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CENGAGE

Life

INTERMEDIATE

B1+

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an exciting series that makes learning English an exploration of the world. Drawing on National Geographic content, *Life* transforms the learning experience into a fabulous journey with irresistible images, articles and videos that engage learners like no series before. Bring *Life* into your classroom!

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- Show justification for the answers to the reading and listening comprehension activities

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Laguna Colorada, Bolivia

Contents

Unit	Grammar	Vocabulary	Real life (functions)	Pronunciation
1 Colour pages 9–20	present simple and present continuous stative verbs question forms	time expressions feelings and personal states the roles we play wordbuilding: noun and verb → noun	opening and closing conversations	questions short questions
VIDEO: Peruvian weavers page 18 ► REVIEW page 20 A				
2 Performance pages 21–32	present perfect simple <i>already, just</i> and <i>yet</i> verb patterns: <i>-ing</i> form and <i>to</i> + infinitive	musical styles emotions global culture describing performances wordbuilding: adjective + noun	choosing an event	weak forms intonation with <i>really, absolutely</i> , etc.
VIDEO: Taiko master page 30 ► REVIEW page 32 A				
3 Water pages 33–44	past simple and past continuous past perfect simple	water and recreation word focus: <i>get</i> wordbuilding: adverbs	telling stories	irregular past tense verbs <i>was</i> and <i>were</i>
VIDEO: One village makes a difference page 42 ► REVIEW page 44 S				
4 Opportunities pages 45–56	predictions: <i>will, may, might, could</i> future forms: present continuous, <i>will, going to</i>	<i>job</i> and <i>work</i> education pay and conditions job requirements wordbuilding: phrasal verbs	making and responding to requests	<i>I'll</i> weak and strong auxiliary verbs
VIDEO: Confucianism in China page 54 ► REVIEW page 56				
5 Travel pages 57–68	present perfect simple and past simple <i>for</i> present perfect continuous and simple <i>How long ... ?</i>	holiday destinations conservation travel problems wordbuilding: compound nouns (noun + noun)	dealing with problems	<i>has, have</i> strong and weak forms
VIDEO: A disappearing world page 66 ► REVIEW page 68 S				
6 Wellbeing pages 69–80	modal verbs (1): <i>have to, must, can, be allowed to, should</i> first conditional: <i>if + will when, as soon as, unless, until, before</i>	a healthy lifestyle modern life restaurants wordbuilding: phrasal verbs with <i>down</i> and <i>up</i>	describing dishes	weak forms disappearing sounds
VIDEO: Dangerous dining page 78 ► REVIEW page 80 S				

Listening	Reading	Critical thinking	Speaking	Writing
a conversation about a family event in Brunei two people doing a quiz about colours and their meaning	an article about how we use colour an article about the colour red	conclusions	routines and leisure activities personal questions the roles we play	text type: a website profile writing skill: criteria for writing
three people talking about arts events a radio show about world fusion music A	an article about why we dance A an article about globalisation	sources	new releases performing changes	text type: a profile writing skill: linking ideas (1)
a radio clip about World Water Day two people talking about what happened next	an interview about underwater discoveries an article about an unforgettable experience	reading between the lines	the first time puzzles it happened to me	text type: a blog post writing skill: interesting language
three people talking about their childhood ambitions a radio programme about International Women's Day	an article about India's new superhighway an article about the economic boom in China	arguments	predictions planning your work pay and conditions	text type: a covering letter writing skill: formal style
three people talking about travel tips part of a radio programme about a wildlife conservationist three conversations about holiday activities	a profile of a wildlife conservationist an article about holiday destinations an article about tourism and conservation	close reading	travel experiences what makes a good holiday? green activities	text type: a postcard writing skill: informal style
part of a radio programme about healthy eating two people discussing the power of the mind	a news item about traditional dishes a news item about imaginary eating S an article about modern lifestyles S	language clues	your favourite dish a healthy lifestyle modern life	text type: a formal letter writing skill: explaining consequences

