

10.5 It'll make your life easier

COMMUNICATE *Creating a new product*

- 1 Work in a group. Think about the technology that Tan Le described. Discuss some possible applications of the technology. Look at these categories for ideas.

travel	shopping	sports	education
work	saving lives	disabilities	entertainment

- 2 Choose one application of Tan Le's technology and think of a new product that could make use of it. Prepare to explain what it does, how it's useful and who should buy it. Make notes.

Name of product:

What it does:

How it's useful:

Who should buy it:

EXPLAINING THE USES OF SOMETHING

It's useful for ... You can use it to ... It's designed for ...

- 3 Prepare a TV advertisement for your product. Write a short script. Then act out the advert for the class.

Do you ever get hungry but feel too busy to make a snack?

With Mind Delivery, you won't need to cook again. It works like this ...

WRITING *Writing a proposal*

- 4 Choose one of the products you heard about in Exercise 3. Write an email to Tan Le telling her about the product. Explain what it is and how it works.

Dear Tan Le,
I have a great idea for a product that uses your amazing new technology.
If you're not too busy, I'd like to take some time to explain it to you ...



Millions of monarch butterflies make the long journey south to Mexico every winter

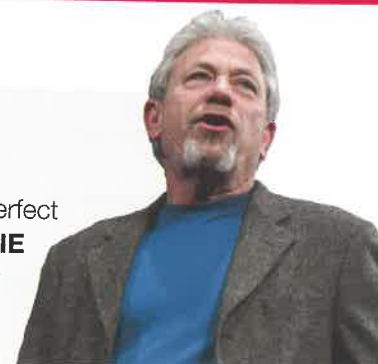
WARM UP

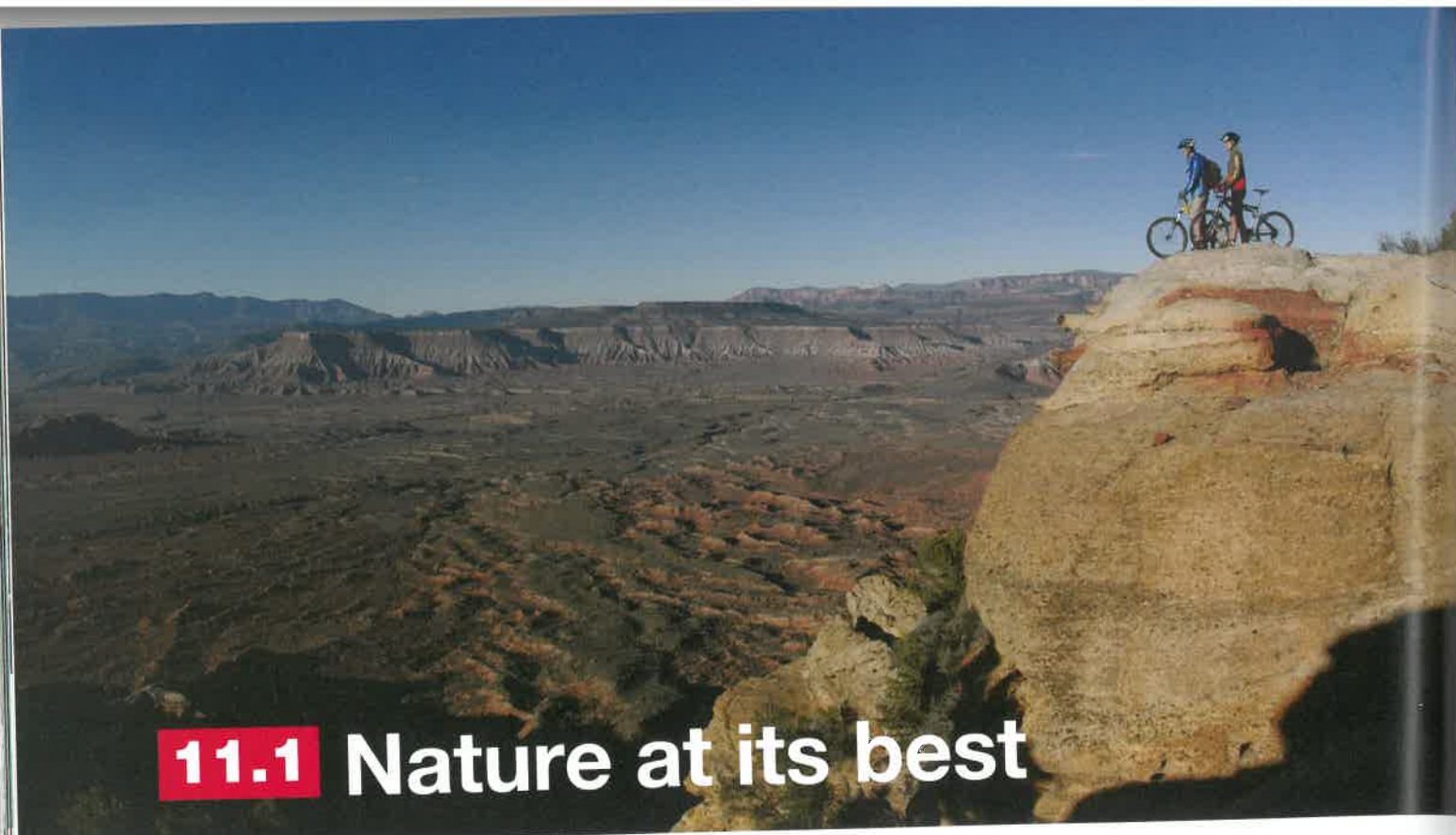
Look at the photo and read the caption. Discuss the questions.

- 1 What other extraordinary journeys do you know of in the natural world?
- 2 Nature often provides memorable sights. Can you think of any you've seen?
- 3 How do you enjoy spending time in nature?

In this unit you:

- talk about nature
- learn to use the present perfect
- watch a TED Talk by **LOUIE SCHWARTZBERG** about the wonder of pollination





11.1 Nature at its best

VOCABULARY Nature

- 1 Complete the table with these words. Can you add one more word to each column?

the coast the desert an island a forest the mountains top of a mountain the woods

on	in
the beach	a cave

- 2 Match the verbs and the activities. Try to add one more activity to each set.

