



普通高中教科书

英语

ENGLISH

选择性必修

第一册

人民教育出版社

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《普通高中教科书 英语》是为了适应新时代的发展需要，依据《普通高中英语课程标准（2017年版）》的精神，充分征求广大师生的反馈意见，在《普通高中课程标准实验教科书 英语》的基础上精心修订而成。此次教材修订的主要目的是：全面落实立德树人根本任务，培育社会主义核心价值观，弘扬中华优秀传统文化，充分体现英语课程工具性和人文性的统一，发展学生的语言能力、文化意识、思维品质和学习能力等英语学科核心素养，充分体现英语学科特殊的育人价值，培养具有中国情怀、国际视野和跨文化沟通能力的社会主义建设者和接班人。

修订后的教材主要具有以下特点：

注重思想引领 教材融入了社会主义核心价值观的基本内容和要求，注重培养学生良好的政治素质、道德品质和健全人格，弘扬中华优秀传统文化，增强文化自信，引导学生形成正确的世界观、人生观和价值观。

反映时代要求 教材充分反映当代社会发展新变化、科技进步新成果，展示新时代中国特色社会主义新成就，将先进的教育思想和理念融入教材之中，同时紧密结合学生的学习和生活实际，关注信息化环境下学生的发展需求。

强调语言实践 教材以英语学习活动观为指导，以主题为引领，以语篇为依托，通过板块式设计将语言知识与听、说、读、看、写等技能有机整合，强调学习过程和学习策略，突出活动目标，让学生用语言做事情，在实践中培养语言运用能力和创新思维。

突出文化意识 教材通过展示多姿多彩的中外文化来培养学生对中华文化的认同和传承，加深对人类优秀文化的学习和鉴赏；通过让学生分析中外文化异同，发展其多元思维和批判性思维，增强学生跨文化理解和跨文化沟通能力，构建人类命运共同体意识。

激发学习动机 教材以真实性、趣味性、规范性和经典性作为内容选编原则，主题覆盖面广，语篇题材和体裁丰富，活动呈现形式多样，版式设计生动活泼且富有美感，力求激发学生的学习兴趣 and 动机，引发他们积极思考、主动参与语言实践活动，提升英语学习效率。

满足不同需求 教材编排内容和活动设计既充分考虑学生的共同基础，又兼顾学生不同的能力水平和学习需求，提供了拓展性的教学内容，为教师灵活使用教材进行教学提供了便利，也切实促进学生的个性发展。

本套教材为高中英语教学提供了丰富的教学资源。希望教材能够帮助同学们打下坚实的语言基础，提高英语水平，获得全面发展；同时也希望老师们能够充分利用教材，在实践中不断完善教学，取得良好的教学效果。

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Asking for and giving clarification Pronunciation: sense group	A description of body language	The <i>-ing</i> form (4) as the object and the predicative	Make a body language information sheet	The Immigrant
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UNIT 1

PEOPLE OF ACHIEVEMENT

Try to become not a man of success, but try rather to become a man of value.

—Albert Einstein



In this unit, you will

- 1 read about people of achievement and their contributions.
- 2 hear and talk about great people.
- 3 write an introduction about someone you admire.
- 4 explore what greatness means and how it is achieved.

Look and discuss

- 1 Who is the woman in the photo?
- 2 What is happening in this photo?
- 3 What more can you find from this photo?

Describe people of achievement

1 Before you read, discuss these questions in groups.

- 1 What kind of person makes great discoveries?
- 2 Which is more important for making a great discovery, talent or effort?



Find descriptive words

Pay attention to the descriptive words in a passage. These will help you form a better impression of the subject described in the passage.



2 Scan the text and find descriptive words about Tu Youyou.

TU YOUYOU AWARDED NOBEL PRIZE

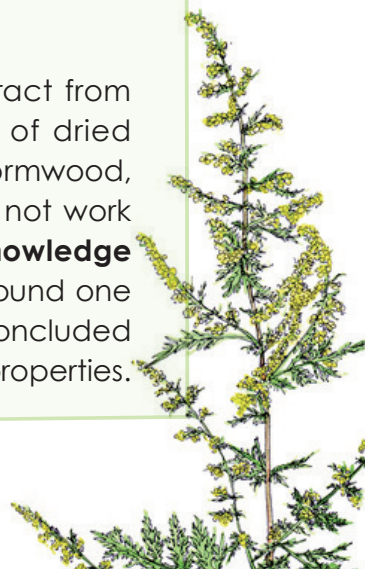
6 October 2015



This year's Nobel Prize in Physiology or Medicine has been awarded to Tu Youyou (co-winner), whose research led to the discovery of artemisinin, a **crucial** new treatment for malaria. Artemisinin has saved hundreds of thousands of lives, and has led to improved health for millions of people. Over 200 million people around the world get malaria each year, and about 600,000 die from it. Artemisinin has become a **vital** part of the treatment for malaria, and is thought to save 100,000 lives a year in Africa alone.

Tu Youyou, a committed and patient scientist, was born in Ningbo, China, on 30 December 1930, and graduated from Peking University Medical School in 1955. After she graduated, she worked at the China Academy of Traditional Chinese Medicine in Beijing. In 1967, the Chinese government formed a team of scientists with the **objective** of discovering a new treatment for malaria, and Tu Youyou was among the first researchers chosen. In the beginning, Tu Youyou went to Hainan, where malaria was more common, to study malaria patients. In 1969, she became the head of the project in Beijing, and decided to review ancient Chinese medical texts to find traditional **botanical** treatments for the disease. Her team examined over 2,000 old medical texts, and **evaluated** 280,000 plants for their medical **properties**. From their research, they discovered and tested 380 **distinct** ancient Chinese medical treatments that showed promise in the fight against malaria.

One medical text from the fourth century suggested using the extract from sweet wormwood to treat a fever. Tu's team tested a collection of dried wormwood leaves but found no effect. They then tried **boiling** fresh wormwood, and using the **liquid obtained** from this to treat malaria, but this did not work either. Their project got stuck. However, Tu Youyou would not **acknowledge defeat**. She **analysed** the medical texts again, and by chance, she found one sentence suggesting a different way to treat the wormwood. She concluded that boiling the sweet wormwood **apparently** destroyed its medical properties.



Using a lower temperature to draw out the extract, she found a **substance** that worked. After failing more than 190 times, the team finally succeeded in 1971. Tu Youyou and her team members even **insisted** on testing the medicine on themselves to make sure that it was safe. Later, the medicine was tested on malaria patients, most of whom recovered. This medicine, which was called artemisinin, soon became a standard treatment for malaria.

According to Tu Youyou, the discovery of artemisinin was a team effort. Upon hearing that she had been awarded the Nobel Prize, she said, "The honour is not just mine. There is a team behind me, and all the people of my country. This success proves the great value of traditional Chinese medicine. It is indeed an honour for China's **scientific** research and Chinese medicine to be spread around the world."

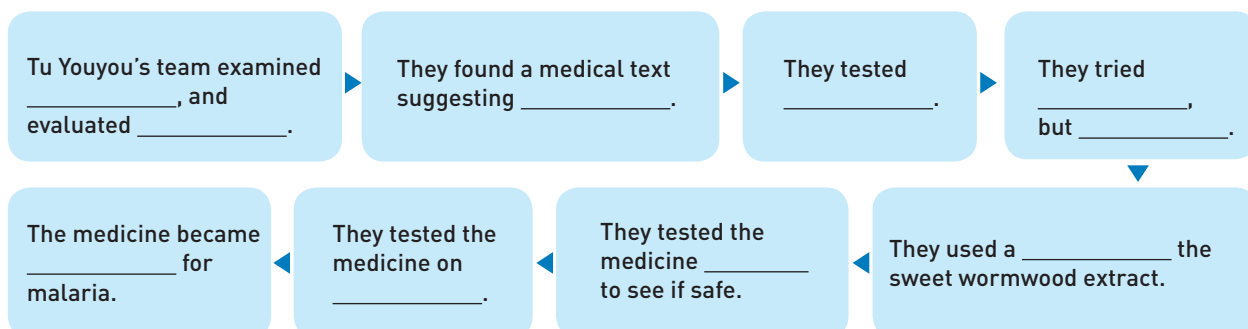
3 Circle the answers to the questions below.

- Where would you most likely find this passage?
A In a blog. B In a book. C In a letter. D In a newspaper.
- Passages like this are most often written in _____ and _____.
A the active voice/offer many opinions B the first person/talk about feelings
C both active and passive voices/**mostly** contain facts
- Which two pieces of information were not included in the passage?
A A quote from Tu Youyou.
B The details of how artemisinin was discovered.
C Tu Youyou's important contributions other than the discovery of artemisinin.
D Tu Youyou's personal life.
E Tu Youyou's road to discovering artemisinin.
F What Tu Youyou was awarded.
G Why artemisinin is an important discovery.

4 Read the text again and answer the questions.

- Why is the discovery of artemisinin important?
- What was the key to getting a good extract from the wormwood?
- What numbers are mentioned in the text? What do they suggest?
- Why is Tu Youyou considered a great person?

5 Complete the flow chart. Then tell the story of how artemisinin was discovered.



Build up your vocabulary

1 Write down the word that matches each definition. Then find the sentences containing these words in the text.

- 1 _____ cook something in very hot water
- 2 _____ relating to plants
- 3 _____ qualities or characteristics of something
- 4 _____ a kind of substance that flows freely, such as water or milk
- 5 _____ physical material that exists

2 Guess the meaning of the underlined words. Then fill in the blanks with words that have the same roots.

- 1 The two flowers are quite distinct from one another, so it is easy to make a _____ between them.
- 2 Scientists need to _____ how the new material stands up to wear and tear to prove how valuable it is.
- 3 A talented scientist well known for his _____ to his country, Huang Danian committed himself to his research in geophysics.
- 4 **A:** Did you come to any conclusions?
B: Yes, we _____ that by drawing out the extract at a low temperature, we could find the substance that we needed to complete the experiment.
- 5 She spends a lot of time _____ her patients' dreams. This analysis is very helpful, explaining their daily behaviour very well.

3 Read the passage about Lu Xun. Fill in the blanks with the correct forms of the words in the box.

insist obtain objective acknowledge apparently crucial

Lu Xun, _____ as one of the greatest modern writers in China, was born in Shaoxing, Zhejiang Province in 1881. In 1904, he became a medical student in Japan, with the _____ of improving people's health and saving lives. However, he changed his mind when he saw in a photo a Chinese man about to be killed by a Japanese soldier. It struck him that the other Chinese men in the photo _____ did not care about what was happening to their fellow countrymen. From this, he concluded that the _____ problem in China was not physical illness, but the spiritual illness of people at that time. Following this, he quit medical school. When he returned to China in 1909, he _____ a teaching job. Later, a friend _____ that he help write for a magazine called *New Youth*. That was how his first famous short story *A Madman's Diary* got published in 1918.

4 In pairs, discuss how people can achieve success, using words and expressions you have learnt in this unit.

Discover useful structures

1 Read the following sentences and underline the relative clauses. Then name the two types of clauses and state their functions.

- They tested hundreds of Chinese medical treatments that showed promise in the fight against the disease.
- Tu Youyou was awarded the Nobel Prize, which is considered one of the highest international honours a person can receive.
- Tu Youyou went to Hainan, where malaria was more common, to study malaria patients.
- Later, the medicine was tested on malaria patients, most of whom recovered.

2 Rewrite the sentences using non-restrictive relative clauses. How do the sentences flow differently?

EXAMPLE

The book tells us about Alexander Fleming. He discovered penicillin. ▶

The book tells us about Alexander Fleming, who discovered penicillin.

- 1 We were very impressed by the old man. He was not willing to acknowledge defeat. ▶
- 2 Afterwards, Einstein had to flee Germany. Hitler was in power there. ▶
- 3 There is nothing we can do to help Linda. Her **circumstances** are beyond our control. ▶
- 4 The teacher asked us to listen to a speech by his favourite **novelist**, J.K. Rowling. It inspired us a lot. ▶
- 5 The building under construction was designed by I.M. Pei—a famous Chinese-American architect. He was born in Guangzhou, China. ▶
- 6 I was asked to explain the project with the help of a **flow chart**. It was a big challenge for me. ▶

3 Work in groups. Complete the sentences using non-restrictive relative clauses to give extra information. Then share them with your group members.

EXAMPLE

I'd like to try ..., ... ▶

I'd like to try that Chinese herbal medicine again, which seems to work best for my cough.

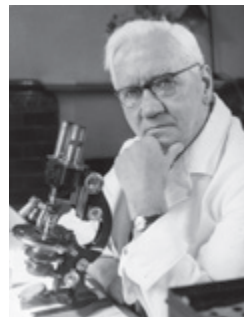
- 1 I would like to travel around ..., ...
- 2 What impressed me most ..., ...
- 3 My favourite scientist is ..., ...
- 4 Finally we arrived at ..., ...
- 5 My grandparents like ..., ...
- 6 I wish to obtain ..., ...
- 7 My best friend ..., ...

Explore the meaning of greatness

1 Match the people with their achievements. Then share with a partner what you know about the people and their achievements.

- | | |
|------------------------|--|
| 1 Alexander Fleming | A contributed to a new treatment for malaria |
| 2 Florence Nightingale | B discovered penicillin |
| 3 Wu Mengchao | C founded modern nursing |
| 4 Zhong Nanshan | D performed operations well into his 90s |
| 5 Tu Youyou | E managed the SARS outbreak |

2 Listen to the conversation. Who does each speaker admire? Tick the correct boxes in the table below.



Name	Dr Wang	Wang Le	Anna Smith
Alexander Fleming			
Zhong Nanshan			
Florence Nightingale			
Wu Mengchao			
Tu Youyou			
Dr Wang			

3 Listen again and answer the questions below. You can discuss them with a partner.

- Why did Anna meet Wang Le at her home?
- Why did Dr Wang decide to become a doctor?
- What kind of person does Wang Le admire? Why?
- What advice did Dr Wang give? Do you agree with him? Give your reasons.



Listen for reasons

When people give their opinions or decisions on a matter, they often give reasons for them. Sometimes, the reason is introduced by words such as *because* or *due to*. At other times, the reason is given right after the opinion or decision, and the link can be **inferred**.

- 4 Work in groups. Brainstorm the names of some great people and write them in the table below.

Ordinary people	Scientists
Environmentalists	Explorers
Inventors	Politicians

- 5 Discuss what makes these people great. Try to use the following language fillers to give yourself time to think.

Giving time to think

(Er/Oh/Um,) let me see/think ...

Well, er, ...

Yeah, I mean, I understand what you're saying ...

Anyway, ...

Just a moment.

Hang on a second.

May I think about that for a moment?

How can/shall/should I put this/it?

Let me think about this/that for a moment.

Right./Sure.

Really?

Well, I guess ...

You see/know, ...

So, ...

Well, it's on the tip of my tongue.

I've nearly got it, er, ...

What I want to say is ...

- 6 Use your discussion to draw conclusions about the meaning of greatness. The following expressions may help you. Then report back to the class.

The greatest person I know of is ..., who ...

To be great, a person should ...

To me, greatness means ...

Why do you think that?

That's true, but ...

I want to be like _____ because he/she ...

has achieved financial success

has invented new products

has made great discoveries

serves as a good role model

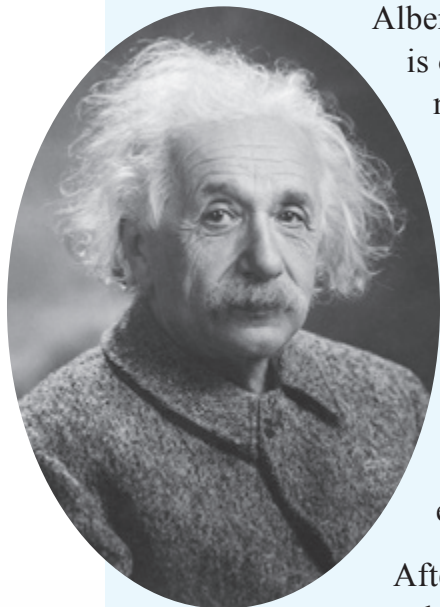
brings happiness to other people

makes great contributions to society

Introduce someone you admire

- 1 What do you know about Albert Einstein? Read the text and complete the timeline. Then introduce Einstein's life story and achievements in your own words.

THE MAN WHO CHANGED OUR UNDERSTANDING OF THE UNIVERSE



Albert Einstein, who is perhaps the greatest scientist in modern physics, is often considered one of the smartest men who ever lived. He made numerous contributions to the world, the most well-known being the general **theory** of relativity and the famous formula $E=mc^2$. Einstein was not only a **genius**; he was a courageous and kind figure loved by many people.

This **gentle** genius was born in Germany on 14 March 1879. When he was 16, he tried to enter university in Switzerland, but failed due to his low scores in the general part of the entrance exam, despite obtaining exceptional scores in maths and physics. After studying for another year, he managed to pass the exam, entering university in 1896 and graduating in 1900.

After two years of looking for work as a teacher, Einstein took a job as a clerk in the Swiss **patent** office. While working there, out of a strong **passion** for knowledge, he continued to study, earning a doctorate in physics in 1905. That same year, which was later recorded as a miracle year in science, he published four **extraordinary** physics papers. Following this, he **gradually** became famous throughout the world as the new Isaac Newton. After four years, he was able to quit his job at the patent office and enter research full-time at a university. In 1922, he was awarded the 1921 Nobel Prize in Physics for his explanation of the photoelectric effect.

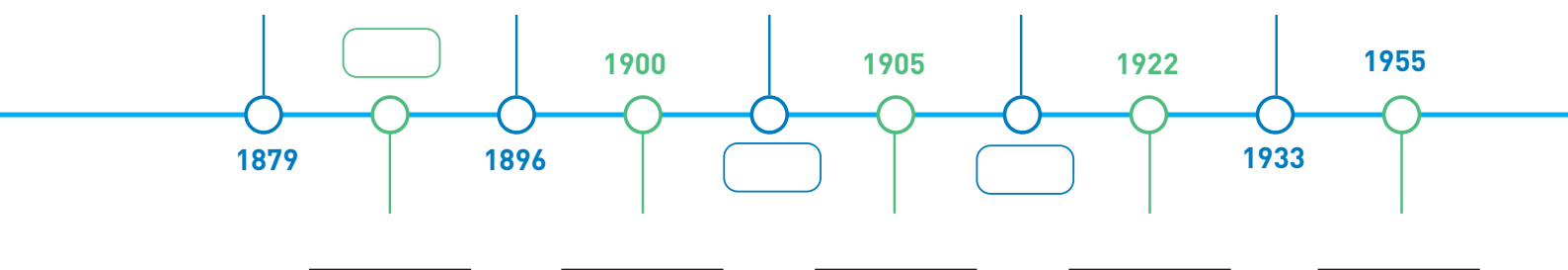
Circumstances changed in 1933, when Hitler came to power in Germany. Einstein, who was Jewish, found the doors of **academic** institutions closed to him. As a **consequence**, he had to flee Germany. After spending time in Europe, he finally took up a position as a researcher at the **Institute** for Advanced Study in Princeton, USA. Following that, he continued to make great achievements in physics and mathematics.

To the public, he was seen as a slightly odd-looking but kind and funny man. He had a thick moustache and long white hair, which sometimes stood on end as though he had just received an electric shock. Although he was a genius, he sometimes forgot things, like his friends' birthdays. But despite his peculiarities, he was loved by his friends and neighbours. There is even a story about how he helped a little girl who knocked on his door and asked for help with her homework. In fact, Einstein often **encountered** people on the street who would stop him and ask him to help explain things. After many such

occasions, he finally started saying, “Pardon me! Sorry! Always I am mistaken for **Professor** Einstein!”

On 18 April 1955, it was reported that Einstein had passed away, and the whole world mourned the great loss of a **brilliant** scientist.

Born in Germany



2 In pairs, discuss the following questions.

- 1 Apart from his **remarkable** achievements, what does the passage tell us about Einstein's life?
- 2 What impressed you most about Einstein? State your reasons.

3 Study the organisation and language features.

- 1 What type of writing is this text? How does the writer develop the text?
- 2 Find the descriptions that tell us what Einstein looked like and what kind of person he was.
- 3 What rhetorical **devices** are used in the passage? Give examples.

4 Write an introduction about someone you admire.

- 1 Choose the person you are going to write about. It should be someone you think is great in some way. It can be an ordinary person, such as a parent, a relative, or a friend.
- 2 Make a list of things that need to be included in your introduction.
- 3 Use your notes to write your introduction and **sum** up how you feel about this person.

5 Exchange your draft with a partner.

- 1 Use the checklist to help you review your partner's **draft**.
 - ✓ Does the writer describe the person's appearance and personality?
 - ✓ Does the writer tell an impressive story of the person's life?
 - ✓ Does the writer say why the person is great?
 - ✓ Does the writer sum up how he/she feels about this person?
- 2 Take your draft back and revise it.

6 Share your introduction with the rest of the class.

1 Complete the sentences with the correct forms of the words in the box.

gentle sum up circumstance encounter novelist patent

- 1 To our surprise, he was actually the _____ and caring father of three children.
- 2 To _____, his fame and wealth were gained through hard work and his in-depth knowledge of his business.
- 3 A genius for invention, Thomas Edison obtained scores of _____.
- 4 Under no _____ should we do terrible things to other people.
- 5 As a botanist, he takes notes on the properties of any plant he _____.
- 6 The first-person narrator is a stylistic device that has been used by many _____ and poets throughout the ages.

2 What do you know about Sun Yat-sen? Read the passage, and then fill in the blanks with relative pronouns or adverbs.

Sun Yat-sen (1866–1925) was widely considered to be the founder and forerunner of modern China. He was only in power for a short time, when he was president of the country in 1912. So it may seem odd to some people _____ knowledge of China may be limited that he is such an important figure. However, his influence is not based on his time in office, but on his continuous struggle for a better society and his concern for all Chinese people. He also put forward many advanced ideas _____ brought the Chinese people together, in particular, the Three Principles of the People. These principles were inspired by Lincoln, _____ he admired, and were developed when he was travelling overseas, _____ he went to find support for his country. The first principle is about nationalism, _____ indicates that China should never be divided and should not be under any foreign control. The second is about people's rights. It means that all people have great value and should also have the same rights. The third is about people's livelihood, _____ means that the government should create opportunities for people to make a good living.




REFLECTING

- ☉ Did this unit cause you to change your thoughts about greatness? If so, how?
- ☉ Will what you have learnt in this unit inspire you to improve yourself? If so, how?
- ☉ What was the most important idea that you learnt in this unit?
- ☉ Overall, I thought this unit was ☐ inspiring ☐ useful ☐ so-so ☐ difficult.

*Project: Prepare a book report

1 Discuss these questions in groups.

- 1 Have you ever read a biography or an autobiography of a great person? Would you recommend this book? Why or why not?
- 2 Which great person would you like to read more about?
- 3 Where can you find recommendations for good biographies or autobiographies?

		
<p><i>Cao Xueqin Biography</i> by Li Jianshu, 2009 (Chinese edition)</p>	<p><i>The Story of My Life</i> by Helen Keller, 1903</p>	<p><i>Steve Jobs</i> by Walter Isaacson, 2011</p>
<p>The book tells the life story of the novelist Cao Xueqin, author of <i>The Dream of the Red Mansions</i>. Cao was born to a rich family but suffered great poverty for most of his life. He drew on his life experiences to write this famous novel, which was published after his death.</p>	<p>Even though Keller wrote this autobiography when she was only 22 years old, it is considered a great book in American literature. It tells about her dark and silent childhood, and how her teacher, Anne Sullivan, opened up a new world to her by teaching her how to communicate.</p>	<p>Isaacson interviewed Steve Jobs over forty times, and interviewed hundreds of Jobs' friends, relatives, and rivals to sum up Jobs' remarkable life. The result is an interesting story of a man driven to succeed and driven to make perfect products.</p>

2 Choose a biography or autobiography of a great person. Read the book, and then write a book report. Keep these points in mind:

- Use the examples above to help you.
- Write about how the book makes you feel or think about that person.
- Write about your overall feelings about the book and its quality.
- Give your opinion: Should others read this book as well? Why or why not?

3 Present your book report to your group. Answer any questions about the book.



Mei Lanfang: Great Artist, Cultural Ambassador

Mei Lanfang is still known today as one of the masters of Beijing Opera. He played a key role in bringing Beijing Opera to the world, leading to the international status and recognition that it has today. Mei Lanfang is still widely remembered for his skill, his kindness, and his deep love for his country.

BEFORE YOU WATCH

Try to match the time phrases with the events in Mei Lanfang's life.

- | | |
|---------------------------------|---|
| 1 at age 8 | A born in Beijing |
| 2 in his 20s | B succeeded in taking Beijing Opera to the USA |
| 3 in 1919 | C died of heart disease |
| 4 after eight years of attempts | D developed a style called the "Mei Lanfang School" |
| 5 over 50 years on stage | E began to travel and perform abroad |
| 6 in 1961 | F started to learn Beijing Opera |
| 7 in 1894 | G became known internationally for his acting skill |

WHILE YOU WATCH

1 Check your answers in Before You Watch.

2 Complete the sentences.

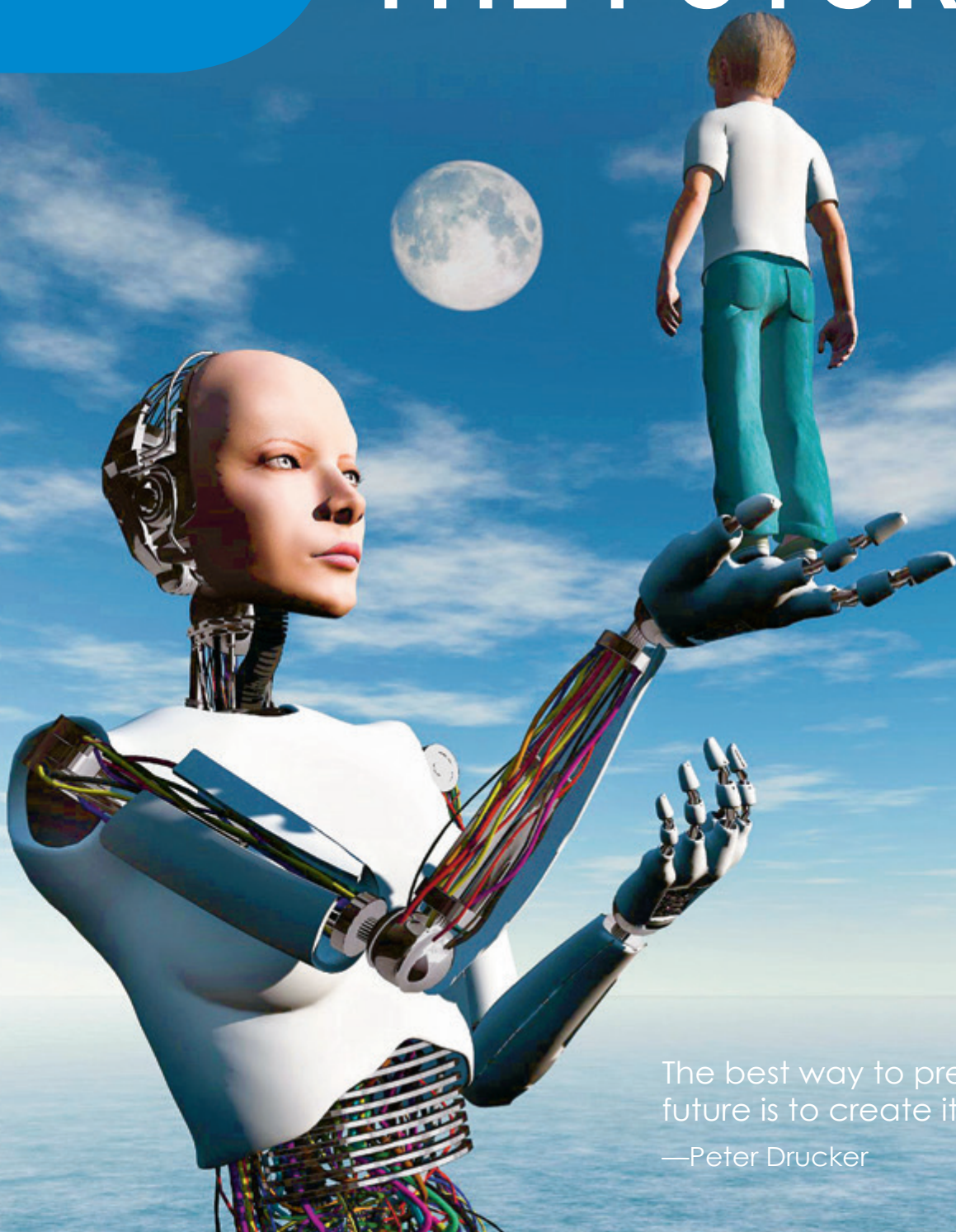
- The great Indian author Rabindranath Tagore _____ about Mei Lanfang.
- In the USA, many fans _____ after the performances to shake his hand.
- Mei Lanfang brought Beijing Opera abroad so that more people could _____ of Chinese culture and art.
- When Japanese troops invaded China, Mei Lanfang _____.

AFTER YOU WATCH

Discuss these questions in groups.

- How did Mei Lanfang become a legend in the art of Beijing Opera?
- Why is Mei Lanfang greatly loved by so many people?
- Who else can you think of that has committed himself/herself to the development of China's art or music culture?

UNIT 2 LOOKING INTO THE FUTURE



The best way to predict the future is to create it.

—Peter Drucker

In this unit, you will

- 1 read about living in a smart house.
- 2 listen to and talk about predictions.
- 3 read about the pros and cons of advances in technology, and write your opinions.
- 4 explore the future of technology.

Look and discuss

- 1 What might the picture be about?
- 2 What are your predictions about the future?
- 3 What might be some of the advantages and disadvantages of life in the future?

Exchange views on smart homes

1 Before you read, discuss these questions in groups.

- 1 What does it mean when we say that something such as a phone is “smart”?
- 2 What do you think a “smart” house can do that other houses cannot?



Identify purpose and audience

The types of **phrases** used in a passage help identify its purpose. For example, the phrase *in my opinion* tells us that the passage is likely meant to **persuade**. And a text that uses imperatives is likely meant to instruct. A passage's content helps identify its audience. For example, a passage that gives tips on looking after pets would have pet owners as its audience.



2 Skim the text and answer these questions.

- 1 What is the purpose of the text?
- 2 Who is the intended audience of this text?

SMART HOMES TO MAKE LIFE EASIER

Have you ever forgotten to lock the door of your house? Or, have you ever forgotten to **switch** off the TV or computer? These kinds of things happen to us all the time, waste resources, and can sometimes lead to problems. However, in the not-too-**distant** future, we will be living in smart homes that will lock the door for us when we are away and remember to switch off the TV when we forget. These smart homes will keep us **secure**, save us energy, and provide a more comfortable environment to live in.

Intelligent Controls

Today, we have to use switches for our lights, knobs for our appliances, and **remote** controls for our TVs and air conditioners. In the future, we will be using advanced technology every day for **automatic** control of just about everything in our home. The future home will use **integrated** sensors to tell when

you leave home each morning, and then go into an energy-**efficient mode** all by itself. You will no longer have to think about turning switches on and off yourself. Your home will also learn your daily **routine** and **preferences**, so everything will be ready for you when you get home each evening. Your lights will come on the **instant** you enter the door along with your favourite music or TV programmes, and you will find your dinner already prepared for you. All controls will respond to voice commands, so if you want to change your routine, you just say aloud what you want and the home system will obey.

Regular Health Checks

In addition, your smart home will be monitoring your health for you every day. Your bed, for example, will record how well you sleep every night. It will also be checking your body weight. If you start to have sleep or weight problems, it will



send a **warning** to your phone. It will also give you suggestions on a healthier diet and how to sleep better. Smart toilets will be keeping **constant** track of your health as well. They can warn you early on if there is something **abnormal** or if you have a **critical** illness, such as **cancer**, and potentially save your life.

No More Disasters

Smart homes will be able to prevent serious damage from accidents. For example, if a water pipe starts **leaking**, or if

there is a short in the electrical wiring, your smart home will **detect** it and provide you with the **relevant** information. This way, you will be able to fix the problem before your home becomes flooded or catches fire.

This smart technology is not a **fantasy**. Many of these new **innovations** are already **available** and being used in some homes. In this sense, the home of tomorrow is already the home of today. **Nevertheless**, it will take some years before most new homes begin to use this new technology.

3 Read the text again and fill in the table below.

In the future, what will smart homes do about ...?			
doors		dinners	
TVs, computers		beds	
water pipes, electrical wires		toilets	
lights, favourite music, or TV programmes			

4 Complete the summary using the correct forms of the words from the text.

A smart home is one that i_____ computers into the **structure** of the building itself. In this way, many of the things that we now do ourselves will become a_____. For example, the smart home could control the air conditioning and lights so that you would no longer have to turn s_____ on and off, making your home more energy-e_____. The smart home could also m_____ itself to make sure that everything is working as it should, and send you w_____ if there is a problem. Such smart homes could even be programmed to d_____ your health problems, and then give you r_____ advice as to the food you should eat or if you should see a doctor. So, in a sense, smart homes will lead us to living smarter lives.

5 Work in groups. Discuss these questions.

- 1 In what way is the home of tomorrow already the home of today?
- 2 What might be some of the disadvantages of smart homes?

Build up your vocabulary

1 Write as many correct pairs of “verb + noun” phrases as possible.

Verbs: detect, integrate, leak, switch on/off, monitor, cure, have, become, issue, encourage, repair, reject



Nouns: a preference, routine, a warning, cancer, learning, the heater, air quality, **potential** dangers, oil, innovation, the electrical wiring, fantasies

EXAMPLE detect potential dangers, have fantasies, ...

