

Agenda

1. Project group list
2. Unit 10A (cont.)
3. Break
4. Unit 10B

Schedule for the rest of the course

April 18	10AB
April 25	10CE + HW4
May 2	Quiz 4 + Presentation + Review

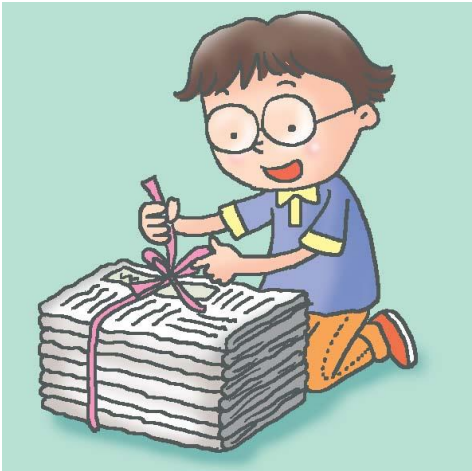
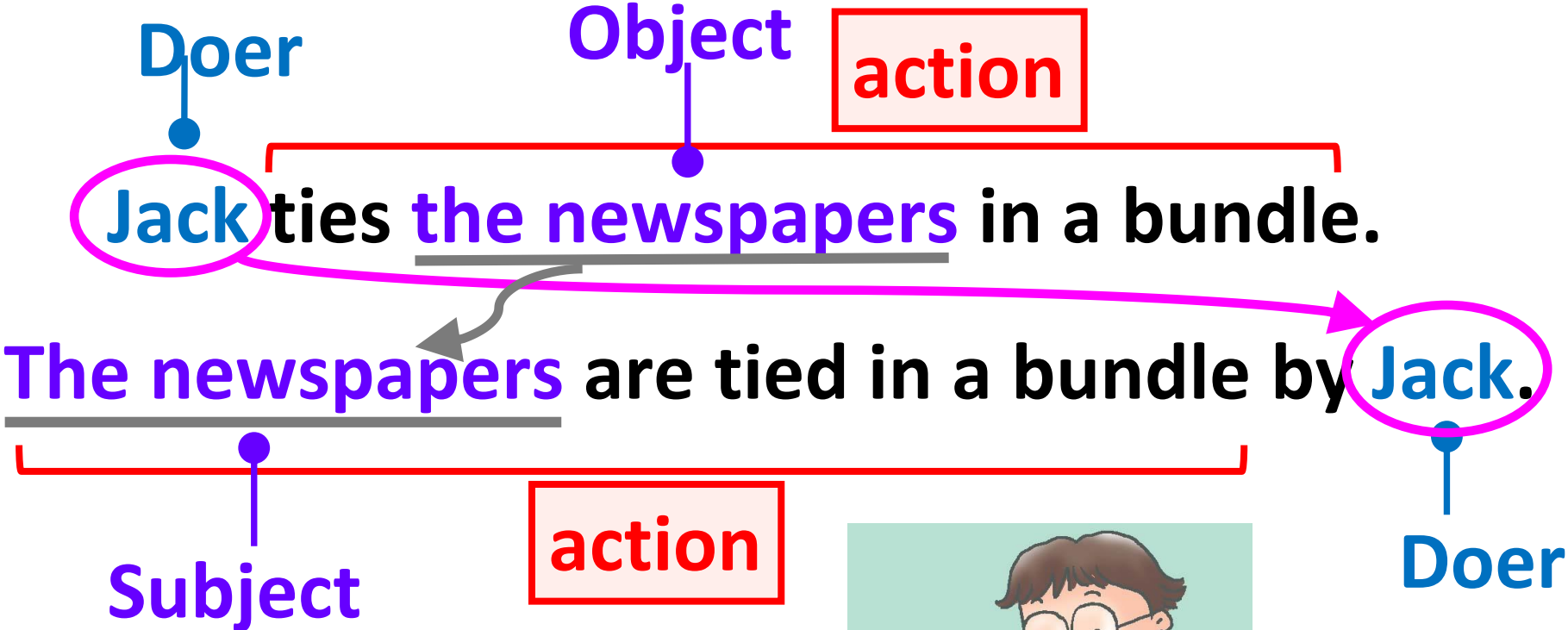
Grammar: The passive

**Passive voice in the simple
present tense**

We use the **passive voice** when we want to **focus on an action** and **not on the doer of the action**.



