

	VOCABULARY	GRAMMAR	LISTENING
<b>1</b> <b>Lives people live</b>  BBC p. 116 Student accommodation	pp. 4–5 Personality; <i>un-, in-, im-, ir-, dis-</i> ; questions with <i>like</i> <b>Reading:</b> Charity p. 15 <b>Word list</b>	p. 6 Present tenses – question forms; subject and object questions; <i>wh-</i> questions  p. 117 <b>FOCUS VLOG</b> <b>GRAMMAR ANIMATION</b>	p. 7 Voluntary work <b>Vocabulary:</b> <i>-ive, -ative, -able, -ing</i> <b>Exam Focus:</b> Note completion <b>Pronunciation Focus:</b> Word stress – personality adjectives
<b>2</b> <b>Science and technology</b>  BBC p. 118 Urban legends	pp. 18–19 Phones and computers; word building; collocations <b>Listening:</b> Famous scientists p. 29 <b>Word list</b>	p. 20 Past Continuous and Past Simple  p. 119 <b>FOCUS VLOG</b> <b>GRAMMAR ANIMATION</b>	p. 21 Becoming a scientist <b>Vocabulary:</b> Science and scientists; collocations <b>Exam Focus:</b> Matching <b>Pronunciation Focus:</b> Word stress – scientists
<b>3</b> <b>The arts</b>  BBC p. 120 The Musketeers	pp. 32–33 TV programmes; adjectives; elements of a film/TV drama <b>Reading:</b> One episode is never enough p. 43 <b>Word list</b>	p. 34 Comparative and superlative adjectives  <b>GRAMMAR ANIMATION</b>	p. 35 A street artist <b>Vocabulary:</b> Art and artists <b>Exam Focus:</b> Multiple choice <b>Pronunciation Focus:</b> Word stress – countries and nationalities
<b>4</b> <b>Home sweet home</b>  BBC p. 122 Cave houses	pp. 46–47 Describing houses; inside a house; <i>make or do</i> <b>Listening:</b> The narrowest house in the world p. 57 <b>Word list</b>	p. 48 Present Perfect with <i>for</i> and <i>since</i>  p. 123 <b>FOCUS VLOG</b> <b>GRAMMAR ANIMATION</b>	p. 49 Teenagers' rooms <b>Vocabulary:</b> Phrasal verbs <b>Exam Focus:</b> Matching <b>Pronunciation Focus:</b> Long vowel sounds
<b>5</b> <b>Time to learn</b>  BBC p. 124 South Korean schools	pp. 60–61 Education; phrasal verbs; collocations <b>Reading:</b> School systems around the world p. 71 <b>Word list</b>	p. 62 First Conditional  <b>GRAMMAR ANIMATION</b>	p. 63 Dealing with exam stress <b>Vocabulary:</b> <i>get</i> <b>Exam Focus:</b> True/False <b>Pronunciation Focus:</b> Large numbers
<b>6</b> <b>Just the job</b>  BBC p. 126 Window cleaning	pp. 74–75 Collocations; describing jobs; phrasal verbs <b>Listening:</b> The worst jobs p. 85 <b>Word list</b>	p. 76 Second Conditional  p. 127 <b>FOCUS VLOG</b> <b>GRAMMAR ANIMATION</b>	p. 77 Becoming an airline pilot <b>Vocabulary:</b> Collocations; jobs <b>Exam Focus:</b> Multiple choice <b>Pronunciation Focus:</b> Stress in job names
<b>7</b> <b>Consumer society</b>  BBC p. 128 Cheap shopping	pp. 88–89 Shops and services; clothes and appearance; collocations <b>Reading:</b> The truth about shopping p. 99 <b>Word list</b>	p. 90 The Passive  <b>GRAMMAR ANIMATION</b>	p. 91 Buying presents <b>Vocabulary:</b> Word families <b>Exam Focus:</b> Matching <b>Pronunciation Focus:</b> Silent letters
<b>8</b> <b>Well-being</b>  BBC p. 130 Keeping fit	pp. 102–103 Symptoms; health; phrasal verbs <b>Reading:</b> Apps to keep you fit p. 113 <b>Word list</b>	p. 104 Past Perfect  p. 131 <b>FOCUS VLOG</b> <b>GRAMMAR ANIMATION</b>	p. 105 Central Park <b>Vocabulary:</b> Places to do sport <b>Exam Focus:</b> Multiple choice <b>Pronunciation Focus:</b> Diphthongs

pp.116–131 **Video worksheets** pp. 132–155 **Grammar** and **Use of English** reference and practice

READING	GRAMMAR	USE OF ENGLISH	WRITING	SPEAKING	FOCUS REVIEW
pp. 8–9 A brief guide to the generations <b>Vocabulary:</b> Verb + preposition <b>Exam Focus:</b> Matching	p. 10 Verb + <i>-ing</i> or verb + <i>to infinitive</i> <b>Vocabulary:</b> Clothes <b>GRAMMAR ANIMATION</b>	p. 11 <i>so</i> and <i>such</i> Multiple-choice cloze	pp. 12–13 <b>Writing Focus:</b> A personal email/letter <b>Language Focus:</b> Adjective + preposition	p. 14 Showing interest <b>ROLE-PLAY</b>	pp. 16–17
pp. 22–23 Science at the South Pole <b>Vocabulary:</b> Nouns and verbs; the temperature <b>Exam Focus:</b> Multiple choice	p. 24 <i>used to</i> <b>GRAMMAR ANIMATION</b>	p. 25 Linkers and time expressions Multiple-choice cloze	pp. 26–27 <b>Writing Focus:</b> A story <b>Language Focus:</b> Informal linkers	p. 28 Telling a story <b>ROLE-PLAY</b>	pp. 30–31
pp. 36–37 Superheroes <b>Vocabulary:</b> Books; cinema; phrasal verbs <b>Exam Focus:</b> Matching	p. 38 Present Perfect with <i>just, already, (not) yet</i> and Past Simple  <b>GRAMMAR ANIMATION</b> p. 121 <b>FOCUS VLOG</b>	p. 39 <i>too</i> and <i>not enough</i> Key word transformation	pp. 40–41 <b>Writing Focus:</b> A film review <b>Language Focus:</b> Adjectives to describe films, plots, screenplays etc.	p. 42 Describing a photo <b>ROLE-PLAY</b>	pp. 44–45
pp. 50–51 People who don't live in traditional houses <b>Vocabulary:</b> Landscape features; describing places; collocations <b>Exam Focus:</b> Gapped text	p. 52 Future forms: Present Continuous, <i>be going to</i> and <i>will</i> <b>GRAMMAR ANIMATION</b>	p. 53 Adverbs Multiple choice	pp. 54–55 <b>Writing Focus:</b> A blog entry <b>Language Focus:</b> Punctuation – commas	p. 56 Making suggestions <b>ROLE-PLAY</b>	pp. 58–59
pp. 64–65 Different, not less <b>Vocabulary:</b> Nouns and verbs; <i>of</i> and <i>for</i> <b>Exam Focus:</b> Matching	p. 66 Defining relative clauses  <b>GRAMMAR ANIMATION</b> p. 125 <b>FOCUS VLOG</b>	p. 67 Future time and conditional clauses Sentence transformation	pp. 68–69 <b>Writing Focus:</b> An enquiry <b>Language Focus:</b> Indirect questions	p. 70 Giving an opinion; agreeing and disagreeing <b>ROLE-PLAY</b>	pp. 72–73
pp. 78–79 Personality types and careers <b>Vocabulary:</b> Compound nouns; word families <b>Exam Focus:</b> Multiple matching	p. 80 Modal verbs for obligation and permission <b>GRAMMAR ANIMATION</b>	p. 81 Adjectives ending in <i>-ed</i> and <i>-ing</i> Multiple choice	pp. 82–83 <b>Writing Focus:</b> A job application <b>Language Focus:</b> Formal language in a job application letter	p. 84 Asking for and giving advice <b>ROLE-PLAY</b>	pp. 86–87
pp. 92–93 The brains behind Amazon.com <b>Vocabulary:</b> Shopping <b>Exam Focus:</b> Multiple choice	p. 94 Quantifiers  <b>GRAMMAR ANIMATION</b> p. 129 <b>FOCUS VLOG</b>	p. 95 Indefinite pronouns: <i>someone, anything, nowhere, everybody, none, etc.</i> Sentence transformation	pp. 96–97 <b>Writing Focus:</b> A formal written complaint <b>Language Focus:</b> Formal language	p. 98 Shopping <b>ROLE-PLAY</b>	pp. 100–101
pp. 106–107 The tower that sucks in smog and spits out clean air <b>Vocabulary:</b> Pollution; word families <b>Exam Focus:</b> Open-ended questions	p. 108 Reported Speech <b>GRAMMAR ANIMATION</b>	p. 109 Phrasal verbs Gapped sentences	pp. 110–111 <b>Writing Focus:</b> A reader's comment – linkers <b>Language Focus:</b> Structures with <i>make</i>	p. 112 A doctor's appointment <b>ROLE-PLAY</b>	pp. 114–115

p. 156 Prepositions p. 157 Phrasal verbs p. 158 Pronouns and numerals p. 159 Irregular verbs

# 2

## Science and technology

*Necessity is the mother of invention.*

A proverb

### BBC



URBAN LEGENDS

Watch the BBC video.  
For the worksheet, go to page 118.

## 2.1

### VOCABULARY

- Online
- phones and computers
- word building
- collocations

*I can use language related to science, technology and inventions.*

#### SHOW WHAT YOU KNOW

- Choose the correct verb. Then complete the sentences to make them true for you.
  - The first thing I do when I visit / **go** online is ...
  - The person I'd like to watch / follow on Twitter is ...
  - The website I visit / go in most is ...
  - The last music I downloaded / followed was ...
  - The last comment I posted / sent on social media was ...
  - The last time I updated / revised my social media profile was ...
- SPEAKING** Compare your sentences with a partner. How much time do you typically spend online each day?

## SCIENCE AND TECHNOLOGY

## QUIZ

- Match the years with these digital inventions.

1977   1984   1990   1993   1994

- The first **web browser** \_\_\_\_\_
- The first **search engine** \_\_\_\_\_
- The first **laser printer** \_\_\_\_\_
- The first **desktop computer** with **keyboard** and mouse \_\_\_\_\_
- The first smartphone \_\_\_\_\_

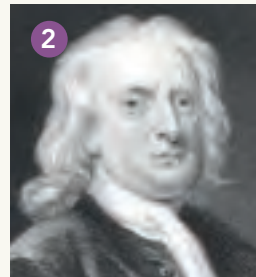
**BONUS QUESTION:** Which company made the first computer with a mouse?

- Which sciences were these great scientists mostly involved in?

astronomy, biology, chemistry, computer science, mathematics, physics



Nicolaus Copernicus





Isaac Newton




Charles Darwin

**BONUS QUESTION:** Which scientist won two Nobel Prizes?

- 3  1.24 Do the Science and Technology Quiz. Then listen and check your answers.
- 4  1.25 Complete sentences 1–5 with the correct scientist in the quiz. Then listen to Part 2 again and check your answers.


- 1 \_\_\_\_\_ did experiments with radioactive materials and discovered polonium and radium.
- 2 \_\_\_\_\_ did research into gravity, light and many areas of physics, maths and astronomy.
- 3 \_\_\_\_\_ invented the idea of a 'Universal Machine' or a computer in 1936.
- 4 \_\_\_\_\_ developed the theory that the Earth moves around the Sun.
- 5 \_\_\_\_\_ observed nature. He took notes and measurements and collected specimens from around the world.

WORD STORE 2A Phones and computers


- 5  1.26 Complete WORD STORE 2A with the compound nouns in red in the quiz. Then listen, check and repeat.
- 6 Complete the questions with compound nouns in WORD STORE 2A.
- 1 How many \_\_\_\_\_ messages do you usually send in a day?
  - 2 Do you always use the same \_\_\_\_\_ name and password online?
  - 3 Have you got a \_\_\_\_\_ computer or a laptop?
  - 4 Which is the most popular search \_\_\_\_\_ in your country?
  - 5 Which \_\_\_\_\_ browser do you normally use?
  - 6 Have you got a reliable \_\_\_\_\_ connection with fast download speeds?
  - 7 Do you like typing on a smartphone or do you prefer to use a key \_\_\_\_\_ ?

- 7 **SPEAKING** Ask and answer the questions in Exercise 6.

WORD STORE 2B Word building

- 8  1.27 Complete WORD STORE 2B with the science subjects in the quiz. Then listen, check and repeat.
- 9 **SPEAKING** Discuss the questions.
- 1 Would you like to be a scientist? Why?/Why not?
  - 2 Which science subject do you find easiest/most difficult to understand?
  - 3 Which science subject do you think will be most useful to you in the future? Why?

WORD STORE 2C Collocations

- 10  1.28 Complete WORD STORE 2C with the infinitive form of the underlined verbs in Exercise 4. Then listen, check and repeat.
- 11 Complete the sentences with the correct verb in Word Store 2C in an appropriate form.
- 1 Tim has \_\_\_\_\_ a new program. It will change how people manage databases.
  - 2 Rowena \_\_\_\_\_ the sky at night. She hopes to \_\_\_\_\_ a new planet.
  - 3 Lucie \_\_\_\_\_ wild plants to develop new drugs.
  - 4 Fred is \_\_\_\_\_ research into laser technology for his doctorate.
  - 5 Lena \_\_\_\_\_ experiments on plastics to measure how strong they are.
  - 6 George looks at big numbers and \_\_\_\_\_ notes. He produces formulas to solve problems.
- 12 **SPEAKING** What kind of scientist is each person in Exercise 11? Discuss which science you think is the most/least important to society.

1 *Tim = a computer scientist*

## 3 Are statements 1–3 true (T) or false (F)?

- 1 Albert Einstein failed Mathematics at school. **T / F**
- 2 An earthquake can shorten the length of a day. **T / F**
- 3 Some people are left-brained, others are right-brained. **T / F**



**BONUS QUESTION: What percentage of our brain do we normally use?**



Marie Skłodowska-Curie



Alan Turing



# 2.2

## GRAMMAR

Past Continuous and Past Simple

*I can use the Past Simple and Past Continuous to describe past events.*

**1 SPEAKING** Read what people say about e-books and printed books. Which comments do you agree with? Think of more advantages and disadvantages. Discuss with a partner.

- ① When I go on holiday, I don't have to pack heavy books.
- ② I like the feel of a real book in my hands.
- ③ I work with computer screens all day – I don't want to read books on a screen too.
- ④ Books are so expensive. E-books are cheaper.

**2** Read about E ink. Who was Joe Jacobson and why did he have a 'Eureka' moment?



In 1997 Joe Jacobson **was working** as a researcher for the Massachusetts Institute of Technology (MIT). One summer, he went on holiday to the coast. He **was lying** on a beach when he **finished** his book. Unfortunately, he didn't have another one with him. At that moment, he imagined

an electronic book that he could download any time he wanted and read in direct sunlight. It was a 'Eureka' moment. His vision became E ink technology and helped develop the e-readers that we have today.

**3** Read the GRAMMAR FOCUS. Complete the examples using the past forms in blue in Exercise 2.

### GRAMMAR FOCUS

#### Past Continuous and Past Simple

- You use the **Past Continuous** to talk about longer actions in progress at a time in the past.  
In 1997 Joe Jacobson <sup>1</sup> \_\_\_\_\_ as a researcher for MIT.
- You often use the **Past Continuous** with the **Past Simple** – usually when a short action (Past Simple) interrupted a longer action (Past Continuous).  
He <sup>2</sup> \_\_\_\_\_ on a beach when he <sup>3</sup> \_\_\_\_\_ his book.

**Past Continuous: was/were + -ing form**

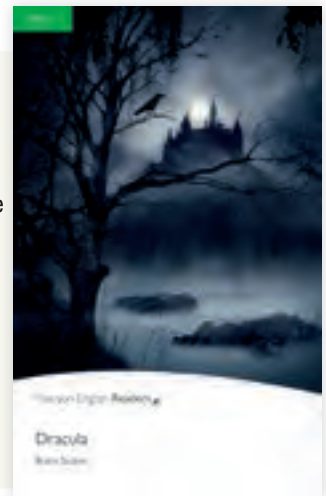
- |   |                                |
|---|--------------------------------|
| + | I <b>was working</b> etc.      |
| - | She <b>wasn't working</b> etc. |
| ? | <b>Were you working?</b> etc.  |

**4** Complete the beginnings of two stories with the Past Simple or the Past Continuous form of the verbs in brackets.



It was a terrible stormy night six months after my father's death. My mother <sup>1</sup> **was sitting** (sit) alone by the fire, waiting for her baby to arrive. She <sup>2</sup> \_\_\_\_\_ (feel) sad and ill. Suddenly she <sup>3</sup> \_\_\_\_\_ (hear) a noise outside. 'There's someone at the door, Peggotty,' my mother <sup>4</sup> \_\_\_\_\_ (call). 'Who is it?' Peggotty was her servant and her only real friend. 'I'll go and see,' Peggotty <sup>5</sup> \_\_\_\_\_ (reply). She <sup>6</sup> \_\_\_\_\_ (go) and <sup>7</sup> \_\_\_\_\_ (open) the door.

As the carriage moved quickly along the rough dry road, Jonathan Harker <sup>8</sup> \_\_\_\_\_ (look out) at the changing view. Behind him was a land of small, green hills and colourful fields of fruit trees. Now he <sup>9</sup> \_\_\_\_\_ (drive) into the Transylvanian mountains through a thick forest. It <sup>10</sup> \_\_\_\_\_ (get) dark, and the other people in the carriage <sup>11</sup> \_\_\_\_\_ (be) quiet and afraid. A woman opposite him <sup>12</sup> \_\_\_\_\_ (reach) towards him and <sup>13</sup> \_\_\_\_\_ (put) something in his hand. It <sup>14</sup> \_\_\_\_\_ (be) a small, silver cross. 'Wear it around your neck,' she said. 'You'll be safe.'



**5 SPEAKING** Which story would you like to continue reading and why? Tell your partner.

**6** Complete each sentence with one Past Simple and one Past Continuous verb form. Which sentences are true for you?

- 1 My parents **were studying** (study) when they **met** (meet).
- 2 My computer \_\_\_\_\_ (crash) when I \_\_\_\_\_ (do) my homework last night.
- 3 I \_\_\_\_\_ (watch) a film when my mum \_\_\_\_\_ (get) home yesterday.
- 4 It \_\_\_\_\_ (rain) when I \_\_\_\_\_ (wake up) this morning.
- 5 I \_\_\_\_\_ (burn) myself when I \_\_\_\_\_ (make) breakfast.
- 6 A friend \_\_\_\_\_ (text) me when I \_\_\_\_\_ (walk) to school.

**7** Write questions for the sentences in Exercise 6. Change pronouns where necessary. Then ask your partner as in the example.

- A: **Were your parents studying when they met?**  
B: **No, they weren't.**

### FOCUS VLOG About technology

**8** Watch the Focus Vlog. For the worksheet, go to page 119.

Grammar page 135

# 2.3

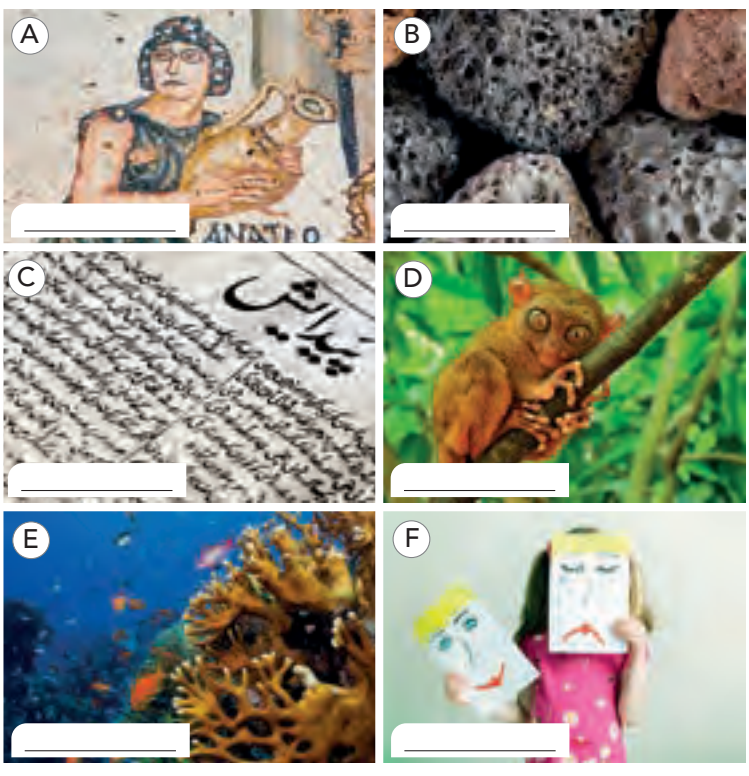
## LISTENING

Matching

I can identify key details in a simple recorded narrative about scientists.

1 **1.29** Label the photos with the words in the box. Then listen, check and repeat.

- linguistics geology marine biology  
archaeology psychology conservation



### EXAM FOCUS Matching

2 **1.30** Listen to two conversations and choose the correct answer.

- 1 What does the girl want to study in the future?  
photo A  photo B  photo D
- 2 The girl and the boy have both seen one of the documentaries. What was it about?  
photo B  photo E  photo F

3 **1.31 SPEAKING** Complete the job descriptions with the jobs in the box. Then listen, check and repeat. Do you know anybody who does one of these jobs? Tell your partner.

- A linguist A geologist A marine biologist  
A psychologist An archaeologist  
A conservationist

- 1 \_\_\_\_\_ studies and often speaks a lot of languages.  
2 \_\_\_\_\_ studies ways of protecting the environment.  
3 \_\_\_\_\_ studies rocks and the history of the Earth.  
4 \_\_\_\_\_ studies how people behave and how their minds work.  
5 \_\_\_\_\_ studies people who lived thousands of years ago.  
6 \_\_\_\_\_ studies, observes and protects oceans.

