

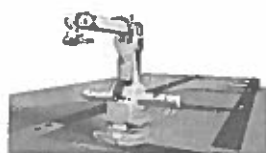
Unit 10 Science

1a Global health

Vocabulary science subjects

1 Label the pictures with the types of science.

astronomy chemistry physics
neuroscience technology zoology



1 _____



2 _____



3 _____



4 _____



5 _____



6 _____

Reading science articles

2 Read these extracts from five science articles. Match the extracts (1-5) with the types of science from Exercise 1.

1 _____
With the problem of energy on Earth, some scientists have studied lightning because they want to use the energy in lightning. A single lightning bolt has around five billion joules of energy. Unfortunately, a lightning bolt lasts for seconds, so how do you catch the energy?

2 _____
On the 18th of this month, Mars will be below the Moon and to the right. If it's a clear night, you'll see the red planet without a telescope. It could be the best view this year.

3 _____
We've had PCs, laptops, and tablets, so what's next? One team of scientists wants to develop a keyboard on your body. A small device projects the keyboard onto your arm and you type onto your skin.

4 _____
The Durrell Wildlife Conservation Trust is on the island of Jersey. There are a lot of rare animals in the park, but the Trust also gives money to projects with animals in places such as the Galapagos Islands, India, Madagascar, and the Caribbean Islands.

5 _____
Mirror neurons help animals to learn. For example, when a young animal watches its mother, it learns how to do something. Scientists believe this is because the mirror neurons in its brain are working.

Grammar present perfect

3 Read the science articles again and underline the present perfect verb forms.
4 Complete the conversations with the present perfect form of the verbs or *have/haven't*.

M = Manager, K = Karen

Conversation 1

M: OK, Karen. ¹ _____ (you ever use) this machine before?

K: Yes, of course I ² _____ (use) one before.

M: No, I mean, ³ _____ (you ever make) copies with this type of machine? It's different from others.

K: Oh, I see. No, I ⁴ _____ but it looks similar to the one in my previous job.

10b Memory and language

Vocabulary memory and learning

- 1 Choose the correct word (a-c) to complete the list of tips for studying for exams.

FIVE TIPS FOR TEST SUCCESS

- Plan a schedule for studying. Write down the date of the test and then write the times and days you are going to ¹ _____ before it.
- ² _____ short lists of information over short periods of time. Take regular breaks.
- Which things do you often ³ _____? Write down that information and study that the most.
- Work with a friend. ⁴ _____ each other with questions.
- Don't study the night before. ⁵ _____ in the evening and go to bed early.

- 1 a study b know c teach
 2 a Forget b Practice c Memorize
 3 a forget b know c train
 4 a Memorize b Learn c Test
 5 a Understand b Relax c Remember

Grammar present perfect and simple past

► SPELL CHECK simple past and past participles

With regular verbs, you add *-ed* (or *-d/-ied*) to the end of a verb to make the simple past form or the past participle (see also Unit 6):

| Infinitive | Simple past | Past participle |
|------------|-------------|-----------------|
| train | trained | trained |
| study | studied | studied |

However, irregular verbs have irregular forms.

Sometimes the simple past and the past participle have the same irregular form:

| Infinitive | Simple past | Past participle |
|------------|-------------|-----------------|
| have | had | had |
| teach | taught | taught |

Sometimes the simple past and the past participle do not have the same irregular form:

| Infinitive | Simple past | Past participle |
|------------|-------------|-----------------|
| know | knew | known |
| take | took | taken |

- 2 Complete the table of irregular verbs. You can find the answers in Unit 10 of the Student Book.

| Infinitive | Simple past | Past participle |
|------------|-------------|-----------------|
| 1 _____ | bought | 2 _____ |
| pay | 3 _____ | paid |
| 4 _____ | put | 5 _____ |
| send | 6 _____ | sent |
| 7 _____ | forgot | forgotten |
| make | 8 _____ | made |
| read | read | 9 _____ |
| 10 _____ | won | won |

- 3 Complete these sentences with the correct form of the verbs from Exercise 2.

- 1 Have you ever _____ any books in other languages?
- 2 Nelson Dellis _____ the Memory Championships in 2010 and 2011.
- 3 When did you _____ these tickets?
- 4 Did you _____ me a text or an email?
- 5 I've _____ the ad for the car in the local newspaper.
- 6 Have you ever _____ for something with online banking?
- 7 We've _____ the rule for the present perfect. Can you remind us?

