

8

Science

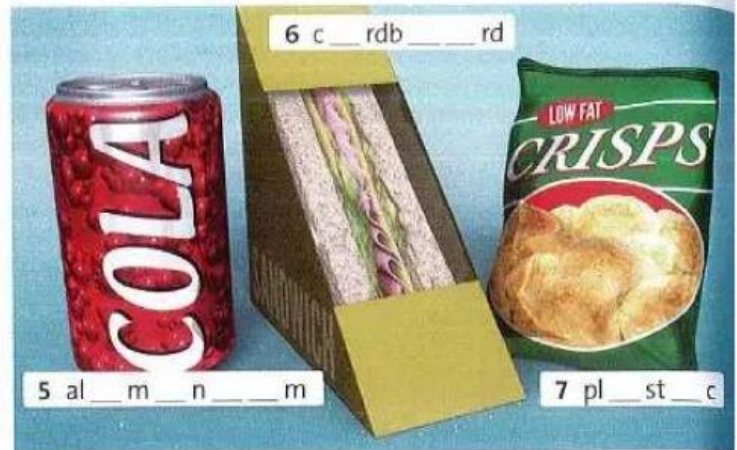
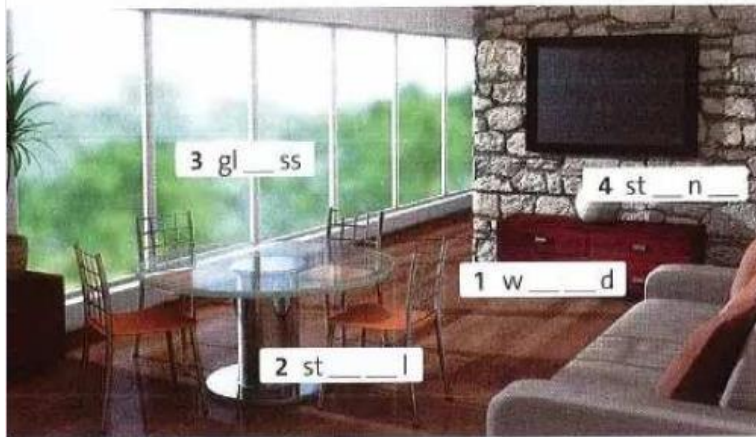
Vocabulary

A

Gadgets

I can describe gadgets and talk about their use.

1 Complete the list of materials using *a, e, i, o* and *u*.



2 Complete the sentences with the correct materials.

- Shoes are often made of l _____.
- Expensive rings are often made of g _____.
- Car tyres are made of r _____.
- Cups and plates are often c _____ but sometimes they are made of c _____.
- Books are made of p _____.
- Pavements are often made of c _____.
- Gates and fences are sometimes made of i _____.
- Tents and backpacks are usually made of n _____.
- In the past, coins were often made of c _____.

3 Answer the questions with the material words from exercises 1 and 2. Use each word only once.

- Which of the materials come from trees?
paper _____
- Which of the materials are metals?

- Which material is made from part of an animal?

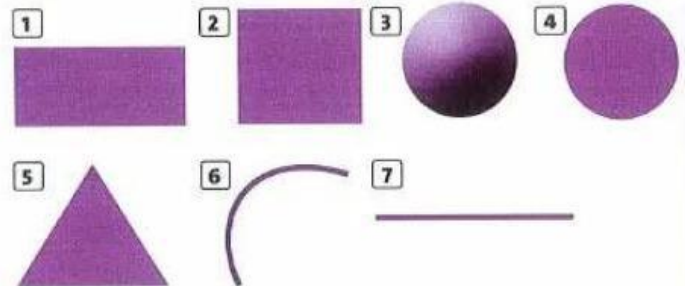
- Which very hard material do we find in the ground?

- Which man-made materials do we make from oil?

- Which materials do we make from other materials which we find in the ground?

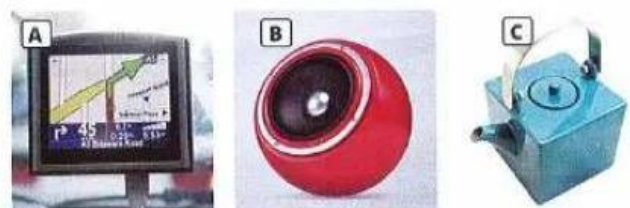
4 Match the words below with the diagrams.

circular curved rectangular spherical square straight triangular



- | | |
|---------|---------|
| 1 _____ | 5 _____ |
| 2 _____ | 6 _____ |
| 3 _____ | 7 _____ |
| 4 _____ | |

5 **2.07** Listen to the sentences and match the objects to the descriptions. Write the correct letter: A, B or C.