4 **1.32** Listen to five speakers talking about why they became scientists. Which job in Exercise 3 does each person do?

5 **1.32** Listen again. Match speakers 1–5 with statements A–F. There is one extra statement.

- Speaker 1:  Speaker 3:  Speaker 5:   
Speaker 2:  Speaker 4:

- A I want to understand how early childhood affects behaviour.  
B I'm keen on studying how machines can communicate.  
C I want to explore oceans and preserve the ocean environment.  
D I'm interested in studying our prehistoric ancestors.  
E I want to study the evolution of our planet.  
F I want to find solutions to nature's problems.

### PRONUNCIATION FOCUS

6 **1.33** Complete the table. Then listen, check and repeat. Mark the stress.

Subject	Job
1 archaeology	archaeologist
2 _____	analyst
3 conservation	_____
4 geology	_____
5 _____	linguist
6 _____	psychologist

7 **SPEAKING** Practise the words in Exercise 6 as in the example. Pay attention to the stress.

A: What does an archaeologist do? B: Archaeology.

### WORD STORE 2D Collocations

8 **1.34** Complete WORD STORE 2D with the words in the box. Then listen, check and repeat.

9 Complete the statements about the speakers with the words and phrases in WORD STORE 2D.

- 1 The marine biologist wants to collect \_\_\_\_\_ about global warming.  
2 The linguist has published \_\_\_\_\_ on robot communication.  
3 The psychologist loves doing research and analysing \_\_\_\_\_.  
4 The archaeologist spent \_\_\_\_\_ in the Egyptian room in the Louvre.  
5 The conservationist is doing research into climate change to help protect \_\_\_\_\_.

10 **SPEAKING** How common is it to study the same subjects as your parents? Think about your friends and family. What will you do? Discuss with a partner.

# 2.4

## READING

Multiple choice

*I can scan an interview to locate specific information.*

1 **SPEAKING** Look at the photos of Antarctica. Discuss the questions.

- 1 What do you think it's like working there?
- 2 What kind of jobs do you think people do?

2 Look at comments from people interested in working in Antarctica. Which of them are suitable in your opinion?

- 1 'I don't mind working long hours.'
- 2 'I don't like the dark.'
- 3 'I need my own space.'
- 4 'I'm very fit and healthy.'
- 5 'I expect to earn lots of money.'
- 6 'I want to save the planet.'

3 **1.35** Listen to a talk about working in Antarctica. Check your ideas in Exercises 1 and 2.

4 **SPEAKING** Discuss whether you would like to work in Antarctica. Explain why or why not.

5 Read an interview with a research scientist and answer the questions.

- 1 What is the population of Antarctica?
- 2 What did Jane Roberts do in her free time in Antarctica?
- 3 What did she miss most when she was there?

### EXAM FOCUS Multiple choice

6 Read the text again. For questions 1–5, choose the correct answer, A, B, C or D.

- 1 The South Pole Station is named after
  - A the first person to reach the South Pole.
  - B the first person who died after reaching the South Pole.
  - C the five people who died after reaching the South Pole.
  - D the first two explorers to reach the South Pole.
- 2 People who work in Antarctica
  - A are residents of Antarctica.
  - B live in small towns.
  - C stay for a period of time in research stations.
  - D return to their country in winter.
- 3 Jane discovered that
  - A she likes working in a laboratory.
  - B millions of years ago dinosaurs lived on ice.
  - C the Antarctic wasn't always cold.
  - D research is like doing a jigsaw.
- 4 The temperature at the South Pole
  - A is -80 degrees all year round.
  - B is usually above zero in summer.
  - C never rises above zero.
  - D is too cold to go outside.
- 5 In the interview, Jane
  - A describes her experience of working in Antarctica.
  - B encourages tourists to visit Antarctica.
  - C explains how researchers apply for jobs in Antarctica.
  - D presents her research into the weather in Antarctica.

7 **1.37** Match the words in blue in the text with the definitions in the box. Then listen, check and repeat.

- 1 several sheets of material on top of one another = layers
- 2 the skeleton = \_\_\_\_\_
- 3 a place where planes can land = \_\_\_\_\_
- 4 organise and manage = \_\_\_\_\_
- 5 a place to eat, usually in a school or factory = \_\_\_\_\_
- 6 a picture cut into small pieces that you put together = \_\_\_\_\_
- 7 arrived (at a place) = \_\_\_\_\_

8 **SPEAKING** Complete the questions with the correct form of the words in Exercise 7. Then ask and answer the questions.

- 1 How long does it take you to \_\_\_\_\_ home after school?
- 2 Do you usually have lunch in the school \_\_\_\_\_?
- 3 Have you ever completed a 1,000-piece \_\_\_\_\_?
- 4 Would you like to \_\_\_\_\_ your own business one day?
- 5 How many \_\_\_\_\_ of clothing do you wear when you go outside in winter?
- 6 Do any museums in your city have dinosaur \_\_\_\_\_?

9 **1.38** Listen to the words and phrases in the box and repeat them. Then complete the text.

above/below zero average temperature  
(0°) degrees centigrade (Celsius) plus/minus 10°C  
The temperature rises/falls to (+40°/-80°) degrees.

### Antarctic weather

The interior of Antarctica is the coldest place on Earth. The hottest month at the South Pole is January with an average temperature of minus 25 <sup>1</sup> \_\_\_\_\_ centigrade. This is the summer in Antarctica. In fact, the temperature in Antarctica has never risen <sup>2</sup> \_\_\_\_\_ zero. The warmest temperature ever recorded at the South Pole (on December 25, 2011) was <sup>3</sup> \_\_\_\_\_ 12.3 degrees <sup>4</sup> \_\_\_\_\_. In winter, temperatures <sup>5</sup> \_\_\_\_\_ to 80 degrees centigrade <sup>6</sup> \_\_\_\_\_ zero. The coldest month is September.

10 **SPEAKING** Tell your partner about the last time you experienced an extreme temperature, hot or cold. Use the questions to prepare.

- 1 When did you experience an extreme temperature?
- 2 Where were you and what were you doing at the time?
- 3 What was the temperature? How long did it last?
- 4 How did you manage and what did you do?
- 5 Do you like extreme temperatures? Why?/Why not?

### WORD STORE 2E The temperature

11 **1.39** Complete WORD STORE 2E by arranging the adjectives in order from coldest to hottest. Then listen, check and repeat.



# Science at the South Pole



1.36

*Jane Roberts is a marine biologist. She worked for two years in Antarctica. Here, she answers your questions.*

## Is there really a pole at the South Pole?

Yes, there is. It's in front of the Amundsen-Scott South Pole Station. In 1911 a Norwegian explorer called Roald Amundsen was the first person to get there, followed by a British man, Robert Falcon Scott, thirty-four days later. Unfortunately, Scott and his team of five all died on the return journey. When the first explorers **reached** the South Pole there was nothing there. Now, several hundred people work at the Station. There's an **airstrip** for small planes, a **canteen**, hot showers, a post office, a tourist shop, a basketball court and a movie theatre.

## Who does Antarctica belong to?

Antarctica doesn't belong to any nation. There's no permanent population, but there are bases that look like small towns. Thirty different countries **run** about seventy research stations in Antarctica. People stay there between three and eighteen months. Most people work only in the summer months, but some stay all year round. The population is around 4,000 in summer and 1,000 in winter.

## Why did you want to work in Antarctica?

I was studying in London and I read about an exciting research project in Antarctica. I applied for the job, but thousands of other people also applied. I was lucky!

## What exactly were you doing there?

I was doing research into marine life. I collected specimens of ice and examined them in the laboratory. There are **layers** of ice thousands of years old! We found the **remains** of a dinosaur. It was in millions of pieces and we had to put all the pieces together like a **jigsaw**. Our research showed us that millions of years ago the Antarctic was much warmer.

## What did you wear in Antarctica?

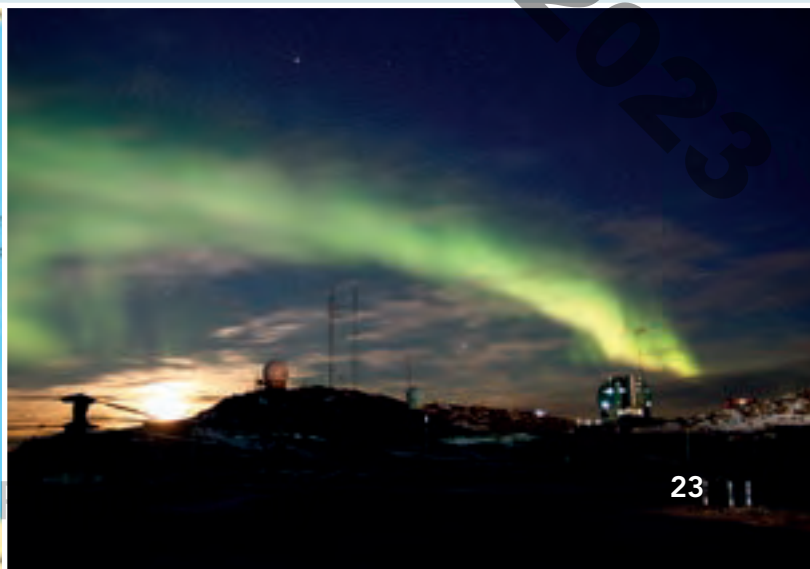
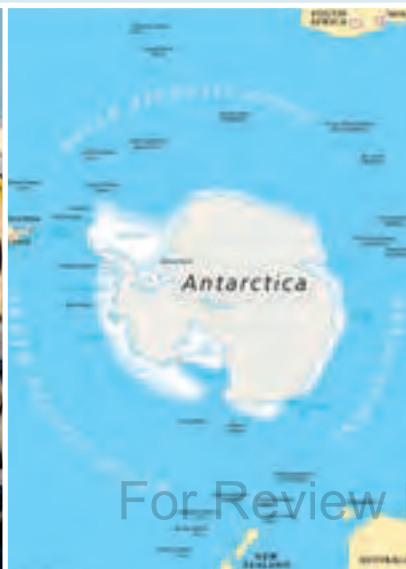
It's extremely cold all year round. When I was doing experiments outside, I wore three pairs of socks and often five layers of clothing. Winter temperatures fall to  $-80^{\circ}\text{C}$  and even summer temperatures are below zero at the South Pole. For several months, there's no sunlight at all. Sometimes it's too cold to go outside.

## What did you do in your free time?

When it was snowing, we read lots of books and played games. There isn't much to do in Antarctica, but I enjoy reading and I made some good friends there too.

## Did you miss home?

No, but I missed colours – it's very white in Antarctica! But I was working all day and it was really interesting work.



For Review

used to

I can use **used to** to refer to past habits and routines.



1 **SPEAKING** Look at the photos. In what way are these things different today? Discuss with a partner.

(fashion friends music relationships school technology travel)

2 **1.40** Listen to a dialogue between Chris and his granddad. Are the sentences about Chris's granddad true (T) or false (F)?

- He **used to phone** people from the phone in the sitting room.
- He used to message people.
- He didn't use to live near his friends.
- His mum didn't use to like the loud music in his bedroom.
- His parents **bought** him a camera for his sixteenth birthday.
- He **used to have** five or six good friends.

3 Read the **GRAMMAR FOCUS**. Complete the examples using the past forms in blue in Exercise 2.

### GRAMMAR FOCUS

#### used to

- You use **used to + verb** to talk about past states that are no longer true.  
He <sup>1</sup> \_\_\_\_\_ **have** five or six good friends.
- You use **used to + verb** to talk about regular past actions that don't happen anymore.  
He <sup>2</sup> \_\_\_\_\_ **phone** people from the phone in the sitting room.
- You don't use **used to + verb** to talk about a past action that only happened once. You use the **Past Simple**.  
His parents <sup>3</sup> \_\_\_\_\_ him a camera for his sixteenth birthday. (NOT *used to buy*)

#### used to + verb

+	I <b>used to work</b> ...
-	He <b>didn't use to work</b> ...
?	<b>Did they use to work</b> ...? Yes, they <b>did</b> ./No they <b>didn't</b> .

4 Complete the sentences with the correct form of the verbs in brackets. Use **used to + verb** or the **Present Simple**.

- People **used to read** (read) maps but now they **use** (use) GPS.
- People \_\_\_\_\_ (not/use) their cars much but now they \_\_\_\_\_ (drive) everywhere.
- People \_\_\_\_\_ (update) their online profiles now, but they \_\_\_\_\_ (write) letters.
- Children \_\_\_\_\_ (play) inside now but in the past they \_\_\_\_\_ (play) outside.
- Teachers \_\_\_\_\_ (suggest) books but now they \_\_\_\_\_ (give out) website addresses.
- Families \_\_\_\_\_ (watch) the TV together but now they \_\_\_\_\_ (watch) it individually.
- Students \_\_\_\_\_ (use) Google now, but they \_\_\_\_\_ (look up) things in encyclopedias.
- Parents \_\_\_\_\_ (not/worry) so much but now they \_\_\_\_\_ (give) children less freedom.

5 **SPEAKING** Discuss the statements in Exercise 4. Do you think they are all true?

6 Replace the Past Simple with **used to + verb** if possible. Which sentences are true for you?

- When I was at primary school, ...
- my parents took me to school every day.
  - I didn't go online much.
  - I went on a school trip to the Science Museum.
  - I didn't like school dinners.
  - my parents bought me my first mobile phone.
  - I wanted to be an astronaut.

7 Make questions for the sentences in Exercise 6. Then ask and answer as in the example.

- A: *Did your parents use to take you to school?*  
B: *Yes, they did.*



# 2.6

## USE OF ENGLISH

Linkers and time expressions

*I can use a range of common linking words and time expressions.*

- 1 1.41 **SPEAKING** Look at the photo. Discuss what you think the film is about. Use the ideas in the box. Then listen and check.

civil rights for black women   computers  
mathematicians   American space projects   robots

- 2 1.41 Listen again and choose the correct option.

- The three women worked for NASA as *mathematicians / astronauts* **during** the 1950s and 60s.
- While** they were working for NASA, they earned more / less than their white colleagues.
- Segregation between blacks and whites continued **until** the *mid- / late* 1960s.
- When** the film came out, Katherine Johnson – 78 / 98 years old at the time – met the actress who played her.
- As soon as** Johnson arrived at the 2016 / 2017 Oscars ceremony, everyone stood up and cheered.

- 3 Read the LANGUAGE FOCUS. Complete the information with the words in blue in Exercise 2.

### LANGUAGE FOCUS

#### Linkers and time expressions

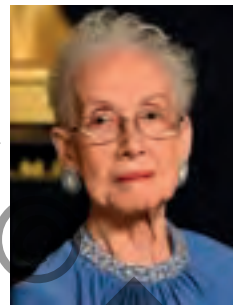
- You use conjunctions **when/while** to link things that happen at the same time. [conjunction + subject + verb]  
**While** they were working for NASA, they earned less than their white colleagues
- You use conjunctions **after**/<sup>2</sup> \_\_\_\_\_ / **before/when** to link things that happen in an order. [conjunction + subject + verb]  
<sup>3</sup> \_\_\_\_\_ the film came out, Johnson met the actress who played her.
- You use prepositions **during/for/until (till)/by** as follows:  
**during** + noun phrase to say **when** something happens –  
<sup>4</sup> \_\_\_\_\_ the 1950s and 60s  
**until (till)** + noun phrase to talk about a state that continues up to a point in time –  
Segregation continued <sup>5</sup> \_\_\_\_\_ the mid-1960s.  
**by** + noun phrase to talk about an action that happens at or before a point in time –  
Segregation stopped by the late 1960s.

- 4 Choose the correct option. Then change the information to make the sentences true for you.

- I haven't been to the cinema **for** / *during* several weeks.
- I saw *Hidden Figures* *during* / *while* I was on holiday.
- I learnt a lot about American Civil Rights *during* / *while* the film.
- I didn't know that segregation in the USA continued *until* / *by* 1964.
- I ate some popcorn *when* / *after* I was watching the film.
- As soon as* / *While* the film finished, I went home.



- 5 1.42 **USE OF ENGLISH** Read the text. Choose the correct answer, A, B or C. Then listen and check.



### KATHERINE JOHNSON

<sup>1</sup>**When** Katherine Johnson was a child, she was a maths genius. <sup>2</sup>\_\_\_\_\_ she was only 14, she went to university to study Maths. <sup>3</sup>\_\_\_\_\_ she was studying at university, her Maths professor told her she should become a research mathematician. <sup>4</sup>\_\_\_\_\_ she graduated from university she became a teacher. <sup>5</sup>\_\_\_\_\_ the 1940s she got married and had children.

She didn't become a research mathematician <sup>6</sup>\_\_\_\_\_ she was 35. She got a job as a 'computer' with NASA. Katherine was different from other 'computers' – <sup>7</sup>\_\_\_\_\_ she was at NASA, she asked a lot of questions. <sup>8</sup>\_\_\_\_\_ Katherine Johnson started work at NASA, only men went to important meetings. She changed that!

- |                 |          |              |
|-----------------|----------|--------------|
| 1 <b>A When</b> | B Before | C During     |
| 2 A While       | B When   | C Until      |
| 3 A During      | B While  | C After      |
| 4 A Before      | B While  | C As soon as |
| 5 A Till        | B During | C While      |
| 6 A until       | B by     | C during     |
| 7 A during      | B while  | C after      |
| 8 A Before      | B During | C As soon as |

- 6 Complete the sentences. Write five true sentences and one false.

- While I was going home yesterday, I ...
- As soon as I got home, I ...
- During the evening I ...
- I didn't go to bed until ...
- I was fast asleep by ...

- 7 **SPEAKING** Read your sentences in Exercise 6 to your partner for him/her to guess which sentence is false.

A story

*I can write a story with a simple linear sequence.*

**1 SPEAKING** Tell your partner about a surprising or interesting thing that happened to you on holiday.

Say:

- 1 where and when it happened.
- 2 how old you were.
- 3 what you were doing when it happened.

**2** Read Paul's story and choose the best title, A, B or C.

- A The Holiday of a Lifetime  
 B Surprise by the Sea  
 C Beautiful Cornwall

**I was twelve years old** and my parents and I were on holiday in Cornwall. They are both biologists and we all love nature. One morning, Dad suggested walking along the beach to a distant village.

**It was a lovely day for a walk**, but after an hour, I noticed some dark clouds. I asked my parents if they thought we should go back. They smiled at each other, and then Mum said we were nearly there.

**What was going on?** Mum usually made me go indoors during storms. What's more, we were still far away from the village. **Anyway**, suddenly, there was loud thunder and it started to rain. "Come on, quick!" my father said. "We're almost there."

I noticed a cottage not far away. Dad started running towards it **so** we ran after him. When we got there, he seemed really excited, which **I must admit** was a bit strange. **Unfortunately**, there was no one home. 'That's unlucky,' said Dad 'but wait...' **Suddenly**, he took a key from his pocket, unlocked the door and pushed it open. He was silent for a moment. Then with a smile he said: "Come in. And welcome home!" **What a surprise!**

**In fact**, thinking back to my parents' behaviour **during** the first part of our holiday, I knew something strange was going on – but I had no idea what! Our new holiday home was the perfect place for nature lovers. **It was awesome!**

We still live in London, but our cottage in Cornwall is our dream house, and **I will never forget the day I first saw it.**

**3** Read the story again and put events in the correct order.

- a Nobody answered the door.
- b The weather changed.
- c The family went into their new holiday home.
- d The family went to Cornwall on holiday.
- e Paul saw a cottage in the distance.
- f The family went for a walk along the coast.


**4** Read the WRITING FOCUS. Complete the examples with the words in purple in the story.

**WRITING FOCUS**

**A story**

- Set the scene:

*I <sup>1</sup>was twelve years old when ...*

*It was late in the evening when ...*

*It <sup>2</sup>\_\_\_\_\_ a walk.*

*I was in the classroom when ...*

- Use questions, short dramatic sentences and occasional exclamation marks to show surprise or excitement:

*What was <sup>3</sup>\_\_\_\_\_ on?*

*What a <sup>4</sup>\_\_\_\_\_!*

*What a nightmare!*

*It was <sup>5</sup>\_\_\_\_\_!*

*We were in trouble.*

- Use adverbs to add interest:

*All of a sudden, / <sup>6</sup>\_\_\_\_\_, / <sup>7</sup>\_\_\_\_\_, / Luckily, ... really (good)*

*... incredibly (beautiful)*

*... completely (lost)*

- Use a summarising statement to begin or end your story:

*I'll never forget <sup>8</sup>\_\_\_\_\_ I first saw ... /*

*the time I decided to ... / when I first went ... /*

*... was an event I'll never forget.*





## 8 Read the story and choose the correct option.

'This is a bad start', I thought and looked again at the directions on my phone. I was trying to find the city hospital for my first day of work experience in the IT department there. Unfortunately, I was very late and totally lost.

<sup>1</sup>*I have to say/Anyhow* it was my fault. I forgot to check the route the day before. <sup>2</sup>*During/Anyway*, my phone said to turn right, but <sup>3</sup>*in fact/I have to say* there was no right turn, just a wall! What was I going to do? I was already ten minutes late. 'Go back to the main road and try again,' I thought 'and go quickly!' I hurried along as fast as I could. I was turning a corner <sup>4</sup>*then/when* suddenly there was a bang <sup>5</sup>*and/so* everything went black.

<sup>6</sup>*When/I must admit* I opened my eyes, there were four worried faces looking down at me. 'Are you alright?' 'Yes, I think so', I said. My head hurt. <sup>7</sup>*Then/While* I remembered the bang and the darkness. 'What happened?'

'Well, you were hurrying along looking at your phone, and you bumped into that tree. We thought you should go to hospital so we've called an ambulance.'