Unit	Grammar	Vocabulary	Real life (functions)	Pronunciation
7 Living space pages 81–92	comparatives and superlatives <i>used to, would</i> and past simple	features of homes in the city word focus: <i>as</i> and <i>like</i> wordbuilding: verb → adjective	expressing preferences and giving reasons	<i>as ... as</i> rising and falling intonation
VIDEO: A special kind of neighbourhood page 90 ► REVIEW page 92 A				
8 Weird news pages 93–104	modal verbs (2) speculation about the present: <i>must, might, may, could, can't</i> modal verbs (3) speculation about the past: <i>must have, might have, may have, could have, can't have, couldn't have</i>	the natural world history <i>-ly</i> adverbs in stories word focus: <i>look</i> wordbuilding: noun → adjective	reacting to surprising news	weak form of <i>have</i> showing interest and disbelief
VIDEO: Killer bees page 102 ► REVIEW page 104 S				
9 Trade pages 105–116	articles in noun phrases determiners and possessives in noun phrases passives	money shopping wordbuilding: compound adjectives	buying things	linking silent letters
VIDEO: Making a deal page 114 ► REVIEW page 116				
10 No limits pages 117–128	defining relative clauses second conditional: <i>if + would</i>	medicine injuries word focus: <i>take</i> wordbuilding: suffixes <i>-ful, -less</i>	talking about injuries	<i>and</i> sentence stress
VIDEO: High-altitude peoples page 126 ► REVIEW page 128 S				
11 Connections pages 129–140	reported speech reporting verbs	communications technology word focus: <i>time</i> wordbuilding: prefix <i>un-</i>	telephone messages	contrastive stress polite requests with <i>can</i> and <i>could</i>
VIDEO: Crossing Antarctica page 138 ► REVIEW page 140				
12 Experts pages 141–152	<i>should have</i> and <i>could have</i> third conditional: <i>if + would have</i>	field trips word focus: <i>go</i> wordbuilding: prefix <i>-in</i>	making and accepting apologies	<i>should have</i> and <i>could have</i> sentence stress
VIDEO: Shark vs. octopus page 150 ► REVIEW page 152 S				

COMMUNICATION ACTIVITIES page 153 ► GRAMMAR SUMMARY page 156 ► AUDIOSCRIPTS page 173

Listening	Reading	Critical thinking	Speaking	Writing
three people talking about different living arrangements podcast replies about homes around the world T four people talking about where they live	an article about what New York used to be like T an article about a little town in Puerto Rico	descriptions	house or flat? your town wish you were here!	text type: a description of a place writing skill: organising ideas
two people discussing an unusual photo S some clips from a website about mysteries in nature part of a radio programme about the Nasca lines	an article about the Nasca lines A an article about one of aviation's greatest mysteries	opinion or fact?	missing captions speculating about the past give your opinion	text type: a news story writing skill: structuring a news story
market research interviews with some people who are shopping a radio item about banking via mobile phones T	a website about producers and products T an article about how to negotiate a price	testing a conclusion	saving money brands negotiating	text type: an eBay advert writing skill: relevant and irrelevant information
a podcast about the <i>Marathon des Sables</i> part of a TV preview show about bionic bodies T	a webpage about life on Mars S two stories about feats of endurance	reading between the lines	medicine I'd love to live in ... inspirational people	text type: a personal email writing skill: linking ideas (2)
an interview with a woman about the languages spoken in her region four conversations about news headlines T	a news item about the last 'uncontacted' tribe an article about social networking T	summarising	news stories personal communication digital media	text type: a report of a meeting writing skill: using notes to write a report
an interview with a cormorant fisherman S two stories about uncomfortable experiences	a review of a book about Arctic expeditions an article about the samurai	relevance	where did I go wrong? what if ... ? going back in time	text type: a website article writing skill: revising

Unit 8 Weird news



A flock of flamingoes in the Gulf of Mexico
Photograph by Robert B. Haas

FEATURES

94 Nature's mysteries

An explanation of strange phenomena in the natural world

96 Desert art

An article on the mysterious Nasca lines in Peru

98 Lost and found? The missing pilot

Current theories about Amelia Earhart's disappearance

102 Killer bees

A video about an invasion of bees in Latin America

1 Work in pairs. Look at the photo. What is unusual about it?

2  **2.8** Listen to two people discussing the photo. What or who do the words in bold in their comments refer to?

- 1 If you look closely you can make **them** out.
- 2 **That's** too much of a coincidence.
- 3 I've seen **this sort of thing** before.
- 4 I think **it's** genuine.
- 5 You can see where **he** has added more flamingos.
- 6 Look at **the ones** at the top.

3  **2.8** Listen again. Answer the questions.

- 1 What does the man think the photo shows?
- 2 What does the woman think has happened to the photo?
- 3 Which person accepts the other's viewpoint?
- 4 Which speaker do you agree with? Why?

4 Work in groups. The woman speaker thinks the image is fake. Have you ever been tricked by anything fake? How can you tell if these things are fake or genuine?

jewellery money paintings passports watches

8a Nature's mysteries



Vocabulary and listening the natural world

1 Work in pairs. You are going to listen to some audio clips from a website about mysteries in nature. Look at the photos from the website. Discuss the photos with your partner.

It looks like (a) ...

It reminds me of (a) ...

