

PRACTICE

Inventions that changed the world

- 1 Work with a partner. Look at the list of inventions. Which is the oldest? Which is the newest? Match them with the dates.

I think the telephone was invented in 1901. What do you think?

I'm not sure. I think it was invented in...

the telephone	105 AD
the printing press	1440
paper	1876
the ballpoint pen	1901
the personal computer (PC)	1924
television	1938
radio	1976

T 10.3 Listen and check. What nationality were the inventors? What were their jobs?

Speaking

- 2 Which inventions do you think are most important? Why? Order them 1-7 (1 = most important). Discuss your ideas as a class.

Passive forms

- 3 Read *All things online!* Complete the sentences with the correct passive form. Which numbers and dates do you think are correct?

T 10.4 Listen and check.

- 4 Make questions about the information in exercise 3. Ask and answer them with a partner.

- 1 How many emails/every year?

How many emails are sent every year?

Over 90 ...

- 2 How many questions/by Google/every day?
3 When/eBay? Who/by?
4 How many items/on eBay/it began?
5 How many films/YouTube every week?
6 When/the first Twitter message/sent? Who/by?
7 How many languages/Facebook/translated into?
8 When/Amazon.com/founded? Who/by?

T 10.5 Listen and check.



All things online!

- Over 90 billion / 90 trillion emails are sent (send) every year.
- Nearly 5.5 million / 5.5 billion questions are answered (answer) by Google every day.
- eBay was invented (invent) in 1985 / 1995 by Pierre Omidyar, a French scientist.
- Nearly 5 / 10 billion items are sold (sell) on eBay since it began.
- 30,000 / 60,000 new video films are posted (post) on YouTube every week.
- The first Twitter message was sent (send) by American businessman, Jack Dorsey, in 2006 / 2009.
- Facebook has been translated (translate) into 26 / 76 languages since it began.
- The online store, Amazon.com, was founded (found) by Jeff Besoz, in his garage in 1989 / 1994.

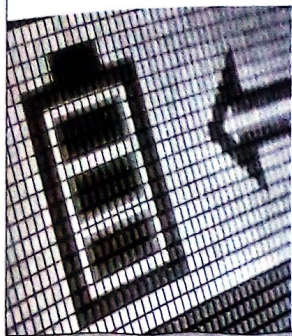
Passives

1 Tenses and infinitives

1 Complete the newspaper articles using the passive verb forms in the boxes.

were developed has been developed will be used be produced are used

1 Scientists develop mobile phone battery that can be charged in just ten seconds



A revolutionary mobile phone battery that recharges in ten seconds instead of several hours ¹ _____ by scientists. This is 100 times faster than existing batteries.

The invention is based on the sort of lithium batteries that ² _____ in most laptops, digital cameras, iPods, and phones. These batteries store a large amount of energy in a small space.

The new batteries ³ _____ by engineers at the Massachusetts Institute of Technology.

The MIT team say their invention uses materials that are freely available, and it could ⁴ _____ in large quantities very easily.

In the next few years, it ⁵ _____ in all kinds of portable gadgets. The same technology could also be used for producing batteries for electric cars.

was hit will be closed was killed were injured were taken

2 25 injured in motorway pile-up

Twenty-five people ¹ _____ in an accident on the M40 motorway yesterday afternoon. Five of the injured ² _____ to hospital by helicopter. Fortunately, no one ³ _____.

The accident happened between junctions 11 and 12 at five o'clock as motorists were driving home. A car braked sharply and ⁴ _____ by the car behind. This caused a multiple pile-up involving fifteen cars, three lorries, and a van.

The motorway is still blocked, and ⁵ _____ until this afternoon.



2 Complete the questions. (Circle) the correct answer, a or b.

1 'What sort of batteries ____ in laptops and cameras?'

a use b are used

'Lithium batteries.'

2 'Who ____ the new battery?'

a developed b was developed

'Engineers at the Massachusetts Institute of Technology.'

3 'How many people ____ in the motorway accident?'

a injured b were injured

'25.'

4 'What ____ the accident?'

a was caused b caused

'A car braked sharply and was hit by the car behind.'

2 Forming the passive

Put the verbs in brackets into the correct passive tense.

Present Simple

- 70% of the earth's surface is covered (cover) by water.
- My car _____ (insure) against accidents and theft.
- We _____ (watch) by CCTV cameras everywhere we go.
- What time _____ the post _____ (deliver)?
- You _____ (cover) in paint! What have you been doing?
- A lot of information about our lives _____ (keep) on computer.
- Every year about 2,000 people _____ (kill) in road accidents in the UK.

Past Simple

- We weren't affected (not affect) by the flood, but our neighbours were.
- _____ your car _____ (damage) in the accident?
- The painting _____ (sell) for ten million dollars.
- I _____ (introduce) to a very interesting man at the party yesterday.
- The door _____ (lock) so I couldn't open it.
- Where were you when these photos _____ (take)?

Present Perfect

- All these problems have been discussed (discuss) many times before.
- _____ you ever _____ (question) by the police?
- I _____ (sack) from my job! What did I do wrong?
- Our plane _____ (delay) because of bad weather.
- Brian's doing well at work. _____ just _____ (promote) to area manager.

Will

- You 'll be told (tell) what to do when you arrive.
- Your exam results _____ (send) in the post.
- Where _____ the next Olympic Games _____ (hold)?

3 Questions

Put the words in the correct order to make questions. Then choose the correct answer from the box.