Example 1



Example 2



We can add the doer of the action when the doer is **known** or **important**.



The sandcastle **is built** by Linda and Joey.

Add '**by**' before the doer.

Example 3



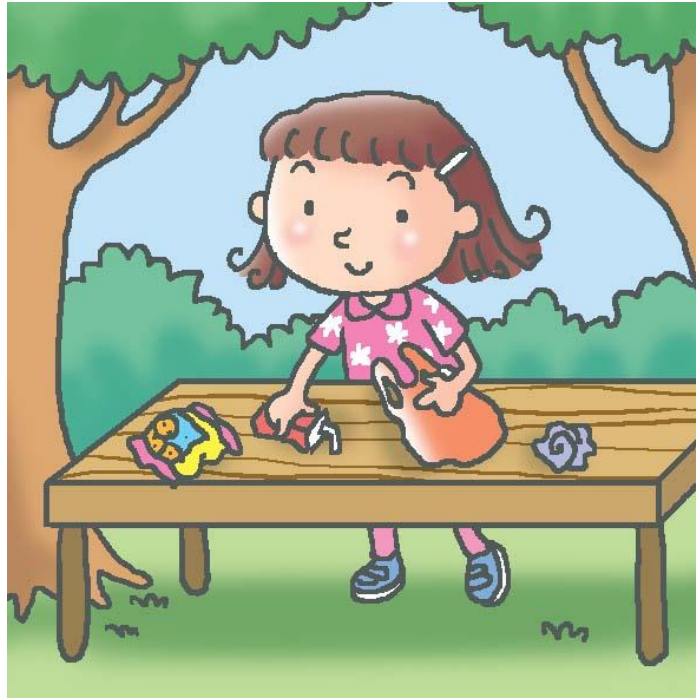
When we use the passive voice, **the doer of the action is often unknown.**



The tree house **is built.**

We **do not know who** builds the tree house.

Example 4



The passive is formed by 'be' (is/am/are) + **past participle** (e.g. eaten/done)



The picnic table **is cleaned** by Phoebe.

'be'

past participle

Example 5



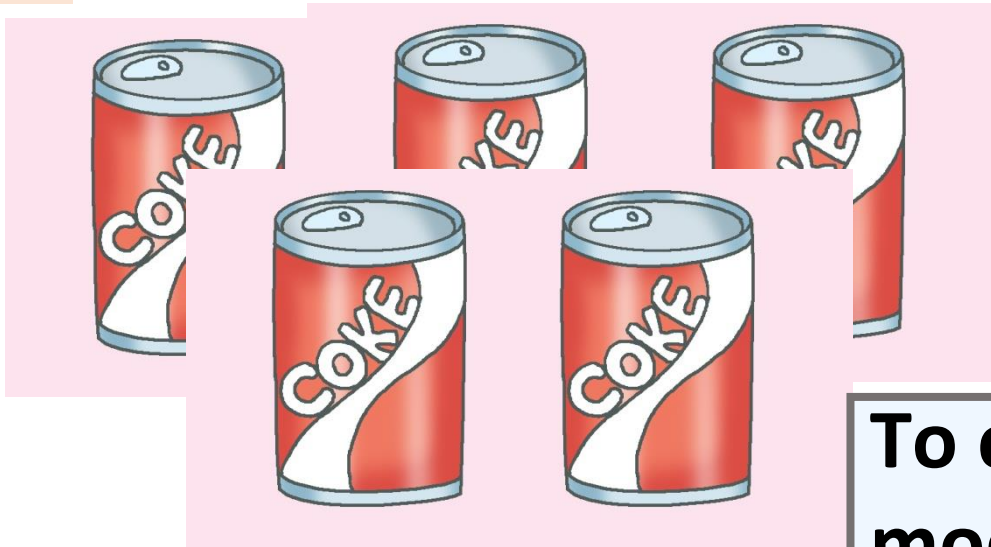
The books **are dropped** by Irene.

**passive
voice**

= Irene **drops** the books.

**active
voice**

Example 6



To change sentences having a modal into the passive voice, we **add 'be'** after the modal.

These cans **can be** reused.

✗ These cans **can reused**.