2 Complete the sentences with the adjectives in the box.

abnormal
efficient

automatic
distant

available
instant

constant
relevant

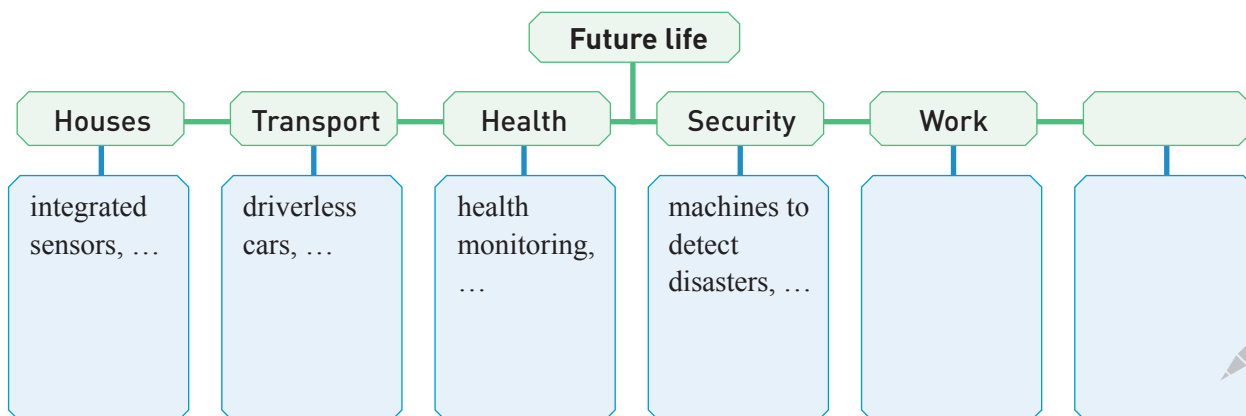
critical
secure

- Big data will become much more _____ in solving **crimes** in the future.
- Many smart watches can provide _____ fitness data.
- It is possible that this technological fantasy will come true in the _____ future.
- After the accident, both drivers are in _____ condition.
- The fridge keeps food at a _____ low temperature.
- The air conditioner works in _____ mode.
- It is important to make food and water _____ to the survivors.
- Houses with advanced appliances will keep us _____ and healthy.
- We find the German transport system to be one of the most _____ in Europe.
- The sensors can detect anything _____ and automatically call someone to come and fix it.

3 Paraphrase the sentences using the words and phrases in brackets.

- Care will also be taken to **combine** the building and surrounding architecture together to form an effective system. (*integrate*)
- We will probably benefit from remote-controlled houses. (*potentially*)
- He insisted that everything in the smart home would be all right. However, I could not help but feel anxious. (*nevertheless*)
- It is a good habit to make certain that you know what is happening with your blood pressure. (*keep track of*)
- The monitoring system sends out warnings as soon as the car begins to leak oil. (*the instant*)

4 Add more elements in the mind map to build up your vocabulary.



Discover useful structures

1 Look at the sentences below. One is in the simple future tense. The other is in the future progressive tense. What different impressions do they make?

- In the future, we *will use* advanced technology every day for automatic control of just about everything in our home.
- In the future, we *will be using* advanced technology every day for automatic control of just about everything in our home.

Find more sentences using the future progressive tense from the unit. Rewrite them using the simple future tense. Try to feel the different impressions they make.

2 Read the passage and complete the following sentences.

Jack goes to school every weekday. He leaves home at 6:45 and arrives at school at about 7:30. His morning classes begin at 8:00 and continue until 12:15. Then he has lunch, which takes about half an hour. His classes begin again at 1:30 in the afternoon and end at 3:50. He goes to the school's football club at 4:30 and finishes practice at 6:00. He arrives home at about 6:45. Every day he follows the same routine and tomorrow will be no exception.

- | | | |
|------------------------------|---------------------------------|----------------------------|
| 1 At 6:30 a.m. tomorrow, ... | A he'll be leaving the house. | B he'll be at home. |
| 2 At 8:10 a.m. tomorrow, ... | A he'll be having a class. | B he'll have a class. |
| 3 At 12:30 tomorrow, ... | A he'll be having lunch. | B he'll have lunch. |
| 4 At 5:00 p.m. tomorrow, ... | A he'll be practising football. | B he'll practise football. |
| 5 At 6:45 p.m. tomorrow, ... | A he'll be arriving home. | B he'll arrive home. |

3 Fill in the blanks with the proper forms of the verbs in brackets.

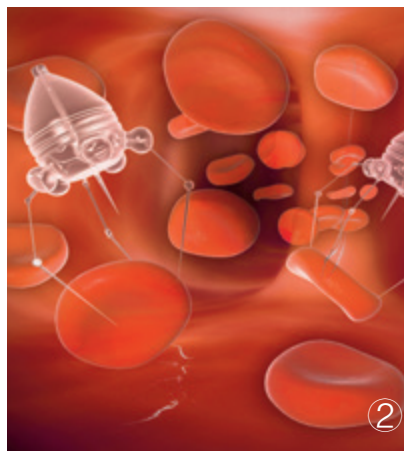
- You can call me then. I _____ (not sleep).
- They set off at 9:00 a.m. and thought they _____ (reach) the airport an hour later.
- Will you _____ (wait) for me until I find the electrical wires?
- Better not hang out with Sam then. He _____ (work) on his article on critical thinking.
- I guess most parents _____ (support) the new plan at the meeting tomorrow.

4 Work in pairs. Read the travel plan and make up a conversation using the future progressive tense.

Monday	Fly to Beijing from Melbourne, arrive at 10:00 a.m.; Visit the Summer Palace in the afternoon
Tuesday	Morning: visit the Palace Museum; Afternoon: go to Wangfujing Street
Wednesday	Go to the Great Wall, three hours' drive there and back
Thursday	Go sightseeing in Shichahai; Visit National Museum of China
Friday	Trip to Zhangjiakou
Saturday	Back to Beijing in the afternoon; Watch Beijing Opera at the Mei Lanfang Theatre.
Sunday	Return to Melbourne

Make predictions about future changes

1 What do these pictures show? Match the words with the pictures.



- _____ automation
- _____ nanobots
- _____ global warming
- _____ artificial intelligence (AI)
- _____ cloning



2 Discuss these questions in groups.

- 1 How do you think these events or such technology might develop in the future?
- 2 What challenges might they bring?
- 3 What opportunities might they bring?



Listen for predictions

When listening for predictions, you should listen for the use of the future tense, in particular the future tense with *will* or *will be doing*. Words such as **predict**, **prediction**, and **forecast**, are also used quite often when making predictions.

- 3 Listen to a radio interview with Dr Han and Vincent Black giving their predictions about the future, and then fill in the table below.

Name	Occupation	Prediction
Dr Han		
Vincent Black		

- 4 Work in pairs. Discuss whether you think Dr Han and Vincent Black's predictions are possible. Why or why not?
- 5 In groups, brainstorm about the future. Discuss these points.
- future events or problems the world might face
 - future technologies
 - how these things will change the way we live
 - the challenges and opportunities these things might bring
- 6 Imagine that you have a job that makes you an expert in the future. In pairs, interview each other about your jobs and predictions. Use the expressions in the box to help you.

Making predictions

I think/believe/predict that in the future ...
 By 2030, we will ...
 I can imagine/forecast ...
 One challenge will be ...
 We will be doing ...

My prediction is that ...
 In the (distant) future there will ...
 I doubt/don't think that ...
 We will have the opportunity to ...
 We are going to ...



Welcome or reject future changes

- 1 Read the text and then decide whether the statements on page 21 are true (T) or false (F).

SHOULD WE FIGHT NEW TECHNOLOGY?

This morning, I saw the shocking headline: “Passenger Dies When Car Crashes in Driverless Mode”. In the article, various people said that the public should **oppose** the idea of developing driverless cars. They said that some advances in technology were unnecessary and could even be dangerous. **Hence**, we should **cease** accepting technology just because it is new. The newspaper reported that the car company had already apologised for the accident, but the families of the deceased said it was not enough. Nevertheless, the company still claimed that most people would be travelling in driverless cars one day soon.

On the one hand, there are many different groups of people around the world who live happily in the **absence** of new technology. Probably the most well-known are the Amish, a group of Christians living in **rural** America. They do not own or drive cars, watch TV, or use the Internet. They have lived mainly as farmers since the 18th century, and they will probably be living the same way in the distant future. They **advocate** a simple life with an **emphasis** on hard work, family, and community. They think that is better than caring about **luxuries** or following the lives of the rich and famous. It could even be argued that the Amish’s quality of life is better since they live in and appreciate the natural environment rather than living in large, polluted cities.

On the other hand, new technology has provided people everywhere with many benefits over the years. For example, the latest weather-tracking computer programs give people lots of warnings about potential natural disasters, which saves many lives. Moreover, the Internet has made it possible for friends and family to keep in touch easily even if they are on opposite sides of the world. It has also made finding opportunities in life much easier, as it allows people to make larger networks of friends through using social media.

Personally, I have benefited quite a lot from technological advances. I found my **career** as an AI designer through a social media network. My health monitor, which I wear all the time, has also helped me get into the best shape of my life. Of course, when new technology changes the way we live, it can be a scary **prospect**. Nevertheless, I will always look on the positive side of change and accept it rather than resist it.



- 1 A person died in an accident while driving a car. T ☐ F ☐
- 2 The Amish avoid new technology because they do not want to have good lives. T ☐ F ☐
- 3 Many disasters have been prevented by weather-tracking computer programs. T ☐ F ☐
- 4 Building large networks through social media helps us find new opportunities. T ☐ F ☐
- 5 The author uses a health monitor to know how much exercise he/she needs. T ☐ F ☐

2 Answer the following questions about the text.

- 1 In which **paragraphs** does the author:
 - describe the issue? _____
 - give an opinion? _____
 - discuss the advantages? _____
 - discuss the disadvantages? _____
- 2 Underline the signpost words or phrases in the text. How do they help tell us the purpose of the paragraphs?
- 3 Why did the author decide to write about this topic?



Signposts

Some words and phrases are used as signposts to help show a paragraph's purpose. These usually come at the beginning or end of a paragraph.

3 Use what you have learnt to express your opinion in an essay about the changes that could be caused by advances in technology.

- 1 Work in groups. Brainstorm some future advances in technology, and their possible advantages and disadvantages.

Advance in technology	Advantage	Disadvantage

- 2 Choose one of these advances in technology and answer the questions.
 - Why do you want to write about this topic?
 - What is your own opinion on the topic?
- 3 Write your opinion in an **essay**.

4 Exchange your draft with a partner.

- 1 Use the checklist to help you review your partner's draft.
 - ✓ Does the essay say what the writer thinks about the topic?
 - ✓ Does the body discuss the advantages and disadvantages of the advance?
 - ✓ Are signposts used to help the reader understand the purpose of each paragraph?
 - ✓ Does the conclusion state the writer's position?
- 2 Take your draft back and revise it.

5 Share your essay with the rest of the class.

1 Complete the dialogues with the correct forms of the words in the box.

luxury	prospect	rural	absence
prediction	essay	network	emphasis

- A: Why are you so concerned?

B: We can't win the case in the _____ of relevant evidence.
- A: It's difficult to make **accurate** _____ about the effects on the environment.

B: I couldn't agree more. We should place more _____ on environmental protection.
- A: What are you working on?

B: I'm writing an _____ on how to integrate individuals' values and society's needs.
- A: How do you find working in your new office?

B: It's great! The office _____ allows users to share files and software, and to use a central printer.
- A: I don't quite understand your choice. What might be the advantages of living in remote _____ areas?

B: The _____ of getting a high-paying job is low, but I find it more meaningful to help people there. In addition, I have the _____ of breathing fresh air every day.

2 Read an introduction to the Future Library project. Fill in the blanks using the correct forms of the words in the box.

cut down

keep

use

write

read

The Future Library is a project by the artist Katie Paterson. It began with the cutting down of trees in a forest north of Oslo, Norway, in 2014. The Future Library Trust _____ wood from these trees to build a special room—the Silent Room—in the Oslo Public Library. In place of the trees that had been cleared, 1,000 new trees were planted. Every year from 2014 until 2114, a different popular author _____ one original story, and the **librarians** _____ all the stories in the Silent Room, where visitors can look at them but not read them. In 2114, the organisers _____ the 1,000 trees that were planted back in 2014. They will then use the wood for publishing the 100 books in the Silent Room. So, in 2114, people _____ books that were made from trees that are growing right now.

REFLECTING

- What new advances in technology introduced in this unit interested you?
- How have your opinions about advances in technology changed because of this unit?
- What advances in technology would you like to learn more about?
- Overall, I thought this unit was ☐ cool ☐ useful ☐ so-so ☐ difficult.

*Project: Write a letter to yourself from the future

- 1 Imagine that your 50-year-old future self has sent you a letter about your future career. What would that letter contain? Work in groups. Discuss the questions.
 - 1 Which careers are you interested in?
 - 2 How might future advances in technology change those careers?
 - 3 What are the advantages and disadvantages of these future careers?
 - 4 How might you best prepare for your future careers?
- 2 Choose the most interesting future career, and write a personal letter to yourself from the future about that career. Your letter may include:
 - a description of the future career
 - the advantages and disadvantages of the career
 - the preparations that are (or are not) needed for the career
 - drawings or photos illustrating the career
 - a greeting and closing

Use the letter below to help you.

Dear Past Bingbing,

Hi! I'm Bingbing, your future self! I know that you are really worried about your future career, so I wanted to write this letter to put your mind at rest.

I'm sorry to say that you won't become a pilot as you wanted. In the future, large passenger airplanes will fly themselves and won't need pilots. But there is a big problem in the future that you don't have now: no one uses cars anymore—they use personal jet packs. As you can imagine, the skies over the city get pretty busy! Someone needs to control all these people so they don't have accidents. And that's what you do: you're a jet pack air traffic controller.

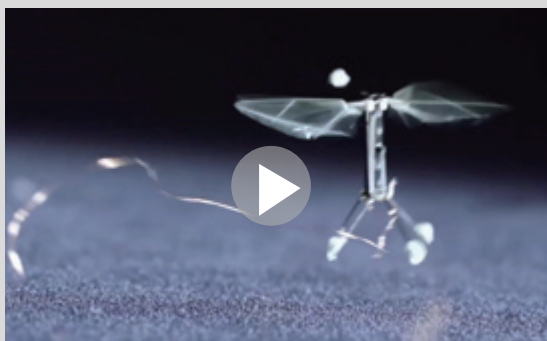
One really good point about your job is that you don't have to leave home. Instead, you'll use a virtual reality headset and microphone to do your job while you are sitting on the sofa drinking tea. But you will have to work on your people skills, as you will be talking to people all day. The bad point? Too many jet packs in the sky! Sometimes it can be kind of tense, and some people don't like to obey the rules or be told what to do.

All in all, I think you'll be happy with this job. But of course you will, because you're me! Stop worrying! Your future is going to be great. Trust me.

Best regards,
Future Bingbing

- 3 Take turns presenting your letters in class. Then vote on the most interesting letter.





Flight of the RoboBee

RoboBees are small flying robots that are being developed at the Wyss Institute of Harvard University by a team headed by Robert Wood.

BEFORE YOU WATCH

Predict what you are going to see. Think and circle the correct word(s) for each sentence.

- 1 RoboBees are like bees in that they fly independently/together, but all work independently/together.
- 2 Robert Wood is an explorer/a roboticist.
- 3 In the future, RoboBees could help explorers/policemen and doctors/photographers.
- 4 All of the RoboBees have crashed/flown successfully.
- 5 Like bees, every RoboBee has a job to do/obeys a queen bee.

WHILE YOU WATCH

- 1 Check your answers in Before You Watch.
- 2 Complete the quotes by Robert Wood with words you hear in the video.

- 1 ... robotics is the _____. It's the next big thing to _____ in areas from medicine to even things like _____.
- 2 We use nature to _____ that we build.
- 3 ... they can be quite useful for applications where you wouldn't _____ or an animal ...
- 4 If you don't fail, you _____.
- 5 If you want to make something fly, _____ in nature.

AFTER YOU WATCH

Discuss these questions in groups.

- 1 What might be some advantages of having many small robots that work together rather than one large robot?
- 2 Specifically, how might RoboBees be used in a future application?
- 3 What other kinds of robots can be created from nature (e.g., a robotic lion or snake)? How might these robots be used?

UNIT 3

FASCINATING PARKS

A national park is not a playground. It's a sanctuary for nature and for humans who will accept nature on nature's own terms.

—Michael Frome

In this unit, you will

- 1 read about Sarek National Park and some theme parks.
- 2 listen to and talk about how to get to different places in a park.
- 3 write an introduction to a park.
- 4 learn about national parks around the world.

Look and discuss

- 1 Where do you think the photo was taken?
- 2 Would you like to go there? Why?
- 3 Should a place like this be developed? If so, how?

Experience a national park

1 Before you read, discuss these questions in groups.

- 1 What kinds of parks have you been to? What were they like?
- 2 When you think of national parks, what comes to mind first?

2 Skim the text. Match the subheadings with the paragraphs.

- A Land of Mountains and Ice
- A Land of Adventure
- Man at Peace with Nature
- A Summer Where the Sun Never Sleeps



Use subheadings

Good subheadings catch the reader's eye and make him or her want to read more. Working out the idea behind the subheadings can help you better understand the structure and the key points of the text.



1

I wake up to the sound of the wind **buffeting** the **cloth** of my tent. Even though the sun is brightly shining, telling whether it is morning or night is impossible. I'm above the Arctic Circle, where in summer the sun never sets. Checking my watch, I see that it is 7:30 a.m. I leave my tent and walk over to the mountain **edge**. Spreading out before me, branches of the Rapa River flow through the **valley** below. I'm in the remote far north of Sweden in Sarek National Park, a place with no roads or towns.

2

Sarek's mountains used to be covered by **vast** sheets of ice. Around 9,000 years ago, this ice melted, leaving behind about 100 glaciers. Soon after, reindeer began to arrive. Following the reindeer were the Sami people, who made this **territory** their home. Getting here is quite difficult, so apart from the Sami very few people have ever seen Sarek. In 1909, Sarek was made a national park in order to keep the land in its natural state. Though the Sami are allowed to continue their traditional way of life in the park, no one else can live here, and all new development is **banned** within park **boundaries**. At the far side of the valley, an ancient Sami **cottage** is **visible**. Close by, there are a few reindeer feeding on grass.

3

For hundreds of years, looking after reindeer was a way of life for the Sami. They used the reindeer's meat for food, their bones for tools, and their skin for making clothes and tents. Since reindeer were always on the move, the Sami would pick up their tents and **accompany** them. Today, most Sami have houses in villages near Sarek and live a modern life just like their neighbours. But every spring, a small number of Sami still follow their reindeer into the valleys of Sarek, living



in tents or old cottages and enjoying their traditions. I am not a Sami, but in Sarek I've **adopted** some of their habits. For example, this morning my breakfast is flat bread warmed over a fire, dried reindeer meat, and some sweet and **sour** berries that I found growing near my tent.

4 _____

After breakfast, I pack my bag and set out again. Since I must carry all of my food and supplies with me, my bag weighs about 30 kilograms. If today is anything like yesterday, it will be full of sweat and hard work as I hike over this difficult land to my destination on the other side of the valley. However, I cannot complain. Being in such a beautiful and wild place makes me feel **blessed** to be alive. Here I am, alone under this broad sky, breathing the fresh air, and enjoying this great adventure. What could be better?

3 Read the text again and answer these questions.

- 1 How many hours a day does the sun shine in summer in Sarek?
- 2 What steps has the Swedish government taken to keep Sarek in its natural state?
- 3 How has life changed for the Sami? Why might so few Sami want to live in Sarek?
- 4 Why does the writer think the sweat and hard work is worth it?
- 5 Would you like to visit Sarek? Why or why not?

4 Are these senses used to describe Sarek in the text? If so, explain how.

Sight	Touch	Smell	Taste	Sound
-------	-------	-------	-------	-------

5 Complete the passage using the correct forms of the words from the text.

In the remote far north of Sweden, in Sarek National Park above the Arctic Circle, I wake up to the sound of the wind b _____ the cloth of my tent. Standing at the e _____ of the mountain, watching the Rapa River f _____ through the valley below, I feel so b _____ to be alive and have this rare opportunity to explore this unique t _____, which is almost unknown to the outside world.

Once covered by v _____ sheets of ice, Sarek's mountains are home to the Sami, the native residents of the park. The Sami lived off reindeer, moved with them, and a _____ them for hundreds of years. Today, most Sami have left their ancient c _____ in the mountain valleys and live a modern life in villages near Sarek instead.

To keep its natural state, except for the Sami, no one is allowed to live in Sarek, and all new development is b _____ within the park b _____. It is hoped that Sarek National Park will always remain as it is, natural and beautiful.

6 Work in groups. Discuss these questions.

- 1 Is it worth making a place like Sarek a national park? Give your reasons.
- 2 Do you think setting up national parks is an effective way to balance development and the protection of nature? Why or why not?

Build up your vocabulary

1 Match each word with its proper meaning and make a sentence with it.

- | | |
|--------------------------|---|
| () 1 buffet <i>v.</i> | A the outer limit of an object |
| () 2 buffet <i>n.</i> | B an official or legal prohibition |
| () 3 edge <i>v.</i> | C a meal with several dishes from which people serve themselves |
| () 4 edge <i>n.</i> | D move carefully towards something |
| () 5 ban <i>v.</i> | E far from, not close |
| () 6 ban <i>n.</i> | F officially or legally prohibit |
| () 7 remote <i>adj.</i> | G (especially of wind or wave) strike repeatedly with a lot of force |
| () 8 remote <i>n.</i> | H (<i>informal</i>) a device for controlling something else from a distance |

2 Work out the meanings of the underlined words in the sentences below and state whether they are compounds or derivatives.

- I believe that a journalist should be completely objective.
- Whenever I sneeze, my English teacher says, "Bless you!"
- We are impressed by the vastness and breathtaking beauty of the oceans.
- He bought a traditional tea set at the airport: a nice teapot and four teacups.
- He ordered the dish **labelled** "Pumpkin Pie and Ice Cream".

3 Complete the passage below with the correct forms of the words in the box.

boundary visible remote vast on the move ban set up

The Northeast Tiger and Leopard National Park was _____ in Jilin and Heilongjiang, with _____ **stretching** all the way to the border and joining with Russia's wildlife reserves. This _____ new park is nearly four times larger than the old wildlife park protecting Siberian tigers in Northeast China. Over the years, increased development in the area affected the tigers' habitat, and it was thought that by 1998 there were only six to nine wild Siberian tigers living in the _____ region. However, a _____ on development put in place in 2015 resulted in a _____ population increase of the species, and now the area is thought to have about 35 tigers and 70 leopards. The problem, however, was that the old park was too small to support further population increases. Always _____, Siberian tigers and leopards need large areas to hunt for food. This larger park, with a connection to Russia's wildlife reserves across the border, should give these species the natural space they need to live in.

Discover useful structures

- 1 Identify the function of the *-ing* form in the sentences below. Then find more sentences with the *-ing* form from the reading passage and state their functions.

- *Getting here* is quite difficult.
- *Being in such a beautiful and wild place* makes me feel blessed to be alive.

- 2 Rewrite each of the following sentences using the *-ing* form as the subject. How does the sentence focus change?

EXAMPLE

It is challenging yet really fascinating to hike through the mountains in the pathless Sarek. ▶
Hiking through the mountains in the pathless Sarek is challenging yet really fascinating.

- 1 It is both challenging and rewarding to study abroad. ▶
- 2 It would hardly be possible to go on a hiking tour in Sarek in winter due to the extreme cold. ▶
- 3 Honestly, it can be both exciting and terrifying to explore a vast unknown land. ▶
- 4 It is good to adopt a positive attitude, even when things are difficult. ▶
- 5 It is strongly advised to hire local guides, because they can offer accurate knowledge of Sarek culture and history. ▶

- 3 Fill in each blank using the *-ing* form of a verb from the box and state its function. One word will be used twice.

combine cover grow take limit walk experience

Xixi National Wetland Park, _____ 10 square kilometres in western Hangzhou, is the first national wetland park in China. _____ city life, nature, and wetlands makes the park a popular destination both for tourists and local residents. At Xixi, _____ a boat tour, _____ along paths, and _____ local customs and traditions of the villages in this park are at the top of the list of people's favourite activities. With trees, bushes, and colourful flowers _____ along the riversides, the park shows different sides of beauty in different seasons.

In order to better develop as well as preserve this place, _____ human impact on Xixi Wetland was considered by the park designers. All the new buildings were designed in a traditional way to fit into the natural environment. This green, watery world is home to many birds and fishes. With trees _____ in the shallows, the wetland is a natural system for providing clean water and producing oxygen, which makes it the "green lungs of Hangzhou".



- 4 Choose a place in your city or town as a destination for a school trip. Use the passage above as an example and write about your choice.

Visit a city park

- 1 Look at the photos taken in Beijing Olympic Forest Park. Match them with the activities below. Write the correct letter in each circle.

A rent a **cycle** _____

C rent a pedal boat _____

E go on a children's ride _____

B walk through an underwater corridor _____

D watch a **fountain** performance _____

F look at flowers _____



- 2 Linlin and Yuhui are taking Jake to Beijing Olympic Forest Park. Listen to their conversation. Tick which activities they are going to do above.

- 3 Look at the map. Listen to the conversation again and finish the activities below.

- 1 Draw the **route** that Jake, Linlin, and Yuhui will take.
- 2 Mark the places they will visit on the map below.



Listen for directions

Listening for directions can be difficult, as often a lot of information is given in a short time. You could listen for sequence words and direction words. You can also try to form a mental map of where you are going while the other person is talking.



- 4 Work in pairs. Role-play visiting the park. Take turns giving directions to different places in the park. Use the words and phrases below to help you.

Asking for and giving directions

Excuse/Pardon me.

How do I get to ...?

Is ... nearby?

Is ... far from ...?

It's about ... metres north of ...

Walk/Go along the river/path ...

When you see the ..., you are close to ...

Go straight **ahead** (until you come to ...).

Do you happen to know where ... is?

How far is ...?

Is ... close to ...?

It's on the north/south/east/west side of the park.

Go through ...

Follow the (main) path to ...

It's ... metres from here.

Explore theme parks and write about a park

- 1 Read the text and then fill in the table on page 32.

THEME PARKS FUN AND MORE THAN FUN

Which theme park would you like to visit? There are various kinds of theme parks, with different parks for almost everything: food, culture, science, cartoons, movies, history, and so on. Some parks are famous for having the biggest or longest roller coasters, others for showing famous sights and sounds. Whichever and whatever you like, there is an **incredible** theme park that will **appeal** to you!

The theme park you are probably most familiar with is Disneyland, which can be found in several parts of the world. Disneyland will bring you into a magical world and make your childhood dreams come true. Travelling through space, visiting a pirate ship, or meeting an **adorable** fairytale or cartoon character are all possible at Disneyland. As you **wander** around the fantasy amusement park, you may see Snow White or Mickey Mouse in a parade or even on the street. Of course, Disneyland also has many exciting rides to **amuse** you, from **enormous swinging** ships to scary free-fall drops. If you want to have fun and more than fun, come to Disneyland!

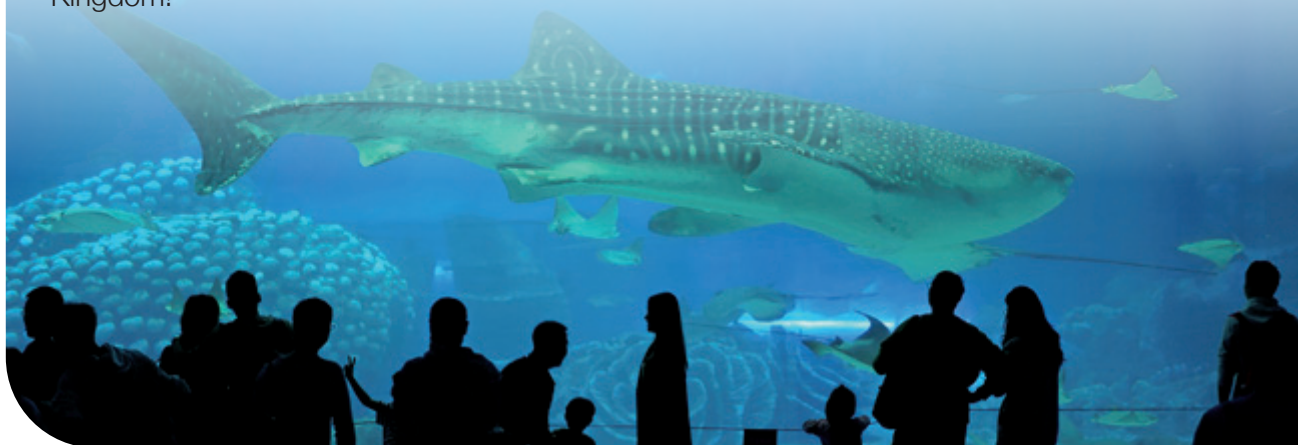




Dollywood, in the beautiful Smoky Mountains in southeastern USA, is unique because it shows and celebrates America's traditional southeastern culture. Famous country music groups put on performances there all year round, indoors and outdoors. People come from all over America to see skilled workers make wood, glass, and **iron** objects in the old-**fashioned** way. Visiting the candy shop and trying some of the same kind of candy that American southerners made 150 years ago is a **rare**

experience. Riding on the only **steam** engine still working in the southeastern United States is a special treat. And for those who like rides, Dollywood has a **superb** old wooden roller coaster, Thunderhead. It is world-famous for having the longest track in the smallest space. Come to Dollywood to have fun learning all about America's historical southeastern culture!

Chimelong Ocean Kingdom in Zhuhai, China, is one of the leading ocean-themed parks in the world. Here you can walk under the Whale Shark Aquarium—the world's largest—and see up to 20,000 fish, in addition to whale sharks. Watching the dolphin and sea lion shows is both educational and fun. Of course, you can also see all kinds of interesting animals, including **polar** bears. The park has more rides than you can imagine: join a water fight against pirates, get turned upside down by an exciting roller coaster, or get wet in one of the water rides! Then at night, see the **splendid** Journey of Lights Parade and fireworks **display**. Hungry? The park has plenty of restaurants with tasty food for every **appetite**—you can even eat while watching the fish swim by. If it is ocean **entertainment** that you are looking for, come to Chimelong Ocean Kingdom!



A	B	C	D
Disneyland (various locations)	Travel through space; visit a _____; _____;	A parade of _____	
Dollywood in _____	_____ Thunderhead	_____ put on performances there	
Chimelong Ocean Kingdom in _____	Water fight against pirates; exciting roller coaster; water rides	Whale Shark Aquarium; _____; polar bears	Plenty of restaurants with _____

2 Study the language features.

- The table on page 32 shows the introductions to each theme park. What headers would you give for **columns** A to D?

A Name and location

B _____

C _____

D _____

- Find the following items in the text, and then discuss in groups how they are used and what they add to the text.

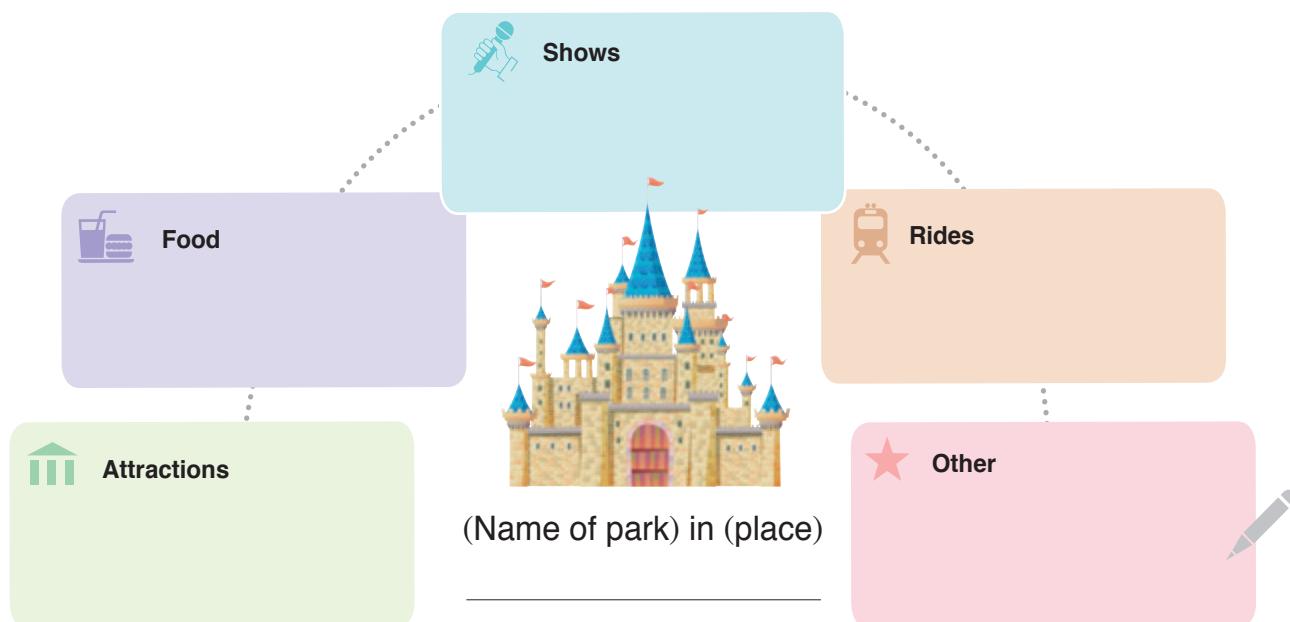
A adjectives

B *if*-clauses

C imperatives

3 Use what you have learnt to write an introduction to a park.

- Choose the park you wish to write about.
- Make a mind map about the park.
- Use your notes to write your draft.



4 Exchange your draft with a partner.

- Use the checklist to help you review your partner's draft.
 - ✓ Is the introduction clear?
 - ✓ Does the writer include all the important points about the park?
 - ✓ Does the writer provide any additional information about the park?
 - ✓ Does the writer use *-ing* forms?
 - ✓ Does the writer use correct grammar, punctuation, and spelling?
- Take your draft back and revise it.

5 Post your introduction in the classroom or read it to your class.

1 Read the passage and fill in the blanks with the correct forms of the words in the box.

vast remote fascinating territory bless accompany appeal to

My name is Svetlana and I have worked as a guide at Lake Baikal (贝加尔湖) for more than 10 years. Lying in a pretty _____ location in Siberia, the deep and _____ lake with more than 300 rivers flowing into it is one of the world's greatest natural wonders.

Every season, I _____ and guide tourists. Baikal is a _____ with unique wildlife, breathtaking beauty, and _____ local culture.

Ancient, inspiring, mysterious, and beautiful, Lake Baikal _____ visitors like no other place on the earth. I feel _____ to have been born here, and I am looking forward to many more years of welcoming visitors to an unforgettable experience at Baikal.



2 Answer these questions using the *-ing* form of the verb phrases in brackets. Then write down at least two more questions and answers of your own.