2 You will hear these words in the audio clips. Work in pairs. Complete the sentences with these words.

ants atmosphere beetles butterflies flies insect
nitrogen oxygen particles predators radiation
stem species spikes

- 1 _____ and _____ are gases which exist in the Earth's _____.
- 2 Both _____ and _____ are types of flying _____.
- 3 _____ is the name for energy in the form of rays or waves.
- 4 _____ and _____ live on the ground and in soil.
- 5 Leaves and flowers grow from the main _____ of a plant.
- 6 _____ are tiny pieces of material.
- 7 _____ are things which catch and eat other _____.
- 8 Some plants have long, sharp _____, like needles.

3 **2.9** Listen to the audio clips. Write the number of the clip (1–3) next to the words in Exercise 2.

4 **2.9** Listen to the clips again. Are the sentences true (T) or false (F)?

- 1 The colours are man-made lights.
- 2 The colour of the lights depends on the amounts of oxygen and nitrogen.
- 3 The orange ball is a butterfly egg.
- 4 The image uses a technique called macro photography.
- 5 Some plants can actually chase and catch insects.
- 6 The Australian sundew plant traps flies on its sticky spikes.

5 What can you remember? Can you answer the questions? Test your partner.

- 1 What are the lights in the sky?
- 2 Why might butterflies lay eggs in places like this?
- 3 How do some plants catch animals?

Grammar modal verbs (2)

- 6 Match these sentences (1–4) from the audio clips with their uses (a–d).
- The colours are so vivid, like neon street signs, that you think they can't be natural.
 - You imagine that they must be man-made.
 - This might be a painting or a work of art.
 - It may not seem logical, but there are indeed plants that catch insects.
- The speaker is certain something is true.
 - The speaker is certain something is not true.
 - The speaker thinks it's possible something is true.
 - The speaker thinks it's possible something is not true.

SPECULATION AND DEDUCTION ABOUT THE PRESENT

<i>must</i>	+ infinitive
<i>might (not) / may (not) / could</i>	+ <i>be</i> + <i>-ing</i>
<i>can't</i>	

For further information and practice, see page 166.

- 7 Look at the grammar box. Underline other verb forms from the box in the audioscript on page 179.
- 8 Read the text *Navigation in nature*. Cross out any options which are not possible.

Word focus look

- 9 Can you match the two parts of these sentences from the audio clips? Check your answers in the audioscript on page 179. Underline another expression with *look* which means the same as item 1.

- | | |
|-----------------------------|-----------------|
| 1 The sky looks as though | a carefully. |
| 2 The sky looks | b water. |
| 3 The shiny drops look like | c it's on fire. |
| 4 Look | d green. |

- 10 Complete the sentences with an expression with *look* from Exercise 9.

- You great! Are you going somewhere special?
- Have you seen what Mark's wearing today? He a model!
- Joe he hasn't slept all night.
- You angry! What's the matter?
- You you've had some good news.
- I'll need to closely at this contract.

Speaking

- 11 Work in two pairs within a group of four. You are photo editors at a magazine. You can't find the correct captions for your photos. Describe your photos to the other pair and find the correct caption.
- Pair A: Turn to page 153. Look at the photos and captions.
- Pair B: Turn to page 154. Look at the photos and captions.

NAVIGATION IN NATURE

Arctic terns (pictured) are among many animals that travel huge distances every year, returning to the same place each time. How do they find their way? Scientists believe that this ability ¹ *must be / can't be* instinctive in some animals, such as salmon, because they are not guided by a parent. They think that the fish ² *might recognise / could recognise* the smell of the river they came from. According to current theories, some migrating birds, like the tern, ³ *could use / may use* the Earth's magnetic field or the sun as a guide. Studies have shown that in some species, older birds are more successful navigators. This ⁴ *can't mean / could mean* that birds learn with experience or they react to weather conditions. In fact, instinct ⁵ *may be / can't be* the whole story: a flock of young geese once learned their migration route by following a human in a plane.



8b Desert art

Your teacher, Mr Jackson, has asked you to do a group project on Nasca lines. You start with exploring some history-related vocabulary items.

Vocabulary history

- 1 Complete the questions with some of these words. Then work in pairs. Ask and answer the questions.

ancient belief century period prehistoric
sacred society tradition

- Do you enjoy visiting monuments?
- Which historical would you like to live in?
- What do the drawings in cave art often show?
- What do you think were the key historic events of the 20th
- Many historical sites had religious or significance. Can you name any in your country?
- Do you think we can learn from studying how lived in the past?