- 4 Complete these short conversations. Use the same verb twice.

- 1 take
 A: Have you ever taken an English test?
 B: Yes, I took one last year.
- 2 study
 A: _____ you ever _____ Spanish?
 B: Yes, I _____ it when I was a student at college.
- 3 teach
 A: _____ you ever _____ a subject?
 B: Not exactly, but I _____ a friend how to use his new computer.

10c Inventions

Vocabulary science and inventions

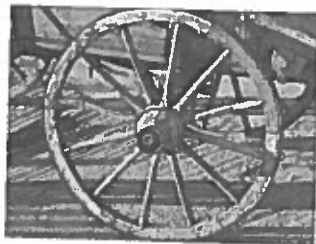
1 Write the names of these inventions.



1 i _____



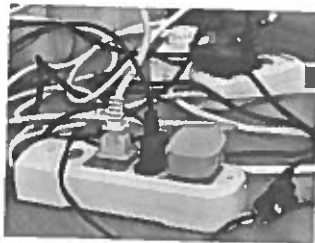
2 v _____ c _____



3 w _____



4 k _____



5 e _____



6 s _____ t _____



7 f _____



8 the I _____

2 Match the descriptions (a-h) with the inventions (1-8) from Exercise 1.

- a It turns.
- b It plays music.
- c It sticks paper.
- d It burns.
- e It cleans the house.
- f It gives energy.
- g It cuts.
- h It searches for links.

Reading a quiz

3 Read descriptions of three inventions. Match them to the name and photo (a-c).

First question: In 1901, an Italian physicist sent a radio message across the Atlantic from England to Canada. What was his name? _____

Second question: You can send messages using a series of short and long sounds. This is a type of code. What is the name of the code and its inventor? _____

Third question: In the first century, the Chinese invented an object. It pointed north and south. What was the invention? _____

a



Morse Code

b



Compass

c



Marconi

4 Answer the questions.

1 When did Marconi send a radio message across the Atlantic Ocean?

2 What is the difference between the sounds in Morse Code?

3 When did the Chinese invent the compass?

4 Where did it point?

10d On the phone

Real life checking and clarifying

1 Complete the conversation (1–8) with the questions (a–h).

- a Was that zero two one, eight eight three four, five zero?
- b What time is it there?
- c Have you emailed me a copy of the new prices?
- d Is that six in the morning?
- e Was that the Ensal Hotel?
- f Can you fax it to the hotel?
- g Where are you now?
- h Is there anything else?

L = Lance, S = Sophie

L: Hello, AGA Technologies. Can I help you?

S: Hello, Lance. This is Sophie.

L: Hello, Sophie. ¹ _____

S: I'm at the Science Fair in Cologne.

L: Great. ² _____

S: It's six o'clock.

L: ³ _____

S: No, in the evening. I want to give you the name of my hotel for the next two days. It's the Insel Hotel...

L: One moment. I need a pen. OK. ⁴ _____

S: No, the Insel Hotel. I for Italy, N – S – E for England, L.

L: Oh sorry. Insel.

S: And the number is zero two one, eight eight three four, five zero.

L: ⁵ _____

S: That's right.

L: ⁶ _____

S: ⁷ _____

L: No, I haven't because your email wasn't working.

S: That's strange. ⁸ _____ I don't know the number.

L: Don't worry. I've just looked at your hotel website and there's a fax number on that.

S: Great, thank you. I'll call you later. Bye for now.

2 Read the conversation again. Choose the correct option (a–c) to complete the sentences.

- 1 The name of the company is _____ Technologies.
a AGA b EGA c AGI
- 2 Sophie is at the Science Fair in _____.
a Casablanca b Cairo c Cologne
- 3 The name of the hotel is _____.
a Insel b Ensal c Insal
- 4 The number is _____.
a 021 8843 50 b 021 8834 50 c 021 4508 83
- 5 Sophie wants the new _____.
a designs b prices c machines

3 Pronunciation contrastive stress

Read these five conversations. Which word do you think B stresses? Underline it.