- 1 What impressed you most when visiting Zhangye Danxia Geopark? (*see the colourful mountains and rocky landscape*)
- 2 What tops the list of tourists' favourite activities in Zhangjiajie? (*admire the magnificent peaks/landscape, take a raft ride, experience the local customs of the Tujia people and the Miao people*)
- 3 What do tourists like to do at Guilin's Li River? (*take a boat tour, admire the karst landscape*)
- 4 What activities would appeal to adventurous tourists in Lijiang, Yunnan Province? (*view glaciers at Yulong Snow Mountain, listen to the sound of rushing water at Tiger Leaping Gorge*)

💡 REFLECTING

- ⊙ What did you learn about parks that you did not know before?
- ⊙ What else would you like to learn about parks?
- ⊙ Of the parks in this unit, which would you like to visit most? Why?
- ⊙ What problems did you or your friends have in studying this unit? How did you solve them? What advice did you give each other?
- ⊙ Overall, I thought this unit was ☐ interesting ☐ useful ☐ so-so ☐ difficult.

*Project: Create your ideal theme park

1 Discuss these questions in groups.

- 1 What kind of theme park do you want to create? You can choose one of the ideas below, or one of your own.

life in space

life in the future

history

ocean

local culture

stories

adventure

science

dinosaurs

food

birds and fish

climbing

- 2 What will your park offer visitors? Come up with at least three things for each category below, and give them interesting names.

Rides and attractions

Shows and events

Restaurants and food stands

2 Assign group members to prepare the following:

- a short introduction to the park.
- a large and colourful map of the park showing where everything is located.
- small pictures of the things discussed.

3 Put your introduction, map, and pictures together to make a poster. Use the poster below to help you.



4 Present your poster to the class, and give an introduction to your theme park.

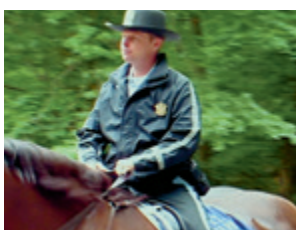


BioBlitz: Life in 24 Hours

This video shows a BioBlitz in Rock Creek Park, which runs through Washington, DC. “Bio” means life, while “blitz” means a quick, energetic effort to do something.

BEFORE YOU WATCH

Work in groups. Use the phrases in the box to describe what is going on in the photos, and then discuss what you think a BioBlitz is.



- park ranger
- people looking for insects
- a person holding a frog
- a woman showing how to use a butterfly net
- an insect trying to escape a Petri dish (培养皿)
- a man taking photos

WHILE YOU WATCH

Decide if the following statements are true (T) or false (F).

- 1 Dr Pimm says, “The extraordinary thing about this BioBlitz is just how little stuff there is here! There really aren’t many wild animals here.”
- 2 Park rangers show a group how to catch frogs.
- 3 David Littschwager is taking photos of insects. He says, “I don’t like spiders.”
- 4 Even at the end, there were a lot of plants and creatures that they couldn’t identify.
- 5 The real purpose of the BioBlitz is to get people interested in the biodiversity that’s all around them, even in their own backyards.

T ☐ F ☐

T ☐ F ☐

T ☐ F ☐

T ☐ F ☐

T ☐ F ☐

AFTER YOU WATCH

Discuss these questions in groups.

- 1 This BioBlitz was conducted in the middle of a large city. Do you think there is as much biodiversity in your city or town? Why or why not?
- 2 Are there any parks in your city or town where you can find many different kinds of plants and animals? What activities can you do there?

UNIT 4 BODY LANGUAGE

What I hide by my language,
my body utters.

—Roland Barthes



In this unit, you will

- 1 read about the function of body language and its implications in different cultures.
- 2 hear and talk about how people use and understand body language.
- 3 describe how people use body language to express meaning.
- 4 appreciate the art of non-verbal humour.

Look and discuss

- 1 What might the people be doing in the photos?
- 2 What do you think they might be feeling?
- 3 When and how do you use body language to convey meanings?

Understand body language

- 1 Choose five sentences and act them out without speaking. Can your partner guess what you are trying to communicate?

Hello!	Goodbye!	Come here!	Go away!	Too expensive!
I'm surprised!	I'm tired.	I'm confused.	OK!	Good luck!
I'm happy!	I'm upset!	I'm sad!	I forgot!	You're great!

- 2 Read the text and fill in the table on page 39.

LISTENING TO HOW BODIES TALK

We use both words and body language to express our thoughts and opinions in our **interactions** with other people. We can learn a lot about what people are thinking by watching their body language. Words are important, but the way people stand, hold their arms, and move their hands can also give us information about their feelings.

Just like spoken language, body language **varies** from culture to culture. The crucial thing is using body language in a way that is **appropriate** to the culture you are in. For example, making eye contact—looking into someone's eyes—in some countries is a way to display interest. In other countries, by contrast, eye contact is not always **approved** of. For example, in many Middle Eastern countries, men and women are not socially permitted to make eye contact. In Japan, it may **demonstrate** respect to look down when talking to an older person.



The gesture for “OK” has different meanings in different cultures. In Japan, someone who **witnesses** another person **employing** the gesture might think it means money. In France, a person encountering an **identical** gesture may **interpret** it as meaning zero. However, you should avoid making this gesture in Brazil and Germany, as it is not considered polite.

Even the gestures we use for “yes” and “no” **differ** around the world. In many countries, shaking one's head means “no”, and nodding means “yes”. By comparison, in Bulgaria and southern Albania, the gestures have the opposite meaning. There are also differences in how we touch each other, how close we stand to someone we are talking to, and how we act when we meet or part. In countries like France and Russia, people may kiss their friends on the **cheek** when they meet. Elsewhere, people **favour** shaking hands, **bowing** from the **waist**, or nodding the head when they meet someone else.



Make inferences

Sometimes a passage does not say something directly. However, you can figure it out by looking at the clues in the passage.

Some gestures seem to have the same meaning everywhere. Placing your hands together and resting them on the side of your head while closing your eyes means “sleep”. A good way of saying “I am full” is moving your hand in circles over your stomach after a meal.

Some body language has many different uses. Perhaps the best example is smiling. A smile can help us get through difficult situations and find friends in a world of strangers. A smile can break down **barriers**. We can use a smile to apologise, to greet someone, to ask for help, or to start a conversation. Experts suggest smiling at yourself in the mirror to make yourself feel happier and stronger. And if we are feeling down or lonely, there is nothing better than seeing the smiling face of a good friend.

Body language/Gesture	Meaning	Country/Region
Eye contact between men and women	Not polite	Middle East
Looking down when talking to someone		
OK sign		
Kissing on the cheek		
Placing your hands together and resting them on the side of your head while closing your eyes		
Moving your hand in circles over your stomach after a meal		

3 Read the text again, and then discuss these questions.

- 1 How is the body language mentioned in the text interpreted in China?
- 2 Can you think of an example of body language that is appropriate in China but might be misunderstood in another culture?
- 3 What advice on body language can you give a foreign friend on his/her first trip to China?



4 Watch the video *Smile Trial*, and then discuss the questions in groups.

- 1 Smiles can be used to hide feelings like **anger**, fear, or worry. Can you describe a situation where you might smile when you don't mean it?
- 2 Apart from fake smiles, is there any other kind of body language that can sometimes be fake?
- 3 Which is a more **reliable** guide for understanding someone's feelings, their body language or the words they speak?

Build up your vocabulary

- 1 Fill in the table with different forms of the words. Refer to a dictionary if necessary.

Noun	Verb	Adjective	Adverb
	differ		
	vary		
	rely		
	interact		
	approve		
	embarrass		



- 2 Work out the meanings of the underlined words in the sentences below. In pairs, list more words of the same kind.

- I rest my head on the desk to get some rest.
- The child displayed great interest in the huge fireworks display.
- Most students favour the plan, while their teachers are not in favour of it.
- Jeremy witnessed the whole **incident** and was expected to be the key witness at the **trial**.
- His lack of eye contact when talking with people shows that he lacks confidence.
- When he noticed a slight frown on his **twin** sister's face, he frowned as well.

- 3 Read the passage about body language. Fill in the blanks with the correct forms of the words and phrases in the box.

by contrast
demonstrate

by comparison
approve of

break down
clue

interaction
gesture

When we think about nonverbal behaviour, or body language, we think about communication. When we think about communication, we think about _____. So what is our body language _____ to others? Social scientists have spent a lot of time looking at the effects of our body language. We make assessments and inferences from body language. And according to those judgements we _____ one person and dislike another. So body language provides external _____ that are influenced by **internal** thoughts and feelings. Scientists have found that when we feel proud and powerful, we usually straighten up to make ourselves bigger. _____, when we feel powerless, we tend to slump, making ourselves smaller. It is obvious that our minds can influence our bodies. But is it also true that our bodies can affect our minds? Scientific experiments show that if we make powerful _____ long enough, we may actually feel more powerful. People who remember to use positive body language are more likely to feel positive _____, so some scientists suggest that we use our bodies to try power **posing** to help _____ our feelings of shyness and powerlessness.

Discover useful structures

- 1 Look at the examples below, paying attention to the italicised parts. Find other examples from the reading text.

- She enjoys *learning about body language in different cultures*. (object)
- The crucial thing is *using body language in a way ...* (predicative)

- 2 Complete the sentences using the *-ing* form of the words and phrases in the box. Two are extra. Then state their functions.

amuse teach break down call on bow get through assess

- 1 Bill's job is _____ sign language.
- 2 The theme of his presentation is _____ barriers between groups.
- 3 By _____, we mean "**bending** our head or body forward as a sign of respect or shame".
- 4 _____ three kilometres of heavy traffic took me almost 25 minutes.
- 5 We intended to visit the theme park but ended up _____ Professor Zhang.

- 3 Complete the passage with the correct forms of the words and phrases in the box. Can you add more examples to explain how you read body language?

lie challenge consider individual differences maintain
consider the whole picture evaluate a patient's condition

Reading body language is not an easy task. It can be _____ because interpreting the signs that another person shows requires _____. In this sense, it can be compared to a doctor _____.

_____ is also key to reading people's body language accurately. For example, when _____, some people avoid eye contact. By contrast, others may _____ eye contact even longer than usual.

- 4 Talk about the body language you can read from the following pictures. Use at least one *-ing* form for each picture.



①



②



③

Explore body language

- 1 Look at these photos and discuss what you think each person is communicating.



- 2 Discuss when and where people need to use body language to communicate effectively.

- 3 Listen to a conversation about body language. Then answer the following questions.

- 1 How did the man get the idea of using gestures to communicate?
- 2 What did the police leader tell his team by using gestures?
- 3 What did the woman say about the acting classes that she's been taking?
- 4 What did the man mean by saying "It's good you tried" at the end of the conversation?

- 4 Listen to the conversation again. Are the following statements correct inferences from the conversation?

- 1 The two speakers are married.
- 2 Making too many gestures in communication is not polite.
- 3 The police team were probably successful in catching the criminals.
- 4 Both speakers think body language is useful.
- 5 The woman is not very confident about her silent acting ability.



Infer meaning

Sometimes things are not said directly, and so you must guess the meaning, relationship of the people, or context. You can do this by:

- drawing conclusions from the background information you already have.
- looking at clues that tell you the context.
- using logic to work out the meaning.

- 5 Act out a scene using only body language to communicate. You may follow these steps to complete your performance.

- 1 Form into groups of four. One of you is the performer, and the others are observers.
- 2 The performer writes down a situation and some messages to convey through body language.

- 3 The performer acts out the scene and the observers individually write down their thoughts without talking to anyone else.
- 4 The actor **reveals** the situation and messages, and the group compares notes. Use the table below to **clarify** any misunderstandings or different answers.

Asking for and giving clarification

What did you mean by ...?
 So you mean ...?
 So did that mean ...?
 What I don't quite understand is ...
 Could you explain ...?
 Could you give me an example?

In other words ...
 What I meant was ...
 What I was trying to say was ...
 Does that make sense?
 Is that clear?
 I can tell that ...

Pronunciation

1 Read the quotes and notice the pause after each sense group.

- 1 There are four ways, | and only four ways, | in which we have contact with the world. | We are evaluated and classified | by these four contacts: | what we do, | how we look, | what we say, | and how we say it. —Dale Carnegie
- 2 If language was given to men | to conceal their thoughts, | then gesture's purpose | was to disclose them. —John Napier
- 3 Body language is a powerful tool. | We had body language | before we had speech, | and apparently, | 80% of what you understand in a conversation | is read through the body, | not the words. —Deborah Bull

2 Read this passage. Then mark “|” where it needs a pause.

Life is a stage, and we are all actors. This is also true when you are in a foreign land. Acting can help you communicate even if you do not know the language. For instance, one day a Chinese lady who was babysitting her grandchild in America went to a supermarket to buy some beef. She was confused to see all kinds of meat there and did not know which ones were beef. She asked a clerk by putting both hands up and saying “Moo! Moo!” The lady got what she wanted even without saying a word of English.



3 Listen to the texts above and see how well you read.

Describe classroom body language



1 Look at the questions. Then read the text on page 44 and try to answer them.

- 1 How does the teacher know what students are thinking?
- 2 According to the teacher, what is some students' favourite activity?
- 3 What does the phrase “who knows what” mean?
- 4 Why does the teacher think body language is important?

HOW DO I KNOW MY STUDENTS'?

As an **educator**, people often ask me how I know what is going on in the minds of my students. Many students are quite shy and don't speak all that much. At the same time, in a classroom of more than forty students, it is hard to have many one-on-one conversations with each person. So, how can I really know what makes each student tick?

My answer? I look at their body language.

It is easy to recognise when students are interested in a lesson. Most tend to look up and make eye contact. When I make a joke, they smile. When I talk about something difficult, they look confused. I know when students are really interested, however, because they lean forward and look at me. People have a **tendency** to lean towards whatever they are interested in. So if a student has his head **lowered** to look at his watch, it **implies** he is bored and just counting the minutes for the class to end. If two friends are leaning their heads together, they are probably writing notes to each other. Of course, not everyone who looks up is paying attention in class. Some students look up, but there is an absence of eye contact. Their eyes **barely** move, and they always have the same distant expression on their faces. It is as though they are asleep with their eyes open.

Some students are amused by something else. They spend all their time looking anywhere but at me. Then again, some students' favourite activity is daydreaming. With their chins on their hands, they **occupy** themselves by **staring** out of the window or up at the **ceiling**. They are certainly interested in something, but who knows what. The main thing is reminding distracted students that they need to pay attention in class.

While it is easy to **perceive** when students are interested, bored, or distracted, it is sometimes much harder to **distinguish** when students are troubled. Students who are angry, afraid, or experiencing **anxiety** may have their arms crossed in front of their **chests** and their legs closed or crossed, like they are guarding their bodies. Students who are sad or worried will nearly always wear a frown. They may also hide their faces in their hands like they are **embarrassed** or **ashamed**. Some students act this way **merely** because they are afraid of being called on by the teacher. However, if a student does not **bother** to brush her hair and her eyes are red from **weeping**, then I can infer that there are deeper issues at work. It could be that she is having

serious **conflicts** with other students or at home.

Whatever it is, I know I need to **inquire** and assess what is going on.

Ultimately, my duty is helping every student to learn. Their body language lets me know when to **adjust** class activities, when to intervene, and when to talk to students individually, so they can all get the most out of school. **Reacting** to body language is an important **component** of being a teacher.



2 Match the body language with the meanings. Write the letters A—J on the lines.

- | | | |
|----------|---|--|
| _____ 1 | Looking up and making eye contact | A very interested |
| _____ 2 | Leaning over to look at one's watch | B bored |
| _____ 3 | Two friends leaning heads together | C interested |
| _____ 4 | Leaning forward and looking at the teacher | D sad or worried |
| _____ 5 | Looking up, but no eye contact, no expression | E distracted |
| _____ 6 | Looking away | F writing notes |
| _____ 7 | Chin on hand, looking out of the window | G serious problems |
| _____ 8 | Looking down, arms or legs crossed | H like they are asleep |
| _____ 9 | Frowning | I daydreaming |
| _____ 10 | Hair not brushed, red eyes | J angry, afraid, or
experiencing anxiety |

3 Look at the following photos. In groups, discuss what these people are doing and what their body language is telling you.



①



②



③

4 Draw someone you know. Show his/her body language in your drawing.

5 Write a passage to describe the body language of the person in your drawing, and explain what his/her body language tells us.

6 Exchange your draft with a partner.

- 1 Use the checklist to help you review your partner's draft.
 - ✓ Is the person properly identified?
 - ✓ Is the description clear?
 - ✓ Does the writer give his/her impressions of the feelings and personality of the person in the drawing, and also explain why he/she has these impressions?
 - ✓ Does the writer use correct grammar, punctuation, and spelling?
- 2 Take your draft back and revise it.

7 Share your drawing and description with the rest of the class.

- 1 How important is body language? Complete the passage with the correct forms of the words in the box to find out.

crucial perceive lack component
demonstrate interact stare at embarrassment

There are three _____ in any face-to-face communication: words, **tone** of voice, and body language. It is said that most of what we communicate with others is nonverbal. So when _____ with people, _____ the message conveyed by body language is _____. You cannot succeed in business and social encounters if you employ inappropriate body language. For example, _____ someone too long can be interpreted as a threat, standing too close may cause _____ and uneasiness, and touching your neck when talking to others probably _____ that you feel nervous and _____ confidence. Sometimes body language speaks louder than words.

- 2 Decide whether each verb in its *-ing* form functions as a subject (S), object (O), predicative (P), or attribute (A).

- 1 Seeing is believing.
- 2 A man cannot be robbed of his learning.
- 3 Living without an aim is like sailing without a compass.
- 4 After staying in the sleeping bag the whole night, I really needed to stretch my legs.
- 5 You should have been more careful. She started coughing and sneezing yesterday.
- 6 One may agree that in a conversation, listening is as powerful as loving.
- 7 After a long day she looked forward to putting her feet up with a nice cup of tea.
- 8 Isabella really put her back into learning Chinese. She wants to start living in China in two or three months.
- 9 Fishing in troubled waters may cause even more problems.

REFLECTING

- ⊙ Which body language in this unit do you use most often? Does it have the same meaning as in the text?
- ⊙ What do you think you could do to communicate better with other people?
- ⊙ Do you think you will be able to tell more from reading others' body language from now on?
- ⊙ What problems did you or your friends have in studying this unit? How did you solve them? What advice did you give each other?
- ⊙ Overall, I thought this unit was ☐ interesting ☐ useful ☐ so-so ☐ difficult.

*Project: Make a body language information sheet

- 1 In groups, brainstorm a list of different kinds of body language. Use the information from this unit, your own experience and knowledge, and/or the website excerpt below.

- Standing with one's hands on one's hips shows that a person is angry in many cultures, such as Malaysia, Argentina, and Mexico.
- Many Mexicans like to touch people on the arm. This shows that they want to be friendly.
- When communicating with someone from Tanzania or Kenya, do not use your left hand when giving or receiving things like a business card or gift.
- In Vietnamese culture, the head is considered the most important part of the body. Only parents or an important person can touch your head.
- If a Lebanese person stands close to you, do not feel that they are entering your personal space. Personal space is relatively smaller in Lebanon and many other places.
- In Korean culture, one must be careful not to show too much emotion through facial expressions, except in very casual situations. Koreans may tend to distrust people who use exaggerated facial expressions, or may misunderstand what those facial expressions mean.
- People of Puerto Rico move their noses to say, "What's going on here?"

- 2 Based on your list, research online to discover what the same kinds of body language mean in different cultures.
- 3 Each group should come up with its own body language information sheet like the example below. Drawings and/or photos can be added to show what the different forms of body language look like.

Body Language Information Sheet	
Body language	Meaning
Moving the hand in circles over the stomach after a meal.	Almost everywhere: I'm full.
The "OK" sign.	Japan: money France: zero Brazil and Germany: not polite China: ...

- 4 Present your information sheet to the class, and then vote on the best one.



The Immigrant

In the film *The Immigrant*, Charlie Chaplin acts as an immigrant who is unused to life in a different country.

BEFORE YOU WATCH

Look at the photos from the film *The Immigrant* and discuss the questions.

- 1 What do you think these characters' body language and expressions mean?



- 2 In groups, discuss what you think the story of this film is.

WHILE YOU WATCH

Think about the answers to these questions.

- 1 Why does Chaplin keep putting money into the woman's pocket and taking it out?
- 2 Where does Chaplin get the money to eat at the restaurant?
- 3 Why does the waiter become angry with Chaplin?
- 4 Why does the man sitting next to Chaplin become angry with him?
- 5 Can Chaplin pay the restaurant bill in the end?

AFTER YOU WATCH

Work in groups. Finish the following activities.

- 1 Write a script, assign roles, and "dub" the scene.
- 2 Discuss if the film is better dubbed or silent.
- 3 Discuss what you think will happen next in the film.

UNIT 5

WORKING THE LAND

My lifelong pursuit is to keep all the people away from hunger.

—Yuan Longping

In this unit, you will

- 1 read about agricultural scientist Yuan Longping.
- 2 listen to and talk about the problem of world hunger.
- 3 write about your opinion on organic farming or chemical farming.
- 4 learn about farming industries in other countries.

Look and discuss

- 1 Where do you think the photo was taken, and what is it of?
- 2 Have you ever been to a place like this? What was it like?

Get to know an agricultural scientist

1 Before you read, look at the photo and the title of the text. Discuss these questions in groups.

- 1 Who is the man in the photo? What crop is he holding in his hands?
- 2 What do you know about the man? What else do you want to know about him?

2 Read the text. Match the main idea with each paragraph.

- | | |
|-------------|--|
| Paragraph 1 | A Yuan conducted research and developed hybrid rice. |
| Paragraph 2 | B Yuan worked hard to fulfil his dreams. |
| Paragraph 3 | C Yuan considered himself a farmer. |
| Paragraph 4 | D Yuan decided to study agriculture. |
| Paragraph 5 | E Yuan's innovation has helped to feed more people. |
| Paragraph 6 | F Yuan cared little for fame or wealth. |

A PIONEER FOR ALL PEOPLE

Yuan Longping, known as the "father of hybrid rice", was one of China's most famous scientists. Yet, he considered himself a farmer because he continually worked the land in his research. Indeed, his slim but strong body was just like that of millions of Chinese farmers, to whom he had **devoted** his life.



Yuan Longping was born in 1930 in Beijing. His parents wanted him to pursue a career in science or medicine. However, what concerned him most was that farmers often had poor harvests and sometimes even had a serious **shortage** of food to eat. To **tackle** this **crisis**, he chose to study agriculture and received an education at Southwest Agricultural College in Chongqing.

After graduating in 1953, he worked as a researcher. Yuan Longping realised that larger fields were not the solution. Instead, farmers needed to **boost** yields in the fields they had. How this could be done was a challenging question at the time. Yuan was **convinced** that the answer could be found in the creation of hybrid rice. A hybrid is a cross between two or more varieties of a species. One

characteristic of hybrids is that they usually **attain** a higher yield than **conventional** crops. However, whether it was possible to develop a hybrid of self-pollinating plants such as rice was a matter of great debate. The common **assumption** then was that it could not be done. Through **intense** effort, Yuan **overcame** enormous technical difficulties to develop the first hybrid rice that could be used for farming in 1974. This hybrid enabled farmers to **expand** their **output** greatly.

Today, it is **estimated** that about 60 percent of **domestic** rice **consumption** in China is

comprised of crops **generated** from Yuan's hybrid strains, and his strains have allowed China's farmers to produce around 200 million tons of rice per year. Yuan's innovation has helped feed not just China, but many other countries that depend on rice as well, such as India and Vietnam. Because of his invaluable contributions, Yuan Longping received numerous awards both in China and abroad.

Given that Yuan's hybrids made him quite wealthy, one might think he would have retired to a life of **leisure**. However, this is far from the case. Deep down, Yuan was still very much a farmer at heart. As a man of the **soil**, he cared little for **celebrity** or money. Instead, he made large donations to support agricultural research.

What impressed people most about Yuan Longping was his ongoing ability to fulfil his dreams. Long ago, he envisioned rice plants as tall as sorghum, with each ear of rice as big as a broom, and each **grain** of rice as huge as a peanut. He succeeded in producing a kind of rice that could feed more people at home and abroad. His later **vision** for "seawater rice" also became a **reality**, and potentially opened up nearly one million square kilometres of **salty** land in China for rice production. Even in his later years, Yuan Longping was still young at heart and full of vision, and everyone was always excited to see what he would dream up next.

3 Read the text again and answer the questions.

- 1 Why did Yuan Longping consider himself a farmer?
- 2 Why did Yuan decide to study agriculture?
- 3 What is the main advantage of hybrid crops?
- 4 How has Yuan's work helped China and other countries?
- 5 What was Yuan's later vision?

4 Complete the sentences with the correct forms of the words in the box.

create estimation education
generation graduate



Use word formation to guess the meaning

Often, new words are not really "new" — they are just different forms of words that you may already know. For instance, a word ending with *-ate* is often a verb, while a word ending in *-tion* is often a noun. Thus, we have *communicate* (verb) and *communication* (noun). English has many word patterns like this.

- 1 This school has _____ thousands of bright young students over the years.
- 2 Most students look for jobs after university _____.
- 3 Because of the _____ of new strains of hybrid crops, people in many parts of the world now have more food to eat.
- 4 Last year, this new electric power plant _____ enough energy to power the whole city.
- 5 It was difficult to calculate exactly how many trees had been cut down. However, a general _____ was possible.

5 Discuss these questions in groups.

- 1 Apart from rice, what are some other important crops in China? What do you know about them?
- 2 Other than hybrid rice, what other hybrid products do you know? Can you think of new hybrid ideas?

Build up your vocabulary

1 Replace the underlined words with the correct forms of the words from the text.

- _____ 1 To deal with this crisis, he chose to study agriculture.
- _____ 2 He is a very good actor and he commits himself to every role that he takes on.
- _____ 3 Yuan Longping strongly believed that the answer could be found in the creation of hybrid rice.
- _____ 4 Yuan Longping, through intense effort, solved enormous difficulties and developed the first hybrid rice that could be used for farming.
- _____ 5 This hybrid enabled farmers to increase their output greatly.
- _____ 6 Students are encouraged to try a variety of free-time activities to reduce the intense stress from studying.

2 Complete the sentences with the correct forms of the words from the text. Then use these words to make your own sentences.

- 1 The c _____ of a person are the special qualities that make him or her different from others.
- 2 Scientists from different countries have been pursuing various possibilities to overcome food s _____.
- 3 Many of us a _____ that earthquakes would never happen in our area.
- 4 With more and more farm machines being used in the fields, the c _____ of fuel has been increasing.
- 5 Newspapers should pay less attention to media c _____ and more attention to our national heroes.
- 6 Our general manager tried his best to help overcome the difficulties we were facing during the financial c _____.
- 7 My mother is very c _____ and finds it hard to accept the modern lifestyle that I enjoy.
- 8 The government has decided to boost the programme to g _____ more new jobs.

3 Complete the news report below with the correct forms of the words and phrases in the box.

tackle vision conventional deep down be comprised of reality consumption

A vast underground shelter built during World War II has been turned into an **urban** farm, supplying supermarkets and restaurants in London. The shelter, which could protect up to 8,000 people from wartime **bombs**, _____ two large tunnels that were intended to one day become an **extension** of the London Underground. But that never became _____ and the shelter was left for 70 years. Then businessmen decided to make use of it to grow green vegetables to meet increasing _____ demands.

The tunnels are lit with pink LEDs as there is no natural light _____ below the ground. The vegetables are grown in special liquids instead of the earth that is used as in _____ farming. Many experts share a _____ that this kind of urban farming could help not only in _____ the problem of population growth, but also in adapting to climate change.

Discover useful structures

1 Look at the complex sentences below and state the functions of the noun clauses italicised. Then find similar complex sentences from the text.

- *What Yuan Longping really cared about* was not money or celebrity.
- *That Yuan Longping had realised his dream of seawater rice* surprised the whole world.
- It surprised the whole world *that Yuan Longping had realised his dream of developing seawater rice*.

2 Match the sentence parts, and then translate the completed sentences into Chinese. Pay attention to how the subjects are introduced differently.

- _____ remains an unanswered question.
- _____ is an important topic for us to research.
- _____ is that these **chemicals** may even cause cancer.
- _____ these vegetables can even be planted without any soil through this new technology.
- _____ is the reason why some people prefer to live in the country rather than in the city.

- What worries many people
- That the lifestyle is slower and healthier
- How we can find a suitable solution to produce sufficient food while keeping the environment safe
- When these **wheat** farmers will join this pilot experiment
- It amazed all of us that

3 Read the passage and underline all the subject clauses. Then in pairs, discuss whether the sentences with subject clauses can be paraphrased.

Grandma has been complaining about the vegetables sold in the supermarket, which have been grown using chemical fertilisers. To her, that they look beautiful on the outside is obvious. However, what she is unhappy about is the lower nutritional value and reduced **flavour**. Now that both of my grandparents have retired from their jobs in the city, how they are going to spend their retirement is an important decision for them. Whether they can live a healthy life is the first thing they are considering. So they have made up their minds to move to the countryside, where they can live a green life.

4 What qualities do you think make a person like Yuan Longping so successful? Work in groups. Have a discussion and prepare a presentation. The following points and expressions may help you.

- his/her determination to tackle the crisis of ...
- his/her intense effort to overcome ...
- his/her dream to develop ...
- his/her love and care for ...
- he/she succeeded in ...
- he/she never gave up ...
- he/she is devoted to ...

What impresses me most is that ...
 What makes him/her a great ... is that ...
 It is important that ...
 Whether ... depends on ...
 That ... is his/her most important quality.

Explore the world hunger problem

- 1 In pairs, discuss what you can see in the photos and how you think each photo relates to world hunger.



- 2 Listen to a radio interview and take notes. Then answer the following questions.

- 1 What is the FAO? What is its mission?
- 2 What can seriously affect crop production?
- 3 What does the FAO think about nutritious food?
- 4 What is the FAO doing to alleviate world hunger?
- 5 What does the FAO suggest countries do?



Identify supporting evidence

When people present important facts, they usually give some evidence to support their claims. The evidence is usually mentioned at the start of a sentence. Listen out for key words like *report*, *research*, *studies*, *figures*, *findings*, etc.

- 3 Listen again and identify how the speaker supports his facts. Match the supporting evidence with the facts.

- 1 According to our latest figures, ...
- 2 There is strong evidence to suggest that ...
- 3 Our research indicates that ...

- A wars can heavily affect food production and transportation.
- B (world hunger) stands at around 11% of the world's population.
- C many people just can't afford to eat well.

- 4 Work in pairs. Discuss the following questions and then share your answers in class. Use a table like the one below to help you organise your thoughts.

- 1 What are all the possible causes of world hunger that you can think of?
- 2 What can people and countries do to help alleviate these causes?

Possible cause	Possible solution

- 5 Work in groups to brainstorm ideas for some school activities that celebrate World Food Day. Use the expressions to help you communicate with your group members.



World Food Day (WFD) was created by the FAO in 1979. It is celebrated in more than 150 countries, raising awareness and knowledge of the problems and causes behind world hunger and poverty.

Sharing your opinions

I'd rather ...	In my eyes ...	In my opinion ...
Without a doubt ...	The advantages are ...	I have a feeling that ...
It's a pity that ...	I'd prefer ... because ...	My impression is that ...
I think/guess/believe ...	From my point of view, ...	My view/opinion/belief is that ...

Evaluate chemical farming and organic farming

 1 Read the text, and then answer the questions on page 56.

CHEMICAL VERSUS ORGANIC FARMING

Chemical pesticides and artificial fertilisers have been in **widespread** use in farming since the middle of the 20th century. When they were first introduced, many farmers welcomed them as a great way to fight crop disease and increase production. Over time, however, what some scientists have found is that their long-term use can sometimes harm both the land and people's health.

For example, pesticides can damage the land by killing not only harmful bacteria and insects, but also helpful ones. In addition, these chemicals can stay in the soil and underground water sources for a long time. This affects the crops grown on the land and, in turn, the animals and humans who **digest** them. Many people worry that these chemicals may make them ill and even cause cancer. In fact, some pesticides like DDT have been prohibited in most countries because of the damage they cause to people and the environment. As for chemical fertilisers, crops grown with them usually grow too fast to be rich in **nutrition**. They may look beautiful on the outside, but inside there is usually more water than **essential minerals**, and they often have less flavour as well.



As an **alternative**, some farmers have switched to organic farming, and many customers have turned to organic food when they shop at the local **grocery**. Organic farming is simply farming without using any chemicals. Organic farmers focus on keeping their soil rich and free of disease through natural means. For example, many organic farmers use natural waste from animals as fertiliser. This makes the soil in their fields richer in minerals. It also keeps the air, soil, water, and crops free of chemicals.

Organic farmers also use many other methods to produce rich soil. They often change the kind of



crop grown in each field every year. For **instance**, they may grow corn or wheat in a field one year, and then grow beans there the next. Why different crops are grown is that they put important minerals back into the ground, making it ready for the next batch of crops. Organic farmers also plant diverse crops that use different **depths** of soil to help keep it rich. For example, peanuts grow on the ground's surface, but many other vegetables put down deep **roots**. The goal of using different organic farming methods is to grow good food while avoiding damage to the environment or to people's health.

Some people would prefer to stop the use of man-made chemicals in agriculture **entirely**. What keeps them from doing so is the fact that chemical farming serves the high demand for food around the world. Organic farming is nowhere near able to meet that need. Therefore, there is still a long way to find a suitable solution that puts sufficient food on the dinner table while keeping people and the environment as healthy as possible.

- 1 Why did many farmers welcome the introduction of chemical farming?
- 2 What concerns many people about the use of pesticides?
- 3 What is one problem with the use of chemical fertilisers?
- 4 How is organic farming different from chemical farming?
- 5 Why do organic farmers change the kind of crop grown in a field every year?
- 6 What is the goal of using organic farming methods? Do you think it can be reached? Why or why not?

2 Match the main ideas (A–D) below with the paragraphs. Then complete the sentences in the table.

- A What organic farming is B Why man-made chemicals are still used in farming
C Organic methods for producing rich soil D The problems with chemical farming

Paragraph	Main Idea	Detail
1–2		<ul style="list-style-type: none"> Pesticides can kill helpful _____. Some pesticides have been _____ because of the _____. Crops grown with chemical fertilisers usually _____ to be full of _____.
3		<ul style="list-style-type: none"> Many organic farmers use _____ as fertiliser.
4		<ul style="list-style-type: none"> They often _____ grown in each field _____. They also plant crops that use _____ of the soil to help keep it rich.
5		<ul style="list-style-type: none"> Organic farming is nowhere near able to meet the high _____.

