

# Unit 6 Mysteries

## FEATURES

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How good are you at puzzles and mysteries?

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The mysterious Nasca lines in Peru

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Current theories about Amelia Earhart's disappearance

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A video about strange creatures in the water

**1** Work in pairs. Look at the image.  
Discuss the questions.

- 1 Does it look like a painting or a photo?
- 2 What is happening?
- 3 What does it make you think about?
- 4 Do you think the image has a message?  
What?



Sunbathing cows in Andalusia, Spain

**2** Listen to a conversation about the image. Check your ideas from Exercise 1.

Track 43

**3** Listen to the conversation again. What do the words in bold refer to?

Track 43

- 1 Do you think the photographer Photoshopped **it**?
- 2 I'm surprised he didn't frighten **them**.
- 3 I can't make **it** out.
- 4 **They**'re parasailing.
- 5 It's a really popular sport **there**.

#### 4 The woman isn't sure if the photo is genuine. Why do people sometimes make 'false' photos? What about these things?

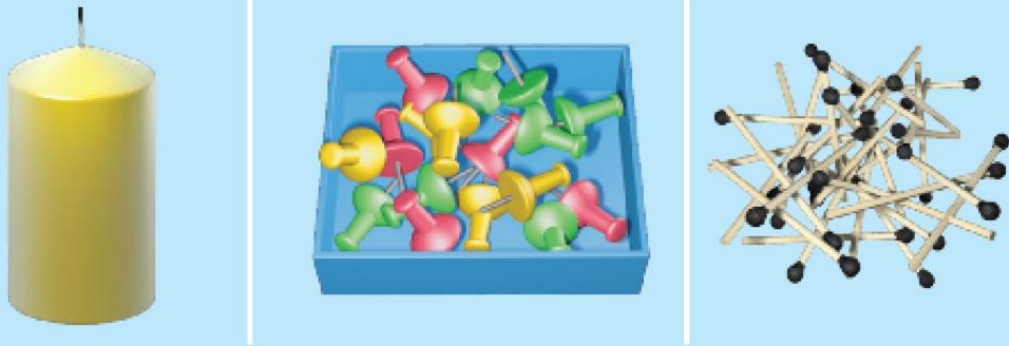
bags clothes eyelashes money paintings passports  
watches

# 6a Flexible thinking

Track 44

## Listening and reading

- 1 Work in pairs. Do you like doing puzzles? Read the puzzle and try to find the answer.
- 2 Compare your ideas for the candle puzzle with another pair. Then turn to [page 155](#) to find out the answer to the puzzle. Was it easy or difficult to work out?



### THE CANDLE TRICK

Your task is to attach the candle to the wall so that the wax doesn't drip on the floor below. You only have the candle, a box of drawing pins and some matches. How do you do it?

*Students refer to Student's Book [page 155](#).*

**3** Listen to a speaker at a conference. She asks her audience to do the puzzle in Exercise 1. What is the mystery she also talks about? [Track 44](#)

**4** Listen again and complete the sentences.

- 1 How good are you at flexible and \_\_\_\_\_ thinking?
- 2 Does the promise of a reward make you work \_\_\_\_\_?
- 3 Imagine I offer half of you some money to do this task more \_\_\_\_\_.
- 4 I'm going to see how long it takes you so that we can find out the average \_\_\_\_\_.
- 5 The people with the reward of \_\_\_\_\_ will be quicker, right?
- 6 The people in the first group need more time to find the \_\_\_\_\_.

- 5 Read the article and find the answer to the mystery the speaker mentioned.  
When is a reward useful? When is it not useful?

# FLEXIBLE THINKING and **REWARDS**

Track 45



People often think that a reward can make people work harder. However, that's not always true. Basically, it depends on the type of task or work. Rewards are great for making people concentrate and concentration helps with tasks that have a clear set of rules – the kind of thing where you follow the rules to complete the task – for example, doing maths problems or working in computer programming. But concentration doesn't help with creative and flexible thinking. When the task doesn't have a clear answer, concentration doesn't help. In fact, your brain needs to be relaxed and open so that it can look at the problem in different ways. In the workplace, the reward is usually money. So businesses need to think carefully about the relationship between work and pay – because it's true that people work harder for a reward, but only in some kinds of work.