Luckily, the doctor said I was fine. <sup>8</sup>*Anyway/I must admit* that was not how I expected to arrive at the hospital for my first day of work experience!

## 5 Read the extracts from different stories. Find and correct three mistakes in each.

1 I was 14 years old then I first became interested in archaeology. I was looking for fossils one Sunday afternoon when I made the discovery that made me famous. I am never forget the feeling of seeing it there in the ground for the first time. It was awesome?

2 We were in the Chemistry lab at school when we noticed the strange smell. All of a suddenly, there was a loud bang. What is going on? Our teacher walked in from a lab next to ours. Her hair was a mess and her glasses were black with smoke. Lucky, she was more shocked than hurt. 'What happened, Miss?' asked one of my classmates.

3 The school trip to the science museum is a day I'll never remember. We had a great time at the museum. When we were going back to meet the others at the bus to go home, my friend and I got stuck in a lift. The lights went off and the alarm didn't work. We were on trouble. What we were going to do?

6 **SPEAKING** Choose one of the extracts in Exercise 5 and say what you think happened next.

7 Complete the LANGUAGE FOCUS with the underlined linkers in the story.

### LANGUAGE FOCUS

#### Informal linkers

In narrative stories we often use:

- *I have to say* or <sup>1</sup>*I must admit* to emphasise the next piece of information.
- *Anyhow* or <sup>2</sup>\_\_\_\_\_ to change the subject or move the story on.
- *Actually* or <sup>3</sup>\_\_\_\_\_ to show that the next piece of information is surprising.
- *And, but, because,* <sup>4</sup>\_\_\_\_\_ to join parts of sentences.
- *Then, when, while,* <sup>5</sup>\_\_\_\_\_ to make the order of events clear.

### SHOW WHAT YOU'VE LEARNT

9 Do the writing task. Use the ideas in the **WRITING FOCUS** and the **LANGUAGE FOCUS** to help you.

Your teacher has asked you to write a story ending with: *I was so relieved. It was finally over!*

Use the questions below to help you.

- Where were you?
- When was it?
- Who was with you?
- What happened?
- What could you see and hear?
- How did you feel?
- What did you do next?
- How did it end?

Remember to:

- give your story a title.
- make your story interesting for the reader.
- give your story a strong ending.

It was a chilly autumn morning ...



# 2.8

## SPEAKING

Telling a story

*I can tell a story and show interest in someone's story.*

1 **SPEAKING** Look at the photo of Tom. Then ask and answer the questions.

- 1 Where was Tom?
- 2 What was he doing?
- 3 What was the problem?

2 **1.43** Read and listen to the story. Compare your ideas in Exercise 1.



Lisa: Hi Tom. How was your holiday in Australia? 1  
 Tom: It was really good, thanks ... except for the day I nearly died. }  
 Lisa: What happened?  
 Tom: I was doing some climbing. At first the sun was shining and I was enjoying myself. 2  
 But all of a sudden the weather changed. 3  
 It became really foggy and I couldn't see the path. }  
 Lisa: Oh dear, that sounds frightening.  
 Tom: I was pretty worried. I continued for a while, but finally I realised I was lost.  
 Lisa: What did you do?  
 Tom: Fortunately, I had my phone with me so I called my father – 9,000 miles away in England! He called the Australian police and told them where I was. Then they called me. Unfortunately, my battery went dead after five seconds. It was dark and cold. I sat under a rock, put on my torch and waited. 4  
 Lisa: Oh no, what a nightmare!  
 Tom: Eventually, they found me. I was so relieved. 5  
 I used to go climbing on my own all the time, but I'll never do it again. }

3 There are often five stages in a story. Match stages 1–5 in Tom's story with headings a–e below.

- |                 |                          |               |                          |
|-----------------|--------------------------|---------------|--------------------------|
| a background    | <input type="checkbox"/> | d problem     | <input type="checkbox"/> |
| b final comment | <input type="checkbox"/> | e main events | <input type="checkbox"/> |
| c introduction  | <input type="checkbox"/> |               |                          |

4 Read the **SPEAKING FOCUS**. Complete the examples with the underlined phrases in the story in Exercise 2.

### SPEAKING FOCUS

#### Telling a story

##### Use the right tenses

- Past Continuous for the 'background':  
The sun was shining and I was enjoying myself.
- Past Simple for the 'problem' and the 'main events':  
The weather changed. I couldn't see the path.

##### Use linkers

- **Beginning:** To start with/At <sup>2</sup> \_\_\_\_\_
- **Middle:** Suddenly/All of a <sup>3</sup> \_\_\_\_\_/Luckily/Fortunately/<sup>4</sup> \_\_\_\_\_
- **End:** In the end/Finally/<sup>5</sup> \_\_\_\_\_

##### Say how you felt

I was excited/frightened/surprised/shocked/worried, etc.

##### Make a 'final comment'

It was the best/worst day of my life!  
 I'll never forget the look on his face!  
 I'll never <sup>6</sup> \_\_\_\_\_ .

#### Listening to a story

##### Neutral response

Really?/Oh dear./Oh no.

##### Strong response

That sounds amazing/funny/<sup>7</sup> \_\_\_\_\_ .  
 What a great story/<sup>8</sup>a \_\_\_\_\_ !

##### Respond with questions

What happened? What did you do?

5 Follow the instructions to prepare your story.

- 1 Choose a topic from the box or one of your own ideas.

a dangerous situation   a mistake  
 some good or bad news   some good or bad luck  
 a nice surprise   something that happened on holiday  
 a problem with technology

- 2 Think about what you are going to say and make notes under the headings for the five stages of a story in Exercise 3.

6 **SPEAKING** Follow the instructions below to practise telling your stories. Then act out your dialogue to the class.

**Student A:** Use your notes in Exercise 5 to tell the story.

**Student B:** Use the **SPEAKING FOCUS** to respond to what Student A says.

### ROLE-PLAY Telling a story

**10** Watch the video and practise. Then role-play your dialogue.

**2.1 Vocabulary** 🔊 4.9

astronomer /ə'strɒnəmə/  
 astronomy /ə'strɒnəmi/  
 biologist /baɪ'ɒlədʒɪst/  
 biology /baɪ'ɒlədʒi/  
 broadband /'brɔːdbænd/  
 camera /'kæməərə/  
 chemist /'kemɪst/  
 chemistry /'keməstri/  
 collect specimens /kə'lekt 'spesəmənz/  
 computer science /kəm'pjʊtə ,saɪəns/  
 computer scientist /kəm'pjʊtə  
 'saɪəntɪst/  
 desktop computer /,desktp  
 kəm'pjʊtə/  
 develop a theory /dɪ'veləp ə 'θəri/  
 digital /'dɪdʒəl/  
 discover /dɪ'skʌvə/  
 do an experiment /,duː ən  
 ɪk'sperɪmənt/  
 do research /,duː rɪ'sɜːtʃ/  
 download music /,daʊnləʊd 'mjuːzɪk/  
 gravity /'grævəti/  
 invent /ɪn'vent/  
 keyboard /'kiːbɔːd/  
 laptop /'læptɒp/  
 laser printer /'leɪzə ,prɪntə/  
 mathematician /,mæθəmə'tɪʃən/  
 mathematics /,mæθə'mætɪks/  
 mouse /maʊs/  
 observe /əb'zɜːv/  
 password /'pɑːswɜːd/  
 physicist /'fɪzɪsɪst/  
 physics /'fɪzɪks/  
 planet /'plænət/  
 science /'saɪəns/  
 scientist /'saɪəntɪst/  
 screen /skriːn/  
 search engine /'sɜːtʃ ,endʒən/  
 smartphone /'smɑːt'fəʊn/  
 take measurements /,teɪk 'meɪzəmənts/  
 take notes /,teɪk 'nəʊts/  
 text message /'tekst ,mesɪdʒ/  
 update your profile /ʌp,deɪt jɔː  
 'prəʊfaɪl/  
 username /'juːzəneɪm/  
 visit a website /,vɪzət ə 'websaɪt/  
 web browser /'web ,braʊzə/

**2.2 Grammar** 🔊 4.10

arrive /ə'raɪv/  
 burn yourself /'bɜːn jə'self/  
 carriage /'kærɪdʒ/  
 coast /kəʊst/  
 crash /kræʃ/  
 direct sunlight /daɪ'rekt 'sʌnlɑːt/  
 e-book /'iː bʊk/  
 E ink /'iː ɪŋk/  
 electronic /,elɪk'trɒnɪk/  
 e-reader /'iː ,riːdə/  
 get dark /,get 'dɑːk/  
 get home /,get 'həʊm/  
 hill /hɪl/  
 imagine /ɪ'mædʒɪn/  
 reach towards /,riːtʃ tə'wɔːdz/  
 reply /rɪ'plaɪ/

researcher /rɪ'sɜːtʃə/  
 rough /rʌf/  
 servant /'sɜːvənt/  
 silver cross /,sɪlvə 'krɒs/  
 text sb /'tekst ,sʌmbɒdi/  
 thick forest /,θɪk 'fɒrəst/  
 vision /'vɪʒən/  
 wake up /,weɪk 'ʌp/

**2.3 Listening** 🔊 4.11

affect /ə'fekt/  
 analyse data/evidence /,ænləɪz 'deɪtə/  
 'evədəns/  
 analysis /ə'næləsəs/  
 ancestor /'ænsəstə/  
 archaeologist /,ɑːki'ɒlədʒɪst/  
 archaeology /,ɑːki'ɒlədʒi/  
 collect data/evidence /kə'lekt 'deɪtə/  
 'evədəns/  
 conservation /,kɒnsə'veɪʃən/  
 conservationist /,kɒnsə'veɪʃənɪst/  
 discovery /dɪ'skʌvəri/  
 environment /ɪn'veɪrənmənt/  
 evolution /,ɪ:və'lʊːʃən/  
 exploration /,ɛksplə'reɪʃən/  
 explore /ɪk'splɔː/  
 find a solution /,faɪnd ə sə'ljuːʃən/  
 geologist /dʒɪ'ɒlədʒɪst/  
 geology /dʒɪ'ɒlədʒi/  
 global warming /,gləʊbəl 'wɔːmɪŋ/  
 linguist /'lɪŋgwɪst/  
 linguistics /lɪŋ'gwɪstɪks/  
 marine biologist /mə,rɪ:n baɪ'ɒlədʒɪst/  
 marine biology /mə,rɪ:n baɪ'ɒlədʒi/  
 observation /,əbzə'veɪʃən/  
 protect the environment /prə'tekt ðɪ  
 ɪn'veɪrənmənt/  
 protection /prə'tekʃən/  
 psychologist /saɪ'kɒlədʒɪst/  
 psychology /saɪ'kɒlədʒi/  
 publish a research paper/evidence  
 /,pʌblɪʃ ə rɪ'sɜːtʃ ,peɪpə'evədəns/  
 solution /sə'ljuːʃən/  
 solve /sɒlv/  
 spend hours /,spend 'aʊəz/  
 technology /tek'nɒlədʒi/

**2.4 Reading** 🔊 4.12

above zero /ə,bʌv 'zɪərəʊ/  
 airstrip /'eəstriːp/  
 average temperature /,ævərɪdʒ  
 'tempɪrətʃə/  
 below zero /bɪ,ləʊ 'zɪərəʊ/  
 boiling /'bɔɪlɪŋ/  
 canteen /kæn'tiːn/  
 chilly /'tʃɪli/  
 cold /kəʊld/  
 degree centigrade /dɪ'ɡriː  
 'sentəɡreɪd/  
 fall /fɔːl/  
 freezing /'friːzɪŋ/  
 hot /hɒt/  
 jigsaw /'dʒɪɡzɔː/  
 layer /'leɪə/  
 own (adj) /əʊn/  
 permanent /'pɜːmənənt/

plus/minus 25 degrees /'plʌs/'maɪnəs  
 'twenti 'faɪv di 'ɡriːz/  
 reach home/the South Pole /,riːtʃ  
 'həʊm/ðə saʊθ 'pəʊl/  
 recorded /rɪ 'kɔːdɪd/  
 remains /rɪ'meɪnz/  
 return to /rɪ'tɜːn tə/  
 rise /raɪz/  
 run a business/research station /,rʌn ə  
 'bɪznəs/rɪ'sɜːtʃ 'steɪʃən/  
 save /seɪv/  
 the dark /ðə dɑːk/  
 warm /wɔːm/

**2.5 Grammar** 🔊 4.13

astronaut /'æstrɒnɔːt/  
 give out /,ɡɪv 'aʊt/  
 GPS /dʒiː piː 'es/  
 mobile phone /,məʊbaɪl 'fəʊn/  
 inside /ɪn'saɪd/  
 outside /aʊt'saɪd/

**2.6 Use of English** 🔊 4.14

cheer /tʃɪə/  
 civil rights /,sɪvəl 'raɪts/  
 fast asleep /,fɑːst ə'sliːp/  
 graduate from /'ɡrædʒueɪt frəm/  
 look up /,lʊk 'ʌp/  
 space /speɪs/  
 stand up /,stænd 'ʌp/

**2.7 Writing** 🔊 4.15

distant /'dɪstənt/  
 loud thunder /laʊd 'θʌndə/  
 fossils /'fɒsəlz/  
 get stuck /get stʌk/  
 lift /lɪft/  
 directions /daɪ'rekʃənz/  
 route /ruːt/  
 turn a corner /tɜːn ə 'kɔːnə/

**2.8 Speaking** 🔊 4.16

all of a sudden /,ɔːl əv ə 'sʌdn/  
 frightened /'fraɪnd/  
 go dead /,ɡəʊ 'ded/  
 nightmare /'naɪtmeə/  
 put on /pʊt 'ɒn/  
 shocked /ʃɒkt/  
 surprised /sə'praɪzd/  
 torch /tɔːtʃ/

## VOCABULARY AND GRAMMAR

1 Complete the sentences with the correct form of the verbs in the box. There is one extra verb.

collect develop discover do invent  
observe take

- Edwin Hubble (1889–1953), an American astronomer, \_\_\_\_\_ galaxies through a telescope.
- Last month the scientists \_\_\_\_\_ specimens of some sea spiders from Antarctica.
- Make sure you \_\_\_\_\_ notes when we are at the museum.
- Do you know who \_\_\_\_\_ the electric guitar?
- This month two teams of archaeology students \_\_\_\_\_ research in South Africa.
- Linguists and psychologists are cooperating to \_\_\_\_\_ a new theory of language learning.

2 Complete the sentences with the correct form of the words in capitals.

- Mr Marco works as a \_\_\_\_\_ at the University of Alaska. **PHYSICS**
- We all tried to find the best \_\_\_\_\_ to the problem. **SOLVE**
- I want to study \_\_\_\_\_ at university. **CHEMIST**
- A \_\_\_\_\_ is someone who works to protect plants and animals. **CONSERVE**
- Take \_\_\_\_\_ of your desk before you buy a new computer screen. **MEASURE**
- The cost of space \_\_\_\_\_ is very high. **EXPLORE**

3 Use the prompts to write sentences.

- My computer / crash / while / I / download / a song.
- Tom / lose / his smartphone / when / he / run / in the park.
- The first international Internet chat / take place / in February 1989.
- It / be / so hot yesterday. The temperature / rise / to 38 degrees Celsius.
- What / you / do / this time last year?
- I / wait / for the photos from Sandra / last night / but / she / not / send / me any.

4 Choose the correct option.

- Broadband Internet *didn't use to be* / *weren't* so popular in the 1980s.
- Did your grandparents *use to buy* / *buy* a black and white television in the 1960s?
- We *did* / *used to do* a lot of exercises last weekend.
- My brother *used to spend* / *was spending* a few hours a day online.
- Last winter the temperature *used to fall* / *fell* to minus 28 degrees Celsius.
- Did they use to use* / *Did they use* GPS when they were climbing in the Alps?

## USE OF ENGLISH

5 Choose the answer, A, B or C, that is closest in meaning to the underlined words.

- NASA is running a project on using 3D printers to make food in space.  
A is analysing      B is organising  
C is planning
- When Anton was a student, he applied for his first job.  
A studied      B was studying  
C used to study
- Lack of water is a permanent problem in this country.  
A a problem that is always there  
B a problem that is sometimes there  
C a new problem
- X: When I was a child, I was in a serious car accident and I spent a month in hospital.  
Y: What a nightmare!  
A What a great story!  
B That sounds frightening!  
C Really? That's cool!
- My sister got lost in the forest, but, luckily, she managed to phone for help.  
A suddenly  
B eventually  
C fortunately
- We analysed the data while we were talking online.  
A before the online talk  
B after the online talk  
C during the online talk

6 Choose the correct answer, A, B or C, to complete both sentences.

- She \_\_\_\_\_ for her bag and took out the phone. We \_\_\_\_\_ home late in the afternoon.  
A asked  
B arrived  
C reached
- They haven't published their research \_\_\_\_\_ yet. How much \_\_\_\_\_ do we need to print the documents?  
A paper  
B report  
C ink
- The radio has warned of \_\_\_\_\_ temperatures today. Cook the pasta in \_\_\_\_\_ water for about 10 minutes.  
A freezing  
B boiling  
C high
- I can't believe you've bought a desktop \_\_\_\_\_! To be a \_\_\_\_\_ scientist you have to be good at maths.  
A rocket  
B computer  
C space
- As \_\_\_\_\_ as they discovered the cave, they started exploring it. They reached the top too \_\_\_\_\_ and spent hours waiting for the sunrise.  
A soon  
B early  
C fast



## READING

- 7 Read three texts about science and technology. Choose the correct answer, A, B or C.

### Underwater forest

Several years ago, scuba diver Chas Broughton discovered an underwater forest of massive ancient cypress trees. Located twenty kilometres from the coast of Alabama, in the Gulf of Mexico, it is home for thousands of sea animals. Chas told a local journalist about the discovery, but they kept it secret until 2004, when Hurricane Ivan uncovered some of the trees. Then scientists started exploring the area.

They have suggested that the forest is more than 50,000 years old. In the past, the ocean level in the area was 125 metres lower than today, but when it rose, the water swallowed the trees up. The forest is so unique that conservationists are now working to make it a marine protected area.

- 1 The scientists  
A found out about the discovery from a local journalist.  
B started visiting the area after the 2004 hurricane.  
C are trying to protect the forest.

### Your ideas in 3-D

Are you interested in 3-D printing but don't want to buy another expensive gadget?

Then this offer is for you! Our 3-D printing service will help you produce a figure from your favourite video game, parts for a robot you are building in your basement, beautiful jewellery or decorations for your home. Just choose a design from our catalogue or create your own, decide what material, size and colour you want and send your project to us.

**We will print the object and send it to you in no time!**

For more information visit our website at:  
[www.wepaint3d.com](http://www.wepaint3d.com)

- 2 The advertisement is addressed to people who  
A want to buy a 3-D printer.  
B are professional designers.  
C want to use 3-D printing technology.

Last week I took part in an unusual survey. A psychologist invited forty-four families and asked us different questions about eating habits now and in the past. She wanted to find out why fathers give children less healthy food than mothers. Strange, isn't it? But it's true in my family.

When my mum isn't at home for dinner, Dad orders a pizza. Mum doesn't accept unhealthy food because she feels responsible for what we eat. Dad cares more about my education or hobbies.

According to the survey, in most families the situation was and is similar. Teenagers observe their parents and learn how to behave in the future. My parents used to observe their parents and now I am observing them.

- 3 The survey the writer took part in shows that  
A mothers and fathers look after families in different ways.  
B fathers don't care about families as much as mothers.  
C teenagers would like to change eating habits in their families.

## SPEAKING

- 8 In pairs, complete the questions with one word in each gap. The first letters are given. Then ask and answer the questions.

- 1 W\_\_\_\_\_ do you use the Internet for?
- 2 Do you use s\_\_\_\_\_ media? Why?/Why not?
- 3 What i\_\_\_\_\_ do you find the most useful? Why?
- 4 What were you doing y\_\_\_\_\_ at 8 p.m.?



- 9 In pairs, write down five words to describe the photo.

- 10 Imagine you are one of the people in the photo. Answer the questions.

- 1 When was it?
- 2 What was the weather like?
- 3 Who were you with?
- 4 What were you doing? What happened?
- 5 How did you feel about it in the end?

- 11 When was the last time you got lost? What happened? Discuss with a partner.

## WRITING

- 12 Read the writing task and write the story.

You agreed to write a story for the *Me and Technology* section of your school newspaper. The title of your story is: *The day technology saved me*. Remember to:

- explain when and where the situation happened.
- describe the events and show their sequence using the correct past tenses.
- make the story interesting for the reader.
- give your story an interesting ending.

## VOCABULARY

2.1

Online • phones and computers  
• word building • collocations

### SHOW WHAT YOU KNOW

1 Complete the sentences with the correct form of the verbs from the box.

( download follow go post update visit )

How do I post this photograph of us on social media?

- I don't understand why so many people \_\_\_\_\_ celebrities on Twitter.
- Akito \_\_\_\_\_ online the moment she wakes up to check her social media messages.
- I've never \_\_\_\_\_ this website before. It has some excellent information on it!
- It's very important to \_\_\_\_\_ your social media profile. Then everybody has the latest information about you.
- Dean is the only person I know that still buys CDs. Most people \_\_\_\_\_ music on computers now.

### WORD STORE 2A | Phones and computers

2 Complete the texts with compound nouns. The first and last letters are given.

@ **COMPUCLEAN**, we clean all kinds of computers including **desktop computers** and **l\_\_\_\_\_s**.

Call us now on 073 123 345 456 for more information.



### REMEMBER THIS

*Log on* and *log in* both mean start using a computer system or website (you often have to enter a username and password to do this, but not always). Their antonyms are *log off* and *log out*.

### REMEMBER BETTER

When you learn phrasal verbs, check in the dictionary or online and find the antonym. We often (but not always) use the opposite preposition, e.g. *switch on* ≠ *switch off*.

A Write the opposites. Use a dictionary if necessary.