3 Write an argumentative essay giving your opinion on chemical or organic farming.

1 Discuss these questions in groups.

- Is the author of the passage for or against organic farming? How do you know?
- What other disadvantages of chemical farming did the author not list?
- How might the following items be problems and how important are they for organic farming?

natural animal waste used as fertiliser
higher cost of producing food
greater effort required to farm

- What other disadvantages of organic farming can you think of?

2 Decide whether your group supports chemical farming or organic farming. Come up with three main points to support your opinion, and then add at least one detail to support each main point. Complete the outline below.

Topic sentence: In my opinion, _____ farming is preferable to _____ farming because

Point 1: _____

(Detail) _____

Point 2: _____

(Detail) _____

Point 3: _____

(Detail) _____

Conclusion: _____

3 Use your outline to write a short essay giving your opinion on the topic.

4 Exchange your draft with a partner.

1 Use this checklist to help you review your partner's draft.

- ✓ Does the writer do a good job of expressing his/her opinion?
- ✓ Does each paragraph have one main idea?
- ✓ Does each paragraph have at least one detail to support its main idea?
- ✓ Does the writer sequence the points in logical order?
- ✓ Does the writer do a good job persuading you to accept his/her opinion?

2 Take your draft back and revise it.

5 Share your essay with the rest of the class.

1 Read and complete the passage with the correct forms of the words and phrases in the box. Then answer the questions.

attain	be comprised of	depth	diverse
essential	for instance	output	soil

Jia Sixie was a government official from Shandong Province who conducted a lot of agricultural research in the sixth century. In his travels, he observed that some farmers had much better _____ than others, so he decided to investigate the best ways of _____ good harvests. After retiring, he wrote a book, *Qi Min Yao Shu*, which _____ sound advice and practices for people doing agricultural work. In one piece of advice, _____, he told farmers to clear weeds from the ground before planting crops. They could either let the animals eat the weeds or turn the _____ over so that the weeds were covered. Then he gave advice on ploughing, suggesting that the autumn ploughing should be at a greater _____ than the spring ploughing. He also suggested changing crops to get better harvests every year. Finally, he suggested that farmers grow a _____ range of crops next to each other in the fields. Although it has been centuries since Jia Sixie died, *Qi Min Yao Shu* is still considered a(n) _____ book in China's agricultural history.

- 1 Why did Jia Sixie investigate good ways of farming?
- 2 What makes *Qi Min Yao Shu* an important book in China's agricultural history?

2 Fill in the blanks with *that*, *whether*, or *wh-* question words to complete the sentences.

- 1 _____ the research centre is to be set up has not been decided.
- 2 _____ many countries still face food shortages remains a big problem.
- 3 _____ impressed me most was that the hybrid rice enabled farmers to expand their output greatly.
- 4 _____ the plan is to be carried out still needs discussing.
- 5 _____ the new chemical pesticide is effective remains to be seen.
- 6 _____ will join in the research team will be announced tomorrow.
- 7 _____ he quit his high-paying job is not difficult to understand. He wanted to start up his own business.

REFLECTING

- ⊗ What did you learn about agriculture that you did not know before?
- ⊗ What interested you most about agriculture in this unit? Give your reasons.
- ⊗ What other important **aspects** of agriculture do you want to know about?
- ⊗ Overall, I thought this unit was ☐ interesting ☐ useful ☐ so-so ☐ difficult.

*Project: Make a poster of your favourite dish, from field to plate

- 1 In groups, discuss this line of poetry, “Every single grain on your plate is the result of hard work.”
 - What does this line mean to you?
 - How should this knowledge affect your daily life?
- 2 Brainstorm a list of your favourite dishes. Each dish should be comprised of five or more ingredients.
- 3 Choose one dish from your list that everyone in your group likes. Find a list of its ingredients from a recipe or a product label.

EXAMPLE: *Kung Pao Chicken is made with chicken, peanuts, onions, red peppers, Sichuan peppercorns, ginger, garlic, oil, cooking wine, salt, soy sauce, vinegar, etc.*



- 4 Assign team members to research where and how each of these ingredients is produced.

EXAMPLE: *Peanuts are planted in April or May. It takes around 120 to 160 days for them to be ready for harvesting. This is usually done by hand. The farmer pulls the peanut plants out of the ground and leaves them in the field to dry. The peanuts are then collected and separated from their vines. They are dried for some more time and then taken to the market for sale.*



- 5 Work together to make a poster about your favourite dish. Each team member should explain where at least one ingredient comes from and how it is produced.
- 6 Present your poster to the class.



Earth University

Earth University is a special university in Costa Rica, where students learn sustainable farming methods that can protect the environment.

BEFORE YOU WATCH

Complete the passage with the words in the box.

agricultural
scholarships

ecology
sustainable

methods
typical

profit
unique

Earth University is located in Guacimo, Costa Rica. It is not a(n) _____ university. What is _____ about it is that students study both in classrooms and in the fields. That is because Earth University is a(n) _____ school where students learn about farming. The kind of farming taught here is called _____ farming. The farming _____ they learn have little or no negative impact on the environment. In class, they also learn about _____, which is the study of how to protect the natural balance of the environment. The students grow bananas on the farm for _____. The money they get from these bananas goes towards _____ for students from poor areas.

WHILE YOU WATCH

Circle the best answers.

- Which is not a goal of Earth University?
A To teach poor students. **B** To teach students how to make food with bananas.
C To give students skills to protect the environment.
- Most of the students are from _____.
A Africa **B** Latin America **C** Costa Rica
- Students have to work six days a week for _____.
A half of the year **B** most of the year **C** the entire year
- Earth University students also learn about _____.
A chemical farming **B** leadership **C** economics

AFTER YOU WATCH

Discuss these questions in groups.

- What do you like about Earth University?
- Would you like to study at Earth University? Why or why not?

UNIT 1

PEOPLE OF ACHIEVEMENT

Using Words and Expressions

- 1 Choose words from the box to make phrases. Some words can be used more than once.

acknowledge	objective	gradually
remarkable	scientific	apparently
distinct	committed	gentle

- a _____ wind
- a _____ supporter
- a _____ research institute
- a _____ southern accent
- an _____ successful career
- _____ facts
- _____ achievements
- _____ accepted the change
- _____ their contributions

- 2 Complete the sentences with the correct forms of the words in the box.

circumstance	objective	collection
appearance	insist	consequence
property	device	substance

- Apparently, the two plants have quite similar physical _____.
- The professor used a special vocal _____ to speak.
- Afterwards, the company filed a patent for a new chemical _____.
- Everyone was amazed at his grandfather's youthful _____.
- The researchers _____ the questionnaires back from the patients.
- I will try my best and work hard to achieve my _____ of studying economics at a top university.

- If you _____ on doing so, you'll have to suffer the _____!
- Banks have acknowledged that they need to pay more attention to customers' financial _____ when evaluating loan applications.

- 3 Translate the sentences into English using the words and phrases in brackets.

- 在递交申请六个月之后，他终于获得了发明专利。(obtain, patent)
- 当评估这个研究项目的时候，他们遇到了许多数据上的困难。(evaluate, encounter)
- 她被新上任的总统邀请出任大使。(take up a position, come to power)
- 他在科学研究方面不但有天赋而且很努力，21岁时就已经在学术领域非常有名了。(genius, academic field)
- 考虑到非常危险，他坚持认为他们不应该在台风天气冒生命危险外出。(extraordinary, insist)

- 4 Find words and phrases from the unit to put into the following groups.

To describe the appearance of a person

pretty

To describe the character of a person

gentle

Related to the process of doing scientific research

analyse

Using Structures

1 Choose the words in the box to complete the sentences.

who whom which
whose when where
in/of/for which of whom

- Some people always talk loudly in public, _____ is really annoying.
- Professor Lu, _____ you spoke to, specialises in constitutional law.
- Please come back at four o'clock, _____ your herbal medicine will be ready.
- What do you want to write about these people, _____ stories I have just told you?
- Have you been to the Louvre Museum, _____ you can see the Mona Lisa on display?
- There are 45 students in our class, out _____ only 10 are taking an optional art course.
- Her mother works in a company, _____ employees are all women.
- It is vital to learn to use these software programs, both _____ can help you with collection and evaluation.

2 Decide whether the sentences are right or wrong. Correct them where necessary.

- Please write down these phrases, all of them will be useful in your writing.
- As a consequence of sending in his application late, he did not get a patent for his invention, that was not surprising at all.
- The researchers are evaluating thousands of plants, which have distinct medical properties.
- The gentle old man is the only person, whom I can trust.

- Have you done all what you can to help the people in need?
- Is this the botanical institute where you visited last week?

3 Write a few sentences about some great people with the information given below. Use relative clauses.

NAME

INFORMATION



Song Qingling

Dr Sun Yat-sen's wife; one of the top leaders in modern Chinese history; devoted her life to improving the welfare of women and children



Huang Wenxiu

A village official, died in a mountain flood, 30 years old; worked on the frontlines of the fight against poverty; to help villagers increase their incomes



Norman Bethune

Came to China in World War II; worked selflessly in China as a doctor and saved many Chinese people



Lu Xun

A leading figure of modern Chinese literature; Lu Xun Literature Prize—one of China's top four literary prizes, awarded every three years



Joan of Arc

A girl dressed as a man; went to fight for her country; helped drive the English invaders out of France

Listening and Speaking



1 Discuss these questions with a partner.

- 1 Do you think it is easy for a person to live alone in a forest observing wild animals? What might this person need and what difficulties might he/she face?
- 2 Look at the photos above. What do you know about Jane Goodall and her achievements?



2 Listen to a speech about Jane Goodall and answer the questions below.

- 1 How was Goodall's research method different, and how did it benefit her study?

- 2 In what ways did Goodall's work change the way people thought about chimps?

- 3 What does the Roots and Shoots programme do?

- 4 Why is Goodall an inspiration to the speaker?

3 Talk about your heroes in groups. The following questions may help you.

- 1 Who is your hero?
- 2 What do you know about the person's life?
- 3 What are one or two stories that can help your audience form an impression of your hero?
- 4 Why do you like or admire this person?
- 5 How does this person inspire you?

4 Give a speech about your hero. The following tips can help you give a well-rounded speech.

- Greet the audience.
- Use the points from your discussion.
- Use a quote where necessary.
- Form an emotional connection through stories about the person.
- Make eye contact with different people in the audience.
- Provide a clear and concise conclusion.

Reading and Writing

- 1 Read the text and decide whether the statements on page 65 are true (T) or false (F).

HEROES IN YOUR EYES

Everyone knows the people who have helped to change the face of the world in recent years. From Bill Gates to Steve Jobs to Jack Ma, few would not recognise their names. However, those who work tirelessly behind the scenes often go unnoticed, in spite of their great achievements. If you know anyone who deserves to have their contributions recognised, we would love to hear from you! Let us know how these people have helped to make a difference in your eyes.



The person I respect most is the geophysicist Huang Danian, who helped China to make many technological advances.

Huang was a remarkable scientist. He had studied and worked in Britain for 18 years, but when he felt that his country needed him, he gave up his well-paid job and returned to China. Over the next seven years, Huang worked to develop many devices needed for deep-Earth exploration.

Unfortunately, such achievements didn't come cheap. Due to the frantic pace of his research, Huang was absent from his father's funeral, and even his own cancer went undetected as he had no time to see a doctor. To sum up, Huang sacrificed everything for his research, and I think more people should honour him.

(Zhang Keyu, Hubei)

I want to tell everyone about two teachers on Changyu Island, Wang Kaiquan and Lin Zhujin.

Few people know about this hometown of mine. The island is beautiful, but it's quite isolated, and there aren't many modern conveniences. In bad weather, even our water and power supplies are unstable. People who have never been to our island are often surprised by this and find it hard to adjust. Many who live on the island dream of leaving. These two primary school teachers, however, have stayed on for 23 long years! They are the only teachers here, and they plan to stay for as long as there are children who need to attend school.

I want to thank them, and let the world know about these teachers who work tirelessly every day for the sake of the children.

(Chen Xueyin, Fujian)



My mother, Liu Shurong, is my greatest inspiration. She is 47 years old and works as a cashier at a neighbourhood supermarket.

I used to think her job was pretty easy, but now that I am older, I realise that my mother deserves respect for doing an amazing job all these years. She works long hours every day for the sake of our family, and she still finds the time to help with household chores and spend time with me.

My mother takes pride in her work. She faces customers with a smile and works hard even when she is tired. Because of her, I have learnt to stay positive even when times are hard.

(Luo Tengfei, Jilin)



- 1 The magazine wants readers to send in stories about famous people. T ☐ F ☐
- 2 Huang Danian returned to China because he wanted to work on deep-Earth exploration. T ☐ F ☐
- 3 The people who live on Changyu Island must be prepared to put up with difficulties when storms arise. T ☐ F ☐
- 4 The teachers on Changyu Island want to live there for as long as there are children on the island. T ☐ F ☐
- 5 Luo Tengfei respects his mother for being a cashier because he admires the job. T ☐ F ☐
- 6 Luo Tengfei has learnt to look at life in a positive way. T ☐ F ☐

2 Read the text again and fill in the table with your notes.

Question	Zhang Keyu	Chen Xueyin	Luo Tengfei
Who are heroes in their eyes?	The _____ Huang Danian	The _____ at a _____ on Changyu Island	His _____
What do they admire about these people?	He _____ for his research	Their willingness to _____ for the sake of the children	Her _____ attitude
What difficulties do/did their heroes face?	He was very busy and had no _____ to focus on anything other than his work.	They had to _____ the lack of _____ while _____.	She has to work _____ hours and also _____ at home.

- 3 Imagine you are writing to the magazine about someone who is a hero in your eyes. Provide examples of this person's achievement(s), and explain how you have changed due to his/her influence.

*Expanding Your World

THREE DAYS TO SEE (Adapted)

Helen Keller

I have often thought it would be a blessing if each human being were stricken blind and deaf for a few days at some time during his early adult life. Darkness would make him more appreciative of sight; silence would teach him the joys of sound.

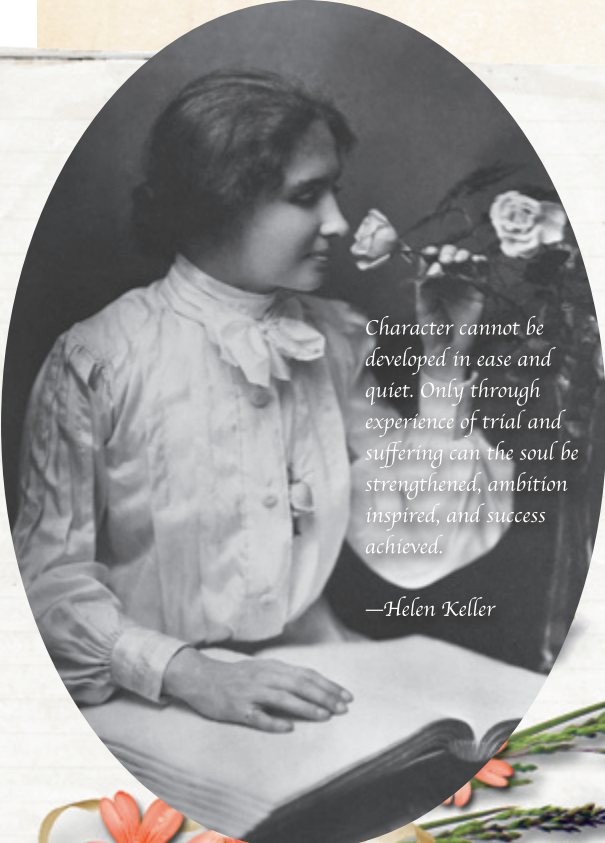
Now and then I have tested my seeing friends to discover what they see. Recently I asked a friend, who had just returned from a long walk in the woods, what she had observed. "Nothing in particular," she replied.

How was it possible, I asked myself, to walk for an hour through the woods and see nothing worthy of note? I who cannot see find hundreds of things to interest me through mere touch. I feel the delicate symmetry of a leaf. I pass my hands lovingly about the smooth skin of a silver birch, or the

rough, shaggy bark of a pine. In spring I touch the branches of trees hopefully in search of a bud, the first sign of awakening Nature after her winter's sleep. Occasionally, if I am very fortunate, I place my hand gently on a small tree and feel the happy quiver of a bird in full song.

At times my heart cries out with longing to see all these things. If I can get so much pleasure from mere touch, how much more beauty must be revealed by sight. And I have imagined what I should most like to see if I were given the use of my eyes, say for just three days.

On the first day, I should want to see the people whose kindness and companionship have made my life worth living. I do not know what it is to see into the heart of a friend through that "window of the soul", the eye. I can only "see" through my fingertips the outline of a face. I can detect laughter, sorrow, and many other obvious emotions. I know my friends from the feel of their faces.



Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, ambition inspired, and success achieved.

—Helen Keller

For instance, can you describe accurately the faces of five different friends? As an experiment, I have questioned husbands about the colour of their wives' eyes, and often they express embarrassed confusion and admit that they do not know.

I should like to see the books which have been read to me, and which have revealed to me the deepest channels of human life. In the afternoon I should take a long walk in the woods and intoxicate my eyes on the beauties of the world of Nature. And I should pray for the glory of a colourful sunset. That night, I should not be able to sleep.

On my second day, I should like to see the pageant of man's progress, and I should go to the museums. I should try to probe into the soul of man through his art. The things I knew through touch I should now see. The evening of my second day I should spend at a theatre or at the movies.

The following morning, I should again greet the dawn, anxious to discover new delights, new revelations of beauty. Today, this third day, I shall spend in the workaday world, amid the haunts of men going about the business of life.

At midnight permanent night would close on me again. Only when darkness had again descended upon me should I realise how much I had left unseen.

I am sure that if you faced the fate of blindness you would use your eyes as never before. Everything you saw would become dear to you. Your eyes would touch and embrace every object that came within your range of vision. Then, at least, you would really see, and a new world of beauty would open itself before you.

I who am blind can give one hint to those who see: Use your eyes as if tomorrow you would be stricken blind. And the same method can be applied to the other senses. Hear the music of voices, the song of a bird, the mighty strains of an orchestra, as if you would be stricken deaf tomorrow. Touch each object as if tomorrow your tactile sense would fail. Smell the perfume of flowers, taste with relish each morsel, as if tomorrow you could never smell and taste again. Make the most of every sense; glory in all the facets of pleasure and beauty, which the world reveals to you through the several means of contact which Nature provides. But of all the senses, I am sure that sight must be the most delightful.



UNIT 2

Using Words and Expressions

1 Cross out the options that are incorrect.

- Health monitors **detect/cause/identify** potential dangers to our health.
- Smart houses can be operated **from far/from a distance/remotely**.
- Pay attention to all the **switches/knobs/appliances** of the electrical equipment.
- They invented **potentially/possibly/greatly** the most efficient way of heating.
- Some monitoring devices are designed to warn people of certain **critical/serious/difficult** illnesses.

2 Complete the sentences with the correct forms of the words and phrases in the box.

in this sense potential
nevertheless keep track of
in addition the instant

- I tried phoning Lily _____ I got home.
- The hotel is equipped with air conditioners. _____, electric fans are available in case some guests are not used to air conditioning.
- My parents come from this area, so _____ it's like coming home.
- Scientists say that this technology is also _____ useful for developing electronic devices.
- The monitoring system _____ what is going on in the house.
- I'm sorry to say that we can't afford any new equipment. _____, we can still keep ahead of our competitors by developing new innovations.

3 Complete the sentences by translating the words in brackets into English.

- People in poor rural areas are being educated to _____ (停止抵制变化).

- I met her when I was studying in Wuhan, and I _____ (保持联系) with her ever since.
- We were sorry to find out that _____ (我们所有的建议都被回绝了).
- It is very difficult to _____ (将你自己融入一个社会) whose culture is so different from your own.
- Some people _____ (反对记录体重) without specific aims.

4 Fill in the blanks with the correct forms of the words in the box. What do you think of the problem mentioned in the passage?

available critical innovation
integrate potential prediction
prospect remote

There are many _____ about what the future will be like, but no one really knows for sure. We do know that there will be many new _____ in technology, though. These new advances will make thousands of new products _____ that no one has yet even thought about. With this, however, there is a _____ new problem which we do not have now: the gap between the technologically rich and the technologically poor. Not everyone may have the money to _____ new technology into their lives, and some people living in _____ areas may not have access to _____ new technology. In light of such _____, many people are already working hard to make new technology cheaper and easier to buy so that everyone might benefit from it.



Using Structures

1 Complete the sentences using the appropriate forms of the verbs in brackets.

- Don't call me between 12:30 and 13:00. I _____ a nap. (*take*)
- After the training, the farmers decided that they _____ tomatoes the next year. (*grow*)
- The engineer was sure that the medical tests _____ that he was healthy. (*show*)
- The day after tomorrow they are going to play football from 4:00 to 6:00 p.m. So at 4:30, they _____ soccer. (*play*)
- Do you think you _____ the same job in ten years' time? (*still do*)
- If you need to contact me, I _____ at the Waterfall Hotel until this Saturday. (*stay*)
- A:** If you see David, can you ask him to call me?
B: Sure. I _____ him this afternoon.
I will tell him then. (*see*)
- A:** Is it all right if I come at about 7:00?
B: Not really. I _____ the news and having dinner with my family. (*watch*)

2 Below is a letter from the present you to the future you. Try to complete it with the most appropriate verb forms.

Dear Future Me,

How are you? If you're still very hard-working, then I'm sure you're _____ (*keep*) yourself busy! I do _____ (*hope*) you're healthier though. I know I love eating too much junk food and far too many sweets. I hope you're stronger than me and _____ (*give up*) these bad habits.

How's everything going with work? Do you remember that you _____ (*want*) to be a pilot? If you do, then I hope you're flying around the world to fun places and _____ (*do*) a lot of sightseeing. I think

that the computer technology in your time must _____ (*be*) so much better than it is now. The way things are going right now, people will no longer _____ (*drive*) cars one day because computers _____ (*operate*) them completely. Moreover, companies will probably _____ (*try*) to do the same thing with planes soon afterwards. I think it would be quite dangerous if all the cars on the road were driverless. However, I think the idea of _____ (*have*) any pilots on a plane is much more dangerous. This is because any big computer problem could cause one or more planes full of people to crash!

I hope I'm right about planes still _____ (*need*) pilots, but if I'm wrong, I look forward to _____ (*find*) out what other job you chose for your career.

Your friend,
Present Me

3 Write down as many possible sentences as you can for the following situations, using the future progressive tense.

EXAMPLE

Next month I'll go on holiday to a coastal city. I ...

Next month I'll go on holiday to a coastal city. I will be lying on the beach, sunbathing, or swimming in the sea.

- You'd better not call me this afternoon. I ...
- Sam is injured. He ...
- You won't see me again. I will ...
- A:** What does the forecast say about the weather next week?
B: It will be very wet, and ...
- A:** Are you travelling somewhere this summer holiday?
B: No, I ...

Listening and Speaking

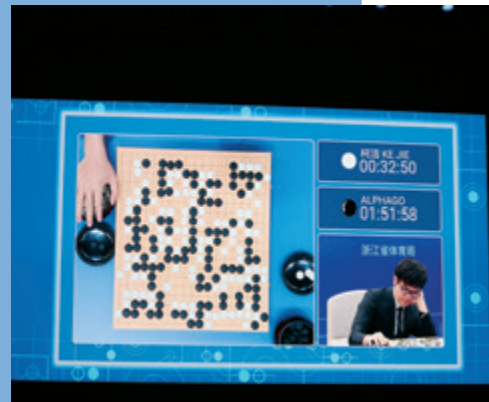
- 1 Look at the photos and the captions. Discuss what you think is happening.



A Garry Kasparov
versus Deep Blue



B "Checkmate!"



C Ke Jie versus AlphaGo

- 2 Listen to this conversation from the future between Yueyue and Huimin, an android that uses AI (artificial intelligence). Order the pictures above (A–C) according to when the events occurred by writing 1–3 in the blanks.

A _____ B _____ C _____

- 3 Listen to the conversation again and write down the dates when the following events occur. They are having this conversation in the year 2310.

- | | |
|--|-------|
| 1 AI research begins | _____ |
| 2 Garry Kasparov defeated by Deep Blue | _____ |
| 3 Ke Jie defeated by AlphaGo | _____ |
| 4 AI computers put into androids | _____ |
| 5 First novel written by an android | _____ |
| 6 First android president of a country | _____ |

- 4 Listen to the conversation again and answer the questions.

- What are Yueyue and Huimin doing while they are talking?
- What does Yueyue want Huimin to do differently?
- What does Huimin offer to do for Yueyue while she is thinking?
- What happens in the end?
- What does Yueyue ask Huimin to do when they are finished?

- 5 What do you think AI will be able to do in the future? How will it affect humans? Discuss your predictions about AI and other future technologies.

Reading and Writing

- 1 Read the text. Where do you think this text might come from? Identify its purpose and possible audience.

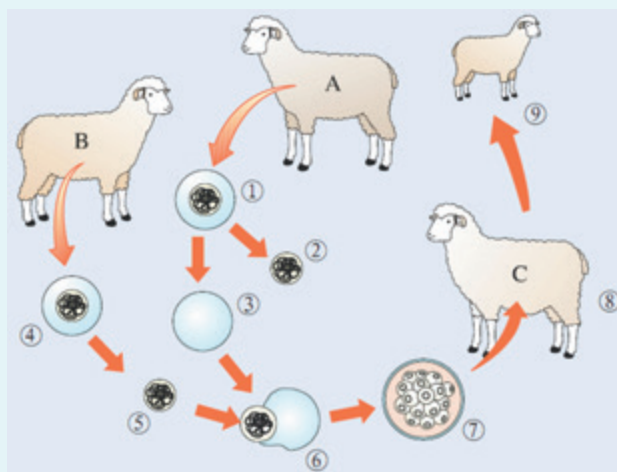
CLONING: WHERE IS IT LEADING US?

When it was announced in 2018 that the Chinese Academy of Sciences in Shanghai had created the world's first cloned monkeys, Zhongzhong and Huahua, heated discussions followed online. In fact, cloning has always been with us. It is a way of making an exact copy of another animal or plant. It happens in plants when gardeners take cuttings from growing plants to make new ones. It also happens in animals when identical twins are produced from the same egg. These are both examples of natural clones.

Cloning has two major uses. First, gardeners use it to produce large quantities of plants for sale. Second, it is valuable for research on new plant species and for medical research on animals. Cloning plants is fairly straightforward, while cloning animals is much more complicated and difficult. Over the years, many scientists failed in their attempts to clone animals, but their determination and patience paid off in 1996 with a breakthrough—the cloning of Dolly the sheep.

The sheep cloning procedure works like this:

- Female sheep A provides an egg cell.
- The nucleus is removed from the egg cell.
- The egg cell is ready for a new nucleus.
- Female sheep B provides a somatic cell (体细胞) for the clone. The nucleus of this cell contains all the genes needed to produce a new sheep.
- The nucleus is taken out of the somatic cell.
- The somatic cell nucleus from sheep B and the egg cell from sheep A are joined.
- The cell divides and grows into an embryo.
- The embryo is put into female sheep C, who becomes the carrier of the clone.
- The lamb which is born is the clone of sheep B. It is in every way identical to sheep B, but younger.



With the advances of scientific research, cloning will have several major uses in the future. For one thing, it could be used to breed animal species which are endangered, or even bring back species which are now extinct. For another, it could be used to grow human organs or tissue in animals, which could be used for human organ transplants or medical treatments. Finally, cloning could be used to breed animals that will provide us with higher quality meat, milk, or eggs.

While there are technical issues that need to be worked through to make widespread cloning possible, the biggest concerns are moral. For example, if scientists brought an extinct animal back into existence, it would probably end up living in a zoo. That is not very good for the animal. Even worse for the animal is using it as a source of organ transplants—because it will be injured or even die. In addition, many people worry that eating animal products that result from cloning might be harmful to our health over time. The possibility of using cloning to produce human beings is an even bigger concern. What would happen if such knowledge ended up in the wrong hands?

When it comes to cloning, we wonder, ultimately, whether cloning will help or harm the world. No doubt, we will be talking about this question for a long time to come.

2 Answer the questions using information from the text.

- 1 What are the two examples of natural clones?
- 2 What are the two main uses for clones today?
- 3 What future medical uses does cloning have?
- 4 Why might cloning an extinct animal be a bad idea?
- 5 Why do many people worry about cloned food?

3 Match the topics with the paragraphs.

- | | |
|-------------|--|
| Paragraph 1 | A Possible uses of cloning in the future |
| Paragraph 2 | B Whether cloning is good or bad |
| Paragraph 3 | C Current uses of cloning |
| Paragraph 4 | D What cloning is |
| Paragraph 5 | E How cloning a sheep works |
| Paragraph 6 | F Moral and ethical concerns about cloning |

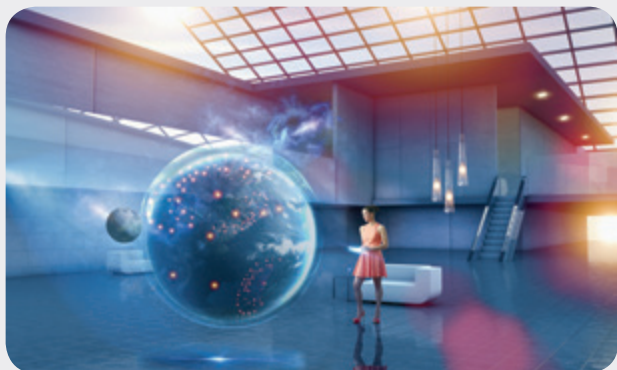
4 Discuss the following questions in groups.

- 1 What are the moral issues involved with cloning?
- 2 What does the author mean by “What would happen if such knowledge ended up in the wrong hands?”
- 3 What moral concerns—if any—do you have regarding cloning? How important are these issues to you? Why?

5 Imagine that you are a scientist and that you have the choice to clone or not to clone a particular animal species. Write a report about your choice.

*Expanding Your World

OUR GREATEST ADVENTURE



In the 1960s and 1970s, some writers and university professors called themselves “futurists”. These futurists tried to predict the future. Only a few of their predictions were right, and all of them missed something that was just around the corner: the revolution in computers and information technology. The problem was that none of these futurists were scientists or engineers. So, while they knew the future would have more powerful

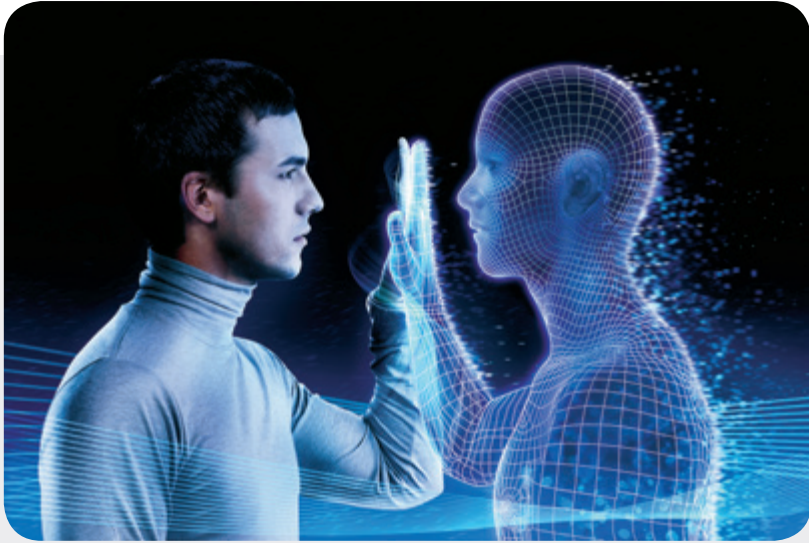
computers, they had no clue what these computers would look like, what they could do, or what impact they would have on our lives.

This should make us hesitate before we try to predict the future. Having said that, we can make some good guesses about future technology by looking at current scientific and technological advances. We can also ask the real experts: the scientists and engineers who are bringing us these advances.

According to experts, in the future computers will be so common that we may no longer even notice them. Forget smartphones and smart watches—we will have smart clothes that adjust to the weather and our body temperature, and change size to fit our body shape. We will also have smart contact lenses. Using these smart contact lenses, we can access the information and power of computers in a way that far exceeds anything currently possible.

Because so much of our daily life will be integrated with computers, virtual reality will become an actual, real reality for many of us. Technology will not just allow us to see a world that is thousands of kilometres away—which only exists in





a computer—but will also allow us to touch and smell that world. This virtual world will at times seem as real as—if not more real than—the actual world around us. Without leaving home, you will be able to take tours of foreign countries, or even get a medical exam by a doctor in another city.

Speaking of medicine, through new technology, people who have brain or spinal injuries will be able to find new hope. There is already, for example, technology which will allow blind people to see using cameras and deaf people to hear using microphones that are connected to their brains. Future technology will allow people to overcome all sorts of physical disabilities.

Much research is being done to unlock the human mind. Using technology that is being developed now, people in the future may be able to not just read someone else's mind, but also record their thoughts like one would record a movie. Some other research involves using robotic technology to replace human functions. For example, robot hands are being developed for people who have no hands. These artificial hands are connected to a person's nerves so that the person's brain tells the hands what to do. In the future they will work just as well as real human hands. Indeed, they may even be better. Not only can they be made stronger and faster than human hands, but also sturdier so they will not break or get injured as easily.

As a result of such advances, in the future, some people who are badly injured may become more robot than human. That is, their brains will control their robotic body parts so they can live their lives fully without being handicapped. Many new parts will be made to replace human body parts that break down, meaning it may be possible to use this technology to extend our lives long past the time of normal death by old age.

These are just a few of the things that are already being explored in science and technology. There will also be advances in transportation and space travel. Of course, there is a lot that we still do not know about the future. Science and technology may provide a road map for the future, but they cannot tell us what we will find along the way. But if we knew everything about the future, then where would the mystery and excitement be? We should all eagerly view the future as a great adventure—a new world waiting to be explored. Who knows exactly what we will find?

Using Words and Expressions

1 Complete the sentences with the correct forms of the words in brackets.

- The price varies _____ depending on where the wine was produced. (*enormous*)
- The shop assistant carefully _____ each item with the price and the date, as if he were handling a valuable piece of art. (*label*)
- At the age of 24, I became a _____, writing for a local newspaper. (*journal*)
- Jane started a special _____ about gap-year travelling in the school magazine. (*column*)
- Parents prefer taking their children to some places that combine _____ with education. (*entertain*)

2 Complete the conversation with the correct forms of the words in the box.

cloth	cottage	fountain
incredible	iron	polar
superb	swing	

- A:** What do you have there?
- B:** Oh, these are some old photos I found while I was looking through some things at Gran's _____. She said that I could keep them. I didn't know it, but her grandfather travelled around the world. He was even a(n) _____ explorer in the Antarctic! This is his album.
- A:** That's _____! I didn't know that either. Who are the women in this photo? The pattern on the _____ they are making is interesting.
- B:** I don't know. It looks like somewhere in India maybe.
- A:** And this photo! I've never seen a more beautiful _____!