- 5 Read the article and find the answer to the mystery the speaker mentioned.  
When is a reward useful? When is it not useful?

# Word focus *long*

- 6 Read the sentences and say if the expression with *long* refers to time (T), distance (D) or something else (S).
- 1 How long did it take you to do the puzzle?
  - 2 Is it a long way from here to your house?
  - 3 How long does the essay need to be in the exam?
  - 4 I'm just going for a coffee. I won't be long.
  - 5 We'll stay here as long as it takes to finish the job.
  - 6 I love sunbathing. I could do it all day long.
  - 7 I can't finish this book. It's just too long.
  - 8 You can stay at my house as long as you don't mind sleeping on the sofa.

**7** Work in pairs. Tell your partner about these things. Add follow-up comments.

- 1 something it took you a long time to do
- 2 a place a long way away you have visited
- 3 something you could do all day long
- 4 something you found too long

*A: When I first started learning English, it took me ages to learn how to pronounce 'daughter'.*

*B: Oh, I had the same problem with 'vegetable'!*

# Grammar purpose: *to ...* , *for ...* and *so that ...*


## ► PURPOSE: *TO ...* , *FOR ...* and *SO THAT ...*

*Imagine I offer half of you some money **to do this** more quickly.*

*We all work **for money**, don't we?*

*Drawing pins are **for attaching** things to other things.*

*I'm going to see how long it takes you **so that we can find out** the average time.*

For further information and practice, see page 166. 

**8** Look at the grammar box. Answer the questions.

- 1 Which verb form follows *to*?
- 2 What can follow *for*?
- 3 What follows *so that*?
- 4 Do the sentences answer the question *how* or *why* / *what for*?

9 Look at the *article Flexible thinking and rewards*. Underline the patterns like those in the grammar box.

10 Choose the correct option to complete the sentences.

- 1 We worked together *for / to* solve the problem faster.
- 2 The box was useful *for / to* holding the candle.
- 3 We looked at the key *for / to* the answers.
- 4 I went to the conference *so that / to* find out more about the brain.
- 5 I sit near the front *so that / to* I can hear better.
- 6 The speaker used pictures *for / to* make the explanation clearer.
- 7 Lots of people do Sudoku *so that / to* keep their brain active.
- 8 I'm learning Chinese *for / so that* I can work in China.

**11** Match the beginnings of the sentences (1–6) with the endings (a–f). Then complete the sentences with *to*, *for* or *so that*.

- 1 I want to learn another language
  - 2 My friend called me
  - 3 I write everything down
  - 4 We download the homework to our phones
  - 5 Are you going to London
  - 6 This notebook is
  - 7 Would you like to meet
  - 8 Did you get much chance
- 
- a a coffee after class?
  - b ask my advice about his course.
  - c help me remember it.
  - d I can enjoy travelling more.
  - e keep my passwords in.
  - f speak Italian on your trip?
  - g we can study on the bus.
  - h work or on holiday?

# Speaking

**12** Work in small groups. Take turns to choose one of the items from the list (without saying which one) and say why we need it. The other students in your group have to try and guess the item, and also add another reason why we need it.

*A: We need this to find our way around a strange place.*

*B: We need it so that we don't get lost? A map?*

*A: Yes!*

glasses credit card good exam results  
window suitcase passport  
professional qualifications picture frame  
boots map guard dog  
dictionary calculator hot food

# 6b Desert art

## Vocabulary art

1 Complete the sentences with these words.

diagram   drawing   figure   line   pattern  
shape

- 1 This looks like a child's \_\_\_\_\_ of a horse.
- 2 Look at that cloud. It's in the \_\_\_\_\_ of a heart.
- 3 Can you draw a ten-centimetre straight \_\_\_\_\_ without a ruler?
- 4 I can see a \_\_\_\_\_ at the door, but I don't know who it is.
- 5 I prefer plain shirts to ones with a colourful \_\_\_\_\_.
- 6 This \_\_\_\_\_ of how to cut up a pineapple isn't very clear.