Listening and reading

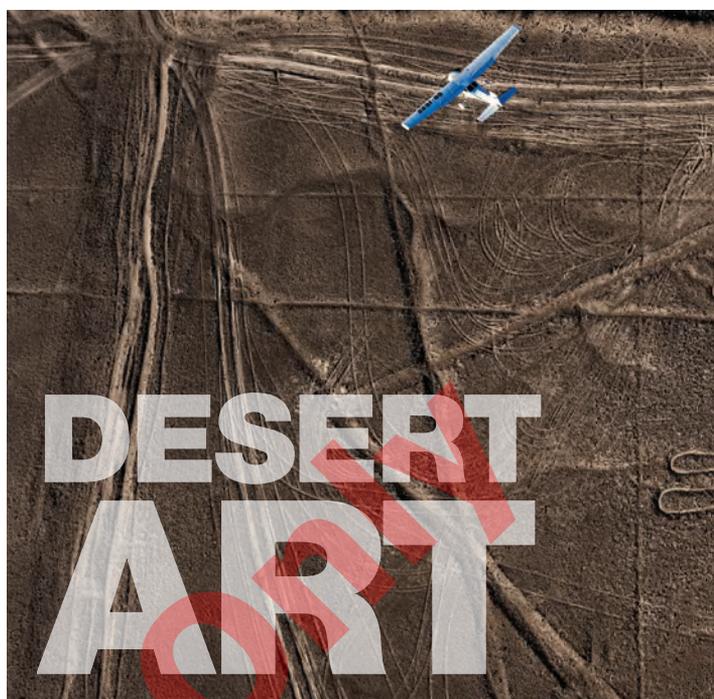
- 2 2.10 Have you heard of the Nasca lines? Work in pairs. Try to answer the questions. Then listen to part of a radio programme. Check your answers.

- What are they?
- Where are they?
- How big are they?
- What do they show?
- How many are there?
- How big an area do they cover?
- How old are they?
- What are they made of?

I've never heard of them. But from the photo, they look as if they're drawings or something.

I think they might be in South America, but I'm not exactly sure.

- 3 Did any of the information in the programme surprise you? Is there any additional information you would like to know about the Nasca lines? Write two or three questions.
- 4 Read the article *Desert Art* and answer the questions. Does the article answer your questions from Exercise 3?
- When did people 'discover' the Nasca lines?
 - What ideas did people have about the purpose of the lines?
 - Why was water important to Nasca society?
 - What is the current theory about the significance of the lines?
- 5 Why do you think people are so fascinated by the Nasca lines?



The mysterious desert drawings known as the Nasca lines have puzzled people since they first became widely known in the late 1920s. Before air travel in Peru began, it was impossible to get a clear view of the giant drawings of the spider, monkey and hummingbird. Yet the Nasca people who made these patterns 2,000 years ago couldn't have seen them from above.

One of the first formal studies of the lines was by Maria Reiche. She spent half a century working for their conservation and was convinced that the lines must have been part of an astronomical calendar. Other people thought they might have been ancient Inca roads or irrigation systems. The weirdest idea was that they could have been landing strips for alien spacecraft!

phenomenon (n) /fə'nomɪnən/ an event or fact
ceremonial (adj) /,serə'məʊniəl/ ritual and traditional

▶ WORDBUILDING noun → adjective

We can make adjectives from nouns by changing the endings of the nouns.

mystery + -ous → mysterious
religion + -ous → religious
astronomy + -ical → astronomical
ceremony + -al → ceremonial

For further information and practice, see Workbook page 67.



Spider
Photograph by Robert Clark

This region of Peru is one of the driest places on Earth and yet successful societies, including the Nasca, lived here. Water must have had an incredible significance to these societies, so perhaps the lines were related to this. We know that the Nasca River, which comes down from the nearby mountains, runs underground for about fifteen kilometres before suddenly emerging on the surface again. This must have seemed an astonishing, even sacred, phenomenon to ancient societies. It has also become clear that there are many huge drawings in the area, not just the ones on the flat desert plain. Many are much older than the Nasca figures themselves, so the same group of people can't have created them. It now seems that the Nasca lines may have been part of a long tradition of ceremonial activities connected to water and religious beliefs.

Grammar modal verbs (3)

One of your group members would like to know more about how to use modal verbs to speculate and deduce things about the past.

- 6 Look at the grammar box. Find and number eight sentences with these forms in the article.

► SPECULATION AND DEDUCTION ABOUT THE PAST

<i>must</i>	<i>have</i>	+ past participle
<i>might / may / could</i>		
<i>can't / couldn't</i>		

For further information and practice, see page 166.

- 7 Answer the questions about the sentences (1–8) in the article.

- Which sentences speculate about things which were possible?
- Which sentences express certainty about the explanations they give?
- Which sentences make a deduction based on logical information?

- 8 Rewrite the sentences about the Nasca using one of the words in brackets.

- We know water wasn't easy to find. (*can't / must*)
- It's possible the rivers dried up. (*might / may not*)
- There's no doubt the lines were very important. (*could / must*)
- Perhaps the lines had a religious significance. (*may / can't*)
- It isn't logical that the animal drawings were roads. (*might / couldn't*)
- Obviously the animals lived in the region. (*might / must*)
- One possibility is that the Nasca people used simple tools. (*could / must*)
- It seems clear that people maintained the lines carefully. (*might / must*)

- 9 2.11 Listen and check your sentences from Exercise 8.

