8. maintain.

Unit 6. 1. exaggerate, 2. distort, 3. depict, 4. reduce, 5. projection, 6. Renaissance.

Unit 7. 1. to name, 2. drought, 3. concern, 4. counterparts, 5. ignore, 6. generation, 7. legacy, 8. to voice, 9. the concern.

Unit 8. 1. likelihood, 2. reliant on, 3. indigenous peoples, 4. anguish, 5. flammable, 6. sustainable, 7. intact, 8. eutrophication.

Unit 9. 1. pillar, 2. over-tourism, 3. shrine, 4. accessible, 5. scarce, 6. temple, 7. benefit, 8. modernization.

Unit 10. 1. pillar, 2. over-tourism, 3. shrine, 4. accessible, 5. scarce, 6. temple, 7. benefit, 8. modernization.

Unit 11. 1. fiscal, 2. tangible, 3. shift, 4. fretting, 5. species, 6. imperative, 7. emissions, 8. resilient, 9. guesstimate, 10. quantify, 11. climate change.

Unit 12. 1. matter, 2. fare, 3. acknowledge, 4. alter, 5. alter, 6. predict, 7. interact, 8. assistant professor, 9. innovation.

Unit 13. 1. encourage, 2. to shrug off, 3. overwhelming, 4. shanty town, 5. shrink down, 6. outnumber, 7. numerically, 8. rare.

Unit 14. 1. champion, 2. resident, 3. cellulose, 4. landfill, 5. hierarchy, 6. municipality, 7. atmosphere, 8. non-ferrous.

Keys to True/False exercises

Unit 1. Comprehension check. Activity 2. 1. false, 2. true, 3. false, 4. true, 5. false, 6. false, 7. false, 8. false, 9. true, 10. false.

Unit 2. Comprehension check. Activity 2. 1. false, 2. false, 3. false, 4. true, 5. true.

Unit 3. Comprehension check. Activity 2. 1. true, 2. true, 3. false, 4. false, 5. true.

Unit 4. Comprehension check. Activity 2. 1. false, 2. false, 3. true, 4. false, 5. true, 6. true, 7. false, 8. true, 9. true, 10. false.

Unit 5. Pre-text exercise 1. 1. false, 2. false, 3. true, 4. false, 5. true.

Unit 6. Pre-text exercise 3. 1. false, 2. true, 3. false, 4. true, 5. true, 6. false.

Unit 7. Comprehension check. Activity 2. 1. true, 2. false, 3. true, 4. true, 5. false, 6. false.

Unit 8. Comprehension check. Activity 2. 1. true, 2. false, 3. true, 4. true, 5. true, 6. false, 7. true, 8. false, 9. true, 10. false.

Unit 9. Pre-text exercise 1. 1. false, 2. false, 3. true, 4. true, 5. true.

Unit 10. Pre-text exercise 1. 1. false, 2. false, 3. false, 4. true, 5. true.

Unit 11. Comprehension check. Activity 2. 1. true, 2. false, 3. true, 4. false, 5. false, 6. false, 7. false, 8. true, 9. true, 10. false.

Unit 12. Comprehension check. Activity 2. 1. true (6), 2. false (8), 3. true (4), 4. true (3), 5. false (2), 6. false (1), 7. true (9), 8. false (5), 9. true (10), 10. false (7).

Unit 13. Comprehension check. Activity 2. 1. false (2), 2. false (5), 3. true (4), 4. false (9), 5. true (1), 6. true (10), 7. true (8), 8. false (7), 9. true (3), 10. true (6).

Unit 14. Comprehension check. Activity 3. 1. true, 2. true, 3. false, 4. false, 5. true, 6. true, 7. false, 8. true, 9. false, 10. true.

Keys to Final test

Ex. 1. 1. B, 2. B, 3. C, 4. C, 5. A

Ex. 2. 1. layer, 2. too, 3. than, 4. up, 5. environment, 6. fuel, 7. more, 8. butterflies, 9. species, 10. unless.

Ex. 3. 1. unless we protect our, 2. succeed in keeping, 3. too hot to, 4. without making, 5. in case you want.

Ex. 4. 1. the, 2. most, 5. they

Ex. 5. 1. endangered, 2. fascination, 3. alternative, 4. colourful, 5. global.

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