- B:** The way the light shines through the water is simply _____. I wonder where it was taken.
- A:** Oh ... But this photo's not so interesting. It looks just like a big hole in the ground.
- B:** It says that it's a huge _____ mine in the United States ... and this photo is interesting: a girl playing on a _____. I wonder if it's Gran when she was young.

3 Paraphrase the sentences using the words and phrases in brackets.

- He was suffering a high fever and didn't feel like eating anything. (*appetite*)
- Jack never wanted to stay in one place for very long, so he always found himself going to different places. (*on the move*)
- The hungry little girl imagined being in a warm house, enjoying a big cake, and her mother keeping her company. (*fantasise*)
- He was daydreaming and totally lost track of what the teacher was saying. (*wander*)
- Hundreds of delicate works of paper-cutting will be shown at the city's gallery. (*on display*)

4 Translate the sentences into English using the words and phrases in brackets.

- 非洲广袤的草原，迷人的景色吸引了世界各地的自然爱好者。(vast, fascinating, appeal to)
- 在这个偏远的小村庄里，只有一条很窄的公路可以通往外面的世界。(remote, route)
- 湖水清澈，可以清晰地看见水中倒映的雪山。(upside down, snow-covered mountain)
- 蒸汽机的发明给现代世界带来了巨大的变化。(steam engine)

Using Structures

- 1 Complete the sentences with the **-ing** form of the verbs in the box. Then answer the questions.

cry finish talk learn ski get

- _____ is a very popular sport in northern China. What other winter sports do you know?
- _____ over spilled milk will not help you much. What helps, though?
- _____ English is quite interesting for me. What is interesting for you?
- Just _____ homework is not enough to get a good grade. What else do you need to do?
- _____ a high GPA (grade point average) will make it easier for you to enter a university. What else will also help?
- _____ on a phone while driving is illegal. What else is prohibited?

- 2 Find the proper beginnings for the quotes below.

- A Adopt the pace of nature
- B Teaching children about the natural world
- C Live in each season
- D Avoiding danger
- E Losing your sense of wonder
- F Walking

- _____ robs you of the excitement of life. —Unknown
- _____ : her secret is patience. —Ralph Waldo Emerson
- _____ would teach people the quality that youngsters find so hard to learn—patience. —Edward P. Weston
- _____ is no safer in the long run than outright exposure. Life is either a daring adventure or nothing. —Helen Keller

- 5 _____ should be treated as one of the most important events in their lives.

—Thomas Berry

- 6 _____ as it passes; breathe the air, drink the drink, taste the fruit, and resign yourself to the influence of the earth.

—Henry David Thoreau

- 3 Translate the Chinese in brackets into English to complete the passage. Use the **-ing** form where possible.

Travelling to cold, dark, and remote Arctic Norway in mid-winter (在隆冬季节去寒冷、

黑暗而偏远的北极圈内的挪威旅游) can be

_____ (激动人心的) especially

for those _____ (寻求

完全不同的体验). _____ (意

识到) the lack of daylight and difficulties in

transport is extremely important. Last January,

we found a few mountain passes were closed,

so _____ (走动) was not easy, but

_____ (欣赏) the northern lights

was an incredible experience.

_____ (在线订交通和宾

馆) did help a lot. _____

(想出如何拍照) in low light actually took us

quite some time during our _____


(筹划) stage. Finally, _____

(雇一位当地的导游) was necessary and helpful for this trip.




- 4 In groups, choose a national park in China and discuss why it was set up as a national park and how people should protect it.

Listening and Speaking

 1 David Evans and Li Yang are visiting the Polynesian Cultural Centre in Hawaii. Listen to their conversation and answer the questions below.

- 1 How many different Polynesian cultures are represented at the park?
- 2 What are canoes, and why are they important to the Polynesians?
- 3 What did the Samoans use to make fire?
- 4 Where do the Maori put their tattoos?
- 5 Why does David tell Li Yang not to worry about getting a tattoo?

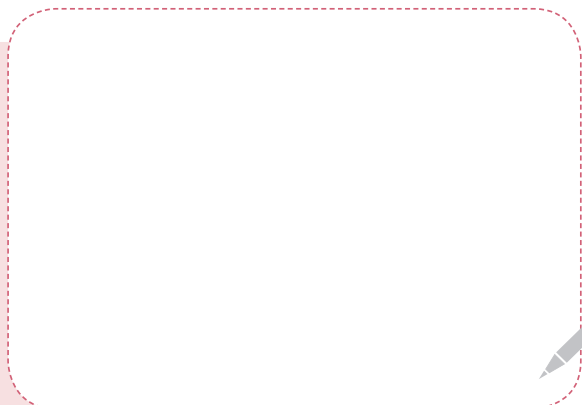
 2 Listen to the conversation again, and mark David and Li Yang's route through the park on the map below. They are starting at the main entrance.



3 In pairs, imagine that you are visiting the park. Where would you like to go and what would you like to do? Take turns giving directions to the different places in the park, using the map above.

4 In pairs, draw a map of your school campus. Imagine that a foreign student has come to your school. Take turns giving directions to the following places in your school, starting from your classroom.

- | | |
|-----------------------|---------------------|
| • classroom | • library |
| • dining hall | • playground |
| • school hall | • student centre |
| • convenience store | • toilets/restrooms |
| • dormitory | • school clinic |
| • headmaster's office | • staffroom |



Reading and Writing

1 Skim this email and find the reason why Chris went to Shangri-La.



Dear Sis,

How have you been? I'm having a good time on my holiday. Do you remember how it was our dream to find Shangri-La some day? You know that place in James Hilton's *Lost Horizon*. Well, now I can safely say that I've been there!

Before you get too excited, I must admit that this Shangri-La is the name of a city in Yunnan, China, and not the place in the book! I decided to come here because I wanted to experience the real Shangri-La for myself, even if it's different from the paradise we read about. So far, I really like it here.

On Monday, I left Lhasa at noon, and after changing flights once, I reached Shangri-La—also called “Zhongdian”—at eight in the evening. The airport is not far from the city, so my taxi ride to the hotel was very short. That night, I was so exhausted that I had a quick bite to eat and then crashed.

Yesterday, I went to the Potatso National Park. The park covers such a wide area that the admission ticket for the park includes a bus tour, as it is the only way to see all the major sites in one day. Just to give you an idea of how large the place is, imagine a park that spans across vast forests, wetlands, lakes, meadows, and several villages! On the bus, I made friends with the passengers around me, and they said that I had definitely picked the right season to visit the park. The autumn scenery, they said, would be absolutely picture-perfect.

On top of its beautiful scenery, the park is also famous for its rich biological diversity. Did you know that Potatso makes up less than one percent of China's total land area, but it contains more than 20 percent of the country's plant and animal species? The black-necked cranes were my favourites. I saw two of them at the picturesque Bita Lake!

At Shudu Lake, the first stop on the bus tour, we saw horses, cows, and yaks enjoying the sunlight and eating grass contentedly. As a nature lover like me, I'm sure you can imagine how delighted I was by this sight.

Bit a Lake, however, is absolutely my favourite place in Potatso. Just imagine, a beautiful lake, blue skies, majestic mountains, and golden trees all around me. In such tranquil surroundings, I could easily believe myself to be standing in James Hilton's Shangri-La. For those who live in cities like we do, spending time in nature can be an incredibly rejuvenating experience.

Tomorrow, I am going hiking at the Tiger Leaping Gorge. Fingers crossed that there will be good weather! Anyway, I need to get some sleep now since tomorrow's going to be a long day, but I'll tell you all about it when I get back!

Love,
Chris



2 Read the text again, and choose the correct answers.

- 1 When Chris said that he “crashed”, it means that he _____.
 A got into an accident in the taxi
 B fell asleep quickly
 C bumped into something by mistake
- 2 “Picture-perfect” scenery is scenery that is _____.
 A often photographed or painted
 B perfect and has no flaws
 C beautiful in pictures but not in real life
- 3 The mentioning of “forests, wetlands, lakes, meadows, and several villages” is helpful in understanding the size of Potatso because _____.
 A most people know the sizes of such places
 B only a large park can include so many different types of places
 C such places are usually not found inside parks
- 4 When Chris said “fingers crossed that there will be good weather”, it means that he _____.
 A knew that there would be good weather
 B saw on the news that there would be good weather
 C hoped that there would be good weather

3 Chris also wrote a postcard to a friend. Complete the card using the information from the text.

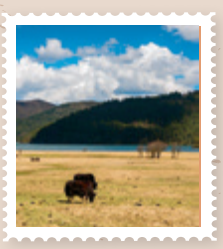
Postcard

Hi Max,

I'm having a great time in Shangri-La! The city is _____ in Hilton's *Lost Horizon* but _____. Yesterday, I went on a _____ in the Potatso National Park. I saw lots of beautiful scenery and even spotted _____.

Wish you were here with me!

Cheers,
Chris



4 Think about these questions and note down your ideas.

- 1 What is included in both the email and the postcard?
- 2 What is in the email, but not in the postcard?

5 Write a postcard to a friend or relative about a trip you have taken.

6 Write an email about your trip and include more details.

*Expanding Your World

NATIONAL PARKS—A TREASURE HOUSE FOR FUTURE GENERATIONS

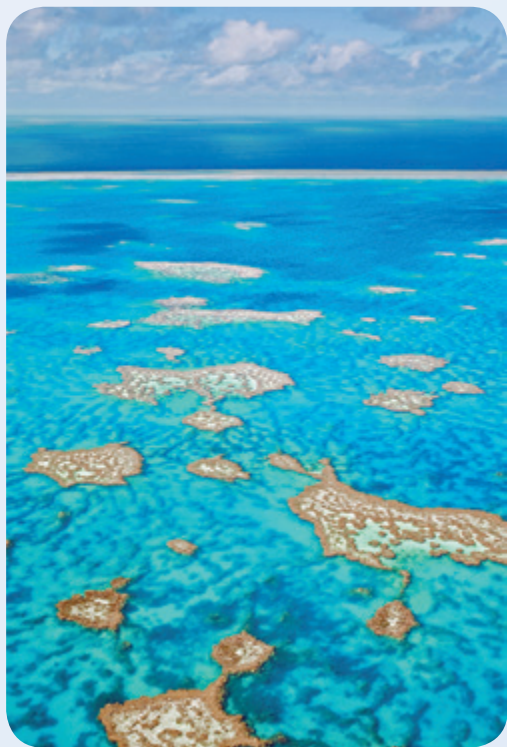
While city life may be exciting, all of us need to escape into nature now and again. Some of the best family holidays involve things like picnics, camping, hikes, and forest walks. Exploring nature allows us to catch sight of rare animals and come across special places of beauty. Of course, none of this would be possible without protected nature areas. This is why national parks are so important. They are places to be treasured—places where the country locks away the very best it has to offer for everyone to enjoy. To protect this heritage, governments allow very little development inside most national parks. A few national parks allow things like hotels and recreation areas to be constructed within them, but most parks do not allow any development at all. Visitors have to bring in their own food and drink, and then be sure to carry out all their waste when they leave.

The very first national park is also one of the most famous in the world—Yellowstone, in the western USA. Nineteenth-century explorers were amazed by what they saw in Yellowstone. Apart from the beautiful mountains, rushing rivers, and tall waterfalls, there were geysers, which sent boiling water as high as 91 metres into the air. Then there were the hot springs, as colourful as rainbows. These explorers wanted to protect the natural features of the area from development so that future generations could enjoy the area. And so, in 1872, Yellowstone was established as a national park. Today, around four million people a year visit it. Many come hoping to see wildlife, which is no longer as common in the American West as it once was. Everyone comes to see the geysers, especially Old Faithful, which sits near the centre of the park, and sends 95.6°C water up to 56 metres into the air every 44 to 125 minutes.

While Yellowstone was made a national park in order to protect its natural features, many others were set up to protect wildlife. A good example is the Serengeti National Park in Tanzania. In the local African language, “Serengeti” means “the place where the land runs on forever”. It is a wide plain covered in tall grass, and dotted with trees. When foreigners began killing the Serengeti lions for sport, the government decided to take action, eventually turning the area into a national park in 1951. Even then, it was a challenge to protect the park’s wildlife. In 1959, a film was made of the great wildebeest migration which occurs every



year in the park. This film, *Serengeti Shall Not Die*, helped people around the world understand the need for wildlife protection. Today, the Serengeti is one of the top tourist attractions in the world. Nowhere else can you see such great herds of wildebeests and zebras, in addition to lions, rhinoceroses, elephants, and many other rare creatures.



Not all famous national parks are on land. Some national parks are marine parks. One good example of this is the Great Barrier Reef Marine Park in Australia. Stretching over 2,300 kilometres, the Great Barrier Reef is considered one of the natural wonders of the world. It is the largest structure in the world made by living creatures. A wide variety of tropical wildlife also makes the reef its home. Since the Great Barrier Reef is just below the surface of the water, it is an excellent place to see nature, and millions of people travel there every year. The park was created in 1975 to protect the reef from overdevelopment and fishing. Unfortunately, the biggest danger to the Great Barrier Reef is something park management cannot stop—global warming. Rising ocean temperatures are causing some coral to die and the colourful reefs to turn grey. Hundreds of years ago, people could not imagine that there would ever be a time when forests would be cut down, oceans would become polluted, and wildlife would face extinction.

Facing the problems of environment pollution and overdevelopment, some national parks have been set aside to protect both natural features and wildlife. A good example of this is the Sanjiangyuan National Park, which was set up in the south of China's Qinghai Province in 2000. The park is at a very high altitude and contains the source of the Yangtze River (Changjiang), Lancang River, and Yellow River. It is also home to many species of plants and birds, along with animals like Tibetan antelopes, snow leopards, wolves, foxes, bears, yaks, and sheep. In most areas of the reserve, development is strictly forbidden, and any permitted development is closely monitored.



The protection of natural areas has attracted much media attention, and now more and more people are supporting the idea of eco-friendly development. Today, people understand that national parks are not just for one generation; they should be protected for every generation to come.

UNIT 4

Using Words and Expressions

- 1 Complete the sentences with the correct forms of the words in the box.

reliable	difference	low
assessment	inquiry	adjust
compare	angry	

- The teacher should make some _____ so that the students will not get bored.
- The twin brothers are alike in appearance but _____ greatly in personality.
- Seeing the boy so upset, the mother called the teacher to _____ what was going on at school.
- In _____ with big cities, these places are less modern but more natural.
- People _____ heavily on the Internet to keep in touch with one another.
- The test was to _____ the level of students' self-respect rather than their academic achievement.
- The young man managed to hold back his _____ and avoid a serious conflict.
- In class, students tend to _____ their heads when the question is too hard for them.

- 2 Paraphrase the sentences using the correct forms of the words and phrases in brackets.

- When I married my husband, my parents were very upset. (*approve of*)
- I have been busy preparing for the birthday party, shopping and decorating the house. (*occupy oneself with*)
- There were three factors playing roles in her quick recovery from the illness: appropriate medical advice, the right medicine, and enough rest. (*at work*)
- When problems occur, people usually find excuses to avoid responsibility. (*tendency*)
- The colours of the forest change with the

season. (*vary from ... to*)

- 6 I believe whatever you say and will always take your side. (*favour*)

- 3 Complete the passage with the correct forms of the words from this unit.

Educators can p_____ what students are thinking by observing their body language. Students tend to l_____ forward and make eye contact with teachers when they are interested in the lesson. By c_____, if they have their heads l_____ or look e_____, they are probably bored, or a_____ by something else. By looking at a student's body language, an educator can also i_____ whether the student is troubled or having personal problems. Observing students' body language helps teachers a_____ students' behaviour and thus take effective measures to help them learn better.

- 4 Translate the sentences into English using the words and phrases in brackets.

- 有些学生回避与老师的眼神交流，只是因为担心被老师叫起来回答问题。(merely, call on)
- 他忙着写毕业论文，几乎没有时间好好吃饭。(barely, bother, occupy)
- 小孩子们会盯着一件他们喜欢的东西来表达他们的兴趣。(tend to, stare at, display)
- 最终他们赢了这场比赛，向所有的球迷证明了他们是一支实力强大的足球队。(ultimately, demonstrate)
- 我亲眼见证了这对年轻的夫妻如何熬过了他们人生中最困难的时期。(witness, get through)
- 恰当地利用肢体语言可以帮助你克服与人交流的障碍。(employ, appropriately, break down, barrier)

Using Structures

1 Read the passage. Underline and correct the mistakes.

Body language is as important as words in communicate with other people. The crucial factor is recognise the fact that body language differs in various cultures, but it is also important to “do in Rome as the Romans do”. For example, show the gesture for “OK” in many cultures can meaning “money” in Japan or “zero” in France. By contrast, make such a gesture in Brazil or Germany can being offensive!

Of course, some body language is sharing by all cultures. For instance, waved one’s hand while see your friend off is like to say “Good-bye”, and smile often gets people through difficult situations.

2 Complete the conversation by translating the Chinese words into English. Use the *-ing* form if possible.

Rose (R) is asking school counsellor Casey (C) about body language.

R: How will I know if someone isn’t interested in what I’m saying?

C: Although body language is not the same for everyone, there are a few general signs you can look for, such as lack of eye contact, being distracted, _____ (看天花板) or other things like a cell phone, their body and feet turning away from you, or _____ (突然改变主意). You could also simply ask if the topic isn’t interesting or change the subject by _____ (问一个问题). For example, “Anyway, that’s enough about my trip; what did you end up doing this weekend?”

R: What does it mean if someone looks at me all the time?

C: That may mean the person likes you or is interested in _____. (逐步认识你). That type of look usually means _____ (请你接着说下去).

R: What does it mean if a person stretches their neck?

C: It could just mean that their neck needs _____ (伸展). On the other hand, it could also be a sign of _____ (感到不舒服) with the current situation. A person _____ (经历焦躁) can also act similarly.

R: What sort of body language can show that someone is lying?

C: This may vary from person to person. Some people would avoid _____ (凝视你的双眼). Others would also shift their bodies, adjust their clothing, or play with their hair.

3 Make up at least two sentences using the *-ing* form in each function.

- *-ing* form as the subject
- *-ing* form as the object
- *-ing* form as the predicative
- *-ing* form as the attribute
- *-ing* form as the adverbial
- *-ing* form as the object complement

Listening and Speaking

1 Listen to a radio interview with Max Snelling and complete the sentences.

- 1 Max Snelling wrote a book about _____ in the animal world.
- 2 His book talks about how animals use body language _____.
- 3 In this interview, Max mostly talks about how _____ use body language.
- 4 When we are angry, we want to look _____.
- 5 Humans _____ to show that we love and accept each other.

2 Listen to the interview again and answer the questions.

- 1 When a chimp smiles, how does he likely feel?

- 2 Why does Max think a chimp smiles when faced with an enemy?

- 3 How are humans and chimps alike in the way they express anger?

- 4 What do chimps do to show they love their babies?

- 5 What does a bigger chimp do to make a smaller chimp feel safe?

3 In groups, choose at least three emotions, such as fear, joy, and sadness. Then discuss these questions.

- 1 Are animals different from or similar to each other in how they show their emotions with their body language?
- 2 How should you react when you see certain kinds of body language from animals?



4 After your discussion, give a short presentation on animal body language to the class.

EXAMPLE

Animals often use body language to show their emotions. For example, when it wants to show fear and tell you to stay away, a bear will slap the ground. This is very different from a dog, which will put its tail between its legs to show fear ...

Reading and Writing

1 Read the text. Match the emotions with the body language and animals on page 86.

ANIMAL BODY LANGUAGE

Human beings are not the only ones who communicate. Animals use body language to tell each other how they feel and what they think. Here is a quick look at how some of our animal friends send messages to us and to each other.



Dogs use sounds, body movements, and their tails to communicate. When a dog is happy, its ears will stand up and its eyes will be wide open. The dog will start barking, moving its tail, and running around in circles or jumping up and down to show you that it wants to play. A dog that is afraid will lie on its back and close its eyes. The dog may show its teeth and lower its body so that it is close to the ground. The dog may also shake, and it will put its tail between its legs. When a dog is angry, its main body language is showing its teeth and growling. The dog will try making itself look as big as possible. The tail will stand straight out from the body.



Elephants also use noises and body language to express themselves. An elephant's sense of smell is highly developed. An elephant can smell how another elephant is feeling and even tell if it is sick. The elephant's nose, or trunk, is also used to make noises and to welcome other elephants. Different noises have a variety of meanings: they can mean "I am hungry", "I am angry", or "Good to see you!" An elephant's body language includes ear signals and gestures. If an elephant spreads its ears, it means "Watch out!" To show friendship, elephants will touch each other with their trunks and stand close to each other, putting their heads together.



Dolphins are social animals. They live in groups and love showing each other their feelings. An angry dolphin will sometimes hit its tail on the surface of the water. The movement and noise let other dolphins know that something is wrong. If a dolphin wants to send a message over a long distance, or if it wants to show how strong it is, it will jump high out of the water and land on its side, making a loud noise. A dolphin's favourite activity is leaping into the air while playing with its friends. When dolphins are tired and need to rest, they will swim in small groups close to the surface. If you see dolphins doing this, you should not disturb them.

1 happiness

2 fear

3 anger

4 warning

5 affection

- shows teeth and growls
- ears stand up and eyes wide open
- shows teeth and lowers body
- spreads ears
- puts its head against another's
- hits its tail down to make noise
- leaps into the air



elephant



dog



dolphin

2 What is the cat's body language communicating in each picture? Here are some words and expressions you can use. Use a dictionary to help you.

purr

meow

stretch

swish its tail

nuzzle its head against her face



①



②



③



④



⑤



⑥

3 Give the cat and the girl names. Use these names and the pictures above to write a story about the cat.

*Expanding Your World

BEING FUNNY WITHOUT SAYING A WORD



Victor Hugo once said, “Laughter is the sun that drives winter from the human face.” Up to now, nobody has been able to create laughter like Charlie Chaplin. He brightened the lives of millions through two world wars and the hard years in between. He made people laugh at a time when they felt depressed, so they could forget their difficulties.

Not that Charlie’s own life was easy. He was born to a poor family in 1889. His parents were both poor music hall performers. To make money, Charlie learnt to sing as soon as he could speak, and dance as soon as he could walk. Such training was common in stage families at that time. Every member of the family performed to help make money. Then his father died, and so Charlie spent his youth looking after his sick mother and his brother. By his teens, Charlie had, through his humour, become one of the most popular child actors in England. No one was bored watching him—he made everything funny.

As time went by, Chaplin began making silent films, where the story was told only through body language and gestures. Usually, Chaplin appeared in these films as the Little Tramp, a poor man with a moustache, large trousers, worn-out shoes, and a small, round hat. He walked around stiffly, carrying a walking stick. Even though the Little Tramp was considered a failure in life, he was still full of kindness and hope. Like Chaplin, the Little Tramp always tried to turn his sadness into joy. Chaplin once said, “My pain may be the reason for somebody’s laugh. But my laugh must never be the reason for somebody’s pain.” He also said, “To truly laugh, you must be able to take your pain, and play with it!”

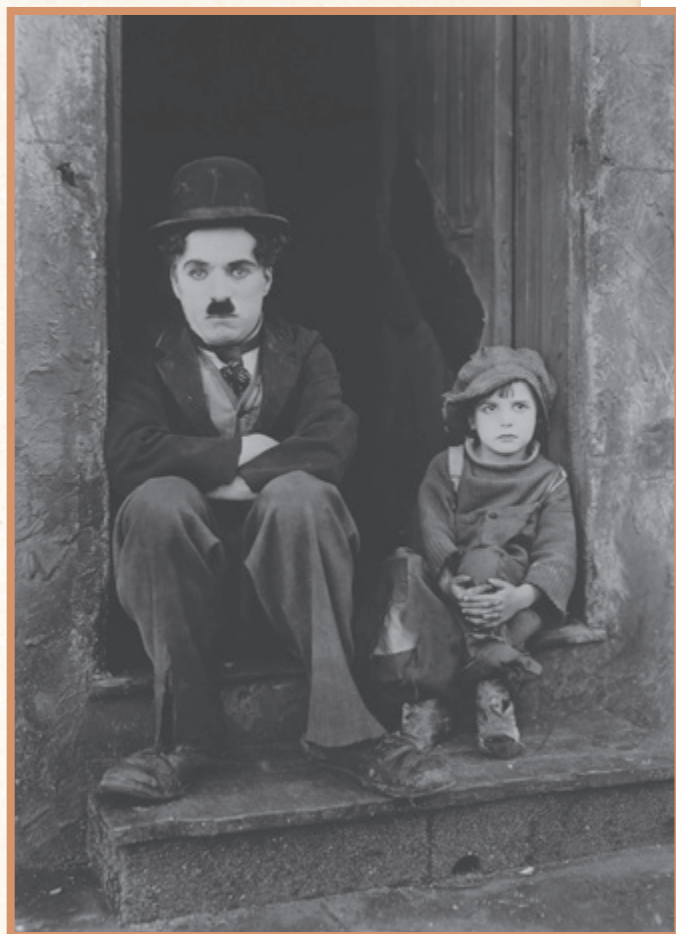


In 1914 and 1915, Chaplin worked almost constantly, making nearly 50 short films. Though short films were in high demand, Chaplin's popularity allowed him to take more time and make longer films. One of these films, *The Kid* (1921), is considered to be among the greatest films ever made. In the film, the Little Tramp finds a baby that has been abandoned, and raises the child as his own. While the film has many funny moments, it also has times of great sadness. As Chaplin said, it was "a picture with a smile, and perhaps a tear".

How did the Little Tramp make a sad situation funny? Here is an example from one of his most famous films, *The Gold Rush* (1925). It is around 1900, and gold has just been discovered in Alaska. The Little Tramp has rushed there in search of gold, but without success. Instead, he is hiding in a small house on a mountain during a snowstorm, with nothing to eat. He is so hungry that he has cooked one of his boots for dinner. The Little Tramp first cuts off the laces and eats them as if they were noodles. Then he cuts up the boot and shares it with Big Jim, another fortune-hunter. The Little Tramp chews on the lower part of the boot, treating it like something good to eat and making you believe that this is one of the best meals he has ever tasted.

When the silent era ended in 1929, Chaplin continued to make films, but these films had little or no dialogue. They had just music and sound effects. Unfortunately, his style of visual humour had gone out of style and so his films were not as successful as before. Finally, in 1940, Chaplin gave up silent films to make *The Great Dictator*. This became Chaplin's most successful movie. It was also his last great success. Essentially, Chaplin went into retirement afterwards, though he made a handful of films later on.

Charlie Chaplin wrote, directed, and produced the films he starred in. In 1972, he was given a special Academy Award, which became known as an Oscar in later years, for his contributions to the film industry. He lived in England and the USA, but spent his last years in Switzerland, where he died in 1977. He is loved and remembered as a great actor who inspired people during dark times.



Using Words and Expressions

1 Choose the correct words to complete the sentences.

- He managed to _____ the judge of his innocence. (*convince, convinced*)
- If you are _____ that something is true, you feel sure that it is true. (*convince, convinced*)
- A hundred years ago, several writers _____ a future in which robots would do more work. (*vision, envisioned*)
- Although his _____ has not come true yet, he will continue working hard to achieve it. (*vision, envision*)
- The whole food chain has been affected by the overuse of _____ in agriculture. (*chemistry, chemicals*)
- Organic _____ is considered to have originated in the early 19th century. (*chemistry, chemicals*)
- Government support will be _____ if the project is to succeed. (*essential, essentials*)
- She packed a few _____ and headed for the countryside. (*essential, essentials*)

2 Complete the sentences with the correct forms of the words in the box.

expand overcome estimate
generate extension

- The school board plans to have a(n) _____ built to the library.
- The new film _____ a lot of excitement, and ticket sales were way beyond our expectations.
- Unable to _____ his shyness, he stood there without saying anything.
- Foreign trade _____ greatly in the past few years.
- It _____ that the project will last more than ten years.

3 Translate the sentences into English using the words and phrases in brackets.

- 我们需要通过大量的调研来验证这个假设是否成立。(assumption)
- 妈妈困惑的问题是宝宝消化不良。(why, digest)
- 严格禁止考试作弊。(prohibit)
- 我们需要找到实现目标的最佳途径, 所以向王教授寻求建议。(attain, turn to)
- 在大城市, 自行车正在成为替代私家车出行的短途交通工具。(alternative, means of transport)

4 Use the correct forms of the expressions in the box to complete the passage. What other agricultural changes do you know about?

a diversity of it is estimated
the need for increase output
widespread use boost the development

By around 3000 BCE, the Egyptians had begun to use oxen to pull ploughs. The use of animals greatly improved agricultural production and reduced _____ humans to perform the heavy labour. Horses, donkeys, mules, and water buffaloes were all used for farm work. With today's technological developments, the _____ of machines has largely replaced animals in farm work. These machines can carry out _____ tasks such as ploughing and planting, fertilising and irrigating, harvesting, and managing pest, weed, and disease control. Farm machinery has _____ of agriculture, and _____ greatly. For example, _____ that one farmer on a cotton-picking machine can harvest as much in a day as 100 people working by hand.

Using Structures

1 Rewrite the sentences using subject clauses.

EXAMPLE

I'd like you to find out how new technologies can increase grape production in Binchuan county. ▶

What I'd like you to find out is how new technologies can increase grape production in Binchuan county.

- 1 We wanted to know where he had lost the laptop. ▶

Where _____
was what we wanted to know.

- 2 The way in which he did the experiment was puzzling to other people. ▶

How _____
was puzzling to other people.

- 3 Do they use too many chemical pesticides? I worry about this most. ▶

Whether _____
is what I worry about most.

- 4 People are happy to see that the living conditions and income of the farmers have improved a lot. ▶

That _____
makes people happy.

- 5 We have not decided on the date for the sports meet yet. ▶

When _____
has not been decided on yet.

2 Make sentences using subject clauses with the help of the cues.

EXAMPLE

he thought / completely wrong

What he thought was completely wrong.

- 1 he said / reasonable

- 2 she will accept the invitation / not clear yet

- 3 the animals are moving to / not exactly known

- 4 you have recovered from your illness / a great relief to us

- 5 he has become distant recently / my concern

3 Circle and correct the mistake in each sentence.

- 1 What have I forgotten is that I have a test today.

- 2 Who left me these flowers are not clear to me.

- 3 This is obvious that students should prepare well for their future.

- 4 Who's ticket this is has not been confirmed.

- 5 When the test will be given have not been decided.

4 Combine each pair of sentences using the word in brackets.

- 1 Can we control pests without causing any ill effects? This still remains a question. (*Whether*)

- 2 Agriculture is the foundation of our country. This is well known. (*It*)

- 3 Some less-developed countries are suffering from food shortages. It is a serious problem in the world. (*That*)

- 4 Some herdsmen in Inner Mongolia fix electronic sensors to their cattle to monitor their movements. It is true that they are doing this. (*It*)

5 The overuse of chemicals in farming has caused serious pollution in nature. Prepare a speech about what worries you most and how to deal with the problem.

It is quite common/important/necessary that ...

Whether... depends on ...

That ... is what ...

What matters most is that ...

Listening and Speaking

- 1 Each of the photos below represents an innovation in agriculture. In pairs, discuss what you think these innovations might be.



A



B



C

- 2 Listen to three news reports about agriculture. Match each report with one of the photos above.

News report 1: _____ News report 2: _____ News report 3: _____

- 3 Listen to the news reports again and take notes. Then fill in the table below.

Question	News report 1	News report 2	News report 3
Who	_____	Intelligent Growth Solutions	Gerald Kibugi
What	The well-respected _____ and agricultural _____ died of _____.	_____ the UK's first commercial vertical farm.	Won an award for creating Green House Do It Yourself software.
When	He died on _____.	_____	_____
Where	His work was at Hebei Agricultural University and _____.	Near Dundee.	_____ Fair, Kenya.
Why	He wanted _____ _____ _____.	Farmland has become _____. Meanwhile, many countries lack enough _____ to grow the crops they need.	Farmers do not have the time to read and _____ learnt from books on greenhouse farming.
How	He helped farmers to _____ and escape _____.	_____ in a greenhouse in large trays, stacked one above the other.	This software allows farmers to _____ on _____.

- 4 In groups, discuss a news story about agriculture that you have heard about recently.

- Answer questions about your story: who, what, when, where, why, and how.
- Use the answers to report your story. You can include quotes in your talk.

Reading and Writing

1 Look at the title and the picture. What do you expect to read in the text?

2 Read the text and then answer the questions on page 93.

BETTER, GREENER LIVES AWAY FROM THE CITY

While the dream of most university graduates is to start a successful career in a big city, more and more young people are choosing to stay in their own hometowns so they can stay with their family and friends. For some young people, it is also a matter of making the quality of life for other people in their hometowns better. They also have a desire to improve and maintain the natural and economic environments in these places for generations to come.

Li Dan is a woman who has discovered that returning home to work in the field of agriculture could offer her both a meaningful challenge and a good standard of living. Born in a small village in Southwest China, she decided not to follow many of her former classmates to the city after getting her degree at university. Instead, she returned to her village and started her own fruit-growing business. Working hard over the last several years, and taking advantage of new technology and the Internet, she has expanded her business to include agritourism. Moreover, her company's annual income has reached six million yuan and more than 50 new jobs have been created. As a result, her decision has also helped to alleviate poverty and improve the lives of many people in her village.

With China's population expected to continue rising in the coming years, the government understands the importance of agriculture. It also understands that university graduates can help come up with better ways to grow crops, and develop new, creative ways of farming using modern technology. To help these young people with their bright and innovative ideas, the government is providing financial help. Business development loans are becoming easier for these young people to obtain, too. Government policies that aim to eliminate poverty are also having a beneficial effect.

"Life in big cities is not all it's cracked up to be," said Zhang Tao, from Binchuan county in Yunnan Province, adding that the air was bad, transport was terrible, and it was hard to make a decent living. What life in one's hometown offers is a strong support network. More importantly, this network is also a good one for getting new agribusinesses up and running quite quickly. Thus, it is no surprise that more new graduates are now attracted to life in the country, where they can fulfil personal goals and contribute to their local communities rather than just being white-collar professionals in big cities.