10 Pronunciation weak form of *have*

You and your group members want to learn how to pronounce *have* properly.

- Look at the sentences you wrote in Exercise 8. Is the verb *have* the main verb or an auxiliary verb?
- Listen again. Is *have* pronounced /hæv/ or /həv/?

Speaking

- To prepare for the oral presentation for the group project, work with a group member on these two aspects. Why do you think the Nasca lines were created? What about other mysterious sites you have heard about?
- Now work with all the group members. Look at the list of things archaeologists have found. They all date from around 2,000 years ago – the same period as Nasca society. What do they say about how people lived then?

a leather sandal
a circle of 2m-high granite 'standing stones'
fragments of pottery with iron-based painted patterns
a metal pot containing cream with a fingerprint visible
pits dug in the ground, full of apricot and plum seeds
a bronze mirror in a grave
pots in the ground containing hundreds of coins
pieces of burnt animal bones

- 13 Tell the class your ideas. Which ideas are the most interesting?

8c Lost and found?

Reading

To prepare for an inter-class quiz competition, Mr Jackson asked the groups to read some articles about the disappearance of Amelia Earhart, which is 'one of aviation's greatest unsolved mysteries'.

- 1 Read the first article, *Where Is Amelia Earhart? Three Theories*, on page 99. Find out what people think happened to her. Compare answers with another group member.
- 2 Read the second article on page 99 quickly. Answer the questions.
 - 1 Which of the three theories is the main article concerned with?
 - 2 Which modern scientific technique might hold the key to the Earhart mystery?
 - 3 If the project is successful, what will it prove?
- 3 Read the second article again. Answer the questions.
 - 1 What is Justin Long's connection to the project?
 - 2 Why can't the study use a sample of Earhart's hair?
 - 3 What is the biggest problem facing the researchers on the new project?
- 4 Find these words in the articles. Look at how the words are used and try to guess their meaning. Then replace the words in bold in the sentences with these words.

log profile funding reveal archive
assumption ensure identical

- 1 The Science Council is **paying for** a study of wildlife in our area.
- 2 The tests **show** that these bones are not human.
- 3 The museum has a huge **collection of documents** on the early days of flight.
- 4 We **need to make certain** that our results are correct.
- 5 The investigation is based on the **theory** that the sample is big enough.
- 6 Detectives often build up a **description** of a suspected criminal.
- 7 These two samples are **exactly the same**.
- 8 The visitor **register** recorded twenty visitors yesterday.

- 5 Work with a group member to complete the summary.

The new project aims to provide a way of testing ¹ The success of the project depends on several things. Firstly, that the bone is from a ² , not a turtle. Secondly, that Earhart's saliva still exists on ³ And thirdly, that there is enough saliva to ⁴

Critical thinking opinion or fact?

- 6 Round 2 of the quiz competition is more challenging. Practise by reading the definitions of *opinions* and *facts*. Then decide if the sentences from the articles are opinion (O) or fact (F).

Opinions are things people believe to be true. They can be a personal point of view or something that many people think.

Facts are items of information that we can check, prove or disprove.

- 1 Amelia Earhart [...] was attempting a round-the-world flight in 1937.
 - 2 Earhart could have landed on a different island.
 - 3 According to Justin Long, Earhart's letters are the only items that are both verifiably hers and that might contain her DNA.
 - 4 A 2009 study revealed that the sample [of hair] was actually thread.
 - 5 Some scientists have suggested the Nikumaroro bone fragment isn't human at all.
 - 6 About 99 per cent of the nuclear genome is identical among all humans.
- 7 Find another fact and another opinion in the second article.

Speaking

- 8 Now work with all the group members. Discuss your answers to the questions.
 - 1 Why do you think Justin Long is involved in the project?
 - 2 The bone fragment 'might have been from one of Earhart's fingers'. What other possibilities exist?
 - 3 Is it certain that any saliva on the envelopes is Earhart's? Why? / Why not?
 - 4 Do you think the project will be successful? Why? / Why not?

In my opinion, Justin Long is involved because his grandparents were interested in Amelia Earhart.



Where is *Amelia Earhart?*

Three Theories

By Ker Than for National Geographic News

Amelia Earhart, the first woman to fly solo across the Atlantic Ocean, was attempting a round-the-world flight in 1937. She planned to land on the tiny Pacific Ocean island of Howland just north of the equator. She never arrived. Her fate, and that of her navigator Fred Noonan, remains one of aviation's greatest unsolved mysteries. Researchers have spent millions of dollars investigating the case and several books have been published that examine the differing theories.

The official US position is that Earhart ran out of fuel and crashed in the Pacific Ocean. The radio log from a US Coast Guard ship indicates that she must have been near Howland when contact was lost.