- |                        |   |                    |
|------------------------|---|--------------------|
| scroll up              | ≠ | <u>scroll down</u> |
| 1 turn up (the volume) | ≠ | _____              |
| 2 turn on              | ≠ | _____              |
| 3 log on               | ≠ | _____              |

B Complete the sentences with phrasal verbs from Exercise A.

The information you need is at the bottom of the webpage. You need to scroll down.

- I can't study with that loud music playing. Please will you \_\_\_\_\_ the volume.
- Use your username and password to \_\_\_\_\_ to the website.
- \_\_\_\_\_ the TV before you go to bed.

Thank you for joining **www.english4U2learn.com**, the number one website for language learners. We have sent you an email with your <sup>2</sup>**u**\_\_\_\_\_ **e** and other login details. Follow the link in the email and choose a <sup>3</sup>**p**\_\_\_\_\_ **d** of nine characters or more. And remember, you can use a <sup>4</sup>**l**\_\_\_\_\_ **r** **p**\_\_\_\_\_ **r** to print your personal daily wordlist, so you can study any time, anywhere!

### howitworks.com - Internet searches

To use the Internet you need to have a <sup>5</sup>**w**\_\_\_\_\_ **b** **b**\_\_\_\_\_ **r**. Then, you can use the touch screen on your phone or the <sup>6</sup>**k**\_\_\_\_\_ **d** on your computer to put a word or phrase into a <sup>7</sup>**s**\_\_\_\_\_ **h** **e**\_\_\_\_\_ **e** such as Google. If you have <sup>8</sup>**b**\_\_\_\_\_ **d**, the information you are trying to find appears very quickly.

our comments on the topic of **teenage communication**

**will328 says:**

Most young people do not use their phones for speaking to people. We either look for information on the Internet or we send <sup>9</sup>**t**\_\_\_\_\_ **t** **m**\_\_\_\_\_ **s** to family and friends.

## WORD STORE 2B | Word building

- 3 Complete the sentences with the correct form of the words in capitals.



Charles Darwin, the world famous *biologist*, travelled to many exotic places such as the Galapagos Islands.

### BIOLOGY

- Galileo Galilei, a famous \_\_\_\_\_, was the first person to see the rings of Saturn. He did this using his telescope in 1610. **ASTRONOMY**
- The famous \_\_\_\_\_ Isaac Newton was born on Christmas Day 1642. And it's not true that an apple hit him on the head. **PHYSICS**
- Larry Page, the \_\_\_\_\_ who helped start the company Google, is now worth \$44.5 billion. **COMPUTER SCIENCE**
- The Nobel Prize is named after Alfred Nobel. He was a \_\_\_\_\_ and he is famous for making dynamite. **CHEMISTRY**
- Euclid was a \_\_\_\_\_ and many people call him the Father of Geometry. He wrote one of the first textbooks for teaching Maths. **MATHEMATICS**

## WORD STORE 2C | Collocations

- 4 Choose the correct verbs.

- When you *do / make* an experiment, it's not always a success.
- I prefer *collecting / taking* specimens. It's better than working in the laboratory.
- Was it Marie Curie that *invented / discovered* radium?
- The Scottish man, John Logie Baird, *invented / discovered* television in 1925.
- Please *take / do* the important measurements this afternoon, Adam.
- Famous scientists often *develop / observe* important theories.
- Do you prefer *taking / doing* notes on a computer or a piece of paper?
- Today we can *do / make* research on the Internet. In the past it wasn't so easy.
- Scientists spend a lot of time just *observing / discovering* their experiments.

## SHOW WHAT YOU'VE LEARNT

- 5 Choose the correct answers A–C.

- I can't enter the website. Something is wrong. Am I using the correct \_\_\_?  
A keyboard  
B password  
C text message
- I've started using a new \_\_\_. I type in what I'm looking for on the Internet and it finds the websites I want really quickly.  
A broadband  
B username  
C search engine
- Sarah spends a lot of time \_\_\_ specimens in the countryside. She truly enjoys being a biologist.  
A collecting  
B developing  
C inventing
- Kevin wants to be a computer \_\_\_ when he is older.  
A science  
B scientist  
C biologist
- Ben emailed the document to me. I made a copy of it on paper with the \_\_\_ for you.  
A keyboard  
B web browser  
C laser printer
- I'm busy at the moment. I'm \_\_\_ notes on this film about astronomy.  
A making  
B doing  
C taking
- Most people have a \_\_\_ Internet connection now because it's fast.  
A web browser  
B broadband  
C desktop
- I need a new \_\_\_ for my desktop computer. The 'Enter' key doesn't work.  
A keyboard  
B laptop  
C username
- You must be very creative to \_\_\_ something completely new and useful for people to use.  
A invent  
B discover  
C observe
- James' father is a(n) \_\_\_. He develops new drugs for people who are sick.  
A astronomer  
B chemist  
C physicist

/10



#### SHOW WHAT YOU KNOW

#### 1 Complete the sentences with the Past Simple forms of the verbs in brackets.

- Graeme <sup>a</sup> *went* (go) online this morning and <sup>b</sup> \_\_\_\_\_ (buy) tickets for the concert.
- Simone and Kay <sup>a</sup> \_\_\_\_\_ (be) very busy all day yesterday. They <sup>b</sup> \_\_\_\_\_ (not/have) time for a break.
- <sup>a</sup> \_\_\_\_\_ (Carly/be) at the Science club last week?  
<sup>b</sup> \_\_\_\_\_ (she/give) her presentation?
- <sup>a</sup> \_\_\_\_\_ (you/download) those games recently?  
<sup>b</sup> \_\_\_\_\_ (they/be) free?

#### 2 ★ Complete the dialogue between a policeman and Steve with the Past Continuous forms of the verbs in brackets.

At the police station ...

- P: What *were you doing* (do) at six o'clock on the 23rd of October?  
S: Erm ... I don't remember. I think I was at home. Yes, I <sup>1</sup> \_\_\_\_\_ (watch) TV.  
P: Was anyone at home with you?  
S: No, nobody. It was just me. I <sup>2</sup> \_\_\_\_\_ (not/work) that day.  
P: I see. So nobody saw you at home at 6 p.m. that day?  
S: Oh ... er ... yes of course. Silly me! My wife was there too. She <sup>3</sup> \_\_\_\_\_ (make) dinner in the kitchen.  
P: And what about your children?  
S: Oh yeah, the kids! They <sup>4</sup> \_\_\_\_\_ (do/homework) upstairs in their bedrooms.  
P: And your mother-in-law?  
S: Oh yes, of course. Er ... She <sup>5</sup> \_\_\_\_\_ (stand) in the kitchen.  
P: I see. So, can you explain why we have pictures of you waiting in your car outside the bank at 6 p.m.?

#### 3 ★ Complete the sentences with the Past Continuous forms of the verbs in brackets.

Alexander Graham Bell *was experimenting* (experiment) in his laboratory when he made the first successful telephone call.

- \_\_\_\_\_ (Archimedes/have) a bath when he shouted 'Eureka!'?
- Mark Zuckerberg \_\_\_\_\_ (study) at Harvard University when he created Facebook.
- \_\_\_\_\_ (Isaac Newton/sit) under an apple tree when he thought of his theory of gravity?
- Marie Curie \_\_\_\_\_ (not/live) in Poland when she won her first Nobel Prize in 1903.

#### 4 ★★ Choose the correct forms.

- Sorry, I <sup>a</sup> *had* / *was having* a shower when you <sup>b</sup> *called* / *were calling*.
- <sup>a</sup> *Did Lola stand* / *Was Lola standing* outside when it <sup>b</sup> *started* / *was starting* to rain?
- When the car <sup>a</sup> *crashed* / *was crashing* into us, we <sup>b</sup> *waited* / *were waiting* at the traffic lights.
- Fortunately, we <sup>a</sup> *didn't ski* / *weren't skiing* when the bad weather <sup>b</sup> *came* / *was coming*.

#### 5 ★★★ Complete the story with the Past Simple or Past Continuous forms of the verbs in brackets.

What *were you doing* (you/do) the last time you <sup>1</sup> \_\_\_\_\_ (see) something truly amazing? Well, fisherman and journalist Al McGlashan <sup>2</sup> \_\_\_\_\_ (fish) with friends in his private boat when he <sup>3</sup> \_\_\_\_\_ (find) something very, very strange. At first the group of fishermen <sup>4</sup> \_\_\_\_\_ (not/know) what it was, but when they <sup>5</sup> \_\_\_\_\_ (look) closely, they saw the body of a giant squid – almost 4 metres long!

Al got out his video camera and then another amazing thing <sup>6</sup> \_\_\_\_\_ (happen). He <sup>7</sup> \_\_\_\_\_ (film) the squid when a large blue shark <sup>8</sup> \_\_\_\_\_ (arrive) and began eating the dead squid for lunch!

Al <sup>9</sup> \_\_\_\_\_ (tell) an Australian newspaper that in all his years of fishing he'd never seen anything like it.



#### SHOW WHAT YOU'VE LEARNT

#### 6 Find and correct the mistakes.

He ~~was clicking~~ on an icon and nothing happened.  
*clicked*

- Tom was downloading music when his computer was getting the virus. \_\_\_\_\_
- Annabelle visited the zoo when she saw an elephant for the first time. \_\_\_\_\_
- Grandma, were you watching television when Apollo 11 was landing on the moon? \_\_\_\_\_
- They were waiting for the bus when it was starting to snow. \_\_\_\_\_
- The girls were playing tennis when Helen was breaking her arm. \_\_\_\_\_
- Was the computers working this morning when you arrived? \_\_\_\_\_

# LISTENING LANGUAGE PRACTICE

2.3


Science and scientists  
• collocations

**1 Read the extracts of interviews with two people and choose the correct answers.**

- 1 Speaker A is a *child psychologist / a children's doctor*.
- 2 Speaker B is a *deep sea diver / a marine biologist*.

**2 Complete the text with the correct verbs from the box. Change the form of the verb if necessary.**

(analyse collect do (x2) explore protect)

Extract from Student's Book recording  1.32

- A: I always want to understand why people do what they do – why do they behave that way? What are they thinking? I'm interested in how we develop from birth to the age of seven. [...] I love *doing* research and <sup>1</sup>\_\_\_\_\_ data. When I finish my studies, I want to work in a children's hospital. [...]
- B: The first time I went scuba diving, I saw a little fish swimming away into the distance, and at that moment I thought 'Oh yes, that's what I want to do – I want to <sup>2</sup>\_\_\_\_\_ oceans, <sup>3</sup>\_\_\_\_\_ evidence about global warming and help to <sup>4</sup>\_\_\_\_\_ marine life.' I love my work – I can't understand why everybody isn't <sup>5</sup>\_\_\_\_\_ my job.



**3 Choose the word which does not form a collocation. Use a dictionary if necessary.**

- 1 **explore** oceans / planets / people / countries
- 2 **analyse** chemistry / data / evidence / research
- 3 **do** experiments / solutions / research / business
- 4 **collect** evidence / signatures / information / science
- 5 **protect** marine life / the environment / wildlife / biology

**4 Complete the sentences with collocations from Exercise 3.**

Even simple things like not throwing rubbish in the sea help to protect *marine life*.

- 1 I don't like beach holidays. I prefer to explore different \_\_\_\_\_ and to visit places where tourists don't usually go.
- 2 The police analysed the \_\_\_\_\_ but weren't able to solve the crime.
- 3 My dad is travelling for work again. His company is doing \_\_\_\_\_ with a Japanese car company.
- 4 Emma's got a summer job with a marketing company doing \_\_\_\_\_ in a shopping centre. She has to stop shoppers and ask them a few questions.
- 5 Our class is collecting \_\_\_\_\_ for a petition against scientific experiments on animals.
- 6 The government should not build a new road here. We need to protect \_\_\_\_\_ and the natural environment in this area.

**VOCABULARY PRACTICE | Science and scientists**

**5 Look at the vocabulary in lesson 2.3 in the Student's Book. Choose a word or phrase from each pair in the box to complete the sentences.**

archaeology / an archaeologist  
conservation / a conservationist  
geology / a geologist    linguistics / a linguist  
marine biology / a marine biologist  
psychology / a psychologist

- Did you know that *a linguist* studies how languages work?
- 1 You must be able to swim if you want to be \_\_\_\_\_. You will probably work in the sea a lot of the time.
  - 2 Haley has \_\_\_\_\_ that she meets. He helps her to talk about her feelings.
  - 3 There's an interesting course on \_\_\_\_\_ in the local youth centre. Maybe I can do it and then help people learn more about saving the planet.
  - 4 Rafeale wants to be \_\_\_\_\_ because he's always liked looking for old things buried in the ground.
  - 5 I don't think I'd like \_\_\_\_\_ – you often examine rocks and stones and get your clothes and hands dirty all the time.

**WORD STORE 2D | Collocations**

**6 Complete the sentences with the missing verb in the correct form. The first letters are given.**

Allan *analysed* the data yesterday and sent me the results this morning.

- 1 It's important to **c**\_\_\_\_\_ lots of data before making any hypothesis.
- 2 Next week, Margaret will **p**\_\_\_\_\_ her first research paper in a science journal. She's very excited.
- 3 Everybody is responsible for helping to **p**\_\_\_\_\_ the environment. So turn off the computer when you are not using it!
- 4 Dr Brown often **s**\_\_\_\_\_ hours looking at test results before he finds a problem.

# 2.4

## READING

All about passwords • antonyms  
• nouns and verbs • the temperature

### 1 Read the text quickly and choose the best title.

- 1 How to create a secure and easy-to-remember password
- 2 How to remember all your passwords
- 3 How to guess someone's password



1 \_\_\_\_\_  
We all know the basic rules for choosing good passwords and keeping them secret. Rule number one: use numbers, symbols and a good mix of letters – upper case (A, B, C) and lower case (a, b, c). Rule number two: use a different password for each of the devices you use or for each website you visit. Rule number three: change your passwords regularly. Rule number four: never write your passwords down. These rules sound easy to follow, right?

2 \_\_\_\_\_  
Well, not really. The rules say that a secure password should look something like this: 'N0r@5%\_fpO&47d1nk'. Do you think you can remember that? Don't forget you should have several different ones, you shouldn't write them down AND you have to change them every few weeks. Does this sound like an impossible task? Well, for most people, it is. So what do most of us do?

3 \_\_\_\_\_  
Recently, researchers had a chance to analyse secret information about passwords. They found that many of us totally ignore the experts' advice and choose simple, easy to remember and extremely insecure passwords. Data shows that one out of every ten people uses '1234' as the pin number for their bank cards, and that the passwords 'welcome', '123456', 'ninja' and of course 'password', are some of the most popular choices.

Even governments choose terrible passwords. It seems hard to believe, but in the 1980s, the American government actually used the 'secret code' '00000000' to unlock its nuclear missiles.

4 \_\_\_\_\_  
So how can we make our passwords secure and memorable\*? Well, first, the length of your password is important. For a hacker with a computer that can make 1000 guesses per second, a lower case, 5-letter password like 'ftmps' takes only around 3hrs and 45 minutes to crack\*. A similar password with 20 letters takes a little longer – around 6.5 thousand trillion centuries\*!

5 \_\_\_\_\_  
Hackers are very good at guessing when we choose symbols and numbers instead of letters. For example, the password 'M@nch3st3r' seems like a good one, but the code is actually very simple – first letter = upper case, @ = a, 3 = E. It is easy for

hackers to program their computers to look out for these kinds of codes. Because the length of the password is so important, a group of words written in lower case, e.g. 'help cheese monkey swimming' is much more secure than something like 'M@nch3st3r', and probably a bit easier to remember (think of a monkey – it is shouting for help and swimming towards some cheese!).

6 \_\_\_\_\_  
One day, we probably won't have to worry about all this because we won't need passwords. Some laptop computers already have fingerprint\* readers. Recently, scientists in the US have designed a prototype ring for your finger that sends electricity through your skin to a touch screen to tell computers and phones who you are. For now though, we still need passwords, and if you want one that is secure and memorable, the best advice is to make it loooooooooooooooooooooooooooooong.



### GLOSSARY

**memorable** (adj) – easy to remember  
**crack** a code or a password (v) – work it out or solve it  
**century** (n) – 100 years

**fingerprint** (n) – a mark made by the pattern of the skin on the end of your fingers



**2 Read the text again. Match headings A–H with paragraphs 1–6. There are two extra headings.**

- A NuM83rs @nd sYmB0ls
- B How to become a hacker
- C No more passwords!
- D Passwords for beginners
- E Dangerous choices
- F How they did it in the US
- G How good is your memory?
- H Short = bad, long = good

**3 Read the text again. For questions 1–6, choose the correct answer A–D.**

- 1 Which basic rule for passwords is not mentioned?
  - A Use a mix of letters, numbers and symbols for passwords.
  - B Use different passwords for different websites.
  - C Never tell another person your password.
  - D Change your passwords often.
- 2 The article says that most people
  - A don't know how to choose a secure password.
  - B use the same password for everything.
  - C don't follow experts' advice when they choose a password.
  - D forget passwords easily.
- 3 The most popular password is
  - A not mentioned.
  - B 'password.'
  - C '1234.'
  - D '00000000.'
- 4 In the 1980s, the US government
  - A had a secure password for unlocking its nuclear missiles.
  - B didn't have a password for unlocking its nuclear missiles.
  - C lost the password for unlocking its nuclear missiles.
  - D didn't have a secure password for unlocking its nuclear missiles.
- 5 The article says that hackers
  - A choose passwords with symbols and numbers.
  - B program their computers to look for symbols and numbers in passwords.
  - C choose lower case passwords.
  - D program their computers to look for long passwords.
- 6 According to the article, scientists in the US recently designed
  - A fingerprint readers for phones.
  - B a prototype keyboard.
  - C something people can wear to identify them.
  - D a touch screen laptop.

**4 Find the opposites underlined in the text.**

- |           |          |                 |       |        |             |       |       |
|-----------|----------|-----------------|-------|--------|-------------|-------|-------|
| fantastic | ≠        | <u>terrible</u> | 3     | forget | ≠           | _____ |       |
| 1         | advanced | ≠               | _____ | 4      | possible    | ≠     | _____ |
| 2         | similar  | ≠               | _____ | 5      | complicated | ≠     | _____ |

**REMEMBER BETTER**

Many words in English have opposites, e.g. *start* ≠ *finish*, *easy* ≠ *difficult*, *man* ≠ *woman*. These words are called antonyms. When you learn antonyms, use them in personal sentences to help you remember.

**In your notebook, write personal sentences with the antonyms from Exercise 4.**

*The weather was terrible at the weekend, but we saw a fantastic film on Saturday.*

**VOCABULARY PRACTICE | Nouns and verbs**

**5 Look at the vocabulary in lesson 2.4 in the Student's Book. Complete the sentences with the missing verbs or nouns. The first and last letters are given.**

My grandmother always has a jigsaw on her living room table. I like to help her when I visit, but I often put the pieces in the wrong place.

- 1 You'll need to put on another l\_\_\_\_\_ r of clothing. It's really cold outside today.
- 2 My father never takes food to work because he eats at the company's c\_\_\_\_\_ n every day.
- 3 How long will it take to r\_\_\_\_\_ h the top of the hill? I'm already really tired.
- 4 Annie wants to r\_\_\_\_\_ n her own computer games shop when she finishes school.
- 5 In many towns here you can still see the r\_\_\_\_\_ s of the old city walls made from large stones.
- 6 We can't land on the island. There's no a\_\_\_\_\_ p there.

**WORD STORE 2E | The temperature**

**6 Complete the telephone conversation between Warmomatic and a customer with the words from the box. There are two extra words.**

( above below boiling chilly cold degrees falling freezing rising )

*In the year 2033 ...*

**W:** Good afternoon. This is Warmomatic. How can I help you?

**C:** Hello? Warmomatic? Oh, thank goodness you've answered. HELP!

**W:** What is the problem, madam?

**C:** My computer-controlled heating system isn't working. My home is really cold! It is <sup>1</sup> \_\_\_\_\_ zero in every room in the house and the temperature is still <sup>2</sup> \_\_\_\_\_. It's minus ten now.

**W:** OK madam, please try to calm down. I'll try to fix the problem from my desktop computer. Please call me again in 20 minutes.

*20 minutes later ...*

**W:** Good afternoon. This is Warmomatic. How can I help you?

**C:** It's me again! Now the house is too hot. In fact, it's <sup>3</sup> \_\_\_\_\_. It's plus 35 <sup>4</sup> \_\_\_\_\_ centigrade and the temperature is <sup>5</sup> \_\_\_\_\_. Help me!

**W:** Oh dear. There is one very easy solution, madam.

**C:** Anything. Please. Tell me what to do.

**W:** Open a window madam. It's <sup>6</sup> \_\_\_\_\_ outside.

### SHOW WHAT YOU KNOW

1 Tick the sentences that describe routines. Choose the time expressions that show regularity.

Alastair played computer games every evening before bed.

- 1 Karen bought a new laptop last weekend.
- 2 Patricia and Matt called each other every Friday night.
- 3 Dean always watched football on Saturday afternoons.
- 4 Mary dropped her mobile phone down the toilet.

2 ★ When they went to university, two friends, Carl and Owen, moved into a student flat together. Write sentences about them with *used to* or *didn't use to* and the verbs in brackets.

When they lived with their parents ...  
they didn't use to eat (eat) unhealthy food. Now they only eat kebabs and pizzas.

- 1 they \_\_\_\_\_ (do) any cleaning at home. They still don't do much and their flat is a mess.
- 2 their parents \_\_\_\_\_ (pay) the bills. Now they pay their own bills.
- 3 Carl \_\_\_\_\_ (use) his dad's computer. Now he uses Owen's.
- 4 Carl and Owen \_\_\_\_\_ (argue). Now they argue about the computer.

3 ★★ Write positive sentences (+), negative sentences (-) and questions (?) about mobile phones in 1983. Use the correct forms of *used to* from the box and the words above each line.