- | | |
|---------|---------|
| 1 _____ | 2 _____ |
| 3 _____ | 4 _____ |
| 5 _____ | 6 _____ |
| 7 _____ | |

8B

Grammar

The passive (present simple and past simple)

I can use the present and past passive to talk about technology.

1 Complete the sentences below with the present simple passive form of the verbs in brackets.

- Millions of mobile phones _____ every year. (sell)
- American football _____ very much in the UK. (not play)
- _____ tablets _____ in your school? (use)
- Most crimes _____ in big cities. (commit)
- Rubber trees _____ in cold countries. (not grow)
- _____ Samsung televisions _____ in Korea? (make)

2 Make the active sentences passive. Include the word *by*.

- Millions of people watched the 2014 World Cup Final on TV.
The 2014 World Cup Final was watched by millions of people on TV.
- Alexander Fleming discovered penicillin.

- Rafa Nadal didn't win the match.

- Robots made that car.

- Did Suzanne Collins write the *Hunger Games* books?

- Peter Jackson directed the *Hobbit* films.

3 Put the words below in the correct order. (Remember where to put the adverb.)

- satnavs. / are / Phones / used as / sometimes

- Was / Bob Dylan? / *Make you feel my love* / first / by / sung

- invented / The wheel / about 5,000 years ago. / probably / was

- quickly / was / The suspect / arrested.

- the missing jewellery / ever / found? / Was

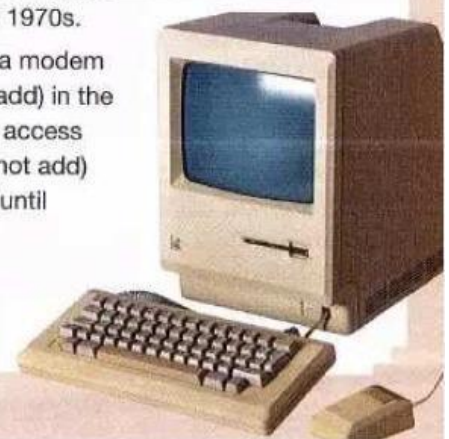
4 Complete the fact file below with the past simple passive form of the verbs in brackets.

COMPUTERS: a short history

- The first computer ¹ _____ (invent) by Charles Babbage in the early 19th century. It ² _____ (not power) by electricity – it was mechanical.
- The first electronic digital computer ³ _____ (build) in 1943 in Britain. It ⁴ _____ (call) 'Colossus' and it ⁵ _____ (use) for decoding enemy messages in the war.
- Businesses began to use computers in the 1950s, but computers ⁶ _____ (not sell) in shops until the early 1970s.



- The first desktop computers ⁷ _____ (develop) in the late 1970s.
- Internet access via a modem ⁸ _____ (add) in the 1990s, but wireless access ⁹ _____ (not add) to most computers until about 2000.



- For the first time, in 2015, more tablets and smartphones ¹⁰ _____ (sell) than laptops and desktops. Will computers eventually disappear from our homes and schools?



8C

Listening

Intentions of the speaker

I can identify the speaker's intention.

Revision: Student Book page 97

- 1 Complete the sentences with the verbs below. Remember to use the correct form of the verb.
 browse come up with get lose
 prescribe run
- He _____ 10 kg during his trip to Antarctica.
 - Yesterday, my friend _____ a great idea for how to raise money for our club.
 - My mum's got a new car and it _____ on biofuel.
 - If you've got a smartphone, you can _____ the internet wherever you are.
 - My sister always _____ a good deal when she goes shopping for clothes.
 - Last month, a doctor _____ some medicine for my headaches.
- 2 Complete the definitions using the verbs below.
 apologise challenge comfort complain
 encourage enquire entertain inform
 persuade recommend warn welcome
- If you _____ somebody (about something), you tell them about a danger.
 - If you _____ to somebody (about something), you tell them why you are unhappy about it.
 - If you _____ (for something), you say that you are sorry.
 - If you _____ about something, you ask questions about it.
 - If you _____ something (to somebody), you say why it is good.
 - If you _____ somebody (to do something), you make them feel more confident about it.
 - If you _____ somebody or something, you say you are happy about their arrival.
 - If you _____ somebody (about something), you tell them facts about it.
 - If you _____ somebody, you invite them to compete with you.
 - If you _____ somebody, you try to make them feel better when they're sad.
 - If you _____ somebody (to do something), you say things which make them want to do it.
 - If you _____ somebody, you keep them amused and interested.