- | | |
|------------|--|
| 1 go | a walk / bike ride |
| 2 go for a | b diving / climbing / cycling / camping |
| 3 go on | c safari / a walking holiday / a bike ride |

- 3 Look at these words to describe a landscape or view. Are they positive (P) or neutral (N)? Can you think of places you would describe with these words?

- | | |
|----------------------|------------------|
| 1 wild _____ | 4 gorgeous _____ |
| 2 breathtaking _____ | 5 pretty _____ |
| 3 mountainous _____ | 6 flat _____ |

- 4 How often do you spend time in the countryside? What do you like to do there? Discuss with a partner.

I try to go out every week. I love walking.

I go walking about once a month.

LISTENING My experiences in nature

Noticing auxiliary verbs

Auxiliary verbs are often contracted and can be difficult to hear. Being able to recognize different auxiliary verbs will help you understand a speaker's message. For example, *I have* is usually shortened to *I've*.

- 5 ▶ 11.1 Listen to Tony Gainsford talking about his experiences in nature. Circle the natural places that he can enjoy near his home.

a beach a forest a park a river

- 6 ▶ 11.5 Listen again. Match the sentence parts to make statements about Gainsford's experiences.

- | | |
|----------------------------|--------------|
| 1 He's been snorkelling in | a Africa. |
| 2 He saw sea turtles in | b Australia. |
| 3 He's never been to | c Greece. |

- 7 Have you had any similar experiences to Gainsford? Discuss with a partner.



Tony Gainsford

Pronunciation /ðə/ and /ði:/

- 8a ▶ 11.2 Listen to the different way *the* is pronounced before a consonant sound and before a vowel sound.

there's a great park along **the** coast here
female turtles come to **the** island's beaches

- 8b ▶ 11.3 Listen and repeat.

- 1 the coast 2 the island 3 the Arctic 4 the desert 5 the wildlife 6 the Earth

SPEAKING Talking about nature

- 9 ▶ 11.4 Listen to the conversation. Where are the two people planning to go?

A: It's great to get out and **enjoy** the countryside while **appreciate / experience** the weather is so nice.

B: You know, we should go to Evans National Forest sometime.

A: That would be fun. I've never been there. Have you?

B: Yeah, I have. It was **so pretty**. **breathtaking / gorgeous**

A: Have you ever **walked up** the mountain there? **climbed up / been to the top of**

B: No, I haven't. I'd love to, though.

A: OK, we should make a plan. Hopefully, we'll **spot** some deer or other wildlife. **see / find**

- 10 Practise the conversation with a partner. Practise again using the words on the right.

- 11 Work in pairs. Think of something fun to do outside together.

What do you think we should do?

How about going for a walk by the river? It's really nice.

11.2 Have you ever seen a bear?

DISCONNECTED FROM NATURE

More and more children today are having less and less contact with the natural world. A recent survey of 2,000 British children between the ages of 8 and 12 had some surprising results.

20% have never climbed a tree.

40% have never been camping.

Only 36% have played outside in the last week.

21% have never visited a farm.

28% have not been on a walk in the countryside in the last year.

More go to hospital from falling out of bed than from falling out of a tree.

GRAMMAR Present perfect

1 ▶ 11.5 Look at the infographic. Do you think children in your country are similar? Discuss with a partner.

2 ▶ 11.6 Listen to a health expert offer some advice. Complete the suggestions.

- Adults need to _____ for children.
- We need to look at why children are _____ more.
- For a few hours a week, parents shouldn't allow their children to _____.

3 Read the sentences in the Grammar box. Answer the questions (a-d).

PRESENT PERFECT

- I've been camping.
 - I went when I was ten.
 - She hasn't visited a farm.
- Which sentence describes an event that happened sometime in the past (but we don't know exactly when)?
 - Which sentence describes an event that happened at a definite time in the past?
 - How do we form the present perfect, and how do we make it negative?
 - What is the main verb in sentence 1? Go or be?

Check your answers on page 152 and do Exercises 1-2.

4 Complete the text with the present perfect form of the verbs. Use contractions where possible.

Pippa Hawkins teaches pre-school children. She says that many of the children in her class ¹ *have never run* (never run) in the countryside and often, they ² _____ (not hear) the sound a cow makes except on TV! But Pippa has started to change this. 'I ³ _____ (take) them to the woods and we ⁴ _____ (go) on a trip to a local river, too.' Now a child can go home and say that he ⁵ _____ (climb) a tree, or that she ⁶ _____ (see) a big fish.

Pippa says, 'They ⁷ _____ (learn) a lot about nature and I ⁸ _____ (enjoy) seeing how happy being outdoors makes the children.' Perhaps this is a lesson that we can all learn from.



LANGUAGE FOCUS Talking about past experiences

5 ▶ 11.7 Study the examples in the Language focus box.

TALKING ABOUT PAST EXPERIENCES

Have you ever climbed a tree?	Yes, I have . I've climbed lots of trees. Yes, but I haven't climbed one since I was a child.
Has she ever slept outdoors?	Yes, she has . She's been camping twice. No, she hasn't . She's never slept outdoors.
Have you ever been to a desert?	Yes, I have . I went to one in Chile last year. No, but I'd like to.
I've had a walk every day this week.	Me too. / So have I. Really? I haven't .
I've never swum in the sea.	Me neither. / I haven't , either. / Neither have I. Really? I have .

For more information and practice, go to page 152.

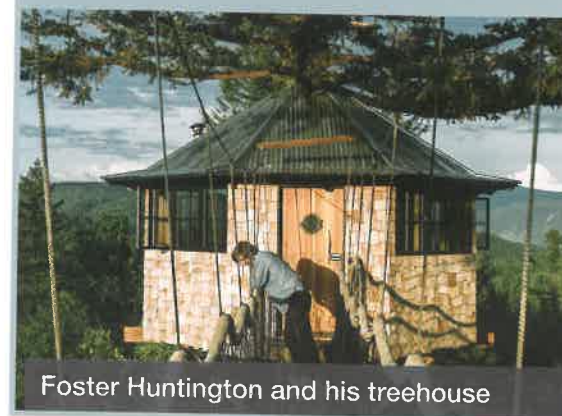
6 ▶ 11.8 Complete the information with the correct form of these verbs. Listen and check your answers.

build	connect	love
make	-see-	want

Have you ever ¹ *seen* a tree house?
Have you ever ² _____ to live in one? One man has ³ _____ that dream come true.