( did   didn't use to   used to   use to )

mobile phones / have cameras (?)

Did mobile phones use to have cameras?

- 1 mobile phones / cost a lot of money (+)  
\_\_\_\_\_
- 2 most normal people / own a mobile phone (-)  
\_\_\_\_\_
- 3 people / make fewer phone calls (+)  
\_\_\_\_\_
- 4 mobile phones / be bigger (?)  
\_\_\_\_\_
- 5 mobile phones / have touch screens (-)  
\_\_\_\_\_
- 6 mobile phones / send text messages (?)  
\_\_\_\_\_

4 ★★★ Tick the correct sentences. Sometimes both sentences are correct.

When I was in the Science club at school, ...

- 1 a we met every Thursday at 4 p.m.
- b we used to meet every Thursday at 4 p.m.
- 2 a we watched videos about great discoveries.
- b we used to watch videos about great discoveries.
- 3 a one week, a physicist came to speak to us.
- b one week, a physicist used to come to speak to us.
- 4 a our group went on a trip to the Science Museum in London.
- b our group used to go on a trip to the Science Museum in London.
- 5 a my friend Emma once gave a talk about the sun.
- b my friend Emma once used to give a talk about the sun.

### SHOW WHAT YOU'VE LEARNT

5 Complete the dialogue between Jodie and her dad with the correct forms of *used to* and the verbs in brackets.

J: Dad, did you use to own (you/own) a smartphone when you were my age?

D: Did I what?

J: 1 \_\_\_\_\_ (you/use) a smartphone or a laptop when you were a teenager?

D: What?! No I didn't. I was 14 in ... er ... wait a minute ... in 1981. We 2 \_\_\_\_\_ (have) laptops back then.

J: So, how 3 \_\_\_\_\_ (check) your messages?

D: Jodie?! There were no messages or texts; no Facebook or anything. We 4 \_\_\_\_\_ (send) letters or faxes.

J: I see. Wow ... Dad, what's a fax?

D: Er ... well ... it was a bit like a photocopier. You 5 \_\_\_\_\_ (write) your message on a piece of paper, then put it in the fax machine ...

J: And then?

D: Well, then you 6 \_\_\_\_\_ (dial) the number and wait. The machine er ... well ... it read the piece of paper and sent it to your friend.

J: What, the piece of paper?

D: What? No! Not the same piece of paper, Jodie – just the message.

J: I see. Wow.

16

GRAMMAR: Train and Try Again page 145



1983

today

## 1 ★ Choose the correct words.

- I read the biography of Martin Luther King *during* / *while* I was at home sick.
- They didn't have smartphones *when* / *by* my father was a student.
- As soon as* / *While* we downloaded the song, we listened to it six times.
- I learned a lot about web browsers *during* / *while* the weekend computer course.
- It was minus ten every day last week *until* / *by* Friday.

## 2 ★★ Complete the second sentence so it has a similar meaning to the first. Use between two and five words, including the word in capitals.

You can take my laptop now but I need it on Wednesday. **BY**

You can take my laptop now but return it *by Wednesday*, please.

- The moment you get home, send me a text message. **SOON**  
Send me a text message \_\_\_\_\_ home.
- Susie drove to Manchester and listened to the CD in the car. **WHEN**  
Susie listened to the CD \_\_\_\_\_ to Manchester.
- I was watching the film and began to feel cold. **DURING**  
I \_\_\_\_\_ the film.
- We had something to eat and waited for the program to download. **WHILE**  
We had something to eat \_\_\_\_\_ downloading.
- James did the experiment then showed me his notes. **AFTER**  
James showed me \_\_\_\_\_ the experiment.
- I read my book and waited for you to arrive. **UNTIL**  
I \_\_\_\_\_ your arrival.

## 3 ★★ Choose the correct answers A–C.

## A modern genius

Stephen Hawking was one of the most famous scientists in the world. He was born in Oxford in 1942 and lived there <sup>1</sup> \_\_\_\_\_ the moment he moved to Cambridge to complete his PhD. <sup>2</sup> \_\_\_\_\_ this, however, people already knew that he was intelligent. He enjoyed Maths and Science at school very much. He found both subjects very easy, and it was <sup>3</sup> \_\_\_\_\_ he was studying there that his friends began to call him 'Einstein', for fun.

Stephen's first university was actually Oxford, where he studied Physics and Chemistry. <sup>4</sup> \_\_\_\_\_ his studies there, at the age of 21, he became very sick and had problems speaking and moving. <sup>5</sup> \_\_\_\_\_ he realised he was extremely ill, he decided to work harder. This was because he really wanted to finish his PhD <sup>6</sup> \_\_\_\_\_ he died.

Hawking finished his PhD when he was only 24. Later he wrote over 15 very popular science books. His doctors didn't expect him to live long. He died at the age of 76 – definitely too early, as many say.



- |            |          |              |            |         |              |
|------------|----------|--------------|------------|---------|--------------|
| 1 A till   | B by     | C while      | 4 A During | B While | C As soon as |
| 2 A After  | B Before | C Until      | 5 A Till   | B While | C When       |
| 3 A during | B while  | C as soon as | 6 A before | B by    | C for        |

## 4 ★★ Complete the sentences with one word in each gap. Use each word only once.

**Dad:** Jono, I don't want you to use my laptop *while* I'm washing the car. Wait until I finish, OK?

**Jono:** Yes, Dad. I promise.

1 **Tess:** Let's play a game \_\_\_\_\_ the flight to Madrid.

**Bill:** Good idea. How about Scrabble?

2 **Matt:** I had to speak to my Physics teacher. Why didn't you wait \_\_\_\_\_ the end of our conversation?

**Vic:** I didn't know where you were or who you were with. Sorry.

3 **Al:** I decided to take a year off \_\_\_\_\_ I went to university to study Chemistry.

**Gina:** Really? What did you do for a year?

4 **Phil:** I stopped downloading the game as \_\_\_\_\_ as I realised it was illegal software.

**Chris:** Good idea. Why don't we try a different game?

5 **Ella:** I need to finish this report \_\_\_\_\_ tomorrow morning. Can we meet in the afternoon?

**Jon:** No problem. I'll send you a text message.

## 5 ★★★ Complete the sentences with the words in brackets in the correct form. Do not change the order of the words. You may need to add words. Use no more than six words in each gap.

I listened to *the song before I knew* (the song / before / know) who sang it.

1 Adrian sent the text message \_\_\_\_\_ (while / drive), which is dangerous.

2 I \_\_\_\_\_ (not fall / asleep / during) the Biology class. I was just resting my eyes.

3 \_\_\_\_\_ (after / I / speak / Mandy) I decided not to lend her my smartphone.

4 The children all \_\_\_\_\_ (go / sleep / by / midnight) on the school trip last week.

5 Yesterday, I called my mum \_\_\_\_\_ (while / travel) home on the bus.



- Read the story *Lost in New York* below. Cross out one incorrect word in each underlined sentence a–g. Then write the correct word.
- Complete the story with the correct form of the verbs in brackets.

1 Read the tips for writing a story. Tick the useful advice.

- Set the scene by introducing who is in the story and where they are.
- Include at least three main characters.
- Use different past tenses and structures in the story.
- Use adjectives, adverbs and phrases to make the story interesting.
- Use linkers and time expressions to show the order of events.
- Try not to repeat the same words.
- Write a happy ending.
- Write four paragraphs.

2 Match suitable parts of useful phrases for writing a story. There are two extra endings.

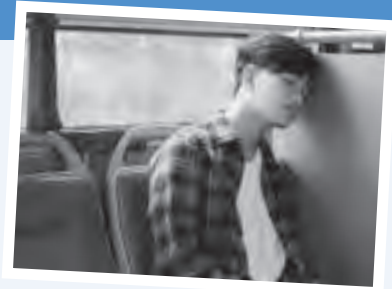
- It was four years
- What a
  - I'll never
  - It was a few
  - It was a lovely day
  - What
  - Meeting my husband was
- a years later when ...
- b in trouble
- c a surprise!
- d nightmare!
- e forget ...
- f going on?
- g for a walk ...
- h an event I'll never forget.
- i ago when ...

3 Read the story *Hitting the Jackpot* below. Complete gaps 1–3 with a suitable phrase from Exercise 2.

4 Read the story again. Choose the correct words.

BLOG

# Lost in New York



when  
I was 14 years old while I got lost in New York. I was (be) on a school trip and on the last day we went to a museum before our flight home. We <sup>1</sup> \_\_\_\_\_ (travel) by city bus when I <sup>2</sup> \_\_\_\_\_ (begin) to feel sleepy.

<sup>a</sup>All of the sudden, someone <sup>3</sup> \_\_\_\_\_ (start) shaking me. I was the only person left on the bus. <sup>b</sup>What was going up? I slowly realised I was lost. <sup>c</sup>I have to saying I was scared. I <sup>4</sup> \_\_\_\_\_ (not/have) any money and my phone was dying. <sup>d</sup>I was by trouble.

While I <sup>5</sup> \_\_\_\_\_ (think) what to do, I <sup>6</sup> \_\_\_\_\_ (see) a woman. She was wearing a pilot's uniform. <sup>e</sup>Lucky, she helped me. <sup>f</sup>She was incredible kind and told me how to get to the airport and even gave me ten dollars for the ticket.

When I finally <sup>7</sup> \_\_\_\_\_ (get) on the plane, the pilot <sup>8</sup> \_\_\_\_\_ (make) an announcement. I recognised her voice immediately. It was the woman from the bus. She <sup>9</sup> \_\_\_\_\_ (invite) me to the front of the plane and <sup>10</sup> \_\_\_\_\_ (explain) how everything worked. <sup>g</sup>I'll always forget the day I travelled with the pilot.

# Hitting the JACKPOT\*



It was four years ago when my luck started to change. I was walking home from work when a man rushed out of a newsagent's and jumped on a bus. <sup>a</sup>Unfortunately / Incredibly, a small piece of paper fell from his pocket.

It was a lottery ticket. I put it in my bag and forgot all about it until a few weeks later when I found it again in my handbag. I checked the ticket. <sup>1</sup> \_\_\_\_\_ It wasn't the winning ticket, but it won a small amount of money.

<sup>b</sup>Anyhow / I must admit I thought about taking the money, but I decided to keep the ticket for good luck instead. <sup>c</sup>Actually / While, my luck did change after that.

<sup>2</sup> \_\_\_\_\_ I met my husband, Paul. On our wedding day, he said he felt like the luckiest man alive. At that moment, I decided to tell him the story of my lottery ticket to show him I was lucky too. <sup>d</sup>Then / Unfortunately Paul started to laugh. <sup>3</sup> \_\_\_\_\_ the next thing he told me. He used to play the lottery and the numbers on the ticket were his lucky numbers. <sup>e</sup>During / Suddenly I knew who he was. It was Paul who dropped the ticket. I couldn't believe it! We weren't rich, but we were very happy <sup>f</sup>anyway / luckily.



\* Hit the Jackpot – to be very successful or lucky

7 Read the task below. Then complete gaps 1–7 in the story with the phrases from the box. There is one extra phrase.

Your school is holding a competition for the best short story about a surprising event. Write a story. Include and develop these points:

- Give information to set the scene.
- Describe what happened on that day using different past tenses and structures.
- Use different words and phrases to show the order of events and add interest.
- Give your story a strong ending.

didn't use to care    didn't use to smile  
used to have    used to laugh    used to see  
didn't use to take    used to tell    used to walk

### An unexpected gift

I was 17 years old <sup>a</sup>when / while I moved to my village. Every day I <sup>1</sup>\_\_\_\_\_ the same way home from school and every day I <sup>2</sup>\_\_\_\_\_ an old man. He <sup>b</sup>was / were sitting quietly under the same tree. He always looked miserable and children <sup>3</sup>\_\_\_\_\_ at him.

During the next few weeks I <sup>c</sup>started / was starting to say hello when I saw him under the tree and later we actually became good friends. I <sup>4</sup>\_\_\_\_\_ him about the exams I was taking at school and he told me all about the job he <sup>5</sup>\_\_\_\_\_ as a conservationist. I <sup>d</sup>have / must admit I <sup>6</sup>\_\_\_\_\_ about the environment, but thanks to him, I started to think about it more carefully.

Anyway, one day he wasn't there. And he wasn't there the next day. What <sup>e</sup>was going / went on? I went to his house to look for him. Unfortunately, I found out he died the day before.

Then, a few weeks later when I <sup>f</sup>wasn't / was walking home from school, a young woman came and gave me a letter. It was from the old man's wife. He told her about our conversations and that he felt cheerful when he was talking to me. He decided that he <sup>g</sup>was wanting / wanted to give me a gift.

He <sup>h</sup>gave / was giving me his special bracelet. He <sup>7</sup>\_\_\_\_\_ it off. Now I do the same. The old man is a friend I'll never forget.

8 Read the story again. Choose the correct words a–h.

9 Look at the story in Exercise 7 again and find examples for some of the tips in Exercise 1.

Tip 3 3 examples of the Past Continuous:

Tip 4 2 adjectives to describe the old man:  
\_\_\_\_\_  
2 adverbs: \_\_\_\_\_  
1 phrase: \_\_\_\_\_

Tip 5 4 linkers and time expressions showing the order of events: \_\_\_\_\_

### SHOW WHAT YOU'VE LEARNT

10 You see a short story competition in your favourite magazine and decide to enter. Write a story with the title 'A day to remember'. Include and develop these points:

- Give information to set the scene.
- Describe what happened on that day using different tenses and structures.
- Use different words and phrases to show the order of events and add interest.
- Give your story a strong ending.



### SHOW THAT YOU'VE CHECKED

Finished? Always check your writing. Can you tick ✓ everything on this list?

In my story:

- I have given information to set the scene, e.g. *I was ten years old ... , It was a cold dark evening.*
- I have used the Past Simple and Continuous, and perhaps *used to* to describe what happened, e.g. *It started to rain as I was climbing the mountain.*
- I have used different words and phrases to make my story interesting for the reader, e.g. *What was going on? It was awesome!*
- I have included adverbs to add interest, e.g. *Suddenly, Luckily, incredibly.*
- I have given my story a strong ending, e.g. *I'll never forget when I first went ... , ... was an event I'll never forget.*
- I have checked my spelling and punctuation.
- My text is neat and clear.

# 2.8

## SPEAKING

Telling a story

### 1 Translate the phrases into your own language.

#### SPEAKING BANK

##### Telling a story

##### Use the right tenses

• Past Continuous is used to describe the background for the main events:

The sun was shining and I was \_\_\_\_\_ enjoying myself.

• Past Simple is used to describe a problem and the main events.

The weather changed. \_\_\_\_\_ I couldn't see the path.

##### Use linkers

• **Beginning:** To start with/ At first \_\_\_\_\_

• **Middle:** Suddenly/All of a sudden/Luckily/Fortunately/ Unfortunately \_\_\_\_\_

• **End:** In the end/Eventually/ Finally \_\_\_\_\_

##### Say how you felt

I was excited/frightened/ relieved/surprised/shocked/ worried. \_\_\_\_\_

##### Make a 'final comment'

It was the best/worst day of my life! \_\_\_\_\_

I'll never forget the look on his face! \_\_\_\_\_

I'll never do it again. \_\_\_\_\_

##### Listening to a story

##### Neutral response

Really?/Oh dear./Oh no. \_\_\_\_\_

##### Strong response

That sounds amazing/funny/ frightening. \_\_\_\_\_

What a great story/a nightmare! \_\_\_\_\_

##### Respond with questions

What happened? \_\_\_\_\_

What did you do? \_\_\_\_\_

### 2 Complete the dialogue between Felix and Eva with the words from the box. There are two extra items.

except for excited happened Luckily  
Next time nightmare relieved shocked  
sounds Suddenly to start with

F: We had a fantastic time on our summer holiday – except for the day we went to the island.

E: What <sup>1</sup> \_\_\_\_\_ ?

F: We were travelling on a fast boat to visit a beautiful little island. The captain of the boat was going very fast and the waves were really big. <sup>2</sup> \_\_\_\_\_, the boat hit a giant wave.

E: Oh no!

F: There was a loud bang, the front window broke and lots and lots of water rushed in.

E: Wow! That <sup>3</sup> \_\_\_\_\_ really frightening.

F: Yeah, well, we were <sup>4</sup> \_\_\_\_\_ because it happened so quickly and the water hit us really hard. <sup>5</sup> \_\_\_\_\_, nobody was seriously hurt.

E: What did you do?

F: Well, in the end we got to the island – wet but very <sup>6</sup> \_\_\_\_\_ to be back on dry land.

E: What a <sup>7</sup> \_\_\_\_\_ !

F: <sup>8</sup> \_\_\_\_\_, we'll take the slow boat.

### 3 Complete each gap with one word.

#### Conversation 1: Alice and Cindy

A: Yesterday I dreamt about meeting someone famous.

C: Really? Who?

A: Well, I was sitting in Manchester Airport, waiting for a flight to Warsaw. I remember, I was reading *Little Women* at the time. Suddenly, the lady next to me said 'Excuse me, <sup>1</sup> \_\_\_\_\_ you enjoying that book?'

C: Who was it?

A: Well, I looked at her and I thought, 'I know you', and then I realised it was Louisa May Alcott.

C: What? The author of the book you <sup>2</sup> \_\_\_\_\_ reading? That's amazing! What did you say?

A: Well, to start <sup>3</sup> \_\_\_\_\_ I didn't know what to say, but fortunately, she was really friendly. <sup>4</sup> \_\_\_\_\_ the end, we chatted for about ten minutes and I told her how much I love her books.

#### Conversation 2: Andrew and Nancy

A: I'm afraid <sup>1</sup> \_\_\_\_\_ horses.

N: What? Why?

A: Well, when I was twelve years old, my neighbour took me riding on her horse.

N: <sup>2</sup> \_\_\_\_\_ happened?

A: It was my first time on a horse. <sup>3</sup> \_\_\_\_\_ first, everything was OK. We <sup>4</sup> \_\_\_\_\_ going very slowly. My neighbour was holding the horse and I was sitting <sup>5</sup> \_\_\_\_\_ its back. I was enjoying the ride, but then all <sup>6</sup> \_\_\_\_\_ a sudden, there was a loud noise and the horse got scared and started running ... really fast!

N: That sounds really frightening.

A: It was. Luckily, I didn't fall off. I stay away from horses these days.



## 1 In pairs, ask and answer the questions.

## PART 1

Talk about personalities.

- 1 What is your best friend like?
- 2 Are you generous or mean? Why?
- 3 What qualities would you like to have? Why?
- 4 What is a good travelling companion like? Why?
- 5 Do you think students should wear school uniforms? Why?/Why not?

## PART 2

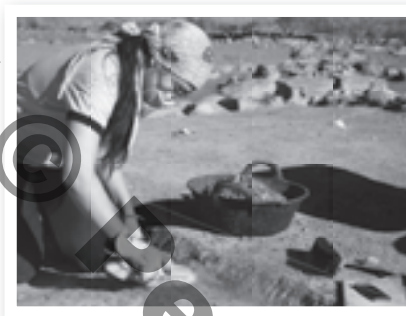
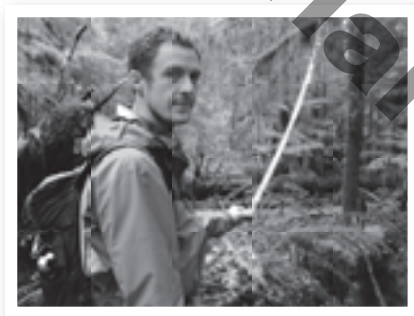
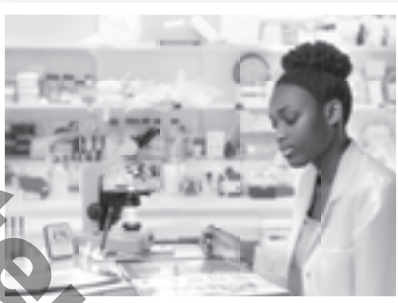
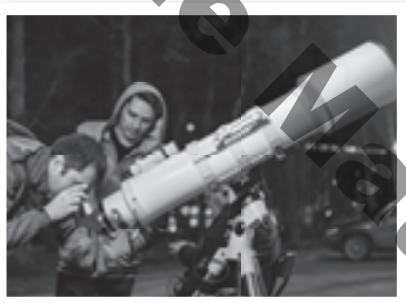
Talk about technology.

- 1 What do you mostly use your smartphone for? Why?
- 2 How do you feel in a place with no wifi? Why?
- 3 Would you prefer to give up your smartphone for a week or your laptop for a month? Why?
- 4 Have you ever had a problem with technology? What happened and how did you feel?
- 5 What is bad about living in the technological age?

## 2 Look at the pictures that show different types of scientists.

## PART 1

Which of these jobs do you think is the most interesting? Discuss in pairs.



## PART 2

In pairs, ask and answer the questions.

- 1 Have you ever watched the night sky like an astronomer?
- 2 Would you prefer to be a physicist, biologist or chemist? Why?
- 3 Do you like Mathematics? Why?/Why not?
- 4 What things can conservationists do to help our planet?
- 5 How do you think archaeologists feel when they find something important? Why?
- 6 Do you like studying Science? Why?/Why not?
- 7 Which of these jobs do you think is the best for you? Why?

## 3 Discuss this question together. 'Do you think scientists do a more important job than artists?' Why?/Why not?

## For scientists:

## Scientists ...

- find ways to make us feel better when we are sick.
- discover ways we can communicate with each other.
- help us to understand the world.
- find ways to help us travel.

## For artists:

## Artists ...

- create culture in society.
- help us to understand ourselves.
- create things that touch our emotions.
- bring colour to our world.

## VOCABULARY AND GRAMMAR

1 Complete the sentences with the words from the box in the correct form. There are two extra words.

jigsaw keyboard laser printer layer  
password search engine specimen username

For more information, check online using a [search engine](#).