# Listening

**2** Look at the photo and read the caption. Match the questions (1–3) with the exchanges (a–c).

- 1 What are they?
- 2 Where are they?
- 3 How big are they?



The mysterious Nasca lines in Peru

- a 'They must be in a desert because there aren't any plants or anything there.'
- 'Yes, it looks really dry.'
- b 'They might be roads.'
- 'No, they can't all be roads. That's clearly a spider.'
- c 'There's a plane above it.'
- 'Yeah, so they must be pretty big.'

- 3** Work in pairs. What do you think the answers to the questions in Exercise 2 are? Listen to an extract from a radio programme and check your ideas.

[Track 46](#)

- 1 What are they?
- 2 Where are they?
- 3 How big are they?

4 What do you think the purpose of the lines was? Listen to another [Track 47](#) extract from the radio programme. Complete the sentences.

- 1 The Nasca people couldn't have seen the \_\_\_\_\_ from above.
- 2 Maria Reiche was convinced that the lines must have been a type of \_\_\_\_\_.
- 3 Other people thought the lines may have been ancient Inca \_\_\_\_\_.
- 4 The strangest idea was the lines could have guided creatures from \_\_\_\_\_.
- 5 The Nasca people can't have known the lines would still be visible \_\_\_\_\_ later.

**5** Which theory do you think is most likely? Compare your ideas with your class.

# Grammar certainty and possibility

## ► CERTAINTY AND POSSIBILITY

### In the present

*must*

*might (not) / may (not) / could*

*can't*

+ infinitive


+ *be* + -ing

### In the past

*must*

*may (not) / might (not) / could* + *have* + past participle

*can't / couldn't*

For further information and practice, see page 166. 

- 6 Look at the grammar box. Underline the patterns in the sentences in Exercises 2 and 4.

*See next slide for answers*

**7** Look at the grammar box again. Choose the correct option to complete the rules.

- 1 We use *must* to say if something is or was *possible / probable*.
- 2 We use *might, may* and *could* to say if something is or was *possible / probable*.
- 3 We use *can't* and *couldn't* to say if something is or was *impossible / improbable*.

**8** Complete the sentences with present modal forms.

- 1 This drawing has eight legs. Insects have six legs. So it \_\_\_\_\_ an insect.
- 2 'What are the straight lines?' 'I'm not sure. They \_\_\_\_\_ paths.'
- 3 'What's the plane doing?' 'It \_\_\_\_\_ photographing the lines, but I can't see a camera.'
- 4 It's summer in Europe now, so it \_\_\_\_\_ winter in Peru.
- 5 I'd like to walk along the lines, but they \_\_\_\_\_ let people do that.
- 6 The figures are so big a plane \_\_\_\_\_ the only way to see them properly.

**9** Complete the sentences about the Nasca lines with the past modal form.

- 1 The lines \_\_\_\_\_ something very special to the Nasca people. (must / mean)
- 2 We know water \_\_\_\_\_ easy to find. (can't / be)
- 3 The water in the area \_\_\_\_\_. (might / disappear)
- 4 People \_\_\_\_\_ the drawings for fun. (might / make)
- 5 The animal drawings \_\_\_\_\_ roads. (couldn't / be)
- 6 The animals \_\_\_\_\_ in the region. (must / live)
- 7 The Nasca people \_\_\_\_\_ simple tools. (could / use)
- 8 People \_\_\_\_\_ the lines carefully. (must / look after)



**10** Complete the conversations using the correct option and the verb in brackets. Use a present or past modal form.

1 A: Why hasn't my sister returned my phone call?

B: Well, she *can't* / *may* \_\_\_\_\_ have forgotten (forget).