Foster Huntington has always ⁴ _____ tree houses, and when he decided to move from New York City to Oregon he had an idea: he would build his own.

He has ⁵ _____ not one, but two tree houses. And he has ⁶ _____ them with a bridge to create a truly unique living space high above the ground. It may not be for everyone, but for Huntington, it's the perfect home.



Foster Huntington and his treehouse

7 Complete the conversations.

- A: Have you ever been camping?
B: Yes, I *did* / *have*. I *went* / *have been* camping last summer.
- A: *Has* / *Have* you ever swam / swum in the sea?
B: No, I haven't. But I *swam* / *'ve swum* in a river last summer.
- A: *Did you see* / *Have you seen* any bears on your trip last August?
B: No, but my brother *saw* / *has seen* one a couple of years ago.

Pronunciation Weak forms (2): have

8 ▶ 11.9 Listen to how *have* is pronounced in these examples. Listen again and repeat.

- Have** you ever been sailing?
- Yes, I **have**.
- No, I **haven't**. But I've been on a canal boat.

SPEAKING Experiences in nature

9 Walk around the classroom. Find someone who answers yes to each question. Then ask a follow-up question.

Have you ever ...

- climbed a tree?
- visited a farm?
- been camping?
- planted a tree?
- been diving?

Have you ever planted a tree?

Yes, I have.

Where did you plant it?

11.3 Small is beautiful

READING The miracle of pollen

- 1 Read the definition of *pollen* in the glossary on page 121. What animals do you know that help carry pollen? Discuss with a partner.
- 2 ▶ 11.10 Read the article. Which animals are mentioned?

Understanding gist

- 3 Choose the best alternative title for the article.
- a The secret life of bees b The importance of pollinators c The wonder of reproduction

Understanding a process

- 4 How does pollination work? Complete the information using these words.

body nectar petals pollen seed

- A flower with bright ¹ _____ and a sweet smell attracts a bee.
- The bee lands on the flower and drinks its ² _____.
- Some pollen gets on the bee's ³ _____.
- The bee lands on another flower and deposits the ⁴ _____ there.
- The flower now has what it needs to produce a ⁵ _____, which will grow into a new plant.



Understanding details

- 5 Circle T for true or F for false.

- | | | |
|---|---|---|
| 1 If pollination stopped, there would be no tomatoes. | T | F |
| 2 There are over 200,000 different types of pollinators. | T | F |
| 3 Ants are the only non-flying pollinators. | T | F |
| 4 Today, there are more honey bees in the United States than ever before. | T | F |
| 5 Scientists have discovered the reason for colony collapse disorder. | T | F |

Understanding vocabulary

- 6 Circle the correct words to complete the definitions.

- If something **attracts** you, you want to be *closer to* / *further away from* it.
 - If you **tear** something **open**, you open it by *pulling with your hands* / *using a knife*.
 - If you **depend on** something, you *need* / *don't need* it.
 - A **serious** problem is *big* / *small*.
 - If something **disappears**, you can't *see* / *understand* it anymore.
- 7 What could be done to protect pollinating plants? Discuss with a partner.

THE MIRACLE OF POLLEN

A bee collects pollen from a lily flower

It happens countless times a day. A flower's bright petals and the smell of sweet ¹nectar **attract** a bee. The bee drops in for a quick taste, and small ²grains of ³pollen stick to its body. The bee then travels to another flower of the same type and as it stops for another meal, leaves the pollen. This is an example of animal pollination – a process vital to plant ⁴reproduction.

It's not only plants that **depend on** animal pollination – humans do, too. Worldwide, approximately a thousand plants that we grow for food, spices, clothing and medicine depend on it. If pollination suddenly stopped, we would have no more apples, tomatoes or coffee and it would be ¹⁵the end of many other products, too.

This essential process is carried out by more than 200,000 different animal species known as pollinators. Flies and beetles – the original pollinators – have performed this task for 130 million ²⁰years, since the time of the first flowering plants. Birds, butterflies and ants also do their part. Even

non-flying mammals help out: monkeys **tear open** flowers with their hands, accidentally spreading pollen into the air and onto their fur.

However, some of our most important pollinators ²⁵are at risk. Climate change, habitat loss and invasive predators all threaten them. The United States, for example, has lost over 50 per cent of its honeybees over the past ten years. A **serious** threat facing bees is colony collapse disorder (CCD), when worker bees mysteriously **disappear** from their colony. Scientists are still trying to identify its cause.

There is a quote ³⁵attributed to Einstein that says if bees disappeared, man would only have four years left to live. Whether that's true or not does not really matter, says wildlife photographer Louie Schwartzberg: the key point is that there is a real danger. 'We depend on pollinators for over a third of the fruits and vegetables we eat', he says. And ⁴⁰this food 'would disappear without pollinating plants. It's pretty serious.'

¹ **nectar (n)** a sweet liquid produced by flowers

² **grain (n)** a piece of something (e.g. salt, sand) that is very small

³ **pollen (n)** very fine, usually yellow, powder that is produced by a plant. It is carried to other plants of the same kind so that the plants can produce seeds.

⁴ **reproduction (n)** the process by which living things produce young

⁵ **attributed to (phrase)** believed to be said by a particular person

Louie Schwartzberg

11.4 The hidden beauty of pollination

TED TALKS

- 1 Read the paragraph. Complete the definitions (1–3). You will hear these words in the TED Talk.

As a filmmaker, **LOUIE SCHWARTZBERG** uses **time-lapse** photography and slow-motion cameras to capture amazing images of nature. He is fascinated by the way plants and pollinators **co-evolve** and believes that threats to pollinators deserve our attention. His idea worth spreading is that we will protect what we fall in love with, so we should enjoy the beauty in nature and **take care of** it.