- We need another two \_\_\_\_\_ of paint on the wall. I can still see the graffiti.
- This new \_\_\_\_\_ is excellent. Look at the high quality of these pictures.
- Luther is in the garden collecting \_\_\_\_\_ for our project on plants.
- I can't find the last piece of the \_\_\_\_\_. Maybe it's under the sofa.
- Did you know that the most used \_\_\_\_\_ in the world is '123456'?

/5

2 Complete the sentences with the correct words. The first letters are given.

Sir Isaac Newton is probably the most famous **p**hysicist in the world.

- My favourite subject is **C** \_\_\_\_\_ because I love working in the lab.
- Patrick is very good with numbers. Does he want to study **M** \_\_\_\_\_ at university?
- C** \_\_\_\_\_ **s** \_\_\_\_\_ make a lot of money. And with robots becoming more popular, they will earn more in the future.
- I know I'm a plant biologist, but it's ten degrees **c** \_\_\_\_\_ outside. Let's stay in the lab today, OK?
- In January 1971, experts observed temperatures of 80 degrees **b** \_\_\_\_\_ zero. Now THAT is cold!

/5

3 Use the beginnings from the box to make words and complete the sentences.

(archaeo- astro- conserva- geo- lingu- psycho-)

Theodore Roosevelt was an early [conservationist](#). He protected over 150 million acres of American forests for public use.

- Many people say that John Aubrey (1626–1697) invented \_\_\_\_\_ when he studied Stonehenge in England.
- Philip Zimbardo is a contemporary American \_\_\_\_\_. His 'prison experiment' showed how people behave in extreme conditions.
- Did you know that \_\_\_\_\_ don't only work with materials on Earth? Some of them work with rocks from the moon and other planets.
- In 1610, Galileo discovered the four largest moons of Jupiter using a telescope. For this reason, people call him the father of \_\_\_\_\_.
- You don't have to speak a foreign language to be a good \_\_\_\_\_, but it probably helps.

/5

4 Choose the correct verb forms.

Peter **didn't go** / *wasn't going* to school on Thursday.

- Adam <sup>a</sup>*did* / *was doing* his homework when Simon <sup>b</sup>*called* / *was calling*.
- We <sup>a</sup>*slept* / *were sleeping* when the postman <sup>b</sup>*rang* / *was ringing* the doorbell.
- <sup>a</sup>*Were they finding* / *Did they find* the pharmacy before it <sup>b</sup>*closed* / *was closing*?
- Chloe and Kyle <sup>a</sup>*danced* / *were dancing* together when the music <sup>b</sup>*stopped* / *was stopping*.
- <sup>a</sup>*Did Shelly wait* / *Was Shelly waiting* at the station when the train <sup>b</sup>*crashed* / *was crashing*?

/5

5 Find and correct the mistakes.

Did Auntie Kay **used** to cook a big meal on Sundays?

[use](#)

- Beth **used** to go to Hong Kong for the first time in 2009. \_\_\_\_\_
- Teenagers **didn't used** to have mobile phones in the 1980s. \_\_\_\_\_
- Josh **used** to invent a popular video game. \_\_\_\_\_
- Did **use** to be milk free at school when you were little? \_\_\_\_\_
- When Grandpa was young, films **used** to were black and white. \_\_\_\_\_

/5

6 Choose the correct answers A–C.

### Flat computers

**C** are small, light personal computers for mobile use. They have most of the same components as <sup>1</sup> \_\_\_\_\_ computers including a screen, speakers and a <sup>2</sup> \_\_\_\_\_ to write/type with. In the 1970s, IBM <sup>3</sup> \_\_\_\_\_ the first company to make and sell these mobile computers. At first, laptops didn't <sup>4</sup> \_\_\_\_\_ to have batteries and the screens were black and white and very small. Later, in the 1990s, colour screens <sup>5</sup> \_\_\_\_\_ more popular. Nowadays, laptops are more popular than any other type of computer.

- |                   |                  |                  |
|-------------------|------------------|------------------|
| A Desktops        | B Websites       | <b>C</b> Laptops |
| 1 A broadband     | B desktop        | C Internet       |
| 2 A keyboard      | B password       | C web browser    |
| 3 A was           | B used to be     | C used to        |
| 4 A use           | B used           | C have           |
| 5 A were becoming | B used to become | C became         |

/5

Total /30

7 Choose the correct answers A–C.

Phil: My father \_\_\_ in a chemistry laboratory in Chicago last summer.

Vic: Cool. Did you visit him when he was there?

- A used to work
- B were working
- C worked**

1 Amy: Why didn't you answer the phone?

Tony: Sorry, I \_\_\_ measurements of the room.

Amy: Ah, OK.

- A took
- B was taking
- C 'm taking

2 Fiona: When I lived in Florence I often went to the Leonardo da Vinci Museum.

Cathy: Really? I didn't know \_\_\_ in Florence.

Fiona: Yes. I lived there for six years.

- A you were living
- B you used to live
- C were you living

3 Dad: Sara! \_\_\_

Sara: Sorry. I just wanted to check something.

- A Not to use my smartphone.
- B You don't use my smartphone.
- C Don't use my smartphone.

4 Pete: I had a great time \_\_\_ the visit to the Natural History Museum.

Jim: I'm not surprised. It's amazing!

- A during
- B while
- C as soon as

5 Mark: Georgiana waited for me \_\_\_ I finished analysing data and then we had lunch.

Connie: That was kind of her.

- A when
- B until
- C soon

/5

8 Complete the sentences with the words in brackets in the correct form. Do not change the order of the words. You may need to add words. Use no more than six words in each gap.

The American physicist James Russell didn't invent the CD (not / invent / the CD) in 1964, but in 1965.

- 1 Professor Phillips was \_\_\_\_\_ (plan / publish / research paper) when he suddenly became ill.
- 2 I \_\_\_\_\_ (not / use / like) computer games but then I discovered Minecraft.
- 3 He sent me the file \_\_\_\_\_ (soon / it / download) so that I could check it.
- 4 James \_\_\_\_\_ (use / work) for Microsoft. He thinks it is a good company.
- 5 Where \_\_\_\_\_ (you / go) when I saw you in the tram last night?

/5

9 Complete the text with the correct forms of the words from the box. There are two extra words.

- |         |         |     |        |
|---------|---------|-----|--------|
| collect | develop | do  | follow |
| protect | remain  | sit | walk   |

The Giants of Georgia

In 2008, a farmer was walking with his animals through the Caucasus Mountains in Georgia. He used <sup>1</sup> \_\_\_\_\_ this often, but on this day he saw the unusual <sup>2</sup> \_\_\_\_\_ of an old stone structure. The farmer decided to explore the area. Inside the structure were two human skeletons. They <sup>3</sup> \_\_\_\_\_ on chairs in front of a table. What was so interesting? The bodies were extremely large.

He contacted a team of archaeologists. On the way there, they saw some very large statues and what seemed to be a large stone road through the forest.

The scientists <sup>4</sup> \_\_\_\_\_ evidence (i.e. some of the bones) and took it to Tbilisi, the capital city of Georgia. They asked Professor Vikua, famous for discovering Homo Erectus Georgicus, to help them, but he died before he could do any research. When the scientists looked for the bones that Professor Vikua had, they could not find them.

In 2014, the Science Channel opened a new investigation, but they haven't found any new evidence or <sup>5</sup> \_\_\_\_\_ a theory to explain these mysterious giant bones.

/5

10 Choose the correct answers A–C.

A job advert from space

Are we in danger from visitors from other planets? Are the astronauts that we B into space making life on this planet dangerous?

Last week while I A a science magazine, I found this interesting article. NASA, it said, were looking for someone to help them <sup>2</sup> \_\_\_\_\_ experiments on the organisms that astronauts regularly collect during their trips into space. The job is to <sup>3</sup> \_\_\_\_\_ notes on what you observe during these tests, and then work with other scientists looking closely at the data.

Your research may help protect Earth against a future alien invasion. But, NASA hopes, one day the results of your work might help them to <sup>4</sup> \_\_\_\_\_ new life on other planets. They might also help mankind <sup>5</sup> \_\_\_\_\_ parts of the universe where no man or woman has ever visited before. What a great job!

- |              |               |               |
|--------------|---------------|---------------|
| A sent       | <b>B send</b> | C did send    |
| 1 A did read | B read        | C was reading |
| 2 A make     | B do          | C take        |
| 3 A take     | B have        | C do          |
| 4 A collect  | B invent      | C discover    |
| 5 A get      | B reach       | C go          |

/5

Total /20



# 2

## Science and technology

*Necessity is the mother of invention.*

A proverb

### BBC



URBAN LEGENDS

6 Watch the BBC video.  
For the worksheet, go to page 118.

### UNIT 2 VIDEOS

**BBC** Urban legends

6

**GRAMMAR ANIMATION**

Lesson 2.2 7 Lesson 2.5 9

**FOCUS VLOG** About technology

Lesson 2.2 8

**ROLE-PLAY**

Lesson 2.8 10

18

### REFERENCES

Culture notes p. 171

Audioscript pp. 178–179

Videoscript pp. 193–194

Using videos in the classroom p. T14

### EXTRA ACTIVITIES

- Photocopiable resource 7 *Crazy calculator* (20 min.) pp. 202, 218–219
- Photocopiable resource 8 *Test yourselves* (10 min.) pp. 202, 220
- Extra digital activities: Vocabulary Checkpoint

## VOCABULARY

### 2.1

Online • phones and computers  
• word building • collocations

*I can use language related to science, technology and inventions.*

### SHOW WHAT YOU KNOW

1 Choose the correct verb. Then complete the sentences to make them true for you.

- 1 The first thing I do when I visit / go online is ...
- 2 The person I'd like to watch / follow on Twitter is ...
- 3 The website I visit / go in most is ...
- 4 The last music I downloaded / followed was ...
- 5 The last comment I posted / sent on social media was ...
- 6 The last time I updated / revised my social media profile was ...

2 **SPEAKING** Compare your sentences with a partner. How much time do you typically spend online each day?

## SCIENCE AND TECHNOLOGY

## QUIZ

1 Match the years with these digital inventions.

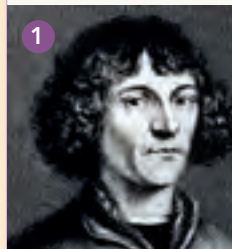
1977    1984    1990    1993    1994

- 1 The first **web browser** 1993
- 2 The first **search engine** 1990
- 3 The first **laser printer** 1977
- 4 The first **desktop computer** with **keyboard** and mouse 1984
- 5 The first smartphone 1994

**BONUS QUESTION:** Which company made the first computer with a mouse? Apple Macintosh

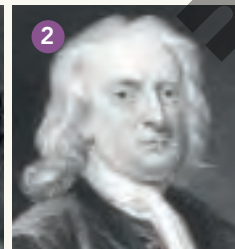
2 Which sciences were these great scientists mostly involved in?

astronomy, biology, chemistry, computer science, mathematics, physics



Nicolaus Copernicus

astronomy and mathematics



Isaac Newton

physics and mathematics



Charles Darwin

biology

**BONUS QUESTION:** Which scientist won two Nobel Prizes?  
Marie Skłodowska-Curie

- 3 1.24 Do the Science and Technology Quiz. Then listen and check your answers.
- 4 1.25 Complete sentences 1–5 with the correct scientist in the quiz. Then listen to Part 2 again and check your answers.
- 1 Marie Sklodowska-Curie did experiments with radioactive materials and discovered polonium and radium.
  - 2 Isaac Newton did research into gravity, light and many areas of physics, maths and astronomy.
  - 3 Alan Turing invented the idea of a 'Universal Machine' or a computer in 1936.
  - 4 Nicolaus Copernicus developed the theory that the Earth moves around the Sun.
  - 5 Charles Darwin observed nature. He took notes and measurements and collected specimens from around the world.

WORD STORE 2A Phones and computers

- 5 1.26 Complete WORD STORE 2A with the compound nouns in red in the quiz. Then listen, check and repeat.
- 6 Complete the questions with compound nouns in WORD STORE 2A.
- 1 How many text messages do you usually send in a day?
  - 2 Do you always use the same user name and password online?
  - 3 Have you got a desktop computer or a laptop?
  - 4 Which is the most popular search engine in your country?
  - 5 Which web browser do you normally use?
  - 6 Have you got a reliable broadband connection with fast download speeds?
  - 7 Do you like typing on a smartphone or do you prefer to use a key board?

7 **SPEAKING** Ask and answer the questions in Exercise 6.

WORD STORE 2B Word building

- 8 1.27 Complete WORD STORE 2B with the science subjects in the quiz. Then listen, check and repeat.
- 9 **SPEAKING** Discuss the questions.
- 1 Would you like to be a scientist? Why?/Why not?
  - 2 Which science subject do you find easiest/most difficult to understand?
  - 3 Which science subject do you think will be most useful to you in the future? Why?

WORD STORE 2C Collocations

- 10 1.28 Complete WORD STORE 2C with the infinitive form of the underlined verbs in Exercise 4. Then listen, check and repeat.
- 11 Complete the sentences with the correct verb in Word Store 2C in an appropriate form.
- 1 Tim has invented a new program. It will change how people manage databases.
  - 2 Rowena observes the sky at night. She hopes to discover a new planet.
  - 3 Lucie collects wild plants to develop new drugs.
  - 4 Fred is doing research into laser technology for his doctorate.
  - 5 Lena does experiments on plastics to measure how strong they are.
  - 6 George looks at big numbers and takes notes. He produces formulas to solve problems.
- 12 **SPEAKING** What kind of scientist is each person in Exercise 11? Discuss which science you think is the most/least important to society.
- 1 Tim = a computer scientist
  - 2 Rowena – astronomer
  - 3 Lucie – biologist
  - 4 Fred – physicist
  - 5 Lena – chemist
  - 6 George – mathematician

## 3 Are statements 1–3 true (T) or false (F)?

- 1 Albert Einstein failed Mathematics at school. T / **F**
- 2 An earthquake can shorten the length of a day. **T** / F
- 3 Some people are left-brained, others are right-brained. T / **F**



**BONUS QUESTION: What percentage of our brain do we normally use?**  
100%! Your whole brain is active at all times.



Marie Sklodowska-Curie  
physics and chemistry



Alan Turing  
computer science

## WORKBOOK

pp. 18–19, including *Show What You've Learnt*

## NEXT CLASS

- Ask students to prepare for a 10–20-minute Vocabulary Quiz: Assessment Package, Unit 2.1, Vocabulary.

- Ask students to do *Show What You Know* in the WB, p. 20.

2.2

GRAMMAR

Past Continuous and Past Simple

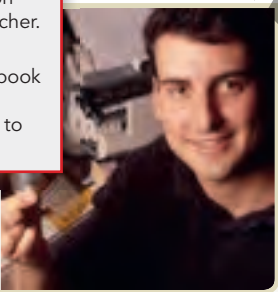
*I can use the Past Simple and Past Continuous to describe past events.*

1 **SPEAKING** Read what people say about e-books and printed books. Which comments do you agree with? Think of more advantages and disadvantages. Discuss with a partner.

- 1 When I go on holiday, I don't have to pack heavy books.
- 2 I like the feel of a real book in my hands.
- 3 I work with computer screens all day – I don't want to read books on a screen too.
- 4 Books are so expensive. E-books are cheaper.

Exercise 2

Joe Jacobson was a researcher. Because he finished his book and wanted another one to read.



In 1997 Joe Jacobson **was working** as a researcher for the Massachusetts Institute of Technology (MIT). One summer, he went on holiday to the coast. He **was lying** on a beach when he **finished** his book. Unfortunately, he didn't have another one with him. At that moment, he imagined

an electronic book that he could download any time he wanted and read in direct sunlight. It was a 'Eureka' moment. His vision became E ink technology and helped develop the e-readers that we have today.

Exercise 7

- 2 Did your computer crash when you were doing your homework last night?
- 3 Were you watching a film when your mum got home yesterday?
- 4 Was it raining when you woke up this morning?
- 5 Did you burn yourself when you were making breakfast?
- 6 Did a friend text you when you were walking to school?

3 **Read the GRAMMAR FOCUS. Complete the examples using the past forms in blue in Exercise 2.**

GRAMMAR FOCUS 67

Past Continuous and Past Simple

- You use the **Past Continuous** to talk about longer actions in progress at a time in the past.  
In 1997 Joe Jacobson <sup>1</sup> **was working** as a researcher for MIT.
- You often use the **Past Continuous** with the **Past Simple** – usually when a short action (Past Simple) interrupted a longer action (Past Continuous).  
He <sup>2</sup> **was lying** on a beach when he <sup>3</sup> **finished** his book.

Past Continuous: was/were + -ing form

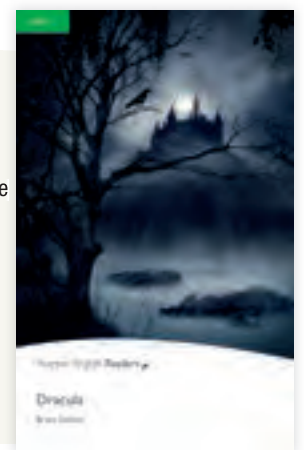
+	I <b>was working</b> etc.
-	She <b>wasn't working</b> etc.
?	<b>Were you working</b> etc.

4 **Complete the beginnings of two stories with the Past Simple or the Past Continuous form of the verbs in brackets.**



It was a terrible stormy night six months after my father's death. My mother <sup>1</sup> **was sitting** (sit) alone by the fire, waiting for her baby to arrive. She <sup>2</sup> **was feeling** (feel) sad and ill. Suddenly she <sup>3</sup> **heard** (hear) a noise outside. 'There's someone at the door, Peggotty,' my mother <sup>4</sup> **called** (call). 'Who is it?' Peggotty was her servant and her only real friend. 'I'll go and see,' Peggotty <sup>5</sup> **replied** (reply). She <sup>6</sup> **went** (go) and <sup>7</sup> **opened** (open) the door.

As the carriage moved quickly along the rough dry road, Jonathan Harker <sup>8</sup> **was looking out** (look out) at the changing view. Behind him was a land of small, green hills and colourful fields of fruit trees. Now he <sup>9</sup> **was driving** (drive) into the Transylvanian mountains through a thick forest. It <sup>10</sup> **was getting** (get) dark, and the other people in the carriage <sup>11</sup> **were** (be) quiet and afraid. A woman opposite him <sup>12</sup> **reached** (reach) towards him and <sup>13</sup> **put** (put) something in his hand. It <sup>14</sup> **was** (be) a small, silver cross. 'Wear it around your neck,' she said. 'You'll be safe.'



5 **SPEAKING** Which story would you like to continue reading and why? Tell your partner.

6 **Complete each sentence with one Past Simple and one Past Continuous verb form. Which sentences are true for you?**

- 1 My parents **were studying** (study) when they **met** (meet).
- 2 My computer **crashed** (crash) when I **was doing** (do) my homework last night.
- 3 I **was watching** (watch) a film when my mum **got** (get) home yesterday.
- 4 It **was raining** (rain) when I **woke up** (wake up) this morning.
- 5 I **burned** (burn) myself when I **was making** (make) breakfast.
- 6 A friend **texted** (text) me when I **was walking** (walk) to school.

7 **Write questions for the sentences in Exercise 6. Change pronouns where necessary. Then ask your partner as in the example.**

- A: *Were your parents studying when they met?*
- B: *No, they weren't.*

FOCUS VLOG 68 About technology

68 Watch the Focus Vlog. For the worksheet, go to page 119.

Grammar page 135

REFERENCES

- Culture notes p. 171
- Videoscript p. 194
- Using videos in the classroom p. T14

EXTRA ACTIVITIES

- Grammar animation
- Photocopiable resource 9 Test yourselves (10 min.) pp. 202, 221
- Extra digital activities: Grammar Checkpoint

WORKBOOK

p. 20, including Show What You've Learnt

NEXT CLASS

Ask students to prepare for a 10–20-minute Grammar Quiz: Assessment Package, Unit 2.2, Grammar.



# 2.3

## LISTENING

Matching

I can identify key details in a simple recorded narrative about scientists.

- 1 1.29 Label the photos with the words in the box. Then listen, check and repeat.

linguistics geology marine biology  
archaeology psychology conservation

### EXAM FOCUS Matching

- 2 1.30 Listen to two conversations and choose the correct answer.

- 1 What does the girl want to study in the future?  
photo A  photo B  photo D
- 2 The girl and the boy have both seen one of the documentaries. What was it about?  
photo B  photo E  photo F

- 3 1.31 **SPEAKING** Complete the job descriptions with the jobs in the box. Then listen, check and repeat. Do you know anybody who does one of these jobs? Tell your partner.

A linguist A geologist A marine biologist  
A psychologist An archaeologist  
A conservationist

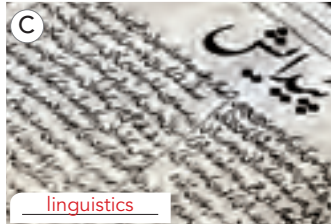
- 1 A linguist studies and often speaks a lot of languages.
- 2 A conservationist studies ways of protecting the environment.
- 3 A geologist studies rocks and the history of the Earth.
- 4 A psychologist studies how people behave and how their minds work.
- 5 An archaeologist studies people who lived thousands of years ago.
- 6 A marine biologist studies, observes and protects oceans.

- 4 1.32 Listen to five speakers talking about why they became scientists. Which job in Exercise 3 does each person do?

- 5 1.32 Listen again. Match speakers 1–5 with statements A–F. There is one extra statement.

Speaker 1:  B Speaker 3:  A Speaker 5:  C  
Speaker 2:  F Speaker 4:  D

- A I want to understand how early childhood affects behaviour.
- B I'm keen on studying how machines can communicate.
- C I want to explore oceans and preserve the ocean environment.
- D I'm interested in studying our prehistoric ancestors.
- E I want to study the evolution of our planet.
- F I want to find solutions to nature's problems.