- 1 What do some young people hope to achieve by living in their hometowns?
- 2 How has Li Dan's decision to work in her hometown contributed to her community?
- 3 Why does the government support people who want to stay and work in their hometowns?
- 4 Based on the context, what do you think the sentence "Life in big cities is not all it's cracked up to be" means?
- 5 What is meant by "a strong support network"?

3 Discuss the following questions in groups.

- 1 Which would you prefer: living in a big city or living in the country? Why?
- 2 How can you best contribute to your hometown?

4 Make a list of three advantages and three disadvantages of working in the city and working in the country. Write your notes in the table below.

Choice	Advantage	Disadvantage
Working in the city	1	1
	2	2
	3	3
Working in the country	1	1
	2	2
	3	3

5 Use the table above to decide which choice you prefer. For each advantage, add one detail. For the disadvantages, add a reason why they do not matter a lot to you. Use the outline below to help you write an essay.

In my opinion, working in the city/country is better.

First, (Advantage 1) _____

(Detail) _____

Second, (Advantage 2) _____

(Detail) _____

Finally, (Advantage 3) _____

(Detail) _____

Of course, there are some disadvantages to working in the city/country.

For example, (disadvantage) _____

In addition, (disadvantage) _____

However, (reasons they do not bother you) _____

All in all, I would prefer to work in the city/country.



*Expanding Your World

AMAZING METHODS OF AGRICULTURE

Agriculture has come a long way from its ancient beginnings. Long ago, farmers would work hard on their individual plots of land, using simple tools or even their bare hands. They tended to their crops for many hours each day so that the crops grew well and did not suffer from pests or disease. Luck played a great part in farming. For example, a single storm could destroy a whole year's work, while a summer of good weather could ensure a good harvest. Where farms were located was often critical to success, too. In hilly countries, some lucky farmers would have land in the lowlands—full of deep, rich soil, while other unlucky farmers would have land on the hills with hard soil full of stones. In addition, some areas would simply be too dry or too wet to grow much of value.

Modern science and technology have helped to greatly reduce the back-breaking labour involved in farming, along with the reliance on luck and guesswork. These advances have enabled people in various countries to benefit from exceptional innovations in crop production.



Probably one of the most beneficial innovations is drip irrigation, which has made it possible to develop big, green farms in the middle of the desert. While there have been experiments in different places in the past to make drip irrigation a reality, it is in the Middle Eastern country of Israel that drip irrigation has become a modern success.

How Simcha Blass, a scientist, discovered this new way of irrigation is rather interesting. He was visiting a friend in the Israeli desert in the 1930s when he noticed something unusual. There was a row of trees near his friend's house, and one of them was much taller than the others. When Blass dug around the roots to find out what the secret was, he discovered that the house's water pipe had a small leak at the base of the tree. The pipe's steady drip onto the tree's roots was giving it just enough water at the perfect rate to grow strong and quickly.

Through this discovery, farmers can now produce crops on arid land without needing much water. This irrigation method uses far less water than other methods. The limited

and focused use of just the right amount of water also denies moisture to weeds and pests, keeping them from harming the crops.

Drip irrigation deals with a lack of water in an area. However, what if an area has plenty of water, but little usable soil? As it turns out, it is possible to grow plants without using soil at all. With hydroponics, plant roots are supported by rocks, glass beads, or a fibre mat. Nutrient-rich water is then provided so that the plants can grow. Given that China has many areas where soil conditions are poor, Chinese researchers have been experimenting with hydroponics since the 1970s. Recent research has centred on vertical hydroponics farming. With a vertical farm, the crops are planted in trays that are stacked into plant skyscrapers. Furthermore, nearly all hydroponic farms and vertical farms are either partially or fully automated.



Besides drip irrigation and hydroponics, scientists have made impressive innovations in agricultural machinery. Of course, the most important and useful agricultural machines, such as tractors and harvesters, were invented long ago. However, many such machines are now self-driving. They use cameras and a positioning system to see where they are and where they are going, and their routes can be planned by a computer. Depending upon the crop, some farms hundreds or thousands of hectares in size can be managed by just a handful of workers using machines such as these. For fruit cultivation, robots are now being employed in some countries. For instance, in Japan, robots are used to spray individual grape clusters with insecticide, trim them so they are all of equal size, bag them so that they can be further protected from pests and the elements, and then harvest them when they are ripe. In other countries, robots are being used to harvest oranges and strawberries, plant rice, and spray pesticides. The field of agricultural robotics is still in its infancy, so there is still a need for human labour to harvest many crops. To help ease this burden, there are also robots that can help workers carry fruit and vegetables to storage areas.



With such technological advances, the image of a farmer pushing a plough will eventually become a thing of the past. Farmers of the future are more likely to be technicians working in control rooms, surrounded by computers and monitors. Indeed, some farmers already are.

Notes 注释

Unit 1

1 TU YOUYOU AWARDED NOBEL PRIZE 屠呦呦获诺贝尔奖

这是英文报刊上新闻报道的标题。新闻标题通常具有用词精准、主题明确、简明扼要等特征。在英文新闻标题中可以省略虚词，使标题更加简洁。本文标题就省略了助动词和冠词。英语中使用全大写的情况并不多见，一般只在正标题、广告等中使用。报刊标题的呈现形式一般首字母大写，尤其是实词首字母大写。如：

Missing Boy Found Dead 失踪男孩遇难

诺贝尔奖（Nobel Prize）是世界公认的最具影响力的国际性奖项之一。该奖项是依据瑞典化学家、企业家、发明家阿尔弗雷德·伯纳德·诺贝尔（Alfred Bernhard Nobel, 1833—1896）遗嘱，将其遗产（3,100万瑞典克朗）作为基金设立的奖项，旨在奖励在多个领域为人类社会作出卓越贡献的杰出人士。该奖项最初设物理学、化学、生理学或医学、文学、和平等五个领域分项，后来增设经济学奖。

2 In 1967, the Chinese government formed a team of scientists with the objective of discovering a new treatment for malaria, and Tu Youyou was among the first researchers chosen. 1967年，中国政府组建了一支以探索治疗疟疾新方法为目的的科学家队伍，屠呦呦是其中首批入选的研究人员。

这是一个由and连接而成的并列复合句。介词短语with the objective ...作第一个分句的状语，表示目的。短语中的objective也可用aim、purpose、goal等替换。如：

He tried a second time with the aim of being chosen. 他又试了第二回，希望能被选上。

He came here with the purpose of carrying out an important task. 他来这里是为了执行一项重要的任务。

第二个分句中chosen是过去分词用作定语，修饰the first researchers。分词短语作定语经常后置。如：

the trees newly planted by the river 河边新种的树木

the book bought yesterday 昨天买的书

3 One medical text from the fourth century suggested using the extract from sweet wormwood to treat a fever. 一本四世纪的医药文献推荐使用青蒿提取物来治疗发烧。

文中提到的医学文献源自我国东晋名医、医药学家葛洪（公元284—364年）所著的《肘后备急方》，书中收集了大量救急用的实用诊疗良方。“肘后”是“带在身边”的意思，书名表示它是一本常备实用手册。

4 Upon hearing that she had been awarded the Nobel Prize, ... 当听到自己被授予诺贝尔奖时，……

在本句中，“介词upon + 动词-ing形式”构成介词短语，用作时间状语。upon还可换为介词on，表示一件事紧接着另一件事而发生。这种用法常见于正式的文体，依据语境，可译作“在……的时候；当……时；一……就……”。如：

Upon graduating, he joined a small law firm. 一毕业他就加入了一个小型律师事务所。

Upon finishing it, I was struck by the feeling that it was the best composition I had ever written. 我写完这篇作文时，就感到这是我写过的最好的作文。

Upon their return to the country, the girls volleyball team received praise and flowers. 女排姑娘们一回国，就收到了赞誉和鲜花。

5 Alexander Fleming 亚历山大·弗莱明 (1881—1955)

英国细菌学家，青霉素的发现者。他于1928年发现青霉菌能够产生一种杀灭葡萄球菌且防止其生长的物质，并命名其为“青霉素”。此后英国病理学家弗洛里和德国生物化学家钱恩肯定了这种物质的治疗价值，三人共获1945年诺贝尔生理学或医学奖。

6 Florence Nightingale 弗洛伦斯·南丁格尔 (1820—1910)

英国著名护士，近代护理学和护士教育的创始人。她通过自己的辛勤奉献和毕生努力，使得医疗护理工作受到尊重，极大地提高了护士的社会地位及形象。南丁格尔的成功不仅在于她带领的队伍拯救了许多伤员，她还在护理和医院管理上带来了世界范围的改革。因为她常在深夜提着灯在医院里探望病人，受伤的士兵亲切地称她为“提灯女士”“提灯天使”。国际护士节设在5月12日南丁格尔生日这一天，就是为了纪念这位近代护理事业的创始人。

7 He had a thick moustache and long white hair, which sometimes stood on end as though he had just received an electric shock. 他胡须浓密，头发又长又白，有时会像刚遭了电击似的竖起来。

stand on end 是竖立起来的意思。英语中有一句俚语 make one's hair stand on end 意思是“令人毛骨悚然”。

Unit 2

1 In the future, we will be using advanced technology every day for automatic control of just about everything in our home. 在未来，我们每天都会使用先进技术对家中几乎所有东西进行自动化控制。

just about 在句中意为“几乎；近乎；差不多”，相当于 almost。如：
You've met just about everyone. 你几乎每个人都见到了。

A: Have you finished your work? 你的工作完成了吗？

B: Just about. 差不多了。

just about 还可以表示“大概；大约”，相当于 approximately。如：
They should be arriving just about now. 他们现在大概该到了。

2 Your lights will come on the instant you enter the door along with your favourite music or TV programmes, and you will find your dinner already prepared for you. 你一进家门，灯就会亮起，还有你最喜欢的音乐或电视节目（会自动播放），而且你会发现晚餐已为你准备好了。

句中的 the instant (that) 起连词作用，表示时间，意思是“一……就……”，that 常省略。如：
I recognised her the instant (= as soon as) I saw her. 我一眼就认出她了。

The instant he finished transferring the payment, he started having second thoughts. 完成转账付款那一刻，他就开始有了不同的想法。

意义和用法近似的短语还有 the moment (that)。如：

He said he'd phone you the moment he got home. 他说他一到家就给你打电话。

The moment we get the money, we'll send the ticket. 我们一收到钱就会把票寄出。

instant 单独作名词时，表示“瞬间；片刻”，相当于 moment。如：

I'll be back in an instant. 我马上就回来。

At that very instant, the queen entered the hall. 就在那个时刻，女王走进了大厅。

【思考】instant 还可用作形容词，你能猜出它在下列短语中的意思吗？

instant coffee

an instant success

- 3 For example, if a water pipe starts leaking, or if there is a short in the electrical wiring, your smart home will detect it and provide you with the relevant information.** 例如, 如果水管漏水或发生电线短路, 你的智能家居将会探测出来, 并给你提供相关的信息。

short 在句中是名词, 相当于 short circuit, 意为“(电线)短路”。如:

The fire was caused by a short in the neighbour's house. 这次火灾是由邻居家的电线短路引起的。

Unit 3

- 1 I wake up to the sound of the wind buffeting the cloth of my tent.** 风噼里啪啦地拍打着我的帐篷的布, 我在这声响中醒来。

wake up to 在句中指因为听到风拍打帐篷发出的声响而醒来。wake up to 还可指“意识到或认识到”的意思。如:

We must wake up to the fact that we have to depend on ourselves. 我们应该认识到必须依靠自己这一现实。

buffet 在句中作动词, 指风势猛烈, 噼里啪啦地拍打着帐篷的布。buffet 作动词时, 意为“(风、雨或浪)用力反复敲打; 连续猛击”。如:

The rain buffeted the window. I couldn't fall asleep at all. 大雨拍打着窗户, 我根本无法入睡。

buffet 还可作名词, 意为“自助餐”。如:

a buffet lunch 自助午餐

【思考】buffet 作名词和作动词时, 发音一样吗? 你知道还有哪些英语单词有类似的发音变化? 请列出三个类似的单词, 并举例说明它们的意思。

- 2 I'm in the remote far north of Sweden in Sarek National Park, a place with no roads or towns.** 我身处瑞典北端偏远的萨勒克国家公园, 一个既没有公路也没有城镇的地方。

萨勒克国家公园, 位于瑞典北部, 设立于1909—1910年, 是欧洲最古老的国家公园之一, 也是萨米人生活的家园。萨勒克国家公园地貌丰富, 包括冰川、河流、峡谷、山峰等。公园内野生动物有狗熊、狼獾、驼鹿、猞猁等, 野生植物在高山地区以地衣苔藓和灌木为主, 著名景观包括拉帕山谷(Rapa Valley)。萨勒克国家公园风景壮美奇绝, 吸引了世界各地的众多登山爱好者和徒步爱好者。

- 3 Following the reindeer were the Sami people, who made this territory their home.** 在驯鹿之后来的是萨米人, 他们在这片土地上安家落户。

驯鹿 reindeer 的复数形式可以是 reindeer 或 reindeers。这种鹿生活在北极圈附近, 成年雄性和雌性头部都能长出像树枝一样的巨大鹿角。

萨米人 the Sami, 也作 the Saami。他们是生活在斯堪的纳维亚北部地区的游牧民族, 是北欧原住民, 以放牧驯鹿为生。

Following the reindeer were the Sami people 是主谓倒装, 主语 the Sami people 后置, 以便与后面的定语从句更好地衔接, 语义上也更连贯。同样的信息用常规的语句表达就成了 “People were following the reindeer. They were the Sami people and they made this territory their home.”, 但这会显得句式单调, 语言平淡。

【思考】你知道的倒装句还有哪些? 请再写出两个倒装句。

- 4 If today is anything like yesterday, it will be full of sweat and hard work as I hike over this difficult land to my destination on the other side of the valley.** 如果今天和昨天差不多, 那将会充满汗水和艰辛, 因为我要徒步跨越这片地形艰险的土地, 到达山谷另一端的目的地。

anything like 后面可以接人或物: anything like somebody/something, 意思是“与……相像; 多少有点像”。如:

He isn't anything like his twin sister. He is very outgoing and talkative. 他和他双胞胎姐姐(或妹妹)可不太像。他特别外向而且健谈。

Is this teapot anything like what your grandpa needs? 这个茶壶多少还符合你祖父的需要吧?

5 Theme Park 主题公园

主题公园和一般娱乐公园的不同之处在于, 它提供的各种活动都和主题互相关联。主题公园的主题包罗万象, 例如星际旅行、历史传奇、民俗文化等。主题公园一般只需要购买一次性门票, 便可畅玩园中各种设施。主题公园内有多种游乐设施和娱乐活动, 例如: 过山车、摩天轮、花车游行、节目表演等。

迪士尼乐园(Disneyland), 也叫作迪士尼主题公园。迪士尼乐园是世界上最早开业的主题公园。第一个迪士尼乐园于1955年在美国加利福尼亚州阿纳海姆开放营业, 之后在美国奥兰多、法国巴黎、日本东京、中国香港等地陆续建成和开放迪士尼乐园, 2016年开放的迪士尼乐园位于中国上海。

多莉山主题公园(Dollywood), 位于美国田纳西州大烟山, 是展现美国东南部传统文化的主题公园。园内有与伐木相关的游乐设施和娱乐项目, 常年举办乡村音乐表演和传统工艺展示, 非常适合对美国传统文化感兴趣的游客。该公园还拥有独特的木结构过山车。

长隆海洋王国(Chimelong Ocean Kingdom), 位于中国珠海, 2014年开放, 是亚洲最大的以海洋为主题的超大型主题乐园。公园有八大园区。园内有不同的珍稀海洋动物和极地动物展馆, 还有各种现代化游乐设施和表演, 自开园之日起, 就吸引了众多中外游客。该乐园的海洋鱼类展馆还创下了最大水族馆、最大水族箱、最大亚克力板、最大水底观景窗、最大水底观景穹顶等五个吉尼斯世界纪录。

6 Whichever and whatever you like, there is an incredible theme park that will appeal to you! 无论你喜欢哪一个, 无论你喜欢什么, 总会有一个奇妙无比的主题公园让你流连忘返!

whichever是由“which + ever”构成的复合词, 意思是“任何一个; 无论哪个; 无论哪些”。如: You can use whichever colour you like. 你可以用任何一种颜色。

Whichever route you take, it takes almost the same amount of time. 不管你走哪一条路, 花的时间都差不多。

【思考】英语中“wh-疑问词 + ever”构成的复合词还有whatever、whenever、wherever、whoever等。你能说出这些词的意思, 并分别造句吗?

appeal to 在句子中意为“吸引; 对……有感染力”。appeal to还可以用来表示“呼吁; 要求; 诉诸; 求助于”的意思。如:

The idea of teaching Chinese abroad really appeals to me. 去国外教汉语这个想法特别吸引我。

The mayor went on TV to appeal to the public to stay calm. 市长在电视上呼吁公众保持冷静。

In order to solve the desertification problem, the farmers appealed to scientists for help. 为了解决土地沙化的问题, 农民们向科学家求助。

Unit 4

1 In other countries, by contrast, eye contact is not always approved of. 相反, 在另一些国家, 眼神交流并不总是被认可。

这个句子的着眼点在行为, 而非行为的实施者, 所以使用被动语态。同时, 被动语态的使用还表现出行文的客观和正式, 这也是被动语态的一种重要的语用功能。如:

It is usually considered rude to talk at the dinner table with your mouth full. 在餐桌上, 满嘴食物与人交谈通常会被视为无礼的表现。

2 In France, a person encountering an identical gesture may interpret it as meaning zero. 在法国，看到同一个手势的人可能会将其解读为“零”。

句中的两个 *-ing* 短语功能不同。第一个 *-ing* 短语 *encountering the identical gesture* 作定语，修饰名词 *person*。*-ing* 短语作定语时通常后置，而单个的 *-ing* 用作定语则大多前置。如：

children playing soccer on the playground 操场上踢球的孩子

flowing water 流水

另外一个 *-ing* 短语 *meaning zero* 作介词 *as* 的宾语。如：

Without providing the required personal information, you'd be considered as having given up on the test. 若未完整填写所要求的个人信息，你将被视为弃考。

3 Many students are quite shy and don't speak all that much. 许多学生生性腼腆，沉默寡言。

“not (all) that + 形容词或副词”是一种较为口语化的表达方式，意为“不那么……；并不多么……”，*all* 有加强语气的作用。表达时如果再加上肢体语言，这一结构就会具有更强的描述性和画面感。如：

The car is not (all) that easy to drive. 这辆车并不那么好开。

The project wasn't (all) that successful. 这个项目并非那么成功。

4 So, how can I really know what makes each student tick? 那么，我是如何搞清楚每个学生为何会这样的呢？

what makes somebody tick 表示“形成某人性格（影响某人行为）的思想（情感、见解）；使某人这样做的原因”，翻译时要酌情考虑措辞。如：

I've never really understood what makes her tick. 我一直没搞清楚她为何会是这样一个人。

People are curious to know what makes firefighters tick. 人们很好奇，想知道那些消防员们工作的动力所在。

5 Their eyes barely move, and they always have the same distant expression on their faces. It is as though they are asleep with their eyes open. 他们的眼睛几乎不动，脸上表情疏远呆滞，好像睁着眼睛在睡觉。

在 *It's as though ...* 这句话中，*it* 指代前一句描述的行为表现（眼睛几乎不动，表情疏远呆滞）。连词 *as though* 相当于 *as if*，意为“就像；好比”。作者认为那些“眼睛几乎不动，表情疏远呆滞”的学生就是“睁着眼睛在睡觉”。如：

It seems as though/if everyone else has finished their homework. 好像其他人都已经把作业做完了。（事实就是自己落后了）

【思考】请把下面句子译成汉语，并说明说话者的含义。

It looks as though it's going to rain.

All of a sudden, Jack jumped as though he had been struck by lightning.

6 While it is easy to perceive when students are interested, bored, or distracted, it is sometimes much harder to distinguish when students are troubled. 尽管学生们何时（对讲课）感兴趣、何时感到无聊或精力不集中是容易察觉的，但要发现学生何时会有困扰有时会难得多。

句中连词 *while* 表示让步关系，意为“虽然；尽管”，相当于 *though*、*although*。如：

While I like Ronald personally, I do not approve of what he has done this time. 尽管我自己喜欢罗纳德，但我并不支持他这次所做的事。

7 However, if a student does not bother to brush her hair and her eyes are red from weeping, then I can infer that there are deeper issues at work. 但是，要是学生都懒得梳

头，并且两眼因哭泣而发红，那么我能够推断她遇到了更严重的问题。

bother在句中意为“费心；因……操心”等。这种用法常见于否定句和疑问句，形成(not) bother to do或doing结构。如：

Gwen jutted her chin forward, nose in the air, and did not bother to answer the teacher. 格温把下巴翘得老高，鼻子朝天，不屑回答老师的提问。

He didn't bother to complain about the matter. 他都懒得就这件事抱怨。

at work这一短语的基本意思是“在上班；在工作”，但是在课文这个句子中，表示“起着某一特定影响或作用”。如：

You can't find my parents at home now. They're at work. 你现在在家找不着我爸妈的，因为他们上班去了。

With your antivirus software at work, your computer is well protected. 有杀毒软件发挥作用，你的电脑受到了很好的保护。

Unit 5

- 1 Indeed, his slim but strong body was just like that of millions of Chinese farmers, to whom he had devoted his life.** 确实，他瘦削但结实的身躯看起来和他为之奉献了一生的千千万万的中国农民一样。

devote ... to 是个动词短语，表示“把（时间、精力或注意力）投入，用于”，也可以搭配反身代词devote oneself to，表示“致力于；专心于”，注意这里to用作介词。如：

She decided to quit her job and devote more time to painting. 她决定辞掉工作，把更多的时间用在画画上。

They devoted themselves to helping these homeless people. 他们全身心地帮助这些无家可归的人。

- 2 Yuan Longping realised that larger fields were not the solution. Instead, farmers needed to boost yields in the fields they had.** 袁隆平意识到，解决问题的办法并不是扩大农田面积，而是农民们需要提高他们已有土地上农作物的产量。

yield在句中作名词，表示“产量；收益”。如：

high yield 高产 low yield 低产

It will bring you a 6% yield on your investment. 它会给你的投资带来6%的利润。

yield还可以作动词，除了表示“生产；产出”之外，还可以表示“屈服；放弃”之意。如：

The fruit trees in his orchards yield a large amount of apples and pears every year. 他果园的果树每年产出大量的苹果和梨。

These experiments yielded important data for the research. 这些实验为研究提供了重要的数据。

We shall never yield to the difficulties. 我们绝不会向困难低头。

【思考】你知道a yield sign里的yield是什么意思吗？

- 3 Today, it is estimated that about 60 percent of domestic rice consumption in China is comprised of crops generated from Yuan's hybrid strains, and his strains have allowed China's farmers to produce around 200 million tons of rice per year.** 据估算，现在中国国内消费的稻米有大约60%来自袁隆平的杂交水稻品种形成的作物，这些品种（形成的作物）让中国农民每年能够生产出大约两亿吨稻米。

这个句子的真正主语是从句that about 60 ... per year。因为真正的主语太长，为了避免句子头重脚轻，所以用形式主语it。英语中还有许多类似It is estimated that ... 这样的结构，用来将真正主语后置。如：

It is said/believed/reported that ...

domestic在句中作形容词，表示“国内的”。如：

domestic flights 国内航班 domestic policy 国内政策 GDP (gross domestic product) 国内生产总值
domestic 作形容词还可以表示“家庭的；家务事的”。如：
domestic violence 家庭暴力

4 Given that Yuan's hybrids made him quite wealthy, one might think he would have retired to a life of leisure. However, this is far from the case. 考虑到杂交水稻使袁隆平变得相当富有，人们可能认为他会退休享受闲适的生活。然而，事实远非如此。

given that 在句中作连词，意思是“考虑到”。如：

Given that the students need more exercise, the head teacher has decided to add more PE classes.
考虑到学生们需要更多的锻炼，校长已决定增加更多体育课。

given 可用作介词，表示“只要是；考虑到；假定；已知”等意思。如：

Given his age, he is very strong and healthy. 考虑到他的年龄，他可以说是非常健康强壮了。

far from the case 表示“远非如此”，也可以说 far from being the case。其中，case 表示“情况；情形”。

far from 表示“远远不；绝非”。如：

His work is far from (being) satisfactory. 他的工作一点也不令人满意。

【思考】give 和 case 在词典里有很多义项，你能查阅词典和相关资料，了解它们的其他词义和常用搭配吗？

5 Deep down, Yuan was still very much a farmer at heart. 实际上，袁隆平在内心深处仍然是一位农民。

deep down 表示“实际上；在心底”的意思。如：

He tried to behave as an adult, but deep down he was still a child. 他试图表现得像一个大人，但是内心深处他还是一个孩子。

very much 副词短语，表示“非常；确实是”。在文中表示程度，起强调作用，可以不用翻译出来。如：
Kindness is very much a part of her character. 善良是她性格中一个重要部分。

Learning English is very much a step-by-step process. 学习英语在很大程度上是一个循序渐进的过程。

A: Are you serious? 你是认真的吗？

B: Very much so. 再认真不过了。

6 Organic farming is nowhere near able to meet that need. 有机耕作完全不能满足那样的需求。

nowhere near 在句中是“完全没有；远不及”的意思。如：

He is nowhere near full recovery. 他远没有完全康复。

This project has been going on for years, and is still nowhere near being finished. 这个项目已经开始了数年，但何时结束依然遥遥无期。

nowhere 作名词是“无处；任何地方；无名之地”的意思，例如表达身处偏僻荒凉的地方，可以说 in the middle of nowhere。如：

She came out of nowhere. 她突然出现。

nowhere 作副词是“无处；任何地方都不”的意思。如：

He is going nowhere. 他哪儿也不去。

Grammar 语法

I Non-Restrictive Relative Clauses 非限制性定语从句

- 1 定语从句可以分为限制性定语从句和非限制性定语从句。非限制性定语从句由关系代词和关系副词引导，但不能用 that 引导。如：

Tu Youyou was awarded the Nobel Prize, **which is considered one of the highest international honours a person can receive**. 屠呦呦获得了诺贝尔奖，这个奖项被认为是个人能获得最高国际荣誉之一。

Later, the medicine was tested on malaria patients, **most of whom recovered**. 后来，这种药用在疟疾病人身上，大部分病人都痊愈了。

I'm above the Arctic Circle, **where in summer the sun never sets**. 我在北极圈以内，这里的夏季永远没有日落。

- 2 限制性定语从句与其所修饰的先行词关系紧密；非限制性定语从句和主句的关系并不十分密切。限制性定语从句在意义上是先行词不可缺少的定语，如果省略，主句意义往往不完整，这种定语从句前面一般不用逗号。非限制性定语从句往往是对先行词或整个主句的附加说明，它与主句之间通常用逗号隔开。试比较：

Davis wanted to visit the farm **where the seawater rice was grown**. 戴维斯想参观种植海水稻的农场。（所含的限制性定语从句不能省略，否则句子的意义就不完整）

Davis wanted to visit Dr Yuan's new farm, **where the seawater rice was grown**. 戴维斯想参观袁博士的新农场，那里种了海水稻。（所含的非限制性定语从句是对农场的附加说明，可以省略）

- 3 非限制性定语从句也可以位于句中，这时前后都需要用逗号隔开。如：

Tu Youyou went to Hainan, **where malaria was more common**, to study malaria patients. 屠呦呦去海南研究疟疾病人的情况，那里是疟疾病更为普遍的地方。

Einstein, **who was Jewish**, found the doors of academic institutions closed to him. 作为一名犹太人，爱因斯坦发现学术机构的大门已对他关闭。

Disneyland, **which consists of several theme areas**, is a popular tourist destination. 迪士尼乐园包含好几个主题园区，是颇受欢迎的旅游目的地。

- 4 除了用于对具体事物补充信息，非限制性定语从句还可以是针对整个句子内容的说明。如：

Ms Liu decided that we could have a class trip to the park this Sunday, **which was exciting**. 刘老师决定我们班本周日可以去公园郊游，这真让人激动。

Laura couldn't come to our party, **which was a pity**. 劳拉不能来参加我们的聚会，这真遗憾。

II Tenses 时态 (3)

将来进行时 (The Future Progressive Tense)

- 1 将来进行时的形式

陈述式	一般疑问式
I/We will/shall (not) be doing ...	Will/Shall I/we (not) be doing ...?
You/They will (not) be doing ...	Will you/they (not) be doing ...?
He/She/It will (not) be doing ...	Will he/she/it (not) be doing ...?

2 将来进行时的基本用法

(1) 将来进行时通常用于表示最近或较远的将来正在进行的动作。如：

The train **will be leaving** in a minute. 火车很快就要开了。

In the future, we **will be using** advanced technology every day for automatic control of just about everything in our home. 在未来，我们将每天使用先进技术对家中几乎一切东西进行自动化控制。

In addition, your smart home **will be monitoring** your health for you. 此外，你的智能房屋还将监控你的健康。

(2) 将来进行时像现在进行时一样，可以表示已计划好的事。如：

We **will be taking** a test at this time tomorrow. 明天这时我们将在考试。

Don't call me between 12:30 and 13:00. I **will be taking** a nap. 中午 12 点半到 1 点之间不要给我打电话，我那时在午休。

Sorry, I can't meet you at five o'clock tomorrow afternoon, because I **will be playing** soccer then. 抱歉，明天下午五点我不能和你见面，因为那时我在踢球。

说明：

1 将来进行时有时也用来委婉地提出请求或者表达其他含义。试体会：

A: Will you be passing the post office? 你将会经过邮局吗？

B: Probably. Why? 可能吧。怎么了？

A: I need some stamps. 我需要些邮票。

B: OK. I'll get some for you. 好吧，我给你买回来。

2 将来进行时有时只单纯表示将来或按计划进行的事，而一般将来时则具有其他的意味。试比较：

I'll be working on this tomorrow. 明天我将做这件事。（表示将来，意思是按计划进行）

I'll work on this tomorrow. 明天我要做这件事。（表示意愿，也可能表示许诺）

Will you be joining us for dinner? 你会和我们一起吃饭吗？（表示将来，询问计划）

Will you join us for dinner? 你来和我们一起吃饭好吗？（发出邀请）

III The *-ing* Form 动词 *-ing* 形式 (3) (4)

动词 *-ing* 形式由“动词原形 + *-ing*”构成。在必修阶段，已经学习了动词 *-ing* 形式在句中用作定语、状语和（宾语）补（足）语，现在继续学习该结构用作主语、宾语和表语。

成分	例句
主语	<p>Getting here is quite difficult, so apart from the Sami very few people have ever seen Sarek.</p> <p>Being in such a beautiful and wild place makes me feel blessed to be alive.</p> <p>Riding on the only steam engine still working in the southeastern United States is a special treat.</p> <p>Watching the dolphin and sea lion shows is both educational and fun.</p>
宾语	<p>However, you should avoid making this gesture in Brazil and Germany, as it is not considered polite.</p> <p>Elsewhere, people favour shaking hands, bowing from the waist, or nodding the head when they meet someone else.</p> <p>Experts suggest smiling at yourself in the mirror to make yourself feel happier and stronger.</p> <p>If we are feeling down or lonely, there is nothing better than seeing the smiling face of a good friend.</p>
表语	<p>Perhaps the best example is smiling.</p> <p>Some students' favourite activity is daydreaming.</p> <p>The main thing is reminding distracted students that they need to pay attention in class.</p> <p>Ultimately, my duty is helping every student to learn.</p>

IV Subject Clauses 主语从句

在英语中，有的从句在复合句中的作用相当于名词，称作名词性从句。复合句中用作主语从句叫作主语从句。引导主语从句的词有连词that、whether（不能用if）；连接代词who、what、which；连接副词when、where、how、why等。主语从句要用陈述句语序。如：

That the earth is round is a fact. 地球是圆的，这是个事实。

Whether she will win the prize is still unknown. 还不知道她是否能够获奖。

Whoever is the last to leave should turn off the lights. 不管谁最后离开都应该关灯。

How this could be done was a good question. 这如何实现是个值得研究的问题。

Why she didn't show up remains a puzzle. 她为什么没来依然是个谜。

What some scientists have found is that their long-term use can sometimes harm both the land and people's health. 有科学家发现长期使用（化肥和杀虫剂）有时会对土地和人体健康都造成损害。

说明：

为了避免主语显得过长，尤其是陈述句作主语从句时，可以用it作句子的形式主语，把主语从句移到句子的末尾。如：

It is a fact that the earth is round. 地球是圆的，这是个事实。

It is unknown whether she will win the prize. 还不知道她是否会获奖。

It is believed by some scientists that the long-term use can sometimes harm both the land and people's health. 有科学家认为长期使用（化肥和杀虫剂）有时会对土地和人体健康都造成损害。

Words and Expressions in Each Unit

各单元生词和习惯用语

注：黑体部分为课标词和短语；白体部分为非课标词；专有名词在每单元词表后面单独列出。

Unit 1

physiology /ˈfɪziˈɒlədʒi/ *n.* 生理学；生理机能

artemisinin /ˌɑːtrɪˈmiːsɪnɪn/ *n.* [药] 青蒿素

crucial /ˈkruːʃl/ *adj.* 至关重要的；关键性的

malaria /məˈleəriə/ *n.* 疟疾

vital /ˈvaɪtəl/ *adj.* 必不可少的；极其重要的；充满生机的

committed /kəˈmɪtɪd/ *adj.* 尽心尽力的；坚定的；

坚信的

commit /kəˈmɪt/

vt. 承诺；保证

vi. 忠于；全心全意投入（工作、活动等）

commit oneself to (sth/doing sth/do sth)