- 1 **Time-lapse** photography makes a *slow action appear fast / fast action appear slow*.
- 2 If two or more species **co-evolve**, they develop particular features *separately / together*.
- 3 You **take care of** something that is *important / unimportant* to you.
- 2 ▶ 11.11 Watch Part 1 of the TED Talk. Choose the correct options to complete the summary.
Louie Schwartzberg thinks the 'little things / big ideas' in life are the most amazing. He describes how pollinators and flowers co-evolved over a period of ²50 / 15 million years. He describes watching flowers with time-lapse photography as a kind of ³magic / dance. He wants to take action to protect the ⁴bees / flowers because if they disappear, we do too.
- 3 ▶ 11.12 Watch Part 2 of the TED Talk. What do you think Louie Schwartzberg means by each statement?
- 1 'So here is some nectar from my film.'
a Here are the parts that include flowers.
b Here are some of the best parts of my film.
- 2 'I hope you'll drink, tweet and plant some seeds to pollinate a friendly garden.'
a I hope you enjoy it and share it with others.
b I hope you get inspired to plant your own garden.
- 3 'And always take time to smell the flowers, and let it fill you with beauty ...'
a Take the time to appreciate the beautiful and natural things in life.
b When you buy flowers, remember to choose the most beautiful ones.

CREATIVE THINKING

- 4 What other things would be interesting to film with time-lapse photography? Discuss with a partner.

VOCABULARY IN CONTEXT

- 5 ▶ 11.13 Watch the clips from the TED Talk. Choose the correct meaning of the words.
- 6 Work in pairs. Discuss the questions.
- 1 Are there any causes you care about enough to take action?
2 Are there any books you love and have read over and over again?

PRESENTATION SKILLS Calling others to action

TIPS

One effective way of closing a presentation is with a call to action — when the presenter calls upon the audience to act in some way. Often the presenter uses *we* or *our* to stress that we are all part of the solution.

- 7 ▶ 11.14 Watch the clip. Notice how Louie Schwartzberg says 'we need' to take care of nature.
- 8 ▶ 11.15 Can you remember what these TED speakers' calls to action were? Match. Then watch the clips and check your answers.
- | | |
|----------------------|---|
| 1 Munir Virani | a 'And I hope many more people will join me. If we all read more widely, there'd be more incentive for publishers to ...' |
| 2 Ann Morgan | b 'It is up to us to decide whether we want schools or parking lots, community-driven recycling projects, or ...' |
| 3 Andras Forgacs | c 'You can write a letter to your government and tell them that we need to focus on these very misunderstood creatures.' |
| 4 Alessandra Orofino | d 'We can design new materials, new products and new facilities. We need to move past just killing animals ...' |
- 9 Work in a group. What are some things that you think Schwartzberg would like to see people do to 'take care of nature'?

A hummingbird feeds on the nectar of a flower, Costa Rica



11.5 Getting out into nature

COMMUNICATE Planning a weekend in the countryside

- 1 Work in a group. You're going to plan a weekend camping trip in the countryside. Decide on a suitable place to go camping. Explain why this is a good place.
- 2 Work together to think of six possible activities to do during the weekend. The aim is to have new experiences and learn about the natural world. Include activities that your group members have never done before.

Activities

Day 1

- 1 _____
- 2 _____
- 3 _____

Day 2

- 1 _____
- 2 _____
- 3 _____

Have you ever been canoeing?

No, I haven't. That's a good idea. Let's do that.

- 3 Join another group. Explain your plan. Answer any questions they may have.

ASKING FOR MORE DETAILS

What exactly ...?

What kind of ...?

Can you explain why you ...?

WRITING Writing a journal entry

- 4 Imagine the first day of your weekend in the countryside has just ended. Write a journal entry describing your experiences and your planned activities for tomorrow.

My weekend in the countryside is going really well! So far, I've planted a tree, made a campfire using sticks and been bird watching. I've had such a great time. Tomorrow will be fun as well. In the morning, we're going to ...

12 Discovery

A scientist explores an ice cave on Ross Island, Antarctica

WARM UP

Look at the photo and read the caption.
Discuss the questions.

- 1 If you found a cave, would you explore it?
- 2 Have you ever found anything interesting while out walking?
- 3 Can you think of any recent discoveries that have taught us more about the past?

In this unit you:

- talk about discoveries
- learn to use the passive
- watch a TED Talk by **NIZAR IBRAHIM** about some amazing dinosaur discoveries



An artefact from the fifth century BC discovered in Lavau, France

12.1 Recent discoveries

VOCABULARY Discoveries

- 1 Look at the photo and read the information. Match each **bold** word with its meaning (1–3).
In 2015, archaeologists **discovered** a tomb from the fifth century BC that is thought to belong to a Celtic prince. After **excavating** the site in Lavau, France and **inspecting** the contents of the tomb, a number of high-quality artefacts were found.
- 1 digging up: _____ 2 found: _____ 3 looking at: _____
- 2 Complete the sentences with these words.
fossil ruins pottery tomb artefacts
- The _____ of an ancient city were identified from the air.
 - Tutankhamun's _____ contained piles of gold.
 - The _____ of a five-centimetre-long ant was discovered in 2011.
 - Researchers believe the pieces of _____ were once large jars that held oil.
 - A number of valuable _____, including several gold vases, were also found.
- 3 Think of a museum or historical site you have visited. What did you see there? Discuss with a partner.

I visited the British Museum in London a few years ago. They have a lot of artefacts from ancient Egypt. It was really interesting.

LISTENING An amazing find

Listening for numbers and dates

It's a good idea to practise saying numbers out loud so you are familiar with how they sound. It's also useful to learn the different ways we say dates.

5 March	March the fifth / the fifth of March
2014	two thousand and fourteen / twenty fourteen

- 4 ▶ 12.1 Listen to archaeologist Fredrik Hiebert talking about a discovery he made. What artefact did he find? Circle the correct answer.

a door a key a crown a ring

- 5 ▶ 12.1 Listen again. Complete the table.

Where was the site?	How old was the artefact?	Who did the artefact belong to?
on the coast of ¹ _____	over ² _____ years old	a merchant who only lived there in ³ _____

- 6 What can we learn about the past from Fredrik Hiebert's discovery? Discuss with a partner.

Pronunciation Numbers and dates

- 7 ▶ 12.2 Work in pairs. Can you pronounce these numbers and dates? Listen and check. Then listen again and repeat.

1 1,000 years old	3 in 1784	5 on 14 September
2 1,500 years ago	4 in 2018	6 a 40-year-old man

SPEAKING Talking about a discovery

- 8 ▶ 12.3 Listen to the conversation. How did the archaeologists find the site?

A: Wow! This is interesting. **Apparently**, archaeologists **According to this, / It says here that** have found an ancient lost city in Honduras.

B: Really? How old is it?

A: Well, the artefacts they found there are **around** **about / approximately** a thousand years old.

B: Wow! How did they find it?