She never forgets things.

2 A: Is Sandra here? I haven't seen her today.

B: Yes, she's here. She *can't* / *might* \_\_\_\_\_ (get) a coffee.

3 A: Who's Tom talking to?

B: It *may* / *must* \_\_\_\_\_ (be) his father. He said, 'Hi, Dad.'

4 A: Why did the plane arrive late?

B: I don't know. It *could* / *mightn't* \_\_\_\_\_ (take off) late.

5 A: Is Joe around? We've got a meeting.

B: Well, his computer is still on, so he *can't* / *must* \_\_\_\_\_ (go out).

6 A: Why is Phil wearing odd socks?

B: He *can't* / *might* \_\_\_\_\_ (get dressed) in a hurry this morning.

## 11 Pronunciation weak form of *have*

- a** Listen to the conversations from Exercise 10 and check your answers. Is *have* in past modals pronounced /hæv/ or /həv/? Is the *h* pronounced? Track 48
- b** Work in pairs. Read the conversations aloud. Pay attention to your pronunciation of *have*.

# Speaking

**12** Work in pairs. Look at the comments and think of situations when you might say these things.

- 1 You must have forgotten to plug it in.
- 2 They may have lost your application.
- 3 They must be at home.
- 4 You might have dropped it on the way here.
- 5 He must have forgotten to pick it up.
- 6 She can't have finished so quickly.
- 7 They might be stuck in traffic.
- 8 You must have spent it on something.

*See next slide for answers*

**13** Imagine you are in the situations in Exercise 12. Have conversations that include the comments. Take turns to begin.

*A: Oh no! The battery's flat on my phone*

*B: You **must have forgotten** to plug it in. Do you want to use mine?*

*A: Thanks, but the number I need is in my contacts – I can't remember it.*

# 6c Lost and found?

## Reading

- 1 Look at the photo and the caption.  
Which of these statements could be true?
  - 1 Amelia Earhart was a famous pilot.
  - 2 She flew across the Atlantic Ocean.
  - 3 In the photo, she's just landed her plane.
  - 4 She lived until she was one hundred years old.
- 2 Read the first article quickly. Check your ideas from Exercise 1.





## Three Theories *by John Roach*

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. Exactly what happened to her and her navigator, Fred Noonan, is still one of aviation's greatest mysteries. Researchers have spent millions of dollars investigating the case and several books have been published that look at the different theories.

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

Another theory says that Earhart could have landed and later died on a different island, called Nikumaroro. Nobody lived there.

And another theory says 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.

# 6c Lost and found?

## Reading

- 1 Look at the photo and the caption.  
Which of these statements could be true?
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  - 2 She flew across the Atlantic Ocean.
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- 2 Read the first article quickly. Check your ideas from Exercise 1.





# Lost and found?

## The missing pilot

*by Ker Than*

[Track 50](#)

Amelia Earhart's dried saliva could help solve the mystery of the aviator's 1937 disappearance. Scientists plan to take samples of her DNA from letters she wrote and create a genetic profile. This could be used to test recent suggestions that a bone found on the South Pacific island of Nikumaroro is Earhart's.

Justin Long is a Canadian whose family is financing part of the DNA project. He makes the point that at the moment, anyone who finds pieces of bones can say that they are Amelia Earhart's remains. According to Long, Earhart's letters are the only existing items that are definitely hers and that might contain her DNA. The remains of Earhart, her navigator Noonan and their twin-engine plane were never found. But in 2009, researchers with the International Group for Historic Aircraft Recovery discovered a piece of bone on Nikumaroro, which they believed might have been from one of Earhart's fingers. However, some scientists have suggested the Nikumaroro bone isn't human at all but may be from a turtle.