承诺；保证（做某事、遵守协议或安排等）

academy /əˈkædəmi/ *n.*（艺术、文学、科学等的）

研究院；学会；专科学校

academic /ˌækəˈdemɪk/ *adj.* 学业的；学术的

objective /əbˈdʒektɪv/ *n.* 目标；目的

adj. 客观的

botanical /bəˈtænɪkl/ *adj.* 植物学的

evaluate /ɪˈvæljuet/ *vt.* 评价；评估

property /ˈprɒpəti/ *n.* 性质；特征；财产

distinct /dɪˈstɪŋkt/ *adj.* 清晰的；清楚的；有区别的

extract /ˈekstrækt/ *n.* 提取物；摘录

/ɪkˈstrækt/ *vt.* 提取；提炼；摘录；（用力）拔出

wormwood /ˈwɜːmwud/ *n.* 蒿；洋艾

boil /bɔɪl/ *vt. & vi.*（使）沸腾；煮开；烧开

n. 沸腾；沸点

liquid /ˈlɪkwɪd/ *n.* 液体

adj. 液体的；液态的

obtain /əbˈteɪn/ *vt.*（尤指经努力）获得；赢得

vi.（规章、习俗等）存在；流行

acknowledge /əkˈnɒlɪdʒ/ *vt.* 承认（属实、权威等）；

（公开）感谢

defeat /dɪˈfi:t/ *n.* 失败；挫败

vt. 击败；战胜

analyse (NAme -ze) /ˈænəlaɪz/ *vt.* 分析

apparently /əˈpærəntli/ *adv.* 显而易见；看来；

显然

substance /ˈsʌbstəns/ *n.* 物质；物品；事实根据

insist /ɪnˈsɪst/ *vi. & vt.* 坚持；坚决要求

insist on 坚决要求

scientific /ˌsaɪəntɪfɪk/ *adj.* 科学（上）的；

关于科学的

mostly /ˈməʊstli/ *adv.* 主要地；一般地

wear and tear（正常使用造成的）磨损；损耗

conclusion /kənˈkluːʒn/ *n.* 结论；推论

penicillin /ˌpenɪˈsɪlɪn/ *n.* 青霉素；盘尼西林

flee /fliː/ *vi. & vt.*（fled, fled）迅速离开；逃跑

circumstance /ˈsɜːkəmstəns/ *n.* [usually pl.] 条件；

环境；状况

novelist /ˈnɒvəlɪst/ *n.* 小说家

novel /ˈnɒvl/ *n.*（长篇）小说

flow /fləʊ/ *n.* 流；流动；流畅；供应

vi. 流；流动

chart /tʃɑːt/ *n.* 图表

vt. 记录；制订计划

flow chart 流程图

found /faʊnd/ *vt.* 创建；建立；把……建立在

infer /ɪnˈfɜː(r)/ *vt.* 推断；推定

politician /ˌpɒləˈtɪʃn/ *n.* 从政者；政治家；政客

numerous /ˈnjuːmərəs/ *adj.* 众多的；许多的

theory /ˈθiəri/ *n.* 理论；学说

relativity /ˌreləˈtɪvəti/ *n.* 相对论；相对性

formula /ˈfɔːmjələ/ *n.* 公式；方程式；配方

genius /ˈdʒiːniəs/ *n.* (pl. geniuses) 天才；天资；天赋

gentle /ˈdʒentl/ *adj.* 温柔的；文静的

patent /ˈpeɪnt/; ˈpætnt/

n. 专利；专利证书；获得专利

adj. 有专利的；受专利保护的

passion /ˈpæʃn/ *n.* 酷爱；激情

doctorate /ˈdɒktərət/ *n.* 博士学位

extraordinary /ɪk'strɔːdnri/ *NAmE* ɪk'strɔːdəneri/
adj. 不一般的; 非凡的; 意想不到的

gradually /'grædʒuəli/ *adv.* 逐渐地; 逐步地

photoelectric /fəʊtəʊ'lektrɪk/ *adj.* 光电的

come to power (开始) 掌权; 上台

institution /ɪnstrɪ'tjuːʃn/ *n.* 社会公共机构; 制度;
习俗

institute /'ɪnstɪtjuːt/ *n.* (教育、专业等) 机构;
机构建筑

consequence /'kɒnsɪkwəns/ *n.* 结果; 后果

take up a position 担任; 任职

moustache (*especially US* mustache)

/mə'staːʃ/; *NAmE* 'mʌstæʃ/ *n.* 上唇的胡子; 髭

peculiarity /pɪ'kjuːli'ærəti/ *n.* 个性; 特点;
怪异的性质

encounter /ɪn'kaʊntə(r)/ *vt.* 偶然碰到; 遇到
n. 邂逅; 遭遇

professor /prə'fesə(r)/ *n.* 教授

mourn /mɔːn/ *vt. & vi.* 哀悼; 忧伤

brilliant /'brɪliənt/ *adj.* 聪颖的; 绝妙的

remarkable /rɪ'mɑːkəbl/ *adj.* 非凡的; 显著的

device /dɪ'vaɪs/ *n.* 方法; 技巧; 装置; 仪器

sum /sʌm/ *vt.* 总结; 概括
n. 金额; 款项; 总数; 总和

sum up 总结; 概括

draft /draːft/ *n.* 草稿; 草案
vt. 起草; 草拟

Nobel Prize /nəʊ'bel 'praɪz/ 诺贝尔奖

Alexander Fleming /ˌæɪlɪg'zɑːndə 'flemɪŋ/
亚历山大·弗莱明

Albert Einstein /'æɪlbət 'aɪnstəɪn/
阿尔伯特·爱因斯坦

Hitler /'hɪtlə/ 希特勒

Florence Nightingale /'flɒrəns 'naɪtɪŋgeɪl/
弗洛伦斯·南丁格尔

SARS /sɑːz/ *abbr.* 严重急性呼吸综合征

Switzerland /'swɪtsərlənd/ 瑞士 (国家名)

Swiss /swɪs/ *adj.* 瑞士的 *n.* (pl. Swiss) 瑞士人

Isaac Newton /'aɪzək 'njuːtn/ 艾萨克·牛顿

Jewish /'dʒuːɪʃ/ *adj.* 犹太人的; 犹太教的

Princeton /'prɪnstən/ 普林斯顿 (美国城市)

persuade /pə'sweɪd/ *vt.* 劝说; 说服

switch /swɪtʃ/ *vt.* 转换; 交换
vi. & vt. (使) 改变; 转变
n. 开关; 转换器; 改变

switch off/on 关 / 开 (电灯、机器等)

distant /'dɪstənt/ *adj.* 遥远的; 远处的; 疏远的;
心不在焉的

secure /sɪ'kjʊə(r)/
adj. 安全的; 安心的; 可靠的; 牢固的
vt. 获得; 拴牢; 保护

knob /nɒb/ *n.* 旋钮; 球形把手

appliance /ə'plaɪəns/ *n.* 电器; 器具

remote /rɪ'məʊt/ *adj.* 远程的; 偏远的

remote control 遥控器; 遥控

air conditioner /kən'dɪʃənə(r)/ 空调机;
空调设备

automatic /ˌɔːtə'mætɪk/ *adj.* 自动的

integrated /'ɪntɪɡreɪtɪd/ *adj.* 各部分密切协调的;
综合的

integrate /'ɪntɪɡreɪt/ *vi. & vt.* (使) 合并;
成为一体

sensor /'sensə(r)/ *n.* 传感器; 敏感元件

efficient /ɪ'fɪʃnt/ *adj.* 效率高的; 有功效的

mode /məʊd/ *n.* 模式; 方式; 风格

routine /ruː'tiːn/ *n.* 常规; 正常顺序
adj. 常规的; 日常的

daily routine 日常生活

preference /'prefrəns/ *n.* 爱好; 偏爱

instant /'ɪnstənt/ *n.* 瞬间; 片刻
adj. 立即的; 速食的; 速溶的

command /kə'mɑːnd/ *n.* 指令; 命令; 控制
vt. 命令; 控制

obey /ə'beɪ/ *vi. & vt.* 服从; 遵守

warning /'wɔːnɪŋ/ *n.* 警告; 警示; 先兆

constant /'kɒnstənt/ *adj.* 不断的; 重复的; 不变的
n. 常数; 常量

early on 在初期; 早先

abnormal /æb'nɔːml/ *adj.* 不正常的; 反常的

critical /'krɪtɪkl/ *adj.* 严重的; 关键的; 批判性的

cancer /'kænsə(r)/ *n.* 癌; 癌症; 毒瘤

potentially /pə'tenʃəli/ *adv.* 潜在地; 可能地

potential /pə'tenʃl/ *adj.* 可能的; 潜在的
n. 潜力; 可能性

leak /liːk/ *vi. & vt.* 漏; 渗漏; 透露
n. 漏洞; 裂缝; 透露

electrical /ɪ'lektrɪkl/ *adj.* 电的; 用电的

Unit 2

phrase /freɪz/ *n.* 短语; 词组

wiring /'waɪərɪŋ/ *n.* 电线线路; 线路系统
 wire /'waɪə(r)/ *n.* 电线; 金属丝 (或线)
vt. 接通电源; 将……连接到
 detect /dɪ'tekt/ *vt.* 发现; 查明
 relevant /'reləvənt/ *adj.* 有关的; 有意义的
 catch fire 着火
 fantasy /'fæntəsi/ *n.* 幻想; 想象
 innovation /ˌɪnə'veɪʃn/ *n.* 创新; 创造
 available /ə'veɪləbl/ *adj.* 可获得的; 可购得的;
 (人) 有空的
 in this sense (in ... sense)
 从这种 (某种) 意义上来讲
 nevertheless /ˌnevəðə'sles/ *adv.* 尽管如此; 不过; 然而
 structure /'strʌktʃə(r)/ *n.* 结构; 体系
vt. 系统安排; 精心组织
 security /sɪ'kjʊərəti/ *n.* 保护措施; 安全工作
 crime /kraɪm/ *n.* 犯罪活动; 不法行为
 combine /kəm'baɪn/ *vt. & vi.* (使) 结合; 混合
 nanobot /'nænəʊbɒt/ *n.* 纳米机器人
 artificial /ˌɑ:tɪ'fɪʃl/ *adj.* 人工的; 人造的; 假的
 artificial intelligence (AI) 人工智能
 clone /kləʊn/ *vt.* 克隆; 以无性繁殖技术复制
n. 克隆动物 (或植物)
 predict /prɪ'dɪkt/ *vt.* 预测; 预言; 预料
 prediction /prɪ'dɪkʃn/ *n.* 预测; 预言
 forecast /'fɔ:kəst/ *vt. & n.* 预测; 预报
 occupation /ˌɒkjʊ'peɪʃn/ *n.* 职业; 占领
 oppose /ə'pəʊz/ *vt.* 反对; 抵制; 阻挠
 hence /hens/ *adv.* 因此; 由此
 cease /si:s/ *vi. & vt.* (使) 停止; 终止
 deceased /dɪ'si:st/ *adj.* 已死的; 亡故的
 absence /'æbsəns/ *n.* 不存在; 缺乏; 缺席
 rural /'rʊərəl/ *adj.* 乡村的; 农村的
 advocate /'ædvəkeɪt/ *vt.* 提倡; 支持; 拥护
n. 提倡者; 支持者; 拥护者
 emphasis /'emfəsis/ *n.* 强调; 重视; 重要性
 luxury /'lʌkʃəri/ *n.* 奢华
 keep in touch (with ...) (与……) 保持联系;
 了解 (某课题或领域的情况)
 career /kə'riə(r)/ *n.* 职业; 事业
 prospect /'prɒspekt/ *n.* 可能性; 前景
 resist /rɪ'zɪst/ *vi. & vt.* 抵制; 反抗; 抵挡
 resistance /rɪ'zɪstəns/ *n.* 抵制; 反对; 抗拒
 paragraph /'pærəgrɑ:f/ *n.* 段; 段落
 signpost /'saɪnpəʊst/ *n.* 路标
 essay /'eseɪ/ *n.* 文章

accurate /'ækjərət/ *adj.* 精确的; 准确的
 librarian /laɪ'breəriən/ *n.* 图书管理员; 图书馆馆长
 Melbourne /'melbən/ 墨尔本 (澳大利亚城市)
 Christian /'krɪstʃən/ *n.* 基督教徒
adj. 基督教的
 the Amish /'ɑ:mɪʃ/ *n.* 阿曼门诺派

Unit 3

buffet /'bʌfɪt/ *vt.* 连续猛击; 打来打去
 /'bʊfeɪ; 'bʌfeɪ/ *n.* 自助餐
 cloth /klɒθ/ *n.* (一块) 布; 织物; 布料
 edge /edʒ/ *n.* 边; 边缘; 边线; 刀刃
vt. & vi. (使) 徐徐移动; 给……加边
 valley /'væli/ *n.* 谷; 山谷; 溪谷
 vast /vɑ:st/ *adj.* 辽阔的; 巨大的; 庞大的
 melt /melt/ *vi. & vt.* (使) 融化; 熔化; 软化
 glacier /'glæsiə(r); 'gleɪsiə(r); NAmE 'gleɪʃər/
n. 冰川
 reindeer /'reɪndɪə(r)/ *n.* 驯鹿
 territory /'terətəri; 'terətəri/ *n.* 领土; 版图; 领域; 地盘
 ban /bæn/ *vt.* 明令禁止; 取缔
n. 禁令
 boundary /'baʊndri/ *n.* 边界; 界限; 分界线
 cottage /'kɒtɪdʒ/ *n.* 小屋; (尤指) 村舍; 小别墅
 visible /'vɪzəbl/ *adj.* 看得见的; 可见的
 on the move 在行进中; 在移动中
 accompany /ə'kʌmpəni/ *vt.* 陪同; 陪伴; 伴随;
 (尤指用钢琴) 为……伴奏
 adopt /ə'dɒpt/ *vt.* 采用; 采取; 采纳
vt. & vi. 领养
 sour /'saʊə(r)/ *adj.* 酸的; 有酸味的
 set out 出发; 启程; (怀着目标) 开始工作
 bless /bles/ *vt.* 祝福
 live off 依靠……生活; 以吃……为生
 prohibition /ˌprəʊɪ'bɪʃn/ *n.* 禁止; 阻止; 禁令
 prohibit /prə'hɪbɪt/ *vt.* (尤指以法令) 禁止; 阻止
 journalist /'dʒɜ:nəlist/ *n.* 新闻记者; 新闻工作者
 sneeze /sni:z/ *vi.* 打喷嚏
n. 喷嚏; 喷嚏声
 teapot /'ti:pɒt/ *n.* 茶壶
 label /'leɪbl/ *vt.* 用标签标明; 贴标签
n. 标签; 标记
 cream /kri:m/ *n.* 奶油; 乳脂; 护肤霜
adj. 奶油色的; 淡黄色的
 leopard /'lepəd/ *n.* 豹

stretch /stretʃ/ *vi.* 延伸; 延续
vi. & vt. 伸展; 舒展

rewarding /rɪ'wɔːdɪŋ/ *adj.* 值得做的; 有益的

bush /bʊʃ/ *n.* 灌木

lung /lʌŋ/ *n.* 肺

cycle /saɪkl/ *n.* 自行车; 摩托车; 循环
vi. 骑自行车

corridor /'kɒrɪdɔː(r)/
n. 狭长地带; 走廊; 过道; 通道

pedal /'pedl/ *n.* (自行车等的) 脚蹬子; 踏板
vt. & vi. 骑自行车; 踩踏板

fountain /'faʊntən/ *n.* 喷泉; 人工喷泉; 喷水池

route /ruːt/ *n.* 路线; 路途; 途径

ahead /ə'hed/ *adv.* 向前; 在前面; 提前

theme /θiːm/ *adj.* 有特定主题的
n. 主题; 主题思想

theme park 主题公园; 主题乐园

roller coaster /'rəʊlə,kəʊstə(r)/ 过山车

incredible /ɪn'kredəbl/ *adj.* 极好的; 极大的;
难以置信的

appeal /ə'piːl/ *vi.* 有吸引力; 呼吁; 恳求; 上诉
n. 吸引力; 呼吁; 上诉; 请求

appeal to 有吸引力; 有感染力; 呼吁; 上诉; 打动

pirate /'paɪrət/ *n.* 海盗; 盗版者
vt. 盗印; 窃用

adorable /ə'dɔːrəbl/ *adj.* 可爱的; 讨人喜爱的

wander /'wɒndə(r)/ *n.* 游荡; 闲逛; 流浪
vt. & vi. 闲逛; 漫游
vi. 走失; 离散; 走神

amusement /ə'mjuːzmənt/ *n.* 娱乐(活动); 愉悦

amuse /ə'mjuːz/ *vt.* (提供) 消遣; (使) 娱乐

enormous /ɪ'nɔːməs/ *adj.* 巨大的; 极大的

swing /swɪŋ/ *vt. & vi.* (swung, swung) (使) 摆动;
摇摆; 转弯; (使) 突然转向

iron /aɪən/ *n.* 铁; 铁器; 铸铁; 熨斗
vt. & vi. (用熨斗) 熨; 烫平

fashion /'fæʃn/ *n.* 时尚; 时兴; 流行款式

rare /reə(r)/ *adj.* 稀少的; 珍贵的; (肉) 半熟的

steam /stiːm/ *n.* 蒸汽; 水蒸气; 蒸汽动力
vi. 蒸发; 散发蒸汽; 冒水汽

superb /suː'pɜːb; sjuː'pɜːb/ *adj.* 极佳的; 卓越的

aquarium /ə'kwɛəriəm/
n. (pl. aquariums or aquaria /-rɪə/) 水族馆; 水族玻璃槽; 养鱼缸

up to 达到(某数量、程度等); 直到; 不多于;
(体力或智力上) 能胜任

polar /'pəʊlə(r)/ *adj.* (近) 极地的; 南极(或北极)的;
磁极的

upside down 颠倒; 倒转; 翻转

splendid /'splendɪd/ *adj.* 壮丽的; 雄伟的; 极佳的;
非常好的

display /dɪ'spleɪ/ *n.* 展览; 陈列; 展览品
vt. 显示; 陈列

appetite /'æpɪtaɪt/ *n.* 食欲; 胃口; 强烈欲望

entertainment /,entə'teɪnmənt/ *n.* 娱乐; 招待;
娱乐活动; 文娱节目

column /'kɒləm/ *n.* (书、报纸印刷页上的) 栏;
专栏; 柱(形物)

Sami /'sɑːmi/ 萨米人(居住在斯堪的纳维亚北部的拉普人)

Sarek National Park 萨勒克国家公园

Sweden /'swɪːdn/ 瑞典(国家名)

the Arctic /'ɑːktɪk/ **Circle** 北极圈

Rapa /'rɑːpɑː/ **River** 拉帕河

Siberian /saɪ'bɪəriən/ *adj.* 西伯利亚(人)的
n. 西伯利亚人

Dollywood /'dɒli,wʊd/ 多莉山主题公园

Unit 4

interaction /,ɪntər'ækʃn/ *n.* 交流; 相互影响

vary /'veəri/ *vi.* (根据情况) 变化; 改变

appropriate /ə'prəʊpriət/ *adj.* 合适的; 恰当的

by contrast 相比之下

approve /ə'pruːv/ *vi.* 赞成; 同意
vt. 批准; 通过

demonstrate /'demənstreɪt/
vt. 表现; 表达; 说明; 证明

gesture /'dʒestʃə(r)/ *n.* 手势; 姿势; 姿态

witness /'wɪtnəs/ *vt.* 当场看到; 目击; 见证
n. 目击者; 证人

employ /ɪm'plɔɪ/ *vt.* 使用; 应用; 雇用

identical /aɪ'dentɪkl/ *adj.* 相同的

interpret /ɪn'tɜːprɪt/ *vt.* 把……理解(解释)为
vi. & vt. 口译

differ /'dɪfə(r)/ *vi.* 相异; 不同于

by comparison (与……) 相比较

cheek /tʃiːk/ *n.* 面颊; 脸颊

favour (NAme -vor) /'feɪvə(r)/ *vt.* 较喜欢; 选择; 有利于
n. 帮助; 恩惠; 赞同

bow /baʊ/ *vi.* 鞠躬; 点头
vt. 低(头)
/bəʊ/ *n.* 弓; 蝴蝶结

waist /weɪst/ *n.* 腰; 腰部
make inferences 推理; 推断
break down 消除; 分解; 打破
barrier /'bæriə(r)/ *n.* 隔阂; 障碍
fake /feɪk/ *adj.* 假装的; 假的; 冒充的
anger /'æŋgə(r)/ *n.* 愤怒; 怒气
vt. 使生气; 激怒
reliable /rɪ'laɪəbl/ *adj.* 可靠的; 可信赖的
incident /'ɪnsɪdənt/ *n.* 发生的事情; 严重事件; 冲突
trial /'traɪəl/ *n.* & *v.* 审讯; 审判; 试验; 试用
slight /slaɪt/ *adj.* 轻微的; 略微的; 细小的
slightly /'slaɪtli/ *adv.* 略微; 稍微
twin /twɪn/ *adj.* 双胞胎之一的; 孪生之一的
n. 孪生之一; 双胞胎之一
nonverbal /,nɒn'vɜ:bl/ *adj.* 不涉及言语的; 非言语的
assessment /ə'sesmənt/ *n.* 评价; 评定
assess /ə'ses/ *vt.* 评估; 评价
internal /ɪn'tɜ:nl/ *adj.* 内部的; 里面的
straighten up 直起来; 整理; 收拾整齐
slump /slʌmp/ *vi.* 垂头弯腰地走 (或坐等)
pose /pəʊz/ *n.* 故作姿态; (为画像、拍照等摆的) 姿势
vi. 摆好姿势
vt. 造成 (威胁、问题等)
bend /bend/ *vt.* & *vi.* (bent, bent) (使) 弯曲;
 倾斜; 偏向
reveal /rɪ'vi:l/ *vt.* 揭示; 显示; 露出
clarify /'klærəfaɪ/ *vt.* 使更清晰易懂; 阐明; 澄清
in other words 换句话说; 也就是说
educator /'edʒukeɪtə(r)/ *n.* 教师; 教育工作者; 教育家
tick /tɪk/ *vt.* 给 (试卷、问题等) 打钩号
vi. (钟表) 发出嘀嗒声
n. 钩号
tendency /'tendənsi/ *n.* 趋势; 倾向
lower /'ləʊə(r)/ *vt.* 把……放低; 降低; 减少
adj. 下面的; 下方的; 较小的
imply /ɪm'plaɪ/ *vt.* 意味着; 暗示
barely /'beəli/ *adv.* 几乎不; 勉强才能; 刚刚
chin /tʃɪn/ *n.* 下巴
occupy /'ɒkjupaɪ/ *vt.* 占据; 占用
stare /steə(r)/ *vi.* 盯着看; 凝视
n. 凝视
ceiling /'si:lɪŋ/ *n.* 天花板; 上限
distract /dɪ'strækt/ *vt.* 分散 (注意力); 使分心
perceive /pə'si:v/ *vt.* 察觉; 看待; 理解
distinguish /dɪ'stɪŋgwɪʃ/ *vi.* & *vt.* 区分; 辨别
anxiety /æŋ'zaɪəti/ *n.* 焦虑; 担心; 害怕

chest /tʃest/ *n.* 胸部; 胸膛
embarrassed /ɪm'bærəst/ *adj.* 难堪的; 尴尬的
ashamed /ə'ʃeɪmd/ *adj.* 羞愧; 惭愧
merely /'mɪəli/ *adv.* 只是; 仅仅; 只不过
call on (短暂地) 访问; 要求 (某人讲话等);
 正式邀请
bother /'bɒðə(r)/ *vi.* & *vt.* 费心; 麻烦; 因……操心
n. 麻烦; 不便
weep /wi:p/ *vi.* & *vt.* (wept, wept) 哭泣; 流泪
at work 有某种影响; 在工作
conflict /'kɒnflɪkt/ *n.* 矛盾; 冲突
/kən'flɪkt/ vi. 冲突; 抵触
inquire /ɪn'kwaɪə(r)/ (= enquire)
vi. & *vt.* 询问; 打听
ultimately /'ʌltɪmətli/ *adv.* 最终; 最后
adjust /ə'dʒʌst/ *vt.* 调整; 调节
vi. & *vt.* 适应; (使) 习惯
intervene /,ɪntə'veɪn/ *vi.* 干预; 介入
react /rɪ'ækt/ *vi.* (对……) 起反应; 回应;
 (对食物等) 有不良反应
component /kəm'pəʊnənt/ *n.* 组成部分; 零件
tone /təʊn/ *n.* 语气; 腔调; 口吻

Brazil /brə'zɪl/ 巴西 (国家名)
Bulgaria /bʌl'ɡeəriə/ 保加利亚 (国家名)
Albania /æl'beɪniə/ 阿尔巴尼亚 (国家名)

Unit 5

hybrid /'haɪbrɪd/ *n.* 杂交植 (动) 物; 合成物;
 混合动力车
devote /dɪ'veʊt/ *vt.* 把……献 (给); 把……专用于;
 专心于
devote ... to 把……用于; 献身; 致力; 专心
shortage /'ʃɔ:tɪdʒ/ *n.* 不足; 缺少; 短缺
tackle /'tækəl/ *vt.* 解决 (难题); 应付 (局面); 处理
crisis /'kraɪsɪs/ *n.* (pl. crises /-sɪz/) 危机; 危急关头
boost /bu:st/ *vt.* 使增长; 使兴旺
n. 增长; 提高; 激励
yield /ji:ld/ *n.* 产量; 产出
vt. 出产 (作物); 产生 (收益、效益等)
vi. 屈服; 让步
convince /kən'vɪns/ *vt.* 使相信; 使确信; 说服
characteristic /,kærəktə'rɪstɪk/
n. 特征; 特点; 品质
adj. 典型的; 独特的

attain /ə'teɪn/ *vt.* (通常经过努力) 获得; 得到

conventional /kən'venʃənəl/ *adj.* 传统的; 习惯的

pollinate /'pɒləneɪt/ *vt.* 授粉; 传粉

assumption /ə'sʌmpʃn/ *n.* 假定; 设定; (责任的) 承担; (权力的) 获得

intense /ɪn'tens/ *adj.* 热切的; 十分强烈的; 激烈的

overcome /,əʊvə'kʌm/ *vt.*

(overcame, overcome) 克服; 解决; 战胜

expand /ɪk'spænd/ *vt. & vi.* 扩大; 增加

vt. 扩展; 发展 (业务)

output /'aʊtpʊt/ *n.* 产量; 输出; 输出量

vt. (output, output) 输出

estimate /'estɪmət/ *vt.* 估计; 估价; 估算

n. 估计; 估算

domestic /də'mestɪk/ *adj.* 本国的; 国内的; 家用的; 家庭的

consumption /kən'sʌmpʃn/ *n.* 消耗; 消耗量; 消费

comprise /kəm'praɪz/ *vt.* 包括; 包含; 由……组成

be comprised of 包括; 包含;

由……组成 (或构成)

generate /'dʒenəreɪt/ *vt.* 产生; 引起

strain /streɪn/ *n.* (动、植物的) 系; 品种; 拉伤; 压力

leisure /'leɪʒə(r)/ *n.* 闲暇; 休闲; 空闲

deep down 在内心深处; 本质上; 实际上

soil /sɔɪl/ *n.* 泥土; 土壤; 国土; 领土

celebrity /sə'lebrəti/ *n.* 名望; 名誉; 名人; 名流

envision /ɪn'vɪʒn/ *vt.* 展望; 想象

sorghum /'sɔ:gəm/ *n.* 高粱; 高粱米

broom /bru:m/ *n.* 扫把; 扫帚; 金雀花

grain /greɪn/ *n.* 谷物; 谷粒; 颗粒

vision /'vɪʒn/ *n.* 想象; 视力; 视野; 影像

reality /rɪ'æləti/ *n.* 现实; 实际情况; 事实

salty /'sɔ:lti/ *adj.* 含盐的; 咸的

urban /'ɜ:bən/ *adj.* 城市的; 都市的; 城镇的

bomb /bɒm/ *n.* 炸弹

vt. 轰炸; 对……投炸弹

tunnel /'tʌnl/ *n.* 地下通道; 地道; 隧道

extension /ɪk'stenʃn/ *n.* 扩建部分; 扩大; 电话分机

chemical /'kemɪkl/ *adj.* 与化学有关的; 化学的

n. 化学制品; 化学品

wheat /wi:t/ *n.* 小麦; 小麦籽

flavour (NAme -vor) /'fleɪvə/

n. 味道; 特点; 特色

fertiliser (NAme -izer) /'fɜ:təlaɪzə(r)/ *n.* 肥料

nutritional /nju'trɪʃənəl/ *adj.* 营养 (物) 的

nutritious /nju'trɪʃəs/ *adj.* 有营养的; 营养丰富的

nutrition /nju'trɪʃn/ *n.* 营养; 滋养

alleviate /ə'li:vɪeɪt/ *vt.* 减轻; 缓解

poverty /'pɒvəti/ *n.* 贫穷; 贫困

organic /ɔ:'gænɪk/ *adj.* 有机的; 不使用化肥的; 有机物的

pesticide /'pestɪsaɪd/ *n.* 杀虫剂; 除害药物

widespread /'waɪdspred/ *adj.* 分布广的; 普遍的; 广泛的

bacterium /bæk'tɪəriəm/ *n.* (pl. -ria /-rɪə/) 细菌

in turn 相应地; 转而; 依次; 轮流

digest /daɪ'dʒest/ *vt. & vi.* 消化

vt. 领会; 领悟

/daɪ'dʒest/ *n.* 摘要; 文摘

essential /ɪ'senʃl/ *adj.* 完全必要的; 极其重要的

mineral /'mɪnərəl/ *n.* 矿物; 矿物质

alternative /ɔ:l'tɜ:nətɪv/ *n.* 可供选择的事物

adj. 可供替代的; 非传统的

grocery /'grəʊsəri/ *n.* 食品杂货店; [pl.] 食品杂货

instance /ɪn'stəns/ *n.* 例子; 实例; 事例

for instance 例如; 比如

batch /bætʃ/ *n.* 一批; 一组

vt. 分批处理

depth /depθ/ *n.* 向下 (或向里) 的距离; 深 (度)

root /ru:t/ *n.* 根; 根茎; 根部; 根源

entirely /ɪn'taɪəli/ *adv.* 全部地; 完整地; 完全地

aspect /'æspekt/ *n.* 方面; 层面

Vietnam /vɪjet'næm/ 越南 (国家名)

LED *abbr.* (light-emitting diode) 发光二极管

DDT *n.* 滴滴涕 (旧时尤用作农业杀虫剂)

Vocabulary

词汇表

注：黑体部分为课标词和短语；白体部分为非课标词；带△符号的词汇为专有名词。

A

- abnormal** /æb'nɔ:ml/ *adj.* 不正常的；反常的 (2)
- absence** /'æbsəns/ *n.* 不存在；缺乏；缺席 (2)
- academic** /,ækə'demɪk/ *adj.* 学业的；学术的 (1)
- academy** /ə'kædəmi/ *n.* (艺术、文学、科学等的) 研究院；学会；专科院校 (1)
- accompany** /ə'kʌmpəni/ *vt.* 陪同；陪伴；伴随；(尤指用钢琴) 为……伴奏 (3)
- accurate** /'ækjərət/ *adj.* 精确的；准确的 (2)
- acknowledge** /ək'nɒlɪdʒ/ *vt.* 承认(属实、权威等)；(公开)感谢 (1)
- adjust** /ə'dʒʌst/ *vt.* 调整；调节 (4)
- vi. & vt.* 适应；(使)习惯 (4)
- adopt** /ə'dɒpt/ *vt.* 采用；采取；采纳 (3)
- vt. & vi.* 领养 (3)
- adorable** /ə'dɔ:rəbl/ *adj.* 可爱的；讨人喜爱的 (3)
- advocate** /'ædvəkeɪt/ *vt.* 提倡；支持；拥护 (2)
- n.* 提倡者；支持者；拥护者 (2)
- ahead** /ə'hed/ *adv.* 向前；在前面；提前 (3)
- air conditioner** /kən'dɪʃənə(r)/ *n.* 空调机；空调设备 (2)
- Albania** /æl'beɪniə/ 阿尔巴尼亚(国家名) (4)
- △ **Albert Einstein** /'ælbət 'aɪnstəɪn/ 阿尔伯特·爱因斯坦 (1)
- △ **Alexander Fleming** /,æli'gʌ:ndə 'flemɪŋ/ 亚历山大·弗莱明 (1)
- alleviate** /ə'li:vieɪt/ *vt.* 减轻；缓解 (5)
- alternative** /ɔ:l'tɜ:nətɪv/ *n.* 可供选择的事物 (5)
- adj.* 可供替代的；非传统的 (5)
- amuse** /ə'mju:z/ *vt.* (提供)消遣；(使)娱乐 (3)
- amusement** /ə'mju:zmənt/ *n.* 娱乐(活动)；愉悦 (3)
- analyse** [NAme -ze] /'ænləaɪz/ *vt.* 分析 (1)
- anger** /'æŋgə(r)/ *n.* 愤怒；怒气 (4)
- vt.* 使生气；激怒 (4)

- anxiety** /æŋ'zaɪəti/ *n.* 焦虑；担心；害怕 (4)
- apparently** /ə'pærəntli/ *adv.* 显而易见；看来；显然 (1)
- appeal** /ə'pi:l/ *vi.* 有吸引力；呼吁；恳求；上诉 (3)
- n.* 吸引力；呼吁；上诉；请求 (3)
- appeal to** 有吸引力；有感染力；呼吁；上诉；打动 (3)
- appetite** /'æpɪtaɪt/ *n.* 食欲；胃口；强烈欲望 (3)
- appliance** /ə'plaiəns/ *n.* 电器；器具 (2)
- appropriate** /ə'prəʊpɪət/ *adj.* 合适的；恰当的 (4)
- approve** /ə'pru:v/ *vi.* 赞成；同意 (4)
- vt.* 批准；通过 (4)
- aquarium** /ə'kwɛəriəm/ *n.* (pl. aquariums or aquaria /-rɪə/) 水族馆；水族玻璃槽；养鱼缸 (3)
- artemisinin** /,ɑ:trɪ'mɪ:sɪnɪn/ *n.* [药] 青蒿素 (1)
- artificial** /,ɑ:trɪ'fɪʃl/ *adj.* 人工的；人造的；假的 (2)
- artificial intelligence (AI)** 人工智能 (2)
- ashamed** /ə'ʃeɪmd/ *adj.* 羞愧；惭愧 (4)
- aspect** /'æspekt/ *n.* 方面；层面 (5)
- assess** /ə'ses/ *vt.* 评估；评价 (4)
- assessment** /ə'sesmənt/ *n.* 评价；评定 (4)
- assumption** /ə'sʌmpʃn/ *n.* 假定；设定；(责任的)承担；(权力的)获得 (5)
- at work** 有某种影响；在工作 (4)
- attain** /ə'teɪn/ *vt.* (通常经过努力)获得；得到 (5)
- automatic** /,ɔ:tə'mætɪk/ *adj.* 自动的 (2)
- available** /ə'veɪləbl/ *adj.* 可获得的；可购得的；(人)有空的 (2)