Quick practice – present passive

Question 1



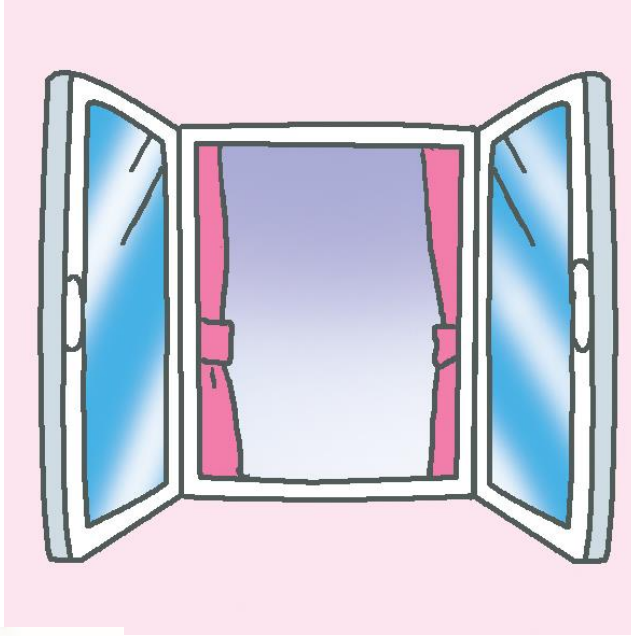
The gardener waters the flowers.
= The flowers are watered by the gardener.

Question 2



Thomas lights a candle.
= A candle is lit by Thomas.