Listening Strategy

You will sometimes have to identify the intentions of the speaker (e.g. to persuade, to warn, to inform, etc.). Listen for phrases such as *I think you should, be careful to, I'm going to tell you about ...* that give you a clue to the speaker's intentions.

- 3 **2.08** Read the Listening Strategy. Then listen to four speakers. What are their intentions? Complete the sentences with the *-ing* form of verbs from exercise 2.
- Speaker 1 is _____ a group of tourists.
 - Speaker 2 is _____ to a friend.
 - Speaker 3 is _____ about a museum.
 - Speaker 4 is _____ a friend.
- 4 **2.09** Read the questions below. Then listen to four speakers one at a time. Pause after each one and answer the relevant question.
- The speaker's main aim is to
 - welcome people to a special event.
 - complain about problems with a new car.
 - enquire about a new model of car.
 - The speaker's main aim is to
 - inform somebody about a new laptop.
 - recommend buying a new laptop.
 - apologise for damaging somebody's laptop.
 - The speaker's main aim is to
 - persuade people to invest money.
 - challenge people to invent a better product.
 - thank people for helping to develop a fantastic product.
 - The speaker's main aim is to
 - describe a machine to her students.
 - warn her students to be careful.
 - challenge her students to do better than her.

8D

Grammar

The passive (present perfect, future and modal verbs)

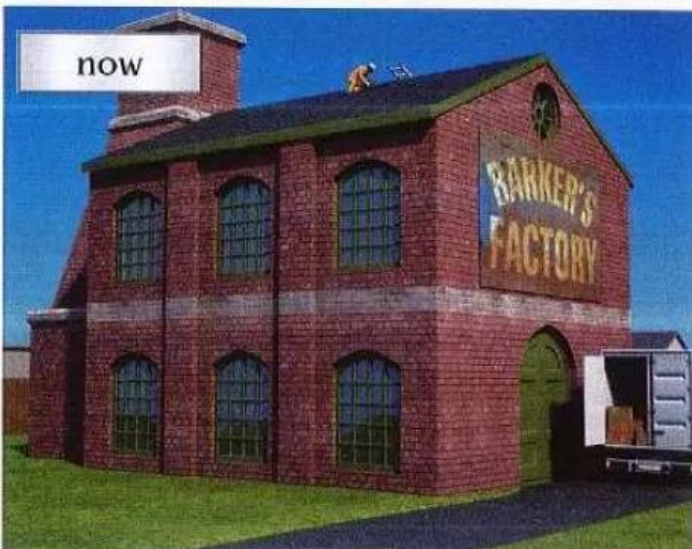
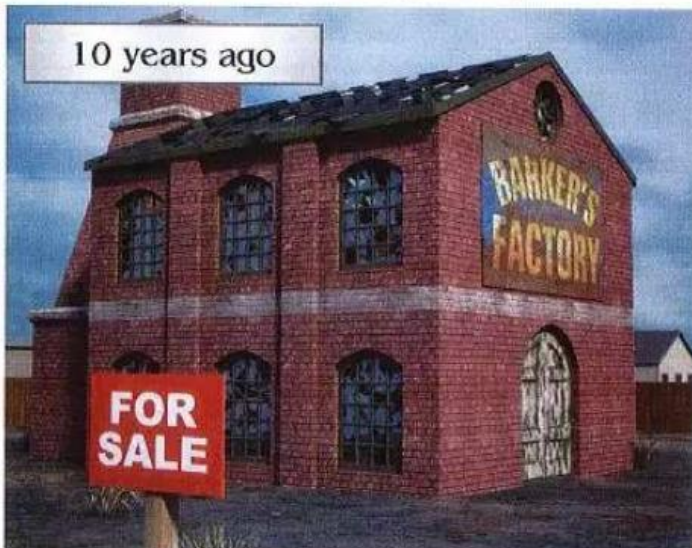
I can use different forms of the passive.

- 1 Complete the sentences below with the present perfect passive form of the verbs in brackets.

- Our car _____ (steal).
- Two important new drugs _____ (develop) this year.
- The bus stop _____ (damage) again.
- The boat _____ (not see) for two days.
- All our money _____ (spend).
- I hope that painting _____ (not sell).

- 2 Look at the pictures, then complete the sentences with the present perfect passive form of the verbs below.

build not change not finish paint replace sell



- The factory *has been sold*.
- The glass in the windows _____.
- The big front door _____.
- The metal sign _____.
- A new road _____.
- The new roof _____.

- 3 Complete the questions using the present perfect passive form and *ever*. Then answer the questions with information that is true for you.

- (you / bite / by a mosquito)
Have you ever been bitten by a mosquito?