The new Earhart DNA project will be organized by Dongya Yang, a genetic archaeologist at Simon Fraser University in Canada. Yang will work on four letters Earhart wrote to her family. More than 400 of Earhart's letters still exist today. Much of Earhart's correspondence was dealt with by her secretary. However, with the four personal letters, it is believed 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 old letters. The problem is that the envelopes probably don't contain much DNA. The project needs a big sample to distinguish between Earhart's DNA and that of other living people because about 99 per cent of the genome is identical among all humans. To make sure that the DNA from the letters belonged to Earhart, the team will compare it to DNA from Earhart's relatives who are still alive and also DNA extracted from another letter, written by Earhart's sister.

**genome** (n) /'dʒiːnəʊm/ the genetic information of each living thing

**navigator** (n) /'nævɪˌgeɪtə/ the person who plans the direction of a plane or ship

**saliva** (n) /sə'laɪvə/ the liquid normally in your mouth

**sealed** (v) /siːld/ closed safely so that it's hard to open

### 3 Read the second article. Answer the questions.

- 1 What is the theory talked about in the article?
- 2 Which modern scientific technique might give an answer to the Earhart mystery?
- 3 If the new project is successful, what will it prove?
- 4 What is the biggest problem for 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 (1–6) with these words.

attempting (line 2)

captured (line 17)

samples (line 24)

financing (line 31)

distinguish (line 67)

identical (line 70)

- 1 My grandparents are **paying for** my studies.
- 2 It's easy to **see the difference** between a leg bone and an arm bone.
- 3 The doctor took **small amounts** of my blood to do tests.
- 4 The soldier was **caught and put in prison** by the enemy.
- 5 The cyclist is **trying** to break the world record.
- 6 The two brothers look **exactly the same** to me.

**5** Work in groups. Discuss the questions.

- 1 The piece of bone 'might have been from one of Earhart's fingers'. Are there any other possibilities?
- 2 Is it certain that any saliva on the envelopes is Earhart's? Why? / Why not?
- 3 Do you think the project will be successful?

**6** Work in pairs. 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 \_\_\_\_\_.

# Wordbuilding nouns and verbs

## ► WORDBUILDING nouns and verbs

Some nouns and verbs have the same form. They can have similar or unconnected meanings.

*land* – similar; *book* – unconnected

For further practice, see Workbook page 51.

**7** Look at the wordbuilding box. Find these words in the two articles. Are they used as nouns or verbs?

1 fly (line 1)

2 land (line 3)

3 books (line 8)

4 records (line 11)

5 contact (line 13)

6 plan (line 23)

7 test (line 26)

8 remains (line 35)

**8** Look at the same words in these sentences. Is the meaning similar to the meaning of the word in Exercise 7?

- 1 Have you got any plans for the weekend?
- 2 We always book our hotel rooms in advance.
- 3 I tried to contact them yesterday without success.
- 4 Did Amelia Earhart hold any flying records?
- 5 Everyone did badly in yesterday's English test.

# Critical thinking speculation or fact?

- 9 Read the definitions. Then decide if the sentences from the articles report speculation (S) or fact (F).

*Speculation* is having a theory or guessing about something.

*Facts* are items of information that we can check, or show to be true or not true.

- 1 Amelia Earhart [...] was attempting a round-the-world flight in 1937.
- 2 Earhart could have landed ... on a different island.
- 3 The problem is that the envelopes probably don't contain much DNA.
- 4 About 99 per cent of the genome is identical among all humans.



- 10** Find one more fact and one more speculation in the articles. Then work in pairs. Do you agree with your partner's choices?

### EXAMPLE ANSWERS

*Fact: Researchers have spent millions of dollars investigating the case ...*

*Speculation: ... she was captured while on a secret mission to the Japanese-controlled Marshall Islands in the North Pacific ...*

## Speaking

- 11** Work in groups. Think of at least three news stories you have heard about recently. Suggest as many reasons as you can for what has happened.

*A: Did you see that ... isn't going to make any more films?*

*B: I know! Do you think he/she could be ill?*