B

- bacterium** /bæk'tɪəriəm/ *n.* (pl. -ria /-rɪə/) 细菌 (5)
- ban** /bæn/ *vt.* 明令禁止；取缔 (3)
- n.* 禁令 (3)
- barely** /'beəli/ *adv.* 几乎不；勉强才能；刚刚 (4)
- barrier** /'bæriə(r)/ *n.* 隔阂；障碍 (4)

batch /bætʃ/ *n.* 一批; 一组
vt. 分批处理 (5)
bend /bend/ *vt. & vi.* (bent, bent) (使) 弯曲;
 倾斜; 偏向 (4)
bless /bles/ *vt.* 祝福 (3)
boil /bɔɪl/ *vt. & vi.* (使) 沸腾; 煮开; 烧开
n. 沸腾; 沸点 (1)
bomb /bɒm/ *n.* 炸弹
vt. 轰炸; 对……投炸弹 (5)
boost /bu:st/ *vt.* 使增长; 使兴旺
n. 增长; 提高; 激励 (5)
botanical /bə'tænikl/ *adj.* 植物学的 (1)
bother /'bɒðə(r)/ *vi. & vt.* 费心; 麻烦; 因……操心
n. 麻烦; 不便 (4)
boundary /'baʊndri/ *n.* 边界; 界限; 分界线 (3)
bow /baʊ/ *vi.* 鞠躬; 点头
vt. 低 (头)
 /bəʊ/ *n.* 弓; 蝴蝶结 (4)
 △ **Brazil** /brə'zɪl/ 巴西 (国家名) (4)
break down 消除; 分解; 打破 (4)
brilliant /'brɪliənt/ *adj.* 聪颖的; 绝妙的 (1)
broom /bru:m/ *n.* 扫把; 扫帚; 金雀花 (5)
buffet /'bʌfɪt/ *vt.* 连续猛击; 打来打去
 /'bʊfeɪ; 'bʌfeɪ/ *n.* 自助餐 (3)
 △ **Bulgaria** /bʌl'geəriə/ 保加利亚 (国家名) (4)
bush /bʊʃ/ *n.* 灌木 (3)
by comparison (与……) 相比较 (4)
by contrast 相比之下 (4)

C

call on (短暂地) 访问; 要求 (某人讲话等);
 正式邀请 (4)
cancer /'kænsə(r)/ *n.* 癌; 癌症; 毒瘤 (2)
career /kə'riə(r)/ *n.* 职业; 事业 (2)
catch fire 着火 (2)
cease /si:s/ *vi. & vt.* (使) 停止; 终止 (2)
ceiling /'si:lɪŋ/ *n.* 天花板; 上限 (4)
celebrity /sə'lebrəti/ *n.* 名望; 名誉; 名人; 名流 (5)
characteristic /ˌkærəktə'rɪstɪk/
n. 特征; 特点; 品质
adj. 典型的; 独特的 (5)
chart /tʃɑ:t/ *n.* 图表
vt. 记录; 制订计划 (1)
flow chart 流程图 (1)
cheek /tʃi:k/ *n.* 面颊; 脸颊 (4)
chemical /'kemɪkl/ *adj.* 与化学有关的; 化学的
n. 化学制品; 化学品 (5)
chest /tʃest/ *n.* 胸部; 胸膛 (4)
chin /tʃɪn/ *n.* 下巴 (4)
 △ **Christian** /'krɪstʃən/ *n.* 基督教徒
adj. 基督教的 (2)
circumstance /'sɜ:kəmstəns/
n. [usually pl.] 条件; 环境; 状况 (1)
clarify /'klærəfaɪ/ *vt.* 使更清晰易懂; 阐明; 澄清 (4)
clone /kləʊn/ *vt.* 克隆; 以无性繁殖技术复制
n. 克隆动物 (或植物) (2)
cloth /klɒθ/ *n.* (一块) 布; 织物; 布料 (3)
column /'kɒləm/ *n.* (书、报纸印刷页上的) 栏;
 专栏; 柱 (形物) (3)
combine /kəm'baɪn/ *vt. & vi.* (使) 结合; 混合 (2)
come to power (开始) 掌权; 上台 (1)
command /kə'mɑ:nd/ *n.* 指令; 命令; 控制
vt. 命令; 控制 (2)
commit /kə'mɪt/
vt. 承诺; 保证
vi. 忠于; 全心全意投入 (工作、活动等) (1)
commit oneself to (sth/doing sth/do sth)
 承诺; 保证 (做某事、遵守协议或安排等) (1)
committed /kə'mɪtɪd/
adj. 尽心尽力的; 坚定的; 坚信的 (1)
component /kəm'pəʊnənt/ *n.* 组成部分; 零件 (4)
comprise /kəm'praɪz/ *vt.* 包括; 包含; 由……组成 (5)
be comprised of 包括; 包含;
 由……组成 (或构成) (5)
conclusion /kən'klu:ʒn/ *n.* 结论; 推论 (1)
conflict /'kɒnflɪkt/ *n.* 矛盾; 冲突
 /kən'flɪkt/ *vi.* 冲突; 抵触 (4)
consequence /'kɒnsɪkwəns/ *n.* 结果; 后果 (1)
constant /'kɒnstənt/
adj. 不断的; 重复的; 不变的
n. 常数; 常量 (2)
consumption /kən'sʌmpʃn/
n. 消耗; 消耗量; 消费 (5)
conventional /kən'venʃənəl/
adj. 传统的; 习惯的 (5)
convince /kən'vɪns/ *vt.* 使相信; 使确信; 说服 (5)
corridor /'kɒrɪdɔ:(r)/
n. 狭长地带; 走廊; 过道; 通道 (3)
cottage /'kɒtɪdʒ/ *n.* 小屋; (尤指) 村舍; 小别墅 (3)
cream /kri:m/ *n.* 奶油; 乳脂; 护肤霜
adj. 奶油色的; 淡黄色的 (3)
crime /kraɪm/ *n.* 犯罪活动; 不法行为 (2)

crisis /'kraɪsɪs/

n. (pl. crises /-sɪz/) 危机; 危急关头 (5)

critical /'krɪtɪkl/ adj. 严重的; 关键的; 批判性的 (2)

crucial /'kruːʃl/ adj. 至关重要的; 关键性的 (1)

cycle /saɪkl/ n. 自行车; 摩托车; 循环
vi. 骑自行车 (3)

D

deceased /dɪ'siːst/ adj. 已死的; 亡故的 (2)

△ DDT n. 滴滴涕 (旧时尤用作农业杀虫剂) (5)

deep down 在内心深处; 本质上; 实际上 (5)

defeat /dɪ'fi:t/ vt. 击败; 战胜
n. 失败; 挫败 (1)

demonstrate /'demənstreɪt/ vt. 表现; 表达; 说明; 证明 (4)

depth /depθ/ n. 向下 (或向里) 的距离; 深 (度) (5)

detect /dɪ'tekt/ vt. 发现; 查明 (2)

device /dɪ'vaɪs/ n. 方法; 技巧; 装置; 仪器 (1)

devote /dɪ'vəʊt/ vt. 把……献 (给); 把……专用于; 专心于 (5)

devote ... to 把……用于; 献身; 致力; 专心 (5)

differ /'dɪfə(r)/ vi. 相异; 不同于 (4)

digest /daɪ'dʒest/ vt. & vi. 消化
vt. 领会; 领悟
'dɑːdʒest/ n. 摘要; 文摘 (5)display /dɪ'spleɪ/ n. 展览; 陈列; 展览品
vt. 显示; 陈列 (3)

distant /'dɪstənt/ adj. 遥远的; 远处的; 疏远的; 心不在焉的 (2)

distinct /dɪ'stɪŋkt/ adj. 清晰的; 清楚的; 有区别的 (1)

distinguish /dɪ'stɪŋɡwɪʃ/ vi. & vt. 区分; 辨别 (4)

distract /dɪ'strækt/ vt. 分散 (注意力); 使分心 (4)

doctorate /'dɒktərət/ n. 博士学位 (1)

△ Dollywood /'dɒli,wʊd/ 多莉山主题公园 (3)

domestic /də'mestɪk/ adj. 本国的; 国内的; 家用的; 家庭的 (5)

draft /draːft/ n. 草稿; 草案
vt. 起草; 草拟 (1)

E

early on 在初期; 早先 (2)

edge /edʒ/ n. 边; 边缘; 边线; 刀刃
vt. & vi. (使) 徐徐移动; 给……加边 (3)

educator /'edʒukeɪtə(r)/

n. 教师; 教育工作者; 教育家 (4)

efficient /ɪ'fɪʃnt/ adj. 效率高的; 有功效的 (2)

electrical /ɪ'lektrɪkl/ adj. 电的; 用电的 (2)

embarrassed /ɪm'bærəst/ adj. 难堪的; 尴尬的 (4)

emphasis /'emfəˌsɪs/ n. 强调; 重视; 重要性 (2)

employ /ɪm'plɔɪ/ vt. 使用; 应用; 雇用 (4)

encounter /ɪn'kaʊntə(r)/ vt. 偶然碰到; 遇到
n. 邂逅; 遭遇 (1)

enormous /ɪ'nɔːməs/ adj. 巨大的; 极大的 (3)

entertainment /,entə'teɪnmənt/ n. 娱乐; 招待; 娱乐活动; 文娱节目 (3)

entirely /ɪn'taɪəli/ adv. 全部地; 完整地; 完全地 (5)

envision /ɪn'vɪʒn/ vt. 展望; 想象 (5)

essay /'eseɪ/ n. 文章 (2)

essential /ɪ'senʃl/ adj. 完全必要的; 极其重要的 (5)

estimate /'estɪmət/ vt. 估计; 估价; 估算
n. 估计; 估算 (5)

evaluate /ɪ'veljueɪt/ vt. 评价; 评估 (1)

expand /ɪk'spænd/ vt. & vi. 扩大; 增加
vt. 扩展; 发展 (业务) (5)

extension /ɪk'stenʃn/ n. 扩建部分; 扩大; 电话分机 (5)

extract /'ekstrækt/ n. 提取物; 摘录
'ɪk'strækt/ vt. 提取; 提炼; 摘录;
(用力) 拔出 (1)

extraordinary /ɪk'strɔːdnəri; NAmE ɪk'strɔːdəneri/ adj. 不一般的; 非凡的; 意想不到的 (1)

F

fake /feɪk/ adj. 假装的; 假的; 冒充的 (4)

fantasy /'fæntəsi/ n. 幻想; 想象 (2)

fashion /'fæʃn/ n. 时尚; 时兴; 流行款式 (3)

favour (NAmE -vor) /'feɪvə(r)/ vt. 较喜欢; 选择; 有利于
n. 帮助; 恩惠; 赞同 (4)

fertiliser (NAmE -izer) /'fɜːtəlaɪzə(r)/ n. 肥料 (5)

flavour (NAmE -vor) /'fleɪvə/ n. 味道; 特点; 特色 (5)

flee /fliː/ vi. & vt. (fled, fled) 迅速离开; 逃跑 (1)

△ Florence Nightingale /'flɒrəns 'nɑːtɪŋgeɪl/ 弗洛伦斯·南丁格尔 (1)

flow /fləʊ/ *n.* 流; 流动; 流畅; 供应
vi. 流; 流动 (1)
forecast /'fɔ:kəst/ *vt. & n.* 预测; 预报 (2)
formula /'fɔ:mjələ/ *n.* 公式; 方程式; 配方 (1)
found /faʊnd/ *vt.* 创建; 建立; 把……建立在 (1)
fountain /'faʊntən/ *n.* 喷泉; 人工喷泉; 喷水池 (3)

G

generate /'dʒenəreɪt/ *vt.* 产生; 引起 (5)
genius /'dʒi:niəs/
n. (*pl.* geniuses) 天才; 天资; 天赋 (1)
gentle /'dʒentl/ *adj.* 温柔的; 文静的 (1)
gesture /'dʒestʃə(r)/ *n.* 手势; 姿势; 姿态 (4)
glacier /'glæsiə(r); 'gleɪsiə(r); NAmE 'gleɪʃər/
n. 冰川 (3)
gradually /'grædʒuəli/ *adv.* 逐渐地; 逐步地 (1)
grain /greɪn/ *n.* 谷物; 谷粒; 颗粒 (5)
grocery /'grəʊsəri/ *n.* 食品杂货店; (5)
[pl.] 食品杂货

H

hence /hens/ *adv.* 因此; 由此 (2)
△ **Hitler** /'hɪtlə/ 希特勒 (1)
hybrid /'haɪbrɪd/ *n.* 杂交植(动)物; 合成物; 混合动力车 (5)

I

identical /aɪ'dentɪkl/ *adj.* 相同的 (4)
imply /ɪm'plaɪ/ *vt.* 意味着; 暗示 (4)
in other words 换句话说; 也就是说 (4)
in this sense (in ... sense)
从这种(某种)意义上讲 (2)
in turn 相应地; 转而; 依次; 轮流 (5)
incident /'ɪnsɪdənt/ *n.* 发生的事情; 严重事件; 冲突 (4)
incredible /ɪn'kredəbl/ *adj.* 极好的; 极大的; 难以置信的 (3)
infer /ɪn'fɜ:(r)/ *vt.* 推断; 推定 (1)
inference /'ɪnfərəns/
n. 推断的结果; 结论; 推论 (4)
make inferences 推理; 推断 (4)
innovation /,ɪnə'veɪʃn/ *n.* 创新; 创造 (2)
inquire /ɪn'kwaɪə(r)/ [= enquire] (4)
vi. & vt. 询问; 打听

insist /ɪn'sɪst/ *vi. & vt.* 坚持; 坚决要求 (1)
insist on 坚决要求 (1)
instance /'ɪnstəns/ *n.* 例子; 实例; 事例 (5)
for instance 例如; 比如 (5)
instant /'ɪnstənt/ *n.* 瞬间; 片刻
adj. 立即的; 速食的; 速溶的 (2)
institute /'ɪnstɪtju:t/ *n.* (教育、专业等) 机构; 机构建筑 (1)
institution /,ɪnstɪ'tju:ʃn/ *n.* 社会公共机构; 制度; 习俗 (1)
integrate /'ɪntɪgreɪt/
vi. & vt. (使) 合并; 成为一体 (2)
integrated /'ɪntɪgreɪtɪd/
adj. 各部分密切协调的; 综合的 (2)
intense /ɪn'tens/
adj. 热切的; 十分强烈的; 激烈的 (5)
interaction /,ɪntər'ækʃn/ *n.* 交流; 相互影响 (4)
internal /ɪn'tɜ:nl/ *adj.* 内部的; 里面的 (4)
interpret /ɪn'tɜ:prɪt/ *vt.* 把……理解(解释)为
vi. & vt. 口译 (4)
intervene /,ɪntə'veɪn/ *vi.* 干预; 介入 (4)
iron /'aɪən/ *n.* 铁; 铁器; 铸铁; 熨斗
vt. & vi. (用熨斗) 熨; 烫平 (3)
△ **Isaac Newton** /'aɪzək 'nju:tn/ 艾萨克·牛顿 (1)

J

△ **Jewish** /dʒu:ɪʃ/ *adj.* 犹太人的; 犹太教的 (1)
journalist /'dʒɜ:nəlɪst/
n. 新闻记者; 新闻工作者 (3)

K

keep in touch (with ...) (与……) 保持联系; 了解(某课题或领域的情况) (2)
knob /nɒb/ *n.* 旋钮; 球形把手 (2)

L

label /'leɪbl/ *vt.* 用标签标明; 贴标签
n. 标签; 标记 (3)
leak /li:k/ *vi. & vt.* 漏; 渗漏; 透露
n. 漏洞; 裂缝; 透露 (2)
△ **LED** *abbr.* (light-emitting diode) 发光二极管 (5)
leisure /'leɪʒə(r)/ *n.* 闲暇; 休闲; 空闲 (5)
leopard /'lepəd/ *n.* 豹 (3)

librarian /laɪ'breəriən/ *n.* 图书管理员;
图书馆馆长 (2)

liquid /'lɪkwɪd/ *n.* 液体
adj. 液体的; 液态的 (1)

live off 依靠……生活; 以吃……为生 (3)

lower /'ləʊə(r)/ *vt.* 把……放低; 降低; 减少
adj. 下面的; 下方的; 较小的 (4)

lung /lʌŋ/ *n.* 肺 (3)

luxury /'lʌkʃəri/ *n.* 奢华 (2)

M

malaria /mə'leəriə/ *n.* 疟疾 (1)

△ **Melbourne** /'melbən/ 墨尔本 (澳大利亚城市) (2)

melt /melt/ *vi. & vt.* (使) 融化; 熔化; 软化 (3)

merely /'mɪəli/ *adv.* 只是; 仅仅; 只不过 (4)

mineral /'mɪnərəl/ *n.* 矿物; 矿物质 (5)

mode /məʊd/ *n.* 模式; 方式; 风格 (2)

mostly /'məʊstli/ *adv.* 主要地; 一般地 (1)

mourn /mɔːn/ *vt. & vi.* 哀悼; 忧伤 (1)

moustache [especially US *mustache*]
/mə'staːʃ; NAmE 'mʌstæʃ/ *n.* 上唇的胡子; 髭 (1)

N

nanobot /'nænəʊbɒt/ *n.* 纳米机器人 (2)

nevertheless /,nevəðə'sles/
adv. 尽管如此; 不过; 然而 (2)

△ **Nobel Prize** /nəʊ'bel 'praɪz/ 诺贝尔奖 (1)

nonverbal /,nɒn'vɜːbl/
adj. 不涉及言语的; 非言语的 (4)

novel /'nɒvl/ *n.* (长篇) 小说 (1)

novelist /'nɒvəlɪst/ *n.* 小说家 (1)

numerous /'njuːmərəs/ *adj.* 众多的; 许多的 (1)

nutrition /nju'trɪʃn/ *n.* 营养; 滋养 (5)

nutritional /nju'trɪʃənəl/ *adj.* 营养(物)的 (5)

nutritious /nju'trɪʃəs/
adj. 有营养的; 营养丰富的 (5)

O

obey /ə'beɪ/ *vi. & vt.* 服从; 遵守 (2)

objective /əb'dʒektɪv/ *n.* 目标; 目的
adj. 客观的 (1)

obtain /əb'teɪn/ *vt.* (尤指经努力) 获得; 赢得
vi. (规章、习俗等) 存在; 流行 (1)

occupation /,ɒkjʊ'peɪʃn/ *n.* 职业; 占领 (2)

occupy /'ɒkjupaɪ/ *vt.* 占据; 占用 (4)

on the move 在行进中; 在移动中 (3)

oppose /ə'pəʊz/ *vt.* 反对; 抵制; 阻挠 (2)

organic /ɔː'gænɪk/ *adj.* 有机的; 不使用化肥的;
有机物的 (5)

output /'aʊtpʊt/ *n.* 产量; 输出; 输出量
vt. (output, output) 输出 (5)

overcome /,əʊvə'kʌm/ *vt.*
(overcame, overcome) 克服; 解决; 战胜 (5)

P

paragraph /'pærəgrɑːf/ *n.* 段; 段落 (2)

passion /'pæʃn/ *n.* 酷爱; 激情 (1)

patent /'peɪnt; 'pætnt/
n. 专利; 专利证书; 获得专利
adj. 有专利的; 受专利保护的 (1)

peculiarity /pɪ'kjʊ:lɪ'ærəti/ *n.* 个性; 特点;
怪异的性质 (1)

pedal /'pedl/ *n.* (自行车等的) 脚蹬子; 踏板
vt. & vi. 骑自行车; 踩踏板 (3)

penicillin /,penɪ'sɪlɪn/ *n.* 青霉素; 盘尼西林 (1)

perceive /pə'siːv/ *vt.* 察觉; 看待; 理解 (4)

persuade /pə'sweɪd/ *vt.* 劝说; 说服 (2)

pesticide /'pestɪsaɪd/ *n.* 杀虫剂; 除害药物 (5)

photoelectric /,fəʊtəʊ'lektrɪk/ *adj.* 光电的 (1)

phrase /freɪz/ *n.* 短语; 词组 (2)

physiology /,fɪzɪ'ɒlədʒi/ *n.* 生理学; 生理机能 (1)

pirate /'paɪrət/ *n.* 海盗; 盗版者
vt. 盗印; 窃用 (3)

polar /'pəʊlə(r)/ *adj.* (近) 极地的;
南极(或北极)的; 磁极的 (3)

politician /,pɒlə'tɪʃn/ *n.* 从政者; 政治家; 政客 (1)

pollinate /'pɒləneɪt/ *vt.* 授粉; 传粉 (5)

pose /pəʊz/ *n.* 故作姿态; (为画像、拍照等摆的) 姿势
vi. 摆好姿势
vt. 造成(威胁、问题等) (4)

potential /pə'tenʃl/ *adj.* 可能的; 潜在的
n. 潜力; 可能性 (2)

potentially /pə'tenʃəli/ *adv.* 潜在地; 可能地 (2)

poverty /'pɒvəti/ *n.* 贫穷; 贫困 (5)

predict /prɪ'dɪkt/ *vt.* 预测; 预言; 预料 (2)

prediction /prɪ'dɪkʃn/ *n.* 预测; 预言 (2)

preference /'prefrəns/ *n.* 爱好; 偏爱 (2)

△ **Princeton** /'prɪnstən/ 普林斯顿 (美国城市) (1)

professor /prə'fesə(r)/ *n.* 教授 (1)
prohibit /prə'hɪbɪt/ *vt.* (尤指以法令) 禁止; 阻止 (3)
prohibition /ˌprəʊɪ'bɪʃn/ *n.* 禁止; 阻止; 禁令 (3)
property /'prɒpəti/ *n.* 性质; 特征; 财产 (1)
prospect /'prɒspekt/ *n.* 可能性; 前景 (2)

R

△ **Rapa** /'rɑ:pɑ:/ *River* 拉帕河 (3)
rare /reə(r)/ *adj.* 稀少的; 珍贵的; (肉) 半熟的 (3)
react /rɪ'ækt/ *vi.* (对……) 起反应; 回应;
 (对食物等) 有不良反应 (4)
reality /rɪ'æləti/ *n.* 现实; 实际情况; 事实 (5)
reindeer /'reɪndɪə(r)/ *n.* 驯鹿 (3)
relativity /ˌrelə'tɪvəti/ *n.* 相对论; 相对性 (1)
relevant /'reləvənt/ *adj.* 有关的; 有意义的 (2)
reliable /rɪ'laɪəbl/ *adj.* 可靠的; 可信赖的 (4)
remarkable /rɪ'mɑ:kəbl/ *adj.* 非凡的; 显著的 (1)
remote /rɪ'məʊt/ *adj.* 远程的; 偏远的 (2)
remote control 遥控器; 遥控 (2)
resist /rɪ'zɪst/ *vi. & vt.* 抵制; 反抗; 抵挡 (2)
resistance /rɪ'zɪstəns/ *n.* 抵制; 反对; 抗拒 (2)
reveal /rɪ'vi:l/ *vt.* 揭示; 显示; 露出 (4)
rewarding /rɪ'wɔ:dɪŋ/ *adj.* 值得做的; 有益的 (3)
roller coaster /'rəʊləˌkəʊstə(r)/ 过山车 (3)
root /ru:t/ *n.* 根; 根茎; 根部; 根源 (5)
route /ru:t/ *n.* 路线; 路途; 途径 (3)
routine /ru:'ti:n/ *n.* 常规; 正常顺序
adj. 常规的; 日常的 (2)
daily routine 日常生活 (2)
rural /'rʊərəl/ *adj.* 乡村的; 农村的 (2)

S

salty /'sɔ:lti/ *adj.* 含盐的; 咸的 (5)
 △ **Sami** /'sɑ:mi/ 萨米人
 (居住在斯堪的纳维亚北部的拉普人) (3)
 △ **Sarek National Park** 萨勒克国家公园 (3)
 △ **SARS** /sɑ:z/ *abbr.* 严重急性呼吸综合征 (1)
scientific /ˌsaɪəntɪfɪk/
adj. 科学(上)的; 关于科学的 (1)
secure /sɪ'kjʊə(r)/
adj. 安全的; 安心的; 可靠的; 牢固的
vt. 获得; 拴牢; 保护 (2)
security /sɪ'kjʊərəti/ *n.* 保护措施; 安全工作 (2)
sensor /'sensə(r)/ *n.* 传感器; 敏感元件 (2)

set out 出发; 启程; (怀着目标) 开始工作 (3)
shortage /'ʃɔ:tɪdʒ/ *n.* 不足; 缺少; 短缺 (5)
 △ **Siberian** /saɪ'bɪəriən/ *adj.* 西伯利亚(人)的
n. 西伯利亚人 (3)
signpost /'saɪnpəʊst/ *n.* 路标 (2)
slight /slaɪt/ *adj.* 轻微的; 略微的; 细小的 (4)
slightly /'slaɪtli/ *adv.* 略微; 稍微 (4)
slump /slʌmp/ *vi.* 垂头弯腰地走(或坐等) (4)
sneeze /sni:z/ *vi.* 打喷嚏
n. 喷嚏; 喷嚏声 (3)
soil /sɔɪl/ *n.* 泥土; 土壤; 国土; 领土 (5)
sorghum /'sɔ:gəm/ *n.* 高粱; 高粱米 (5)
sour /'saʊə(r)/ *adj.* 酸的; 有酸味的 (3)
splendid /'splendɪd/
adj. 壮丽的; 雄伟的; 极佳的; 非常好的 (3)
stare /steə(r)/ *vi.* 盯着看; 凝视
n. 凝视 (4)
steam /sti:m/ *n.* 蒸汽; 水蒸气; 蒸汽动力
vi. 蒸发; 散发蒸汽; 冒水汽 (3)
straighten up 直起来; 整理; 收拾整齐 (4)
strain /streɪn/
n. (动、植物的) 系; 品种; 拉伤; 压力 (5)
stretch /stretʃ/ *vi.* 延伸; 延续
vi. & vt. 伸展; 舒展 (3)
structure /'strʌktʃə(r)/ *n.* 结构; 体系
vt. 系统安排; 精心组织 (2)
substance /'sʌbstəns/ *n.* 物质; 物品; 事实根据 (1)
sum /sʌm/ *vt.* 总结; 概括
n. 金额; 款项; 总数; 总和 (1)
sum up 总结; 概括 (1)
superb /su:'pɜ:b; sju:'pɜ:b/ *adj.* 极佳的; 卓越的 (3)
 △ **Sweden** /'swi:dn/ 瑞典(国家名) (3)
swing /swɪŋ/ *vt. & vi.* (swung, swung)
 (使) 摆动; 摇摆; 转弯; (使) 突然转向 (3)
 △ **Swiss** /swɪs/ *adj.* 瑞士的
n. (pl. Swiss) 瑞士人 (1)
switch /swɪtʃ/ *vt.* 转换; 交换
vi. & vt. (使) 改变; 转变
n. 开关; 转换器; 改变 (2)
switch off/on 关/开(电灯、机器等) (2)
 △ **Switzerland** /'swɪtsə'lənd/ 瑞士(国家名) (1)

T

tackle /'tækəl/ *vt.* 解决(难题); 应付(局面);
 处理 (5)

take up a position 担任; 任职

teapot /'ti:pɒt/ *n.* 茶壶

tendency /'tendənsi/ *n.* 趋势; 倾向

territory /'terətri; 'terətɔ:ri/

n. 领土; 版图; 领域; 地盘

△ **the Amish** /'ɑ:mɪʃ; 'æmɪʃ/

n. 阿曼门诺派

△ **the Arctic** /'ɑ:ktɪk/ **Circle** 北极圈

theme /θi:m/ *adj.* 有特定主题的

n. 主题; 主题思想

theme park 主题公园; 主题乐园

theory /'θiəri/ *n.* 理论; 学说

tick /tɪk/ *vt.* 给 (试卷、问题等) 打钩号

vi. (钟表) 发出嘀嗒声

n. 钩号

tone /təʊn/ *n.* 语气; 腔调; 口吻

trial /'traɪəl/ *n. & v.* 审讯; 审判; 试验; 试用

tunnel /'tʌnl/ *n.* 地下通道; 地道; 隧道

twin /twɪn/ *adj.* 双胞胎之一的; 孪生之一的

n. 孪生之一; 双胞胎之一

U

ultimately /'ʌltɪmətli/ *adv.* 最终; 最后

up to 达到 (某数量、程度等); 直到; 不多于;

(体力或智力上) 能胜任

upside down 颠倒; 倒转; 翻转

urban /'ɜ:bən/ *adj.* 城市的; 都市的; 城镇的

V

valley /'væli/ *n.* 谷; 山谷; 溪谷

(1) **vary** /'veəri/ *vi.* (根据情况) 变化; 改变 (4)

(3) **vast** /vɑ:st/ *adj.* 辽阔的; 巨大的; 庞大的 (3)

(4) **visible** /'vɪzəbl/ *adj.* 看得见的; 可见的 (3)

vision /'vɪʒn/ *n.* 想象; 视力; 视野; 影像 (5)

(3) **vital** /'vaɪtl/

adj. 必不可少的; 极其重要的; 充满生机的 (1)

(2) △ **Vietnam** /,vjet'næm/ 越南 (国家名) (5)

(3)

W

(3) **waist** /weɪst/ *n.* 腰; 腰部 (4)

(1) **wander** /'wɒndə(r)/ *n.* 游荡; 闲逛; 流浪

vt. & vi. 闲逛; 漫游

vi. 走失; 离散; 走神 (3)

(4) **warning** /'wɔ:nɪŋ/ *n.* 警告; 警示; 先兆 (2)

(4) **wear and tear** (正常使用造成的) 磨损; 损耗 (1)

(4) **weep** /wi:p/ *vi. & vt.* (wept, wept) 哭泣; 流泪 (4)

(5) **wheat** /wi:t/ *n.* 小麦; 小麦籽 (5)

widespread /'waɪdspred/

adj. 分布广的; 普遍的; 广泛的 (5)

wire /'waɪə(r)/ *n.* 电线; 金属丝 (或线)

vt. 接通电源; 将……连接到 (2)

wiring /'waɪərɪŋ/ *n.* 电线线路; 线路系统 (2)

(4) **witness** /'wɪtnəs/ *vt.* 当场看到; 目击; 见证

n. 目击者; 证人 (4)

(3) **wormwood** /'wɜ:mwud/ *n.* 蒿; 洋艾 (1)

Y

yield /ji:ld/ *n.* 产量; 产出

vt. 出产 (作物); 产生 (收益、效益等)

(3) *vi.* 屈服; 让步 (5)

Irregular Verbs 不规则动词

Verb	Past tense	Past participle
be (am,is, are)	was, were	been
bear	bore	born, borne
beat	beat	beaten
become	became	become
begin	began	begun
bend	bent	bent
bet	bet	bet
bite	bit	bitten
blow	blew	blown
break	broke	broken
bring	brought	brought
build	built	built
burn	burnt/burned	burnt/burned
buy	bought	bought
catch	caught	caught
choose	chose	chosen
come	came	come
cost	cost	cost
cut	cut	cut
deal	dealt	dealt
dig	dug	dug
do (does)	did	done
draw	drew	drawn
dream	dreamt/dreamed	dreamt/dreamed
drink	drank	drunk
drive	drove	driven
eat	ate	eaten
fall	fell	fallen
feed	fed	fed
feel	felt	felt
fight	fought	fought
find	found	found
flee	fled	fled

Verb	Past tense	Past participle
fly	flew	flown
forget	forgot	forgotten
get	got	got/gotten
give	gave	given
go	went	gone
grow	grew	grown
hang (悬挂)	hung	hung
have (has)	had	had
hear	heard	heard
hide	hid	hidden
hit	hit	hit
hold	held	held
hurt	hurt	hurt
keep	kept	kept
know	knew	known
lay	laid	laid
lead	led	led
lean	leant/leaned	leant/leaned
learn	learnt/learned	learnt/learned
leap	leapt/leaped	leapt/leaped
leave	left	left
lend	lent	lent
let	let	let
lie (躺)	lay	lain
light	lit/lighted	lit/lighted
lose	lost	lost
make	made	made
mean	meant	meant
meet	met	met
mistake	mistook	mistaken
output	output	output
overcome	overcame	overcome
oversleep	overslept	overslept

Verb	Past tense	Past participle
pay	paid	paid
put	put	put
quit	quit/quitted	quit/quitted
read /ri:d/	read /red/	read /red/
ride	rode	ridden
ring	rang	rung
rise	rose	risen
run	ran	run
say	said	said
see	saw	seen
seek	sought	sought
sell	sold	sold
send	sent	sent
set	set	set
shake	shook	shaken
shine	shone	shone
shoot	shot	shot
show	showed	shown
shut	shut	shut
sing	sang	sung
sit	sat	sat
sleep	slept	slept
slide	slid	slid
smell	smelt/smelled	smelt/smelled

Verb	Past tense	Past participle
speak	spoke	spoken
speed	sped/speeded	sped/speeded
spell	spelt/spelled	spelt/spelled
spend	spent	spent
spread	spread	spread
stand	stood	stood
steal	stole	stolen
stick	stuck	stuck
strike	struck	struck/stricken
sweep	swept	swept
swim	swam	swum
swing	swung	swung
take	took	taken
teach	taught	taught
tell	told	told
think	thought	thought
throw	threw	thrown
understand	understood	understood
upset	upset	upset
wake	woke	woken
wear	wore	worn
weep	wept	wept
win	won	won
write	wrote	written

后 记

本册教科书由人民教育出版社课程教材研究所英语课程教材研究开发中心与美国圣智学习集团合作，依据教育部《普通高中英语课程标准（2017年版）》编写。

本册教科书的编写，集中反映了我国十余年来普通高中课程改革的成果，吸取了2004年版《普通高中课程标准实验教科书 英语》的编写经验，凝聚了参与课改实验的教育专家、学科专家、教材编写专家、教研人员和一线教师，以及教材设计装帧专家的集体智慧。本册教科书的执笔者还有 Edward Yoshioka、Ravin Daswani、Rayne Ngoi、熊金霞、马晓蕾、贵丽萍、赵静宜、麻晓蓉、庄力。为本册书绘制插图的是怡彩艺术设计、王国栋。为本册书摄影的是朱京。

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本册教科书出版之前，我们通过多种渠道与教科书选用作品（包括照片、画作）的作者进行了联系，得到了他们的大力支持。对此，我们表示衷心的感谢！

本册教科书投入使用后，我们根据各方意见作了修订，真诚希望广大师生和家长继续提出宝贵意见！

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