- (your home / burgle)

- (you / chase / by a dog)

- (your phone / steal)

- 4 Rewrite these sentences to make them passive. Include *by ...* to say who or what carries out the action.

In the house of the future:

- your fridge will order your food online.
your food will be ordered online by your fridge.
- the sun will provide most of your electricity.

- robots will clean all the rooms.

- machines will prepare all of your food.

- 5 Complete the dialogue using the present perfect passive and future form of the verbs in brackets.

Presenter Can you give us the latest news on this exciting project to build a hotel on the moon?

Scientist The plans for the new hotel ¹ _____ (complete) and a location ² _____ (choose).

Presenter So when ³ _____ (it / build)?

Scientist Well, the exact date ⁴ _____ (not decide) until next month at the United Nations meeting. The plans ⁵ _____ (approve) at that meeting too.

Presenter And after that?

Scientist After that, the first parts of the hotel ⁶ _____ (send) to the moon before the end of the year.

- 6 Complete the following sentences about a new software, using the correct passive voice.

- Possible replies to email _____ (can suggest) for your convenience.

- Attachments _____ (can store) for ever.

- Automatic replies _____ (may send) when new mails arrive.

- Updates _____ (can access) at no extra cost.

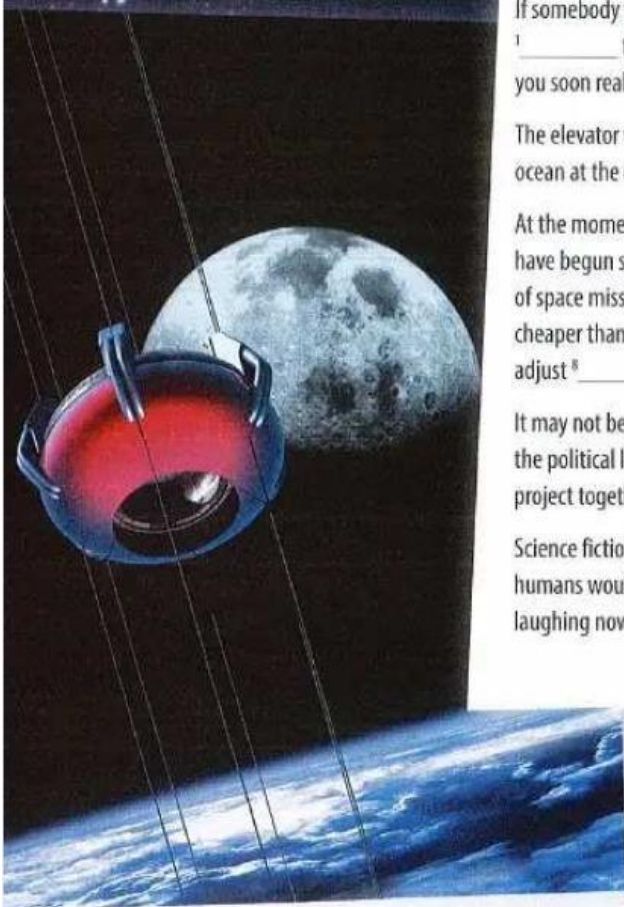
- Certain features _____

8E

Word Skills

Verb + preposition

I can understand and use verb + preposition collocations.



If somebody told you they were building a lift to take people into space, you would probably laugh ¹ _____ the idea. But in fact, if you listen ² _____ scientists and engineers talking about the plan, you soon realise they are being completely serious.

The elevator would consist ³ _____ a carbon fibre ribbon 100,000 km long. One end would be in the ocean at the equator, and the other end would be in space.

At the moment, it takes months or years to prepare ⁴ _____ a trip into space by rocket. Space agencies have begun searching ⁵ _____ a better option – partly because they worry ⁶ _____ the cost of space missions. The idea of a space elevator appeals ⁷ _____ governments because it would be far cheaper than sending rockets into space. It would be slower, but that would give passengers more time to adjust ⁸ _____ the different conditions as they left the earth.

It may not be easy though: countries might argue ⁹ _____ the exact location of the elevator. But if the political leaders can cope ¹⁰ _____ these problems and manage to take part ¹¹ _____ the project together, it is certainly possible.

Science fiction writer Arthur C. Clarke wrote a novel ¹² _____ the idea in 1979. He said in a speech that humans would build a space elevator ten years after they stopped laughing at the idea. Well, they've stopped laughing now.