Question 3

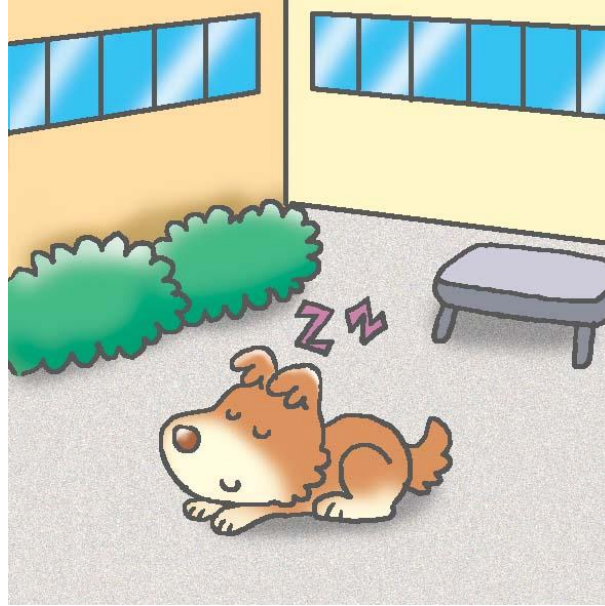


**‘Mum cleans the windows
every week.’**



**The windows are cleaned
by Mum every week.**

Question 4

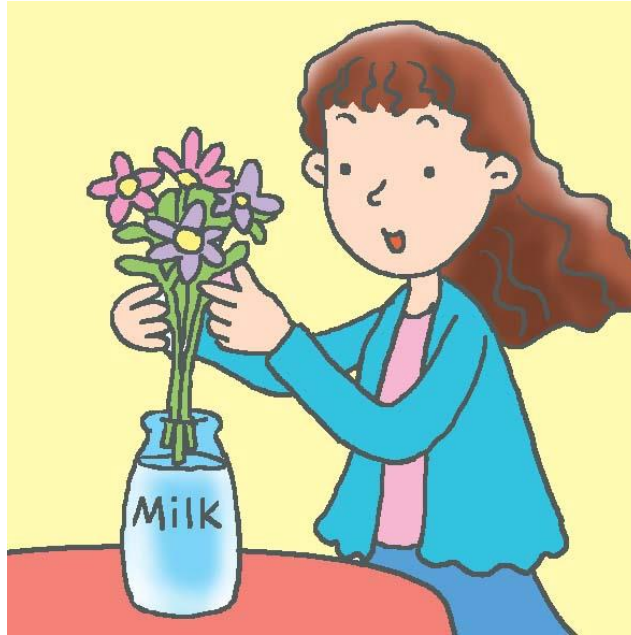


**‘Dad feeds the dog
every morning.’**



**The dog is fed by Dad
every morning.**

Question 5

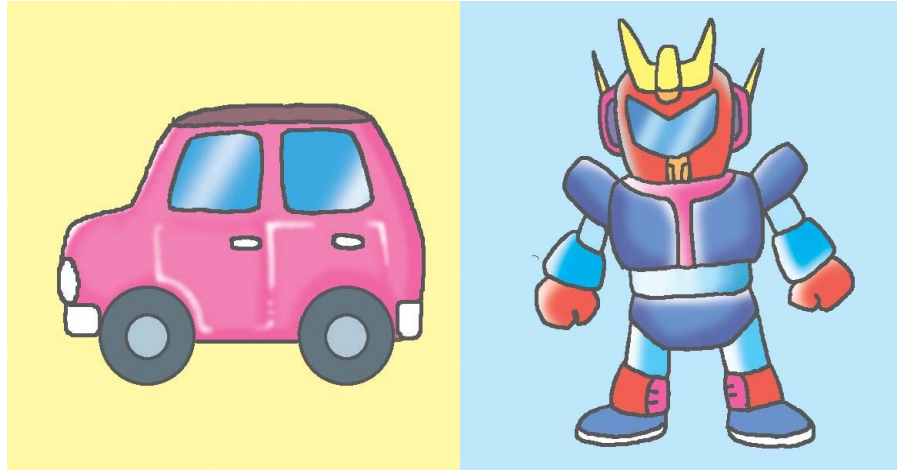


(the milk bottle /
turn into /
a vase)



**The milk bottle is turned
into a vase.**

Question 6




Can old toys be
given to charity?

Yes. Old toys can be
given to charity.



Present simple passive

We form the present simple passive with the present of *be*  + the past participle of the main verb. We use the present simple passive for:

- facts that are generally true.

*A lot of electronic devices **are made** in China.*

- regular actions.

*Diving classes **are held** every Saturday.*

- steps in a process.

*The devices **are designed** in California. After they're built in China, they're **shipped** all over the world.*

Affirmatives and negatives

<i>The equipment</i>	<i>is / isn't</i>	<i>made in China.</i>
<i>Smoke signals</i>	<i>are / aren't</i>	<i>used today.</i>

Questions

<i>Is</i>	<i>the equipment</i>	<i>made in China?</i>
<i>Are</i>	<i>smoke signals</i>	<i>used today?</i>

Grammar: The passive

**Passive voice in the simple past
tense**

Example 1



Remember to use '**was**' for '**I**', '**he**', '**she**', '**it**' and other singular subjects.

Active voice: The cat **spilled** the wine.

Diagram labels for Active voice:
- **subject** (green bracket) under 'The cat'
- **tense** (blue bracket) under 'spilled'
- **object** (orange bracket) under 'the wine'

Passive voice:

The wine **was spilled** by the cat.

Diagram labels for Passive voice:
- **subject** (green bracket) under 'The wine'
- **'was' + past participle** (blue bracket) under 'was spilled'
- **object** (orange bracket) under 'the cat'

Arrows show the transformation from Active to Passive voice:
- A green arrow points from 'The cat' (subject) to 'by the cat' (agent).
- A blue arrow points from 'spilled' (verb) to 'was spilled' (verb phrase).
- An orange arrow points from 'the wine' (object) to 'The wine' (subject).

Example 2



Remember to use '**were**' for '**you**', '**we**', '**they**' and other plural subjects.

subject **past tense** **object**
Active voice: John planted the flowers.

Passive
voice:

The flowers **were** planted by John.
subject **'were' + past participle** **object**

Example 3



We put '**not**' between '**was**'/'**were**' and the past participle.

Active voice: **subject** **past tense** **object**
Ann did not do the survey.

Passive voice:

subject **'was' + not + past participle** **object**
The survey was not done by Ann.

Example 4



subject past tense object

Active voice: Mum did not buy the toy car.

Passive voice: The toy car was not bought by Mum.

subject

'was' + not +
past participle

object



Question 1



My sister drew this picture yesterday.



This picture was drawn by my sister yesterday.



Question 2



The heavy rain flooded most of the farmlands.

Most of the farmlands
were flooded by the heavy
rain.



Question 3



The factory smoke polluted the air.



The air was polluted **by the**
factory smoke.



Question



Carl did not bring the picnic basket.



The picnic basket was not
brought by Carl.



Question 5



Ashley peeled the orange.



**The orange was peeled
by Ashley.**



Question 6



Mr Smith did not find the hand prints.



**The hand prints were not
found by Mr Smith.**



Question 7



Ben ate the chicken wing.