Another theory says that Earhart could have landed on a different island, called Nikumaroro, and subsequently died since the island is uninhabited.

Yet another theory claims she was captured while on a secret mission to the Japanese-controlled Marshall Islands in the North Pacific and eventually returned to the USA with a new identity.

Lost and found? The missing pilot

18 February 2011

Amelia Earhart's dried saliva could help solve the longstanding mystery of the aviator's 1937 disappearance, according to scientists who plan to take samples of her DNA from her correspondence. A new project aims to create a genetic profile that could be used to test recent claims that a bone found on the South Pacific island of Nikumaroro is Earhart's.

Justin Long, a Canadian whose family is partially funding the DNA project, points out that at the moment, anyone who finds fragments of bones can claim that they are Amelia Earhart's remains. Long, an internet-marketing executive, is the grandson of 1970s aviator Elgen Long, who with his wife wrote the 1999 book *Amelia Earhart: The Mystery Solved*. According to Justin Long, Earhart's letters are the only items that are both verifiably

hers and that might contain her DNA. Hair samples are one of the best sources of a person's DNA, but no hair samples from Earhart are known. There was, in theory, a sample of Earhart's hair in the International Women's Air and Space Museum in Cleveland, USA. However, a 2009 study revealed that the sample was actually thread.

The remains of Earhart, her navigator Noonan, and their twin-engine plane were never recovered. But in 2009, researchers with the International Group for Historic Aircraft Recovery found a bone fragment on Nikumaroro, which they believed might have been from one of Earhart's fingers. However, some scientists have suggested the Nikumaroro bone fragment isn't human at all but may instead belong to a sea turtle which was found nearby.

The new Earhart DNA project will be headed by Dongya Yang, a genetic archaeologist at Simon Fraser University

in Canada. Yang will work on four letters Earhart wrote to her family, out of more than 400 letters in the Earhart archive. Much of Earhart's correspondence was dealt with by her secretary. However, with the four personal letters, the assumption is that Earhart must have sealed the envelopes herself.

Meanwhile, geneticist Brenna Henn of Stanford University, USA said she knows of no other case where DNA has been collected from decades-old letters. But she said Yang's methodology 'sounds reasonable'. The problem is that about 99 per cent of the genome is identical among all humans. If the team obtains little material, they have almost no power to discriminate between Earhart's DNA and that of other living people. To ensure that the DNA from the letters indeed belonged to Earhart, the team will compare it to DNA from Earhart's still-living relatives and also DNA extracted from another letter, written by Earhart's sister.

genome /'dʒi:nəʊm/ the genetic information of each living thing
saliva /sə'laɪvə/ the liquid normally in your mouth

8d You must be joking!

Real life reacting to surprising news

Mr Jackson gave you some radio news items to listen to.

1 **2.12** Listen to three conversations about news items. Choose the best headline (a–b) in each case.

- 1 a **ESCAPED SHEEP TAKE OVER LONDON PARK**
b **SHEEP IN GLOBAL WARMING SHOCK**
- 2 a **FORGED BANK NOTES ALERT**
b **USA TO JOIN THE EURO ZONE**
- 3 a **FUEL PRICES TO DOUBLE NEXT WEEK**
b **PETROL PRICES SLASHED**

2 Can you remember? Answer the questions for each story.

- 1 What is the problem?
- 2 Does the second speaker believe the first speaker?
- 3 What is the date?



3 **2.12** Look at the expressions for reacting to news. Listen to the conversations again. Put the expressions in order (1–9).

▶ REACTING TO SURPRISING NEWS

Are you serious?
Are you sure?
Come off it!
Oh yeah?
Really?
That can't be right!
They must have made a mistake.
You must be joking!
You're having me on!

4 One of the news items is about April Fools' Day (1 April), which is a day when people play tricks on each other in many countries. Do you do anything similar in your country?

5 Pronunciation showing interest and disbelief

You and your group members would like to explore more on intonation.

a **2.13** Listen to these expressions for reacting to news. Notice how the speaker's intonation rises to show interest and falls to show disbelief. Repeat the expressions.

- 1 Oh yeah?
- 2 Come off it!

b Work with a group member. Take turns to respond to these statements.

- 1 I'd love to go travelling round the world.
- 2 A meteorite has crashed to Earth in the middle of London.
- 3 I found a wallet full of money in the street this morning.
- 4 Biologists have discovered a parrot that can speak three languages.
- 5 I'm starting a new job tomorrow.

6 Work with the same partner again. Choose one of the other April Fools' Day headlines from Exercise 1. Decide what the hoax is. Make notes about the main points of the story. Invent as many details as you wish. Practise telling the story with your partner.

7 Work with a new partner. Take turns to listen and react to your stories. Use the expressions for reacting to news to help you.