- Complete the text with these prepositions: *about, at, for, in, of, to, and with*. You will have to use some prepositions more than once.
- Circle the correct prepositions to complete the sentences.
 - You should apologise **for** / **to** that comment!
 - Cats get frightened if you shout **at** / **to** them.
 - I asked **about** / **for** the manager so that I could talk to him in person.
 - We complained **for** / **about** our hotel room.
 - I've never heard **from** / **of** this video game.
 - I dreamed **about** / **of** flying again last night.
 - After a long discussion, they agreed **to** / **with** our request and gave us our money back.
 - If you're unhappy with the service, why don't you write **for** / **to** the manager?
- Study the dictionary entries and answer the questions.
 - Which verb is used with two prepositions with no change of meaning? _____
 - Which verb is used with two prepositions, but the meaning changes? _____
 - Which entry uses **bold and italic** type for two words that often go together? _____

charge / tʃɑːdʒ / verb [T, I] **charge (sb/sth) for sth** to ask sb to pay a particular amount of money: *We charge £75 a night for a single room.* ♦ *They forgot to charge us for the drinks.* 2 [T, I] **charge sb (with sth)** to accuse sb officially of doing sth which is against the law: *Three men have been charged with robbery.*

inform / ɪn'fɔːm / verb [T] **inform sb (of/about sth)** to give sb information (about sth), especially in an official way: *You should inform the police of the accident.* ♦ *Do keep me informed of any changes.*

VOCAB BOOST!

Dictionaries often use *something* or *somebody* (sth or sb) in their definitions, but when you record verbs it is a good idea to include words which often go with those verbs.
to complain about sth / sb → to complain about the weather / the noise / your hotel / your neighbours / your doctor

- Read the **Vocab boost!** box. Write some words that often go with these verbs.

- to care for sth / sb → to care for _____
- to learn about sth → to learn about _____
- to write to sb → to write to _____

8F

Reading

Inventions that save lives

I can understand a text about inventions.

Revision: Student Book page 100

- 1 Complete the sentences with nouns formed from the verbs and adjectives below in brackets.
- The Hubble telescope can measure the _____ (move) of distant galaxies.
 - The city centre was destroyed in the war. The _____ (reconstruct) took many years.
 - Hard disk recorders allow us to make _____ (record) of TV programmes.
 - Many men hope doctors will invent a cure for _____ (bald).
 - The aeroplane is a wonderful _____ (invent).
 - That's a lovely flower _____ (arrange).
 - Beethoven suffered from _____ (deaf) during the last 25 years of his life.
 - Before the _____ (discover) of America in 1492, many people thought the Earth was flat.

- 2 Read the texts and match two of the inventions with the photos (A–B).

Reading Strategy

Sometimes, true / false tasks include a third option: the text does not say. Choose the third option if the text does not contain enough information to clearly say if the sentence is true or false. Do not use your own knowledge (or guesswork) to fill any information gaps!

- 3 Read the Reading Strategy. Then decide if the sentences below are true (T), false (F) or 'does not say' (DNS).
- Carrying water on your head can cause neck injuries.
 - With the Hippo-Roller people can carry more water than with a normal bucket.
 - The LifeStraw is made from natural materials.
 - The LifeStraw never stops working.
 - A fizzy drinks company worked with Simon Berry to design the AidPod.
 - The AidPod is used successfully in many different countries.



- 1 Hippo-Roller, photo _____

Many women and children in Africa spend up to nine hours a day carrying water to their homes. They use 20-litre plastic buckets, which they carry on their heads. The buckets are very heavy and often cause back and neck injuries. So engineers Pettie Petzer and Johan Jonker designed a 'rolling wheel' which can carry ninety litres of water and is much easier to move. 33,000 'Hippo-Rollers' have been delivered to remote villages in Africa. The results are good: women have more time to look after their families, the children can go to school, and there are fewer injuries.

- 2 LifeStraw, photo _____

There are 780 million people in the world who don't have clean safe drinking water. This fact led the Swiss company Vestergaard to invent a special kind of straw that allows people to drink dirty water without getting ill. The LifeStraw is a long thin tube that cleans the water as you drink. LifeStraw is very light and can clean up to 1,000 litres of water before you need to replace it. LifeStraw was used to help people after the Haiti earthquake, and floods in Pakistan and Thailand.

- 3 AidPod, photo _____

When Simon Berry was travelling in Zambia, he noticed that he could buy fizzy drinks in the remotest villages. But the people had no medicines, and one in five children were dying before their fifth birthday. He had an idea. 'Why don't they bring medicines when they deliver the fizzy drinks?' So he invented the AidPod, a triangular packet of medicines that fits between the bottles in a crate. Berry is testing his ideas in Zambia. If his plan works, he hopes to do the same thing in other African countries.