### PRONUNCIATION FOCUS

- 6 1.33 Complete the table. Then listen, check and repeat. Mark the stress.

Subject	Job
1 archaeology	<u>archaeologist</u>
2 <u>analysis</u>	analyst
3 conservation	<u>conservationist</u>
4 geology	<u>geologist</u>
5 <u>linguistics</u>	linguist
6 <u>psychology</u>	psychologist

- 7 **SPEAKING** Practise the words in Exercise 6 as in the example. Pay attention to the stress.

A: *What does an archaeologist do?* B: *Archaeology.*

### WORD STORE 2D Collocations

- 8 1.34 Complete WORD STORE 2D with the words in the box. Then listen, check and repeat.

- 9 Complete the statements about the speakers with the words and phrases in WORD STORE 2D.

- 1 The marine biologist wants to collect evidence about global warming.
- 2 The linguist has published a research paper on robot communication.
- 3 The psychologist loves doing research and analysing data.
- 4 The archaeologist spent hours in the Egyptian room in the Louvre.
- 5 The conservationist is doing research into climate change to help protect the environment.

- 10 **SPEAKING** How common is it to study the same subjects as your parents? Think about your friends and family. What will you do? Discuss with a partner.

#### Exercise 4

- 1 A linguist  
2 A conservationist  
3 A psychologist  
4 An archaeologist  
5 A marine biologist

### REFERENCES

Audioscript p. 179

### EXTRA ACTIVITIES

Students write the jobs in order 1–6 of preference for themselves (1 = best, 6 = least favourite). They compare in pairs, justifying their choices and trying to use the new vocabulary.

### WORKBOOK

p. 21

### NEXT CLASS

Ask students to find out three facts about Antarctic exploration.

Multiple choice

*I can scan an interview to locate specific information.*

**1 SPEAKING** Look at the photos of Antarctica. Discuss the questions.

- 1 What do you think it's like working there?
- 2 What kind of jobs do you think people do?

**2** Look at comments from people interested in working in Antarctica. Tick the people who you think are suitable.

- 1 'I don't mind working long hours.'
- 2 'I don't like the dark.'
- 3 'I need my own space.'
- 4 'I'm very fit and healthy.'
- 5 'I expect to earn lots of money.'
- 6 'I want to save the planet.'

**3** **1.35** Listen to a talk about working in Antarctica. Check your ideas in Exercises 1 and 2.

**4 SPEAKING** Discuss whether you would like to work in Antarctica. Explain why or why not.

**5** Read an interview with a research scientist and answer the questions.

- 1 What is the population of Antarctica? 1,000–4,000
- 2 What did Jane Roberts do in her free time in Antarctica?  
*She read lots of books and played games.*
- 3 What did she miss most when she was there? *colours*

**EXAM FOCUS** Multiple choice

**6** Read the text again. For questions 1–5, choose the correct answer, A, B, C or D.

- 1 The South Pole Station is named after
  - A the first person to reach the South Pole.
  - B the first person who died after reaching the South Pole.
  - C the five people who died after reaching the South Pole.
  - D** the first two explorers to reach the South Pole.
- 2 People who work in Antarctica
  - A are residents of Antarctica.
  - B live in small towns.
  - C** stay for a period of time in research stations.
  - D return to their country in winter.
- 3 Jane discovered that
  - A she likes working in a laboratory.
  - B millions of years ago dinosaurs lived on ice.
  - C** the Antarctic wasn't always cold.
  - D research is like doing a jigsaw.
- 4 The temperature at the South Pole
  - A is –80 degrees all year round.
  - B is usually above zero in summer.
  - C** never rises above zero.
  - D is too cold to go outside.
- 5 In the interview, Jane
  - A** describes her experience of working in Antarctica.
  - B encourages tourists to visit Antarctica.
  - C explains how researchers apply for jobs in Antarctica.
  - D presents her research into the weather in Antarctica.

**7** **1.37** Match the words in blue in the text with the definitions in the box. Then listen, check and repeat.

- 1 several sheets of material on top of one another = layers
- 2 the skeleton = remains
- 3 a place where planes can land = airstrip
- 4 organise and manage = run
- 5 a place to eat, usually in a school or factory = canteen
- 6 a picture cut into small pieces that you put together = jigsaw
- 7 arrived (at a place) = reached

**8 SPEAKING** Complete the questions with the correct form of the words in Exercise 7. Then ask and answer the questions.

- 1 How long does it take you to reach home after school?
- 2 Do you usually have lunch in the school canteen?
- 3 Have you ever completed a 1,000-piece jigsaw?
- 4 Would you like to run your own business one day?
- 5 How many layers of clothing do you wear when you go outside in winter?
- 6 Do any museums in your city have dinosaur remains?

**9** **1.38** Listen to the words and phrases in the box and repeat them. Then complete the text.

above/below zero average temperature  
(0°) degrees centigrade (Celsius) plus/minus 10°C  
The temperature rises/falls to (+40°/–80°) degrees.

**Antarctic weather**

The interior of Antarctica is the coldest place on Earth. The hottest month at the South Pole is January with an average temperature of minus 25 <sup>1</sup> degrees centigrade. This is the summer in Antarctica. In fact, the temperature in Antarctica has never risen <sup>2</sup> above zero. The warmest temperature ever recorded at the South Pole (on December 25, 2011) was <sup>3</sup> minus 12.3 degrees <sup>4</sup> centigrade/Celsius. In winter, temperatures <sup>5</sup> fall to 80 degrees centigrade <sup>6</sup> below zero. The coldest month is September.

**10 SPEAKING** Tell your partner about the last time you experienced an extreme temperature, hot or cold. Use the questions to prepare.

- 1 When did you experience an extreme temperature?
- 2 Where were you and what were you doing at the time?
- 3 What was the temperature? How long did it last?
- 4 How did you manage and what did you do?
- 5 Do you like extreme temperatures? Why?/Why not?

**WORD STORE 2E** The temperature

**11** **1.39** Complete WORD STORE 2E by arranging the adjectives in order from coldest to hottest. Then listen, check and repeat.

**REFERENCES**

Culture notes p. 171  
Audioscript p. 179

**EXTRA ACTIVITIES**

Students write true/false sentences about the text, e.g. *Not many people apply for a job in Antarctica.* (F) *Roald Amundsen was the first person to get to the South Pole.* (T) They exchange their sentences with a partner and decide whether the sentences are true or false.

**WORKBOOK**

pp. 22–23

**NEXT CLASS**

Ask students to do *Show What You Know* in the WB, p. 24.

# Science at the South Pole



1.36

*Jane Roberts is a marine biologist. She worked for two years in Antarctica. Here, she answers your questions.*

## Is there really a pole at the South Pole?

Yes, there is. It's in front of the Amundsen-Scott South Pole Station. In 1911 a Norwegian explorer called Roald Amundsen was the first person to get there, followed by a British man, Robert Falcon Scott, thirty-four days later. Unfortunately, Scott and his team of five all died on the return journey. When the first explorers **reached** the South Pole there was nothing there. Now, several hundred people work at the Station. There's an **airstrip** for small planes, a **canteen**, hot showers, a post office, a tourist shop, a basketball court and a movie theatre.

## Who does Antarctica belong to?

Antarctica doesn't belong to any nation. There's no permanent population, but there are bases that look like small towns. Thirty different countries **run** about seventy research stations in Antarctica. People stay there between three and eighteen months. Most people work only in the summer months, but some stay all year round. The population is around 4,000 in summer and 1,000 in winter.

## Why did you want to work in Antarctica?

I was studying in London and I read about an exciting research project in Antarctica. I applied for the job, but thousands of other people also applied. I was lucky!

## What exactly were you doing there?

I was doing research into marine life. I collected specimens of ice and examined them in the laboratory. There are **layers** of ice thousands of years old! We found the **remains** of a dinosaur. It was in millions of pieces and we had to put all the pieces together like a **jigsaw**. Our research showed us that millions of years ago the Antarctic was much warmer.

## What did you wear in Antarctica?

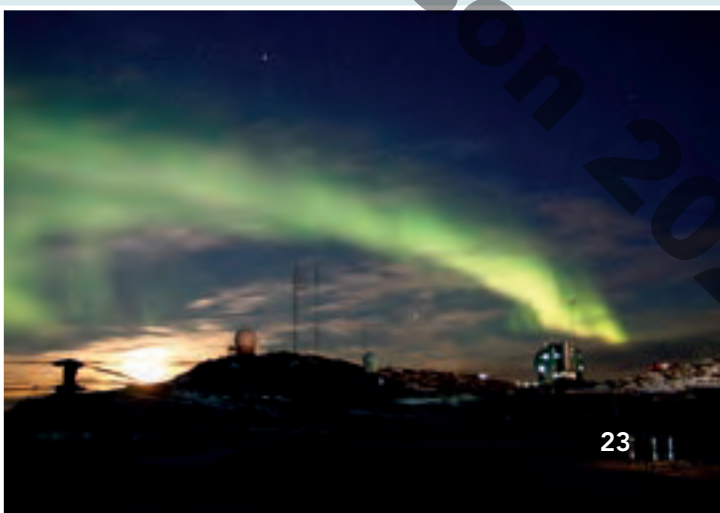
It's extremely cold all year round. When I was doing experiments outside, I wore three pairs of socks and often five layers of clothing. Winter temperatures fall to  $-80^{\circ}\text{C}$  and even summer temperatures are below zero at the South Pole. For several months, there's no sunlight at all. Sometimes it's too cold to go outside.

## What did you do in your free time?

When it was snowing, we read lots of books and played games. There isn't much to do in Antarctica, but I enjoy reading and I made some good friends there too.

## Did you miss home?

No, but I missed colours – it's very white in Antarctica! But I was working all day and it was really interesting work.



23



## 2.5

## GRAMMAR

used to

I can use **used to** to refer to past habits and routines.



- 1 **SPEAKING** Look at the photos. In what way are these things different today? Discuss with a partner.

(fashion friends music relationships school  
technology travel)

- 2 **1.40** Listen to a dialogue between Chris and his granddad. Are the sentences about Chris's granddad true (T) or false (F)?

- He **used to phone** people from the phone in the sitting room.
- He used to message people.
- He didn't use to live near his friends.
- His mum didn't use to like the loud music in his bedroom.
- His parents **bought** him a camera for his sixteenth birthday.
- He **used to have** five or six good friends.

T

F

F

T

T

T

- 3 Read the GRAMMAR FOCUS. Complete the examples using the past forms in blue in Exercise 2.

## GRAMMAR FOCUS 69

## used to

- You use **used to + verb** to talk about past states that are no longer true.  
He <sup>1</sup> **used to** **have** five or six good friends.
- You use **used to + verb** to talk about regular past actions that don't happen anymore.  
He <sup>2</sup> **used to** **phone** people from the phone in the sitting room.
- You don't use **used to + verb** to talk about a past action that only happened once. You use the **Past Simple**.  
His parents <sup>3</sup> **bought** him a camera for his sixteenth birthday. (NOT ~~used to buy~~)

## used to + verb

+	I <b>used to work</b> ...
-	He <b>didn't use to work</b> ...
?	Did they <b>use to work</b> ...? Yes, they <b>did</b> ./No they <b>didn't</b> .

## Exercise 7

- Did you use to go online much?
- Did you go on a school trip to the Science Museum?
- Did you use to like school dinners?
- Did your parents buy you your first mobile phone?
- Did you use to want to be an astronaut?

- 4 Complete the sentences with the correct form of the verbs in brackets. Use **used to + verb** or the Present Simple.

- People **used to read** (read) maps but now they **use** (use) GPS.
- People **didn't use to use** (not/use) their cars much but now they **drive** (drive) everywhere.
- People **update** (update) their online profiles now, but they **used to write** (write) letters.
- Children **play** (play) inside now but in the past they **used to play** (play) outside.
- Teachers **used to suggest** (suggest) books but now they **give out** (give out) website addresses.
- Families **used to watch** (watch) the TV together but now they **watch** (watch) it individually.
- Students **use** (use) Google now, but they **used to look up** (look up) things in encyclopedias.
- Parents **didn't use to worry** (not/worry) so much but now they **give** (give) children less freedom.

- 5 **SPEAKING** Discuss the statements in Exercise 4. Do you think they are all true?

- 6 Replace the Past Simple with **used to + verb** if possible. Which sentences are true for you?

When I was at primary school, ...

- my parents took me to school every day. **used to take**
- I didn't go online much. **didn't use to go**
- I went on a school trip to the Science Museum. **X**
- I didn't like school dinners. **didn't use to like**
- my parents bought me my first mobile phone. **X**
- I wanted to be an astronaut. **used to want to be**

- 7 Make questions for the sentences in Exercise 6. Then ask and answer as in the example.

A: Did your parents use to take you to school?  
B: Yes, they did.

Grammar page 136

## REFERENCES

Culture notes pp. 171–172  
Audioscript p. 180  
Using videos in the classroom p. T14

## EXTRA ACTIVITIES

- Grammar animation

- Photocopiable resource 10 *When you were a child ...* (15min.) pp. 202, 222
- Extra digital activities: Grammar Checkpoint

## WORKBOOK

p. 24, including *Show What You've Learnt*

## NEXT CLASS

- Ask students to prepare for a 10–20-minute Grammar Quiz: Assessment Package, Unit 2.5, Grammar.
- Ask students to think about a biographical film they have seen. Who was it about? Students make short notes to talk about the film.

# 2.6

## USE OF ENGLISH

Linkers and time expressions

I can use a range of common linking words and time expressions.

- 1 **1.41 SPEAKING** Look at the photo. Discuss what you think the film is about. Use the ideas in the box. Then listen and check.

civil rights for black women ✓ computers ✓  
mathematicians ✓ American space projects ✓ robots ✗

- 2 **1.41** Listen again and choose the correct option.

- The three women worked for NASA as mathematicians / astronauts during the 1950s and 60s.
- While they were working for NASA, they earned more / less than their white colleagues.
- Segregation between blacks and whites continued until the mid- / late 1960s.
- When the film came out, Katherine Johnson – now 78 / 98 years old – met the actress who played her.
- As soon as Johnson arrived at the 2016 / 2017 Oscars ceremony, everyone stood up and cheered.

- 3 Read the LANGUAGE FOCUS. Complete the information with the words in blue in Exercise 2.

### LANGUAGE FOCUS

#### Linkers and time expressions

- You use conjunctions **when/while** to link things that happen at the same time. [conjunction + subject + verb]  
<sup>1</sup> While they were working for NASA, they earned less than their white colleagues
- You use conjunctions **after** / **as soon as** / **before/when** to link things that happen in an order. [conjunction + subject + verb]  
<sup>3</sup> When the film came out, Johnson met the actress who played her.
- You use prepositions **during/for/until (till)/by** as follows:  
**during** + noun phrase to say **when** something happens –  
<sup>4</sup> during the 1950s and 60s  
**until (till)** + noun phrase to talk about a state that continues up to a point in time –  
Segregation continued <sup>5</sup> until the mid-1960s.  
**by** + noun phrase to talk about an action that happens at or before a point in time –  
Segregation stopped by the late 1960s.

- 4 Choose the correct option. Then change the information to make the sentences true for you.
- I haven't been to the cinema for / during several weeks.
  - I saw *Hidden Figures* during / while I was on holiday.
  - I learnt a lot about American Civil Rights during / while the film.
  - I didn't know that segregation in the USA continued until / by 1964.
  - I ate some popcorn when / after I was watching the film.
  - As soon as / While the film finished, I went home.



- 5 **1.42 USE OF ENGLISH** Read the text. Choose the correct answer, A, B or C. Then listen and check.



### KATHERINE JOHNSON

<sup>1</sup> When Katherine Johnson was a child, she was a maths genius. <sup>2</sup> \_\_\_ she was only 14, she went to university to study Maths. <sup>3</sup> \_\_\_ she was studying at university, her Maths professor told her she should become a research mathematician. <sup>4</sup> \_\_\_ she graduated from university she became a teacher. <sup>5</sup> \_\_\_ the 1940s she got married and had children.

She didn't become a research mathematician <sup>6</sup> \_\_\_ she was 35. She got a job as a 'computer' with NASA. Katherine was different from other 'computers' – <sup>7</sup> \_\_\_ she was at NASA, she asked a lot of questions. <sup>8</sup> \_\_\_ Katherine Johnson started work at NASA, only men went to important meetings. She changed that!

- |                   |                 |                     |
|-------------------|-----------------|---------------------|
| 1 <u>A</u> When   | B Before        | C During            |
| 2 A While         | <u>B</u> When   | C Until             |
| 3 A During        | <u>B</u> While  | C After             |
| 4 A Before        | B While         | <u>C</u> As soon as |
| 5 A Till          | <u>B</u> During | C While             |
| 6 <u>A</u> until  | B by            | C during            |
| 7 A during        | <u>B</u> while  | C after             |
| 8 <u>A</u> Before | B During        | C As soon as        |

- 6 Complete the sentences. Write five true sentences and one false.

- While I was going home yesterday, I ...
- As soon as I got home, I ...
- During the evening I ...
- I didn't go to bed until ...
- I was fast asleep by ...

- 7 **SPEAKING** Read your sentences in Exercise 6 to your partner for him/her to guess which sentence is false.

Use of English page 137

25

### REFERENCES

Culture notes p. 172

Audioscript p. 180

### EXTRA ACTIVITIES

- Students do another version of ex. 6: They write five sentence endings

e.g. ..., I went straight to bed. They exchange them with a partner and complete them to write true sentences using appropriate linkers in ex. 3.

- Ask students to tell the class about a biographical film using the notes they have prepared.

### WORKBOOK

p. 25

### NEXT CLASS

- Ask students to prepare for a 10–20-minute Use of English Quiz: Assessment Package, Unit 2.6, Use of English.

25



A story

*I can write a story with a simple linear sequence.*

- 1 **SPEAKING** Tell your partner about a surprising or interesting thing that happened to you on holiday.

Say:

- 1 where and when it happened.
- 2 how old you were.
- 3 what you were doing when it happened.

- 2 Read Paul's story and choose the best title, A, B or C.

- A The Holiday of a Lifetime  
 B Surprise by the Sea  
 C Beautiful Cornwall

I was twelve years old and my parents and I were on holiday in Cornwall. They are both biologists and we all love nature. One morning, Dad suggested walking along the beach to a distant village.

It was a lovely day for a walk, but after an hour, I noticed some dark clouds. I asked my parents if they thought we should go back. They smiled at each other, and then Mum said we were nearly there.

What was going on? Mum usually made me go indoors during storms. What's more, we were still far away from the village. Anyway, suddenly, there was loud thunder and it started to rain. "Come on, quick!" my father said. "We're almost there."

I noticed a cottage not far away. Dad started running towards it so we ran after him. When we got there, he seemed really excited, which I must admit was a bit strange. Unfortunately, there was no one home. 'That's unlucky,' said Dad 'but wait...' Suddenly, he took a key from his pocket, unlocked the door and pushed it open. He was silent for a moment. Then with a smile he said: "Come in. And welcome home!" What a surprise!

In fact, thinking back to my parents' behaviour during the first part of our holiday, I knew something strange was going on – but I had no idea what! Our new holiday home was the perfect place for nature lovers. It was awesome!

We still live in London, but our cottage in Cornwall is our dream house, and I will never forget the day I first saw it.

- 3 Read the story again and put events in the correct order.

- a Nobody answered the door. 5  
 b The weather changed. 3  
 c The family went into their new holiday home. 6  
 d The family went to Cornwall on holiday. 1  
 e Paul saw a cottage in the distance. 4  
 f The family went for a walk along the coast. 2

- 4 Read the WRITING FOCUS. Complete the examples with the words in purple in the story.

### WRITING FOCUS

#### A story

- Set the scene:

I <sup>1</sup> was twelve years old when ...

It was late in the evening when ...

It <sup>2</sup> was a lovely day for a walk.

I was in the classroom when ...

- Use questions, short dramatic sentences and occasional exclamation marks to show surprise or excitement:

What was <sup>3</sup> going on?

What a <sup>4</sup> surprise !

What a nightmare!

It was <sup>5</sup> awesome !

We were in trouble.

- Use adverbs to add interest:

All of a sudden, / <sup>6</sup> Unfortunately/Suddenly , /

<sup>7</sup> Unfortunately/Suddenly , / Luckily,

... really (good)

... incredibly (beautiful)

... completely (lost)

- Use a summarising statement to begin or end your story:

I'll never forget <sup>8</sup> the day I first saw ... /

the time I decided to ... / when I first went ... /

... was an event I'll never forget.

### REFERENCES

Culture notes p. 172

### EXTRA ACTIVITIES

- Photocopiable resource 11 A story (15 min.) pp. 203, 223
- Students work in pairs and write a story beginning with: *I'll never forget that day!*

### WORKBOOK

pp. 26–27, including *Show What You've Learnt* and *Show That You've Checked*

### NEXT CLASS

Ask students to prepare notes about an adventure film that they have seen. What happened? What happened in the end? Students make short notes to talk about the film.





**8 Read the story and choose the correct option.**

'This is a bad start', I thought and looked again at the directions on my phone. I was trying to find the city hospital for my first day of work experience in the IT department there. Unfortunately, I was very late and totally lost.

<sup>1</sup>I have to say /Anyhow it was my fault. I forgot to check the route the day before. <sup>2</sup>During /Anyway, my phone said to turn right, but <sup>3</sup>in fact /I have to say there was no right turn, just a wall! What was I going to do? I was already ten minutes late. 'Go back to the main road and try again,' I thought 'and go quickly!' I hurried along as fast as I could. I was turning a corner <sup>4</sup>then /when suddenly there was a bang <sup>5</sup>and /so everything went black.

<sup>6</sup>When /I must admit I opened my eyes, there were four worried faces looking down at me. 'Are you alright?' 'Yes, I think so', I said. My head hurt. <sup>7</sup>Then /While I remembered the bang and the darkness. 'What happened?'