In China. More than 100 million!
In India. ~~Flour, yeast, and water.~~
Between 60 and 80 million people.

- bread/made/is/from/What/?
'What is bread made from?'
'Flour, yeast and water.'
- Hindi/spoken/Where/is/?
' _____ '
' _____ '
- people/killed/How many/in the Second World War/were/?
' _____ '
' _____ '
- held/Where/the Olympic games/were/in 2008/?
' _____ '
' _____ '
- iPhones/made/How many/been/have/?
' _____ '
' _____ '

4 Short answers

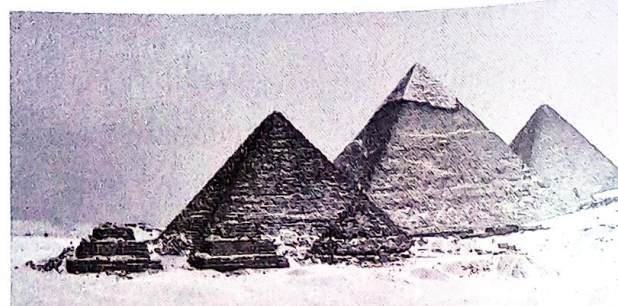
Correct the information in these sentences.

- Paper is made from plastic.
No it isn't! It's made from wood.
- Champagne is made in Scotland.

- iPhones are made by Nokia.

- The *Mona Lisa* was painted by Van Gogh.

- The Pyramids were built in Greece.



5 The passive infinitive

Complete the sentences with the passive infinitive of the verbs in the box.

clean	serve	do	spend	knock down
cancel	take	contact	ban	

- The situation is serious. Something must be done immediately.
- More money should _____ on health care.
- Please go and sit at the table. Dinner will _____ in five minutes.
- Can you take my suit to the dry cleaner's? It needs to _____ before the wedding.
- Smoking should _____ in public places.
- These pills must _____ with food twice a day.
- The old factory is going to _____ tomorrow.
- The football match had to _____ because of bad weather.
- I'm not taking my phone, so I can't _____ while I'm away.

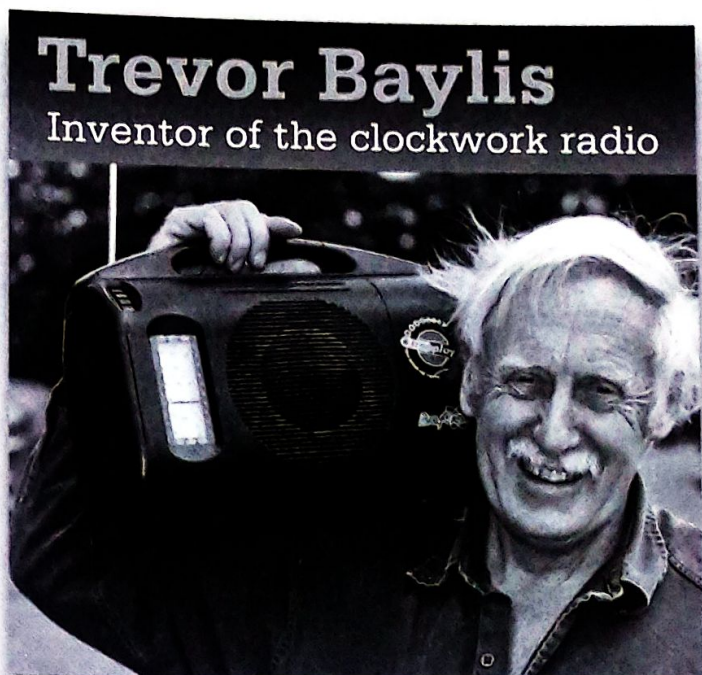
6 Active or passive?

- 1 Choose the best way to follow the sentences.

Circle a or b.

- I live in an old house. ...
a Someone built it 200 years ago.
b It was built 200 years ago.
- She wears the most beautiful clothes. ...
a They're all made in Italy.
b People in Italy make them all.
- I bought some shoes, but I never wore them ...
a so I sold them on eBay.
b so they were sold on eBay.
- Do you like this painting? ...
a It was done by me.
b I did it myself.
- The *Mona Lisa* is the most famous painting in the world. ...
a It can be seen in the Louvre in Paris.
b People can see it in the Louvre in Paris.
- We all have breakfast together every morning. ...
a Then the children are taken to school by me.
b Then I take the children to school.

- 2 Read about the inventor, Trevor Baylis. Put the verbs in brackets into the correct tense, active or passive.



Trevor Baylis ¹ _____ (grow up) in London. He ² _____ (educate) at a local school and then ³ _____ (study) engineering at a technical college in the city.

He is best-known for the invention of the world's first clockwork radio, in 1991. He wanted to produce a radio that could ⁴ _____ (use) by people in parts of Africa where there wasn't any electricity to get information about health and AIDS.

No manufacturer wanted to produce his early attempts, but then, in 1994, his radio ⁵ _____ (show) on a TV programme. A South African businessman ⁶ _____ (invest) money in the project, and the first clockwork radios, called *Freeplay*, ⁷ _____ (manufacture) in South Africa in 1995. Since then the radios have been a great success, and millions ⁸ _____ (sell) around the world.

Over the years Trevor Baylis ⁹ _____ (give) many awards for his invention. He continues to work hard. In 2003, he ¹⁰ _____ (start) a company which aims to help new inventors get financial backing. The company ¹¹ _____ (base) in Richmond, London, where the famous inventor lives.