A: The site was **identified** from the air. A team of **discovered / located** archaeologists was **looking for** a city known as the **searching for / trying to find** 'City of the Monkey God'. They think this is it.

B: How exciting!

- 9 Practise the conversation with a partner. Practise again using the words on the right.
- 10 What famous discoveries can you name? They can be in any field, such as archaeology, medicine, exploration or history.

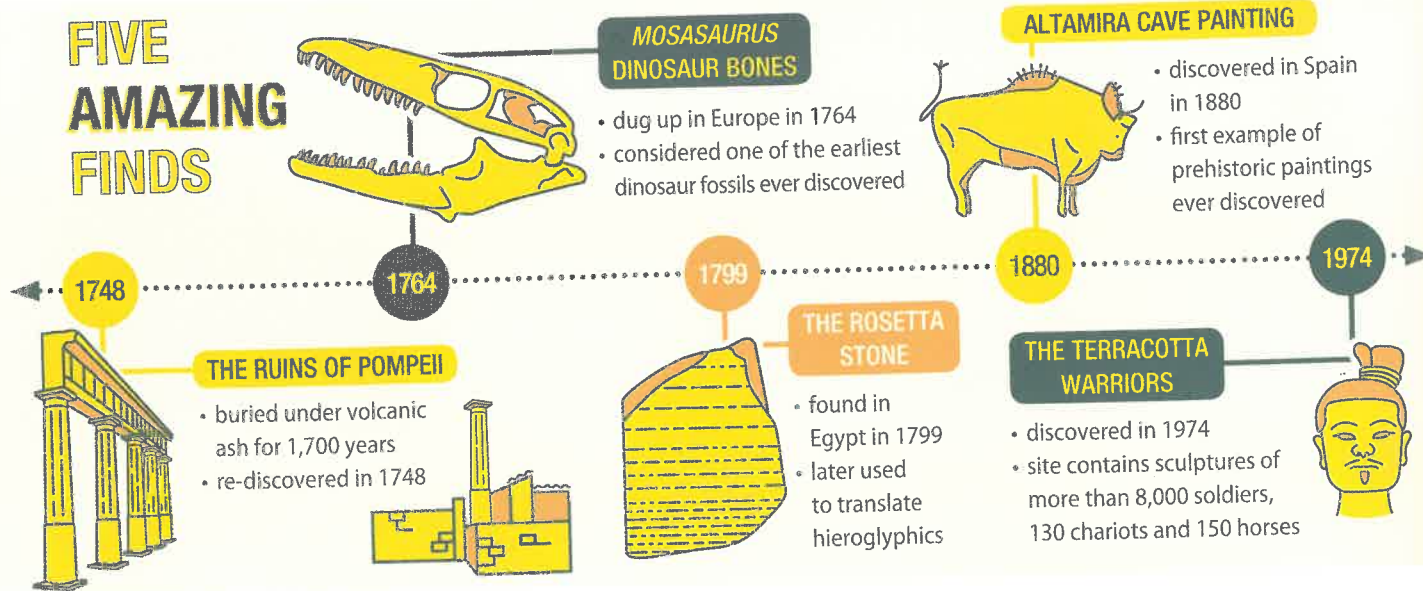
I heard that some scientists think they have discovered a new planet in our solar system.

I heard about that too.



Fredrik Hiebert

12.2 Amazing finds



GRAMMAR The passive

- ▶ 12.4 Look at the infographic. Which discovery do you think is the most interesting? Why?
- ▶ 12.5 Listen to an expert talking about the terracotta warriors. Complete the sentences.
 - The site was a _____ built for the first emperor of China.
 - The site is over _____ years old.
 - The sculptures were originally painted in _____ colours.
- Read the sentences in the Grammar box. Answer the questions (a–e).

- Complete the passive forms in the text with the correct past participles of the verbs.

The earliest cave paintings were ¹ _____ (discover) in a cave called El Castillo in Northern Spain in 1903. Some images of hands were ² _____ (reveal) that were ³ _____ (paint) nearly 40,000 years ago.

Until a few years ago, all early cave painting was ⁴ _____ (believe) to be in Europe. But in the 1950s, twelve images of hands and animals were ⁵ _____ (find) on the island of Sulawesi in Indonesia. The paintings were ⁶ _____ (study) in 2014 and were shown to be nearly 40,000 years old, about 30,000 years older than people thought.

THE PASSIVE

- Thousands of people **visit** the sculptures every year.
 - The sculptures **are visited** by thousands of people every year.
 - The terracotta warriors **were discovered** in 1974.
- Is sentence 1 active or passive?
 - Are sentences 2 and 3 active or passive?
 - How do we change an active sentence into a passive sentence?
 - In sentence 2, what word do we use before the agent (the person who performs the action)?
 - Why might we prefer to use the passive in sentence 3?

Check your answers on page 153 and do Exercises 1–2.

LANGUAGE FOCUS Talking about discoveries

- ▶ 12.6 Study the examples in the Language focus box.

TALKING ABOUT DISCOVERIES

Lots of tourists **visit** Pompeii.
The museum **displays** many artefacts.
The volcanic ash **killed** people instantly.
People **forgot** about the city.
Archaeologists **didn't discover** it until 1,700 years later.

Pompeii **is visited by** lots of tourists.
Many artefacts **are displayed by** the museum.
People **were killed** instantly **by** the volcanic ash.
The city **was forgotten** about.
It **wasn't discovered** until 1,700 years later.

- Is the cave **protected**?
- Are the walls **covered** in paintings?
- Was the cave **found** recently?
- Were the animals **painted** in colour?

Yes, it **is**.
Yes, they **are**.
No, it **wasn't**. It **was found** over 100 years ago.
Yes, they **were**.

For more information and practice, go to page 154.

Pronunciation Irregular past participles

- ▶ 12.7 Write the past participle of these verbs (1–5 and a–e). Then match the past participles that have the same vowel sound. Listen and check. Listen again and repeat.

- | | |
|------------------------|--------------------|
| 1 become <i>become</i> | a hurt _____ |
| 2 build _____ | b sing <i>sung</i> |
| 3 buy _____ | c say _____ |
| 4 hear _____ | d teach _____ |
| 5 read _____ | e write _____ |

- ▶ 12.8 Complete the information. Circle the correct options. Listen and check your answers.