'Well, you were hurrying along looking at your phone, and you bumped into that tree. We thought you should go to hospital so we've called an ambulance.'

Luckily, the doctor said I was fine. <sup>8</sup>Anyway /I must admit that was not how I expected to arrive at the hospital for my first day of work experience!

**5 Read the extracts from different stories. Find and correct three mistakes in each.**

- I was 14 years old then when I first became interested in archaeology. I was looking for fossils one Sunday afternoon when I made the discovery that made me famous. I am 'I'll never forget the feeling of seeing it there in the ground for the first time. It was awesome?!
- We were in the Chemistry lab at school when we noticed the strange smell. All of a suddenly sudden, there was a loud bang. What is was going on? Our teacher walked in from a lab next to ours. Her hair was a mess and her glasses were black with smoke. Lucky Luckily, she was more shocked than hurt. 'What happened, Miss?' asked one of my classmates.
- The school trip to the science museum is a day I'll never remember forget. We had a great time at the museum. When we were going back to meet the others at the bus to go home, my friend and I got stuck in a lift. The lights went off and the alarm didn't work. We were on in trouble. What we were were we going to do?

**6 SPEAKING** Choose one of the extracts in Exercise 5 and say what you think happened next.

**7 Complete the LANGUAGE FOCUS with the underlined linkers in the story.**

**LANGUAGE FOCUS**

**Informal linkers**

In narrative stories we often use:

- *I have to say* or <sup>1</sup>I must admit to emphasise the next piece of information.
- *Anyhow* or <sup>2</sup>anyway to change the subject or move the story on.
- *Actually* or <sup>3</sup>in fact to show that the next piece of information is surprising.
- *And, but, because,* <sup>4</sup>so to join parts of sentences.
- *Then, when, while,* <sup>5</sup>during to make the order of events clear.

**SHOW WHAT YOU'VE LEARNT**

**9 Do the writing task. Use the ideas in the WRITING FOCUS and the LANGUAGE FOCUS to help you.**

Your teacher has asked you to write a story ending with: *I was so relieved. It was finally over!*

Use the questions below to help you.

- Where were you?
- When was it?
- Who was with you?
- What happened?
- What could you see and hear?
- How did you feel?
- What did you do next?
- How did it end?

Remember to:

- give your story a title.
- make your story interesting for the reader.
- give your story a strong ending.

It was a chilly autumn morning ...

## 2.8

## SPEAKING

Telling a story

*I can tell a story and show interest in someone's story.*

1 **SPEAKING** Look at the photo of Tom. Then ask and answer the questions.

- Where was Tom? **In Australia**
- What was he doing? **He was climbing a mountain.**
- What was the problem? **It became foggy and he got lost.**

2 **1.43** Read and listen to the story. Compare your ideas in Exercise 1.



- Lisa: Hi Tom. How was your holiday in Australia?  
 Tom: It was really good, thanks ... except for the day I nearly died.  
 Lisa: What happened?  
 Tom: I was doing some climbing. **At first** the sun was shining and I was enjoying myself. But **all of a sudden** the weather changed. It became really foggy and I couldn't see the path.  
 Lisa: Oh dear, **that sounds frightening**.  
 Tom: I was pretty worried. I continued for a while, but finally I realised I was lost.  
 Lisa: What did you do?  
 Tom: Fortunately, I had my phone with me so I called my father – 9,000 miles away in England! He called the Australian police and told them where I was. Then they called me. **Unfortunately**, my battery went dead after five seconds. It was dark and cold. I sat under a rock, put on my torch and waited.  
 Lisa: Oh no, **what a nightmare!**  
 Tom: **Eventually**, they found me. I was so relieved. I used to go climbing on my own all the time, but **I'll never do it again**.

3 There are often five stages in a story. Match stages 1–5 in Tom's story with headings a–e below.

- |                 |   |               |   |
|-----------------|---|---------------|---|
| a background    | 2 | d problem     | 3 |
| b final comment | 5 | e main events | 4 |
| c introduction  | 1 |               |   |

4 Read the **SPEAKING FOCUS**. Complete the examples with the underlined phrases in the story in Exercise 2.

## SPEAKING FOCUS

## Telling a story

## Use the right tenses

- Past Continuous for the 'background':  
The sun 'was shining' and I was enjoying myself.
- Past Simple for the 'problem' and the 'main events':  
The weather changed. I couldn't see the path.

## Use linkers

- Beginning:** To start with/At <sup>2</sup> first
- Middle:** Suddenly/All of a <sup>3</sup> sudden /Luckily/ Fortunately/<sup>4</sup> Unfortunately
- End:** In the end/Finally/<sup>5</sup> Eventually

## Say how you felt

I was excited/frightened/surprised/shocked/worried, etc.

## Make a 'final comment'

It was the best/worst day of my life!  
 I'll never forget the look on his face!  
 I'll never <sup>6</sup> do it again .

## Listening to a story

## Neutral response

Really?/Oh dear./Oh no.

## Strong response

That sounds amazing/funny/<sup>7</sup> frightening .  
 What a great story/<sup>8</sup> a nightmare !

## Respond with questions

What happened? What did you do?

## 5 Follow the instructions to prepare your story.

- Choose a topic from the box or one of your own ideas.

a dangerous situation a mistake  
 some good or bad news some good or bad luck  
 a nice surprise something that happened on holiday  
 a problem with technology

- Think about what you are going to say and make notes under the headings for the five stages of a story in Exercise 3.

6 **SPEAKING** Follow the instructions below to practise telling your stories. Then act out your dialogue to the class.

**Student A:** Use your notes in Exercise 5 to tell the story.

**Student B:** Use the **SPEAKING FOCUS** to respond to what Student A says.

## ROLE-PLAY 10 Telling a story

- 10** Watch the video and practise. Then role-play your dialogue.

## REFERENCES

Audioscript p. 180

Using videos in the classroom p. T14

## EXTRA ACTIVITIES

- Students work in pairs. One is Tom (from the dialogue in ex. 2), the other is a journalist who interviews Tom.
- Students tell their stories of the adventure films using the notes they prepared at home.

## WORKBOOK

p. 28

## NEXT CLASS

Ask students to study the Word list on p. 29.

2.1 Vocabulary 4.9

astronomer /ə'strɒnəmə/  
 astronomy /ə'strɒnəmi/  
 biologist /baɪ'ɒlədʒɪst/  
 biology /baɪ'ɒlədʒi/  
 broadband /'brɔːdbænd/  
 camera /'kæməɾə/  
 chemist /'kemɪst/  
 chemistry /'keməstri/  
 collect specimens /kə'lekt 'spesəmənz/  
 computer science /kəm'pjʊtə ,saɪəns/  
 computer scientist /kəm'pjʊtə 'saɪəntɪst/  
 desktop computer /,desk'tɒp kəm'pjʊtə/  
 develop a theory /dɪ'veləp ə 'θɪəri/  
 digital /'dɪdʒɪtl/  
 discover /dɪs'kʌvə/  
 do an experiment /duː ən ɪk'sperɪmənt/  
 do research /,duː rɪ'sɜːtʃ/  
 download music /,daʊn'ləʊd 'mjuːzɪk/  
 gravity /'grævəti/  
 invent /ɪn'vent/  
 keyboard /'kiːbɔːd/  
 laptop /'læptɒp/  
 laser printer /'leɪzə ,prɪntə/  
 mathematician /,mæθəmə'tɪʃən/  
 mathematics /,mæθə'mæ'tɪks/  
 mouse /maʊs/  
 observe /əb'zɜːv/  
 password /'pɑːswɜːd/  
 physicist /'fɪzɪsɪst/  
 physics /'fɪzɪks/  
 planet /'plænət/  
 science /'saɪəns/  
 scientist /'saɪəntɪst/  
 screen /skriːn/  
 search engine /'sɜːtʃ ,endʒən/  
 smartphone /'smɑːtfəʊn/  
 take measurements /,teɪk 'meʒəmənts/  
 take notes /,teɪk 'nəʊts/  
 text message /'tekst ,mesɪdʒ/  
 update your profile /ʌp,deɪt jɔː 'prəʊfaɪl/  
 username /'juːzəneɪm/  
 visit a website /,vɪzət ə 'websaɪt/  
 web browser /'web ,braʊzə/

2.2 Grammar 4.10

arrive /ə'raɪv/  
 burn yourself /'bɜːn jə'self/  
 carriage /'kærɪdʒ/  
 coast /kəʊst/  
 crash /kræʃ/  
 direct sunlight /daɪ'rekt 'sʌnlajt/  
 e-book /'iː bʊk/  
 E ink /'iː ɪŋk/  
 electronic /,elɪk'trɒnɪk/  
 e-reader /'iː ,riːdə/  
 get dark /,get 'dɑːk/  
 get home /,get 'həʊm/  
 hill /hɪl/  
 imagine /ɪ'mædʒɪn/  
 reach towards /,riːtʃ tə'wɔːdz/  
 reply /rɪ'plaɪ/

researcher /rɪ'sɜːtʃə/  
 rough /rʌf/  
 servant /'sɜːvənt/  
 silver cross /,sɪlvə 'krɒs/  
 text sb /'tekst ,sʌmbɒdi/  
 thick forest /,θɪk 'fɒrəst/  
 vision /'vɪʒən/  
 wake up /,weɪk 'ʌp/

2.3 Listening 4.11

affect /ə'fekt/  
 analyse data/evidence /,ænləɪz 'deɪtə/ 'evədəns/  
 analysis /ə'næləsəs/  
 ancestor /'ænsəstə/  
 archaeologist /,ɑːki'ɒlədʒɪst/  
 archaeology /,ɑːki'ɒlədʒi/  
 collect data/evidence /kə'lekt 'deɪtə/ 'evədəns/  
 conservation /,kɒnsə'veɪʃən/  
 conservationist /,kɒnsə'veɪʃənɪst/  
 discovery /dɪs'kʌvəri/  
 environment /ɪn'veɪrənmənt/  
 evolution /,iːvə'ljuːʃən/  
 exploration /,eksplə'reɪʃən/  
 explore /ɪk'splɔː/  
 find a solution /,faɪnd ə sə'ljuːʃən/  
 geologist /dʒɪ'ɒlədʒɪst/  
 geology /dʒɪ'ɒlədʒi/  
 global warming /,gləʊbəl 'wɔːmɪŋ/  
 linguist /'lɪŋgwɪst/  
 linguistics /lɪŋ'gwɪstɪks/  
 marine biologist /mə,rɪːn baɪ'ɒlədʒɪst/  
 marine biology /mə,rɪːn baɪ'ɒlədʒi/  
 observation /,əbzə'veɪʃən/  
 protect the environment /prə'tekt ðɪ ɪn'veɪrənmənt/  
 protection /prə'tekʃən/  
 psychologist /saɪ'kɒlədʒɪst/  
 psychology /saɪ'kɒlədʒi/  
 publish a research paper/evidence /,pʌblɪʃ ə rɪ'sɜːtʃ ,peɪpə/evədəns/  
 solution /sə'ljuːʃən/  
 solve /sɒlv/  
 spend hours /,spend 'aʊəz/  
 technology /tek'nɒlədʒi/

2.4 Reading 4.12

above zero /ə,bʌv 'ziərəʊ/  
 airstrip /'eəstriːp/  
 average temperature /,ævərɪdʒ 'temprətʃə/  
 below zero /bi,ləʊ 'ziərəʊ/  
 boiling /'bɔɪlɪŋ/  
 canteen /kæn'tiːn/  
 chilly /'tʃɪli/  
 cold /kəʊld/  
 degree centigrade /di,griː 'sentəgreɪd/  
 fall /fɔːl/  
 freezing /'friːzɪŋ/  
 hot /hɒt/  
 jigsaw /'dʒɪɡsɔː/  
 layer /'leɪə/  
 own (adj) /əʊn/  
 permanent /'pɜːmənənt/

plus/minus 25 degrees /'plʌs/'maɪnəs 'twenti 'faɪv di 'griːz/  
 reach home/the South Pole /,riːtʃ 'həʊm/ðə saʊθ 'pəʊl/  
 recorded /rɪ 'kɔːdɪd/  
 remains /rɪ'meɪnz/  
 return to /rɪ'tɜːn tə/  
 rise /raɪz/  
 run a business/research station /,rʌn ə 'bɪznəs/rɪ'sɜːtʃ 'steɪʃən/  
 save /seɪv/  
 the dark /ðə dɑːk/  
 warm /wɔːm/

2.5 Grammar 4.13

astronaut /'æstrɒnɔːt/  
 give out /,gɪv 'aʊt/  
 GPS /,dʒiː piː 'es/  
 mobile phone /,məʊbaɪl 'fəʊn/  
 inside /ɪn'saɪd/  
 outside /aʊt'saɪd/

2.6 Use of English 4.14

cheer /tʃɪə/  
 civil rights /,sɪvəl 'raɪts/  
 fast asleep /,fɑːst ə'sliːp/  
 graduate from /'grædʒueɪt frəm/  
 look up /,lʊk 'ʌp/  
 space /speɪs/  
 stand up /,stænd 'ʌp/

2.7 Writing 4.15

distant /'dɪstənt/  
 loud thunder /laʊd 'θʌndə/  
 fossils /'fɒsəlz/  
 get stuck /get stʌk/  
 lift /lɪft/  
 directions /daɪ'rekʃənz/  
 route /ruːt/  
 turn a corner /tɜːn ə 'kɔːnə/

2.8 Speaking 4.16

all of a sudden /ɔːl əv ə 'sʌdn/  
 frightened /'fraɪntnd/  
 go dead /,gəʊ 'ded/  
 nightmare /'naɪtmeə/  
 put on /put 'ɒn/  
 shocked /ʃɒkt/  
 surprised /sə'praɪzd/  
 torch /tɔːtʃ/

WORD LIST ACTIVITIES

• Students study the list for a few minutes, then close their books. Play *Snowman* with words from the list. One student draws a dash for each letter of the word and then a part of the snowman for each wrong guess. Students get a point when they guess the word before the snowman is complete. They lose a point when they guess wrong and the last part of the snowman is complete. Only the student drawing the snowman

can check the spelling in their book. They take turns.  
 • Students study the list for a few minutes and then work in teams. Call out a word in the students' own language and ask them to give you the English word. The first team to answer correctly gets a point. Now call out a word in English and ask students to give you a translation. Continue for five minutes calling out words in both languages. The team with the most points wins.



## VOCABULARY AND GRAMMAR

1 Complete the sentences with the correct form of the verbs in the box. There is one extra verb.

collect develop discover do invent  
observe take

- Edwin Hubble (1889–1953), an American astronomer, observed galaxies through a telescope.
- Last month the scientists collected specimens of some sea spiders from Antarctica.
- Make sure you take notes when we are at the museum.
- Do you know who invented the electric guitar?
- This month two teams of archaeology students are doing research in South Africa.
- Linguists and psychologists are cooperating to develop a new theory of language learning.

2 Complete the sentences with the correct form of the words in capitals.

- Mr Marco works as a physicist at the University of Alaska. **PHYSICIS**
- We all tried to find the best solution(s) to the problem. **SOLVE**
- I want to study Chemistry at university. **CHEMIST**
- A conservationist is someone who works to protect plants and animals. **CONSERVE**
- Take measurements of your desk before you buy a new computer screen. **MEASURE**
- The cost of space exploration is very high. **EXPLORE**

3 Use the prompts to write sentences.

- My computer / crash / while / I / download / a song.
- Tom / lose / his smartphone / when / he / run / in the park.
- The first international Internet chat / take place / in February 1989.
- It / be / so hot yesterday. The temperature / rise / to 38 degrees Celsius.
- What / you / do / this time last year?
- I / wait / for the photos from Sandra / last night / but / she / not / send / me any.

4 Choose the correct option.

- Broadband Internet didn't use to be / weren't so popular in the 1980s.
- Did your grandparents use to buy / buy a black and white television in the 1960s?
- We did / used to do a lot of exercises last weekend.
- My brother used to spend / was spending a few hours a day online.
- Last winter the temperature used to fall / fell to minus 28 degrees Celsius.
- Did they use to use / Did they use GPS when they were climbing in the Alps?

## USE OF ENGLISH

5 Choose the answer, A, B or C, that is closest in meaning to the underlined words.

- NASA is running a project on using 3D printers to make food in space.  
A is analysing **B** is organising  
C is planning
- When Anton was a student, he applied for his first job.  
A studied **B** was studying  
C used to study
- Lack of water is a permanent problem in this country.  
**A** a problem that is always there  
B a problem that is sometimes there  
C a new problem
- X: When I was a child, I was in a serious car accident and I spent a month in hospital.  
Y: What a nightmare!  
A What a great story!  
**B** That sounds frightening!  
C Really? That's cool!
- My sister got lost in the forest, but, luckily, she managed to phone for help.  
A suddenly  
B eventually  
**C** fortunately
- We analysed the data while we were talking online.  
A before the online talk  
B after the online talk  
**C** during the online talk

6 Choose the correct answer, A, B or C, to complete both sentences.

- She \_\_\_ for her bag and took out the phone. We \_\_\_ home late in the afternoon.  
A asked  
B arrived  
**C** reached
- They haven't published their research \_\_\_ yet. How much \_\_\_ do we need to print the documents?  
**A** paper  
B report  
C ink
- The radio has warned of \_\_\_ temperatures today. Cook the pasta in \_\_\_ water for about 10 minutes.  
A freezing  
**B** boiling  
C high
- I can't believe you've bought a desktop \_\_\_! To be a \_\_\_ scientist you have to be good at maths.  
A rocket  
**B** computer  
C space
- As \_\_\_ as they discovered the cave, they started exploring it. They reached the top too \_\_\_ and spent hours waiting for the sunrise.  
**A** soon  
B early  
C fast

### Exercise 3

- My computer crashed while I was downloading a song.
- Tom lost his smartphone when he was running in the park.
- The first international Internet chat took place in February 1989.
- It was so hot yesterday. The temperature rose to 38 degrees Celsius.
- What were you doing this time last year?
- I was waiting for the photos from Sandra last night but she didn't send me any.

### EXTRA ACTIVITIES

- Photocopiable resources 50–51 Gapped sentences (12 min.) pp. 211, 268–269
- Photocopiable resources 54–55 Sentence transformation (15 min.) pp. 211, 272–273

- Word Practice 1, WORD STORE booklet, p. 4
- Photocopiable resource 12 A new sport (speaking; 13 min.) pp. 203, 224
- Extra digital activities: Reading and Use of English

### NEXT CLASS

- Ask students to do Self-check 2.10, WB pp. 30–31, as homework.
- Ask students to prepare for Unit Test 2: Assessment Package, Unit 2.
- Ask students to prepare for Review Test 1: Assessment Package, Unit 2.

## READING

- 7 Read three texts about science and technology. Choose the correct answer, A, B or C.

### Underwater forest

Several years ago, scuba diver Chas Broughton discovered an underwater forest of massive ancient cypress trees. Located twenty kilometres from the coast of Alabama, in the Gulf of Mexico, it is home for thousands of sea animals. Chas told a local journalist about the discovery, but they kept it secret until 2004, when Hurricane Ivan uncovered some of the trees. Then scientists started exploring the area.

They have suggested that the forest is more than 50,000 years old. In the past, the ocean level in the area was 125 metres lower than today, but when it rose, the water swallowed the trees up. The forest is so unique that conservationists are now working to make it a marine protected area.

- 1 The scientists  
A found out about the discovery from a local journalist.  
 B started visiting the area after the 2004 hurricane.  
C are trying to protect the forest.

### Your ideas in 3-D

Are you interested in 3-D printing but don't want to buy another expensive gadget?

Then this offer is for you! Our 3-D printing service will help you produce a figure from your favourite video game, parts for a robot you are building in your basement, beautiful jewellery or decorations for your home. Just choose a design from our catalogue or create your own, decide what material, size and colour you want and send your project to us.

**We will print the object and send it to you in no time!**

For more information visit our website at:

[www.weprint3d.com](http://www.weprint3d.com)

- 2 The advertisement is addressed to people who  
A want to buy a 3-D printer.  
B are professional designers.  
 C want to use 3-D printing technology.

Last week I took part in an unusual survey. A psychologist invited forty-four families and asked us different questions about eating habits now and in the past. She wanted to find out why fathers give children less healthy food than mothers. Strange, isn't it? But it's true in my family.

When my mum isn't at home for dinner, Dad orders a pizza. Mum doesn't accept unhealthy food because she feels responsible for what we eat. Dad cares more about my education or hobbies.

According to the survey, in most families the situation was and is similar. Teenagers observe their parents and learn how to behave in the future. My parents used to observe their parents and now I am observing them.

- 3 The survey the writer took part in shows that  
 A mothers and fathers look after families in different ways.  
B fathers don't care about families as much as mothers.  
C teenagers would like to change eating habits in their families.

## SPEAKING

- 8 In pairs, complete the questions with one word in each gap. The first letters are given. Then ask and answer the questions.

- 1 **W**hat do you use the Internet for?
- 2 Do you use **s**ocial media? Why?/Why not?
- 3 What **i**nvention(s) do you find the most useful? Why?
- 4 What were you doing **y**esterday at 8 p.m.?



- 9 In pairs, write down five words to describe the photo.

- 10 Imagine you are one of the people in the photo. Answer the questions.

- 1 When was it?
- 2 What was the weather like?
- 3 Who were you with?
- 4 What were you doing? What happened?
- 5 How did you feel about it in the end?

- 11 When was the last time you got lost? What happened? Discuss with a partner.

## WRITING

- 12 Read the writing task and write the story.

You agreed to write a story for the *Me and Technology* section of your school newspaper. The title of your story is: *The day technology saved me*. Remember to:

- explain when and where the situation happened.
- describe the events and show their sequence using the correct past tenses.
- make the story interesting for the reader.
- give your story an interesting ending.

## PROJECT

- How to teach with projects p. T19
- Work in groups. Do some research to find out about unusual scientific work or place to do science experiments. Prepare a presentation about it and then present it to your class.