**The chicken wing was
eaten by Ben .**

GRAMMAR The passive

- 10** Look at the sentences from the lecture in the Grammar box. Underline the verb in each sentence. Circle the subject of each verb.

The passive

Communication all over the world is seen as perfectly normal today.

The first smoke message was sent about 10,000 years ago.

The first telephone... was made in 1876.

The first text message was sent in 1992.

11 Read the sentences in the Grammar box again. Choose the correct option to complete each rule.

- 1** We form the passive with the verb *to be* / *to have* and the *present* / *past* participle.
- 2** We put the subject of the passive verb *before* / *after* the verb.

12 Compare these two sentences and answer the questions.

a *Alexander Graham Bell made the first phone call in 1876.*

b *The first phone call was made in 1876.*

1 Which sentence is active? Which is passive? **a: active; b: passive**

2 Which sentence focuses on the person who did the action? **a**

3 What is the focus of the other sentence? **the first phone call**

4 What happens to the object of the active sentence?

It becomes the subject in the passive.

13 Match the two parts of the passive sentences.

- c** 1 The most popular smartphones and tablets
- g** 2 A smartphone is basically a mobile phone that
- e** 3 These phones are small, hand-held devices that
- a** 4 The idea of combining telephones and computers
- h** 5 But the first telephone + computer machines
- d** 6 In the 1990s these basic phones
- f** 7 By the early 2000s simple smartphones
- b** 8 Then in 2007 the first smartphone with a large screen
 - a** was first thought of as early as 1909.
 - b** was produced and mobile phones changed forever!
 - c** are used all over the world today.
 - d** were developed to send and receive emails and faxes.
 - e** are used in a similar way to a computer.
 - f** were sold and used in many countries.
 - g** is connected to the internet.
 - h** were invented in the USA in 1971.

- 14** Complete the article with the passive voice of the verbs. Use the present simple or past simple.

Messages from space?

The RATAN-600 radio telescope in Russia

(1) was turned on (turn on) in 1974. It


(2) was built (build) to receive radio signals from space. Most of the signals are just 'space noise', but sometimes, scientists hear radio signals with certain patterns that they think may be messages.

In August of 2016, a signal (3) was received (receive) that was very different from the usual noise. When the

signal (4) was shared (share) with experts around the world, they agreed that it was very interesting. Was it a message that (5) was sent (send) from another

planet – a smoke signal saying *We are here*? No one knows for sure. Every possible message (6) is studied (study) carefully, and the work continues.

15 PRONUNCIATION Stress in passive verbs

- a** Listen to the sentences. Underline the passive verb phrases. Which part of the verb phrase is stressed: *be*, the past participle or both?  62

1 An earlier message was received in the US in 1974.

was received

2 The signal wasn't produced on Earth – it came from space.

wasn't produced

3 Messages are sent from Earth into space every day.

are sent

4 Every time a cell phone call is made, or a TV or radio show is broadcast, a signal is sent into space.

is made; is broadcast, is sent

5 Maybe this information is studied on another planet.

is studied

- b** Complete the rule.

In affirmative passive verbs we usually stress the past participle, but in negatives we stress (form of) be or not.

Sometimes in negative clauses the two parts might be quite equally stressed

10B Can tech teach us?

VOCABULARY BUILDING Word families

Many words have a basic form which we can use to make verbs, nouns and other parts of speech.

- 1** Complete the table with the other forms of the words.
Use a dictionary if necessary.

Verb	Noun (thing)	Noun (person)
develop	(1) development	developer
improve	(2) improvement	—
achieve	achievement	(3) achiever
(4) equip	equipment	—
disappoint	(5) disappointment	—
entertain	entertainment	(6) entertainer

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- 2 Complete the article with words from Exercise 1.

A short history of artificial intelligence

Computer experts and software (1) **developer** first began trying to create artificial intelligence (AI) in the 1950s. Their earliest (2) **achievements** included teaching computers to play games and do maths. They thought they could create a thinking computer within twenty years but that turned out to be a (3) **disappointment** – the job was harder than expected. In the 1970s, work on AI slowed down, though computer games based on early research became a popular type of (4) **entertainment**. But in the 1980s, as computer technology (5) **improved**, AI research started up again. Now, companies are beginning to (6) **equip** everyday technology like cars and smartphones with simple AI that can answer questions and follow spoken instructions. This means that many of us now have AI in our pocket. What will happen next?