The Voynich manuscript is one of the world's most mysterious books. The text ¹*writes / is written* from left to right and most pages have illustrations. The language used in the book is not known. Its alphabet ²*contains / is contained* 20–25 individual characters, and most of these ³*made / are made* using just one or two pen strokes.

Wilfrid Voynich – a Polish book dealer – ⁴*discovered / was discovered* the book in 1912, and it ⁵*names / is named* after him. Carbon dating shows that it ⁶*created / was created* in the early 15th century.

People have many questions about the manuscript. Some claim a microscope ⁷*needed / was needed* to draw some of the illustrations, but the microscope ⁸*didn't invent / wasn't invented* until the 16th century. Others say the dating is not accurate and argue that it's a modern fake.

- Complete the conversations with the correct form of the verbs.

- A: Who _____ (discover) the first dinosaur fossil?
B: I'm not sure, but I think it _____ (find) in Europe somewhere.
- A: Where _____ the Rosetta Stone _____ (locate) today?
B: In the British Museum. It _____ (see) by 2.5 million people a year.
- A: _____ King Tut _____ (bury) with a lot of valuable objects?
B: Yes. After his tomb was opened, everything _____ (remove) and placed in a museum.

SPEAKING Discovery quiz

- Work in pairs. You are going to do a quiz. Student A: turn to page 157. Student B: turn to page 159.



12.3 It's in his bones

READING The dinosaur hunter

- 1 Read the introduction to the interview. Think of three questions you'd like to ask Nizar Ibrahim.
- 2 12.9 Read the interview. Which of your questions were answered?

Understanding gist

- 3 Tick (✓) the topics that are discussed in the interview.

a why Nizar Ibrahim became a palaeontologist	c extreme weather Ibrahim has faced
b an experience Ibrahim found thrilling	d advice Ibrahim received as a child

Understanding details

- 4 Are the following statements true, false or not given according to the interview? Circle **T** for true, **F** for false or **NG** for not given.

1 Ibrahim was interested in animals from a young age.	T	F	NG
2 Ibrahim's uncle was a palaeontologist.	T	F	NG
3 Ibrahim decided he wanted to be a palaeontologist when he was a teenager.	T	F	NG
4 Ibrahim found a huge dinosaur bone in Morocco.	T	F	NG
5 Ibrahim made an amazing discovery in the Sahara.	T	F	NG

Understanding pronoun referencing

- 5 Read the excerpts from the interview. What do the pronouns in **bold** refer to?
 - '... **it** inspired me to want to write a book of my own.'

a receiving a book about dinosaurs	b meeting a famous author
------------------------------------	---------------------------
 - 'I ... added the word *Dr* in front of **it**.'

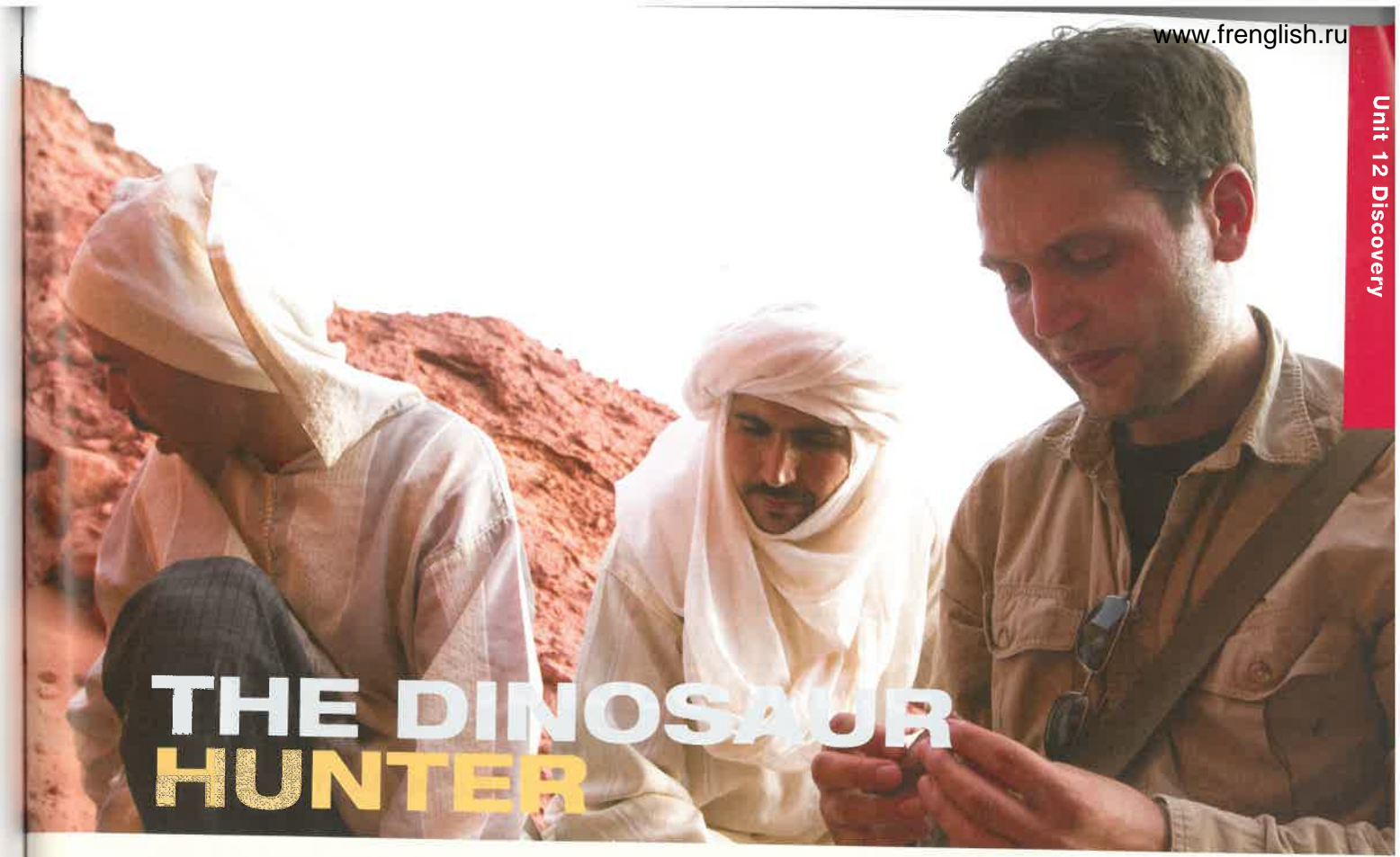
a the author's name	b his own name
---------------------	----------------
 - '... don't let anyone take **them** away from you.'

a your discoveries	b your dreams
--------------------	---------------
 - '... **which** turned out to be one of the most challenging trips.'

a a trip to Morocco	b a trip to the Sahara
---------------------	------------------------

Understanding vocabulary

- 6 Complete each sentence with a **bold** word from the interview.
 - If you feel less determined or confident about something, you feel _____.
 - A(n) _____ storm is one that is strong and powerful.
 - A person with very _____ interests is interested in many different things.
 - _____ are difficulties that makes it hard to do something.
 - A(n) _____ is a gradual increase in something.
- 7 What do you think is the most challenging aspect of being a palaeontologist? Discuss.