8e In the news

To prepare you for the next writing assignment, Mr Jackson gave you a news story to read.

Writing a news story

1 Work with a group member. Read the news story. Do you think it is true or not? Explain your reasons to your partner.

2 Writing skill structuring a news story

a Read the introductory sentence in the news story again. Answer the questions.

- 1 What happened?
- 2 Who was involved?
- 3 Where did it happen?

b Read the main paragraph and find:

- 1 how the woman cut the cable.
- 2 four things that happened after she cut the cable.
- 3 two pieces of background information.

c Read the main paragraph again. How are the events and background details organised?

3 Vocabulary -ly adverbs in stories

a Adverbs help you write better news stories. Find these adverbs in the story. Then match the adverbs with their meanings.

Adverbs

accidentally unfortunately temporarily
immediately apparently

Meanings

at once by mistake for a short time
it seems that we are sorry to say

b Cross out any options which are not possible.

- 1 *Apparently*, / *Quickly*, this type of incident is increasing in Georgia.
- 2 *Fortunately*, / *Incredibly*, nobody was hurt.
- 3 Internet services were *amazingly* / *gradually* restored across the region.
- 4 *Coincidentally*, / *Rapidly*, Internet services also failed in other regions last week.
- 5 Software providers say hackers *deliberately* / *sadly* sabotaged the service.
- 6 *Hopefully*, / *Slowly*, the police will release the woman because of her age.

c Work with a group member. Decide which of the sentences in Exercise 3b fit into the story and where they fit.

GEORGIAN WOMAN CUTS OFF WEB ACCESS TO WHOLE OF ARMENIA

An elderly Georgian woman has accidentally cut through an underground cable and cut off Internet services to all of neighbouring Armenia.

The woman, 75, was digging for metal near the Georgian capital Tbilisi and her spade damaged the fibre-optic cable. Unfortunately, Georgia provides 90 per cent of Armenia's Internet. Web users in the nation of 3.2 million people were left twiddling their thumbs for up to five hours. Large parts of Georgia and some areas of Azerbaijan were also temporarily affected. The damage was detected by a system monitoring the fibre-optic link and a security team went immediately to the spot. The cable is protected, but apparently landslides or heavy rain may have left it exposed on the surface. The woman, called 'the spade-hacker' by local media, was arrested on suspicion of damaging property. She faces up to three years in prison.

4 You are going to write a hoax story or an April Fool story. This can be invented or it can be a story you have heard. First, make notes about the main events and the background details of the story. Think about *what?* *who?* *where?* and also *why?* and *how?*

5 Write an introductory sentence to summarise the story. Then number your notes in the order you will write about them. Include at least three adverbs where appropriate.

6 Write your story in about 150–200 words. Write an interesting headline.

7 Work with a group member. Exchange stories. Use these questions to check your partner's story.

- Did the headline make you interested in reading the story?
- Are the facts of the story clear?
- Do you think the story is true?

8f Killer bees



One man believes that this foreign bee may cause problems for the whole rain forest.

On a science field trip, your teacher shows you and your classmates a video about killer bees.

Before you watch

- 1 Work in groups. Look at the title of this video and the photo and discuss the questions.
 - 1 What do you know about bees?
 - 2 Why do you think these bees are called 'killer bees'?
 - 3 What problems do you think they might cause for the rain forest?
- 2 The video is about a man who studies bees. What do you think you will see him doing in the video?

driving	getting stung by a bee
flying a plane	hiking in the rain forest
holding bees	putting his hand in a beehive
writing a journal	working with a beehive

While you watch

- 3 Watch the video and check your answers from Exercise 2.
- 4 Work with a partner. Choose one of the topics below. Watch the first part of the video (to 03.05) and make notes about David Roubik or bees. Then tell another pair what you found out about your topic.

David Roubik

- 1 How long has he studied bees?
.....
- 2 Where does he work?
.....
- 3 How many species of bees has he found in one square kilometre in the rain forest?
.....
- 4 Why does he think there's a problem for the native bees?
.....

Bees

- 5 How do bees benefit the rain forest?
.....
- 6 Where do they live?
.....
- 7 Why did people bring African honeybees to South America?
.....
- 8 How did the experiment go wrong?
.....

adaptable (adj) /ə'dæptəbəl/ able to change easily when necessary
canopy (n) /'kænəpi:/ the top level in a rain forest
compete (v) /kəm'pi:t/ try to be more successful
entomologist (n) /entə'mɒlədʒɪst/ a person who studies insects
force out (v) /fɔ:s 'aʊt/ oblige a person or animal to leave
hive (n) /haɪv/ a place where bees live
interact (v) /ɪntə'rækt/ have a relationship with
leading (adj) /'li:dɪŋ/ one of the most important
native (adj) /'neɪtɪv/ occurring naturally in a place

- 5 Watch the rest of the video (03.06 to the end). Are these sentences true (T) or false (F)? Correct the false sentences.