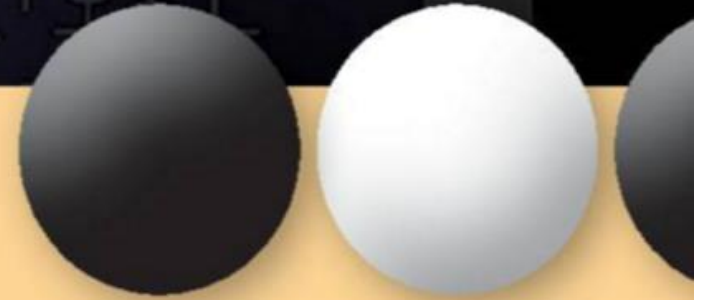
Unit 10 Reading Vocab.

Match the following words with the correct meaning.

1. defeat (v.) (line 6)	(B)	A. the process of getting better at doing something
2. against (adv.) (line 7)	(C)	B. to win a victory over; beat in a game or battle
3. analyze (v.) (line 14)	(F)	C. in the opposite direction or contrary to
4. process (n.) (line 15)	(D)	D. a series of actions that are done in order to achieve a particular result
5. develop (v.) (line 16)	(E)	E. to grow and become more mature or advanced
6. achievement (n.) (line 20)	(G)	F. to study or examine something carefully in a methodical way
7. progress (n.) (line 22)	(A)	G. a thing that somebody has done successfully

Playing against computers

THAT LEARN



63 When Fan Hui lost a game of Go in October 2015, history was made: it was the first time a human Go champion was beaten by an artificial intelligence (AI) – a computer programme that can think. And in 5 March 2016, history was repeated when Lee Sedol – one of the world's top players – was defeated. As Fan watched AlphaGo make an important move against Lee, he thought: 'That wasn't a human move.' Then he said, 'So beautiful, so beautiful.'

10 Usually, game-playing electronic devices are programmed to predict the possible results of a move, but they don't learn new moves or improve. AlphaGo is different. When it was built, the AI was given three million human Go moves to analyze. Then it began

15 playing. Through the process of sometimes losing and sometimes winning, the AI developed its own style of play, and learned to 'think' – some people even say 'feel' – like a real Go player.

Are Fan and Lee disappointed about AlphaGo's 20 achievements? Is our technology becoming too smart? Perhaps surprisingly, the two Go champions see it as progress. After he was beaten by AlphaGo, Fan began to play the game in a different way and he improved. He won more games against other humans. Lee, 25 whose experience was similar, said 'I have improved already. It has given me new ideas.' In this case, human and machine are working together for the development and improvement of both.

5 Read the article. Underline phrases or sentences in the article that support these ideas. Compare your answers with a partner.

- 1** The game between Fan Hui and AlphaGo was important.
- 2** Fan Hui respected AlphaGo as a player.
- 3** AlphaGo wasn't programmed like other computers.
- 4** AlphaGo learned to play Go in a way that is similar to the way a person learns.
- 5** AlphaGo taught Fan and Lee some new things about Go.

1. The game between Fan Hui and AlphaGo was important.
history was made: (line 2)
2. Fan Hui respected AlphaGo as a player.
Then he said, 'So beautiful, so beautiful.' (lines 8–9)
3. AlphaGo wasn't programmed like other computers.
AlphaGo is different. (lines 12–13)

4. AlphaGo learned to play Go in a way that is similar to the way a person learns.
... the AI developed its own style of play and learned to 'think' ... like a real Go player (lines 16–18)
5. AlphaGo taught Fan and Lee some new things about Go.
After he was beaten by AlphaGo, Fan began to play the game in a different way and he improved. (lines 22–23)
Lee ... said 'I have improved already. It has given me new ideas.' (lines 24–26)

6 Read the article again. Choose the best option to complete each sentence.

- 1** AlphaGo won because it
 - a** copied moves made by humans.
 - b** made a surprising move.
 - c** didn't follow the rules.
- 2** AlphaGo
 - a** was programmed to win.
 - b** can make about three million different moves.
 - c** learned to play by practising.
- 3** Fan and Lee
 - a** learned from AlphaGo and became better players.
 - b** were very angry that AlphaGo won.
 - c** regret playing against AlphaGo.