Like many children, ¹palaeontologist Nizar Ibrahim had a fascination with dinosaurs. He has spent most of his life searching for their fossils.

5 What inspired you to dedicate your life to your work?

As a child, I was always interested in animals. I was five when I received my first book about dinosaurs, and it inspired me to want to write a book of my own. When I was told that I would have to study hard and get a PhD, I wrote my name under the author's and added the word *Dr* in front of it. I made the decision then and there that I would become a palaeontologist.

I am so inspired by the history of life on our planet. And I feel that palaeontology is our best tool to understand it.

20 What has been your most memorable experience in the field?

It is difficult to choose one particular ²memorable experience. Locating and unearthing the largest

dinosaur bone ever found in the Kem Kem region of south-eastern Morocco was a thrilling experience.

There is a real **build-up** of excitement when searching for fossils because most finds begin as small bits of bone, and the element of discovery and surprise is ³ever-present.

What about the challenges?

The challenges I face during my ⁴fieldwork are very **diverse** and range from **violent** sandstorms and extensive flooding to working in the middle of the Sahara in 50°C heat.

Several years ago, I led a small expedition to the Sahara, on a very ⁵restrictive budget, with just one vehicle and extremely limited supplies, which turned out to be one of the most challenging trips.

What advice would you give your younger self?

First: follow your dreams and don't let anyone take them away from you. Second: don't be **discouraged**. Hurdles and **obstacles** are a part of life and can be overcome. Third: make big plans.

¹ palaeontologist (n) a scientist who studies fossils
² memorable (adj) special and worth remembering
³ ever-present (adj) constant, always there

⁴ fieldwork (n) practical work done in the natural environment, not in an office or lab
⁵ restrictive (adj) stopping someone from doing what they want to do



12.4 How we unearthed the Spinosaurus

TED TALKS

- 1 Read the paragraph. Complete the definitions (1–3). You will hear these words in the TED Talk.

NIZAR IBRAHIM's quest to find dinosaur fossils has taken him to extreme corners of the planet. In the Sahara, he discovered the **remains** of a **bizarre** but beautiful creature. His idea worth spreading is that there will always be amazing discoveries and adventures for palaeontologists, archaeologists and other explorers.

- 1 A **quest** is an unexpected discovery / a long search for something.
 - 2 The **remains** of a dinosaur might include its bones / footprints.
 - 3 Something that is **bizarre** is very difficult to find / strange or unusual.
- 2 Look at the dinosaur on page 133. What can you learn about it from the illustration?
- 3 12.10 Watch Part 1 of the TED Talk. What did Nazir Ibrahim already know about the Spinosaurus? Complete the notes.
- Some ¹ _____ were discovered 100 years ago in Egypt but were destroyed in World War II.
 - The Spinosaurus lived about ² _____ years ago.
 - From drawings, we know it was big, had a sail on its ³ _____ and a long jaw like a ⁴ _____.
 - It probably ate ⁵ _____.
- 4 12.11 Watch Part 2 of the TED Talk. What did Ibrahim discover about the Spinosaurus from the bones that were found? Circle the correct words.
- 1 The Spinosaurus's head was very *different from* / *similar to* other predatory dinosaurs.
 - 2 The Spinosaurus's feet were similar in appearance to those of a *land* / *water* animal.
 - 3 The structure of the Spinosaurus's bones suggests it spent a lot of time *walking* / *in the water*.
 - 4 The Spinosaurus was *bigger* / *smaller* than a T. rex.

- 5 12.12 Watch Part 3 of the TED Talk. Ibrahim quotes dinosaur hunter Roy Chapman Andrews when he says, 'Always, there has been an adventure just around the corner – and the world is still full of corners.' What does he mean by this?

CRITICAL THINKING

- 6 What kind of things do you think we will never know about the Spinosaurus? Why not? Discuss with a partner.