- 1 By 1982 the African bee was starting to make its home in Panama.
- 2 Roubik thinks the newspapers reported the story of the bees correctly.
- 3 The biggest danger from the African bees is to man.
- 4 Native bees are important because they pollinate the plants in the rain forest.
- 5 Native bees cannot compete with the stronger African bees.
- 6 Roubik visits the Maya people because they have a lot of experience with bees.
- 7 Maya farmers think the African bees are not a problem.
- 8 Fifteen years ago there wasn't much honey.

After you watch

6 Roleplay interviewing a honey farmer

Work with a partner.

Student A: You are an entomologist studying bees. Use the ideas below to prepare questions to interview a Maya honey farmer.

Student B: You are a Maya honey farmer using traditional farming techniques. Use the ideas below to tell the entomologist about your concerns.

- how long the farmer has kept bees
- the effect of killer bees on his/her life
- how much honey there used to be
- how many native bees there are now
- the effects the disappearance of native bees is having on the local forests

Act out the interview. Then change roles and act out the interview again.

7 Work in a group and discuss these questions.

- 1 Should human beings be permitted to experiment with nature to increase the production of food?
- 2 What are the risks of experiments like these? What are the advantages?

outlandish (adj) /aʊt'lændɪʃ/ very strange
pollinate (v) /'pɒlɪneɪt/ carry pollen from one flower to another
repeatedly (adv) /rɪ'pi:tɪdli/ again and again
sting (v) (past: stung) /stɪŋ/ what an insect does when it injects a person with poison
spread (v) /spred/ move to cover a larger area
survive (v) /sə'vaɪv/ continue living after a dangerous event
swarm (n) /swɔ:m/ a large group of bees
take over (v) /teɪk 'əʊvə/ take control of something

UNIT 8 REVIEW

Grammar

1 Match the news headlines (1–3) with the comments (a–f). There are two comments for each headline. Choose the best option in the comments. Then work in pairs. Compare your answers.

1 **MAN CLAIMS TO BE 150 YEARS OLD**

2 **WEBSITE REVEALS LOCH NESS MONSTER PHOTOS**

3 **ASTRONOMERS FIND NEW PLANET**

- a They *could* / *must* be fake.
- b He *can't* / *must* be telling the truth.
- c They *might have* / *mustn't have* used new equipment.
- d It *can't have* / *might have* just appeared from nowhere.
- e He *might* / *might not* be old – but not that old.
- f They *might* / *must* be of a big fish.

2 Look at the photo of Stonehenge, a prehistoric site in southern England. Do you know what Stonehenge was for? Check your ideas in *the facts* and *the theories*.



the facts

- ❑ dated at 3–4,000 years ago
- ❑ no written records from that period
- ❑ The larger stones weigh 25 tons. They come from about 30 kilometres away from the site.
- ❑ The smaller stones originate from Wales, 230 kilometres away.
- ❑ The circle is aligned with the sun's highest and lowest points in the sky.

the theories

- ❑ created by Merlin of King Arthur's court
- ❑ the ruins of a Roman building
- ❑ built by invaders from Denmark
- ❑ an alien landing area
- ❑ a sacred site
- ❑ a cemetery or burial site
- ❑ a scientific observatory

3 Work in pairs. Discuss the theories and decide what you think of each one. Then work with another pair. Which theory do you think is the most probable? Explain your reasons.

I CAN

speculate and make deductions about events in the present and past (modal verbs)

Vocabulary

4 Work in pairs. Write down two of these things.

- 1 gases: _____, _____
- 2 insects: _____, _____
- 3 words meaning 'very old': _____, _____
- 4 words for ideas in science or investigations: _____, _____

5 Work in pairs. Answer as many questions as you can.

- 1 What do you understand by trick photography?
- 2 What part of a plant is the stem?
- 3 What kind of things are sticky?
- 4 Name some animals that migrate.
- 5 What do irrigation systems do?
- 6 What's an archive?
- 7 What kind of people might build a profile of someone?
- 8 Is a hoax a person?
- 9 What kind of thing happens accidentally?
- 10 What do you use a spade for?

I CAN

talk about things from the natural world

talk about history

Real life

6 Test your memory. Can you remember ways of reacting to news using these words?

joking off on right serious sure

7 Work in groups. Each person needs six pieces of paper. Write surprising sentences about yourself (true and false) on the pieces of paper. Take turns to read out your sentences one by one at random. Use appropriate expressions to react to the sentences about the other people and try to find out which sentences are true.

I CAN

react appropriately to surprising news

Speaking

8 Work in pairs. What is the most surprising (true) thing you have read about or seen a report about in the last few months? Tell your partner.