- 1 A: Is that two in the morning?
B: No, it's three in the morning.
- 2 A: Was that the Ensal Hotel?
B: No, it was the Insel Hotel.
- 3 A: Is that I for Italy?
B: No, it's A for Amsterdam.
- 4 A: Is that two in the morning?
B: No, it's two in the afternoon.
- 5 A: Was that three double six?
B: No, it was three double seven.



10e Telephone messages

Vocabulary email addresses and websites

1 Match the parts of the email addresses and websites with the words.

- | | |
|---------|--------------|
| 1 @ | dot com |
| 2 .com | at |
| 3 / | dash |
| 4 - | dot edu |
| 5 www. | dot org |
| 6 // | underscore |
| 7 : | double slash |
| 8 .org | slash |
| 9 _ | www dot |
| 10 .edu | colon |

2 Read the words of three people saying email addresses and websites. Write the address or website.

1 *So that's h underscore schmitt at hotmail dot com.*

2 *The hotel website is www dot concordia dot com.*

3 *Download the podcast from www dot instolisten dot org slash dailypod dash 2.*

3 Writing skill imperatives

Read the speakers' words. Rewrite the sentences so they start with an imperative.

- 1 Can you call Stacey back?
Call Stacey back.

2 I'd like you to send everyone a letter.

3 Can you take Mr. D'Souza to the station?

4 Would you reserve a table for two?

5 Can you buy more paper?

6 Would you print these photographs, please?

7 Can you email the designs to g_rich@gmail.com?

8 I'd like you to telephone the hotel.

Writing a telephone message

4 Read the voicemail. Complete the message.

V = Voicemail, L = Lisa

V: Hello. This is the Insel Hotel. Please leave a message after the tone.

L: Hello. This is Lisa Farrell. That's F-A-R-R-E-L-L. This is a message for Dr. Nakao. That's N-A-K-A-O. I'm in Cologne tomorrow at two o'clock in the afternoon. Can I meet him in the hotel reception area. Thank you.

MESSAGE

Name of caller: _____

Message for: _____

Message: _____

Urgent _____

Wordbuilding synonyms and antonyms

1 Replace the words in bold with a synonym.

call find memorize search send
show stop working study

- Please **email** me the photographs.
 - Read** the grammar rules.
 - Look at this list of words. How many can you **learn and remember**?
 - Look** for the answer to this question on the Internet.
 - Can you **teach** me how to use the photocopier?
 - Scientists need to **discover** the answer.
 - Did you **telephone** the movie theater for movie times?
 - Robots often **break down**.
- 2 Complete these pairs of sentences with the correct antonym.
- remember / forget
 - I always _____ the Chinese word for "house".
 - Can you _____ the Chinese word for "house"?
 - leave/ take
 - Eduardo is out of the office. Do you want me to _____ a message?
 - Eduardo is out of the office. Do you want to _____ a message for him?
 - teach / learn
 - You're good at playing the guitar! Can you _____ me?
 - I'd like to _____ how to play the guitar.
 - send / receive
 - Did we _____ any emails from any customers today?
 - Did you _____ the contracts to our customers?

Learning skills your learning style

3 Students can have different learning styles. Some students are more:

- Visual (They learn by looking.)
- Auditory (They learn by listening.)
- Kinesthetic (They learn by doing.)

Do this quiz to find out your learning style. Choose the best ending (a-c) for you to complete these sentences.

What's your learning style?

- When I learn English in class,
 - I like watching the teacher.
 - I like listening to the teacher.
 - I like doing something with other people.
- When I learn a new word,
 - I draw a picture of it.
 - I repeat the word many times.
 - I imagine it in my head.
- When I study for an English test,
 - I write notes and use different colors.
 - I talk to myself or other people about my notes.
 - I study and do physical activity at the same time.

What do your answers mean?

Mostly A answers = You are a visual learner.
Mostly B answers = You are an auditory learner.
Mostly C answers = You are a kinesthetic learner.

Check!

4 Answer the questions. You can check your answers in Unit 10 of the Student Book.

a What are three words ending with *-ology*?

- _____ology
- _____ology
- _____ology

b What are three ways to send information?

- _____
- _____
- _____

c What three types of new technology do you use every day?

- _____
- _____
- _____

d What three old inventions do you never use?

- _____
- _____
- _____