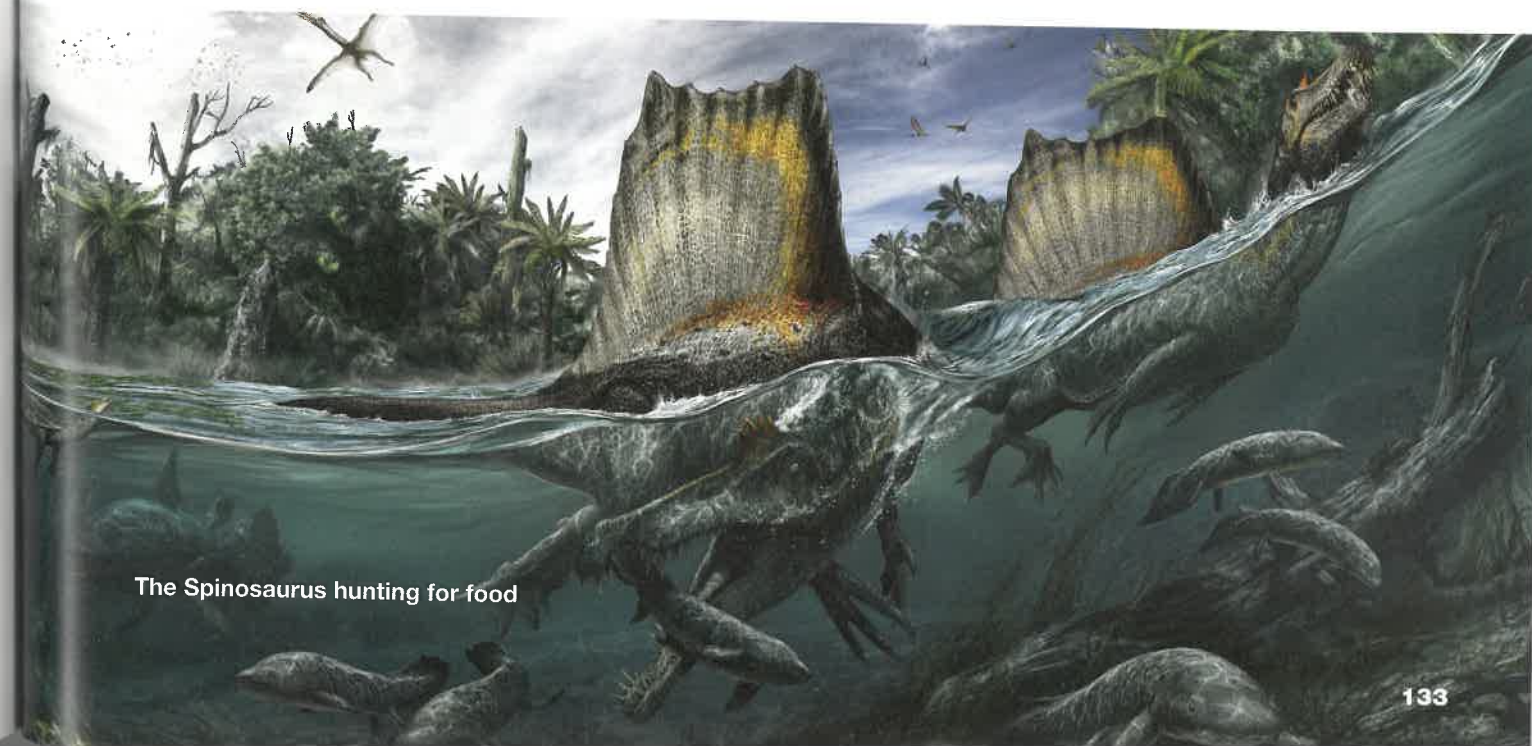
VOCABULARY IN CONTEXT

- 7 12.13 Watch the clips from the TED Talk. Choose the correct meaning of the words.
- 8 Work in pairs. Complete the sentences in your own words.
- 1 An example of a once-in-a-lifetime event is
 - 2 I find it sad that there are not many ... left in the world.

PRESENTATION SKILLS Using descriptive language

TIPS A good presenter uses descriptive language to 'paint a picture'. One way to do this is to compare something to another thing the audience already knows so that it's easier to imagine.

- 9 12.14 Watch the clip. Notice the descriptive language Nizar Ibrahim uses. Which animal does he compare the Spinosaurus's head to?
- 10 12.15 Now watch three other TED speakers. Complete the sentences.
- 1 Jarrett J. Krosoczka says a two-year-old's birthday cake is like a _____.
 - 2 Munir Virani says that vultures are our natural _____ collectors.
 - 3 Louie Schwartzberg compares footage of time-lapse flowers to a _____.
- 11 Work in pairs. Describe the picture on page 123. Use descriptive language.



The Spinosaurus hunting for food

12.5 What have you found?

COMMUNICATE A newspaper interview

1 Work in pairs. Read the information, then do the roleplay.

Student A: You are an archaeologist. Turn to page 159.

Student B: You are a newspaper reporter. Student A recently found some unusual items in the ground. You are going to interview him or her about the discovery. Prepare questions to ask.

- What?
- Where?
- When?
- How old?
- Importance?

EXPLAINING POSSIBILITIES

It's possible that ... It could be that ... There's a possibility that ...

2 Switch roles. Student B: Turn to page 160. Student A: Prepare questions to ask.

WRITING Reporting the news

3 Use the information you learned in Exercises 1 and 2 to write a short news report.

A mysterious skull was discovered last weekend in the garden of a local family. Lisa Morgan, a student at Mason College, was planting a tree behind her house when she made the discovery.

4 You are about to go on live TV to report your story. Read your news report to a partner.



Presentation 4 | UNITS 10-12

MODEL PRESENTATION

1 Complete the transcript of the presentation using these words.

- | | | | | |
|-----------|------------|-----------|-------------|----------|
| amazingly | discovered | forests | fossils | has been |
| have been | has eaten | hopefully | was created | was made |

Today, I want to tell you about an amazing discovery that ¹ _____ not so long ago. Take a look at this picture. This is Hang Son Doong – the world's largest cave. I first heard about this place when I saw an unbelievable video of it on YouTube. Hang Son Doong is in Vietnam. Its name means 'Mountain River Cave'. How big is it? Well, it's more than 5 kilometres long, 200 metres high and 150 metres wide. In some places the cave is big enough to fit a jumbo jet inside! The cave ² _____ by a river which ³ _____ away the limestone of the Annamite Mountains. How was it ⁴ _____? Well, ⁵ _____, nobody knew about this place until a local man named Ho Khanh found it by accident in 1991. And it was only in 2009 that the cave became internationally known after a group of British scientists went there to study it. Inside the cave, entire ⁶ _____ stretch out across the cave floor, and 300-million-year-old ⁷ _____ have been found inside. The cave is so large it even has its own weather system. Very few people ⁸ _____ inside the cave although it ⁹ _____ open to the public since 2013. ¹⁰ _____, I'll get the chance to go there myself one day. It looks like a truly incredible place.



2 P.4 Watch the presentation and check your answers.

3 P.4 Review the list of presentation skills from units 1-12 below. Which does the speaker use? Tick (✓) each skill used as you watch again.

Presentation skills: units 1-12

The speaker ...

- | | | | |
|---------------------------------------|--------------------------|-----------------------------|--------------------------|
| • uses questions to signpost | <input type="checkbox"/> | • tells an anecdote | <input type="checkbox"/> |
| • personalizes the presentation | <input type="checkbox"/> | • uses supporting evidence | <input type="checkbox"/> |
| • closes the presentation effectively | <input type="checkbox"/> | • uses an effective slide | <input type="checkbox"/> |
| • provides background information | <input type="checkbox"/> | • uses descriptive language | <input type="checkbox"/> |
| • numbers key points | <input type="checkbox"/> | • gives a call to action | <input type="checkbox"/> |
| • uses their voice effectively | <input type="checkbox"/> | • deals with the unexpected | <input type="checkbox"/> |