the passive and its uses

FORM

Use be + past participle to form the passive.

present simple active present simple passive present continuous active present continuous passive past simple active

- past simple passive present perfect active present perfect passive will active will passive
- We find oil and gas beneath the ground or sea. Oil and gas are found beneath the ground or sea. The police are questioning two men. Two men are being questioned by the police. Teachers trained Aztec boys to fight. Aztec boys were trained to fight. Tourism has harmed some countries. Some countries have been harmed by tourism. We will choose a new class representative on Monday. A new class representative will be chosen on Monday.

USE

Use the passive

- to move important information (the object of the active sentence) to the beginning. Two men are being questioned by the police.
- when we want to be impersonal and not mention the name of the person who performs the action. We often use the passive in scientific or technical processes.
- Oil and gas are found beneath the ground or sea.
- when it is obvious who performed the action, eg teachers, or we do not want to use a general subject eg people, they.

Aztec boys were trained to fight.

Two missing children have been found safe and well.

• more often in formal speech and writing than in everyday speech.

transitive and intransitive

Verbs which have an object are called transitive verbs; verbs without an object are intransitive. Only transitive verbs can be made passive.

transitive	subject	verb	object	
	Î	lost	my wallet	on the way to school.
intransitive	1	swim	-	every day.

Use by

- when it is important to know the 'agent' or person who performed the action Some countries have been harmed by tourism.
- only when it is really necessary. The two men were arrested. (by the police – this is obvious)

Use with

• for objects which perform actions. The game was played with a ball of solid rubber

- 1 Complete the sentence with the past simple passive form of the verb in brackets.
 - a In ancient times, fires (light) were lit distances.
 - **b** Morse code (invent)
 - c The world's first television images (show) 1926. d Radios (use)
 - War.
 - e The World Wide Web (design) physics researchers to communicate.
 - f Buying books and CDs over the Internet (make) company Amazon.
 - g The first mobile phones with cameras (sell)
 - h Vinyl albums and tapes (replace) replaced by mp3. i The first English dictionary (wrote)
- j The first mass-produced cars (introduce) USA.
- 2 Read the text and <u>underline</u> all the subject, verb and object structures. Then rewrite the text using present simple passive verbs. Leave out any unnecessary words.

How a toy car is made

In the factory, they use a computer to plan the exact shape of the car. They then feed this computer program into a machine, and produce a plastic prototype. Then they produce the actual toy cars in a factory abroad. As far as construction is concerned, they make the bodies of the cars from plastic. They add small electric motors to the cars, and then they paint them. They also attach licence plates. Quality control inspects the cars and then they wrap them and pack them into cardboard boxes. They ship the cars to Britain.

a As a first step, a computer is used to plan the exact shape of the car.

b	Then and
С	The actual
d	The bodies
6	Small
	Licence
f	At the next stage,
	Finally,

to use smoke as a signal over long

by an American called Samuel Morse. to scientists in Scotland in

to broadcast coded messages during the Second World

originally to make it easier for nuclear

popular by the

in Japan. by CDs, which are now being

. by Robert Cawdrey in 1604. by the Ford company in the

 Britain.

uses the passive and its 79

3 Complete the text with either the *will* passive or present perfect passive forms of the verbs in brackets.

In recent years many plans a (make) have been made for large floating cities with living accommodation for as many as 50,000 people. One such project which b (advertise) is the Freedom from smaller Ship. According to the plans for this project, this huge ship c (construct) out to sea for final assembly. The ship units, which d (take) by 100 diesel engines, and the residents on board f (carry) e (power)



around the world continuously. The large number of people on the ship g (provide) with all kinds of entertainment and sports facilities, and modern recycling methods h (use) to save energy on board. At the time of writing, this project i (not build) and (criticize) by some people who say it is too expensive. We shall have to wait and see whether this ambitious plan ever becomes reality.

- 4 Rewrite the sentence using a present perfect passive with by. Leave out any unnecessary words.
 - a Cheaper air travel has made possible the global expansion in tourism. The global expansion in tourism has been made possible by cheaper air travel.
 - b Countries all over the world have experienced a growth in tourism.

c Millions of tourists have visited the popular Mediterranean resorts since the 1970s.

d Recently tourists have chosen more distant locations in Africa, Asia and South America.

e Mass tourism has badly affected some countries.

f International companies have built large hotels on unspoilt coastline.

- g These developments have disturbed local wildlife.
- h Tourists have damaged coral reefs and other habitats.
- Such developments have also displaced local people.
- Some governments have developed the idea of ecotourism to counteract some of these problems.

5 Read the information about urban development. Then complete the text with the present perfect passive or past perfect passive form of the verbs in brackets.



ocial studi

SSARY 015

In many countries in recen
used for industrial purpos
for other purposes. In Lor
b (transform)
c (built)
was a busy port, but by th
and many docks e (close)

areas of derelict land, and many people without jobs. Since the 1 on the project. 600 hectares of derelict lar 90 km of new roads h (build) ,80,0 and 24,000 new homes j (construct) and 130 hectares of parks k (plant) Cultural venues such as the Docklands Arena m (open) not agree with all the things that n (do)

jobs are in media, IT or business. On the other hand, a declining a new lease of life.

- 6A Rewrite each sentence so that it does not contain the words someone or people.
 - a Someone built ships with sails more than 5,000 years ago.

Ships with sails were built more than 5,000 years ago.

- **b** Someone constructed a hot-air balloon in 1783.
- c People developed the steam ship in the 19th century.
- d Someone opened the first successful passenger railway in 1830.
- e People started the first passenger airlines after the First World War.

EXTENSION ACTIVITY

- 1 How much do you know about history? Write five sentences about famous events in the past, using these verbs: discover, invent, paint, write, build.
- 2 Write a list of five recent news events in your country. Describe what was done at a particular time.

Need more practice? Go to the **Review** on page 192.

nt years, areas of <mark>urban</mark> land which were once	
es a (redevelop) have been redeveloped	
don, for example, the Docklands	
since the 1980s.The docks	
in the 19th century when London	
e 1980s, most business d (lose)	
This left large	
980s, £10 billion (\in 14.7 billion) f (spend)	
nd g (improve),	
000 new jobs i (create)	
In addition to this, 100,000 new trees	
s I (create)	
Some local people do	
, as houses here are expensive, and most	
area of the city o (give)	
.54	RY
area of the city o (give)	6
U	100

- 6B Rewrite each sentence so that it includes the agent by.
 - f The Chinese probably printed the first books more than a thousand years ago.
 - g The Remington company sold the first modern typewriters in the 1870s.
 - h Edison recorded the first words on a gramophone record in 1877.
 - i The Lumière brothers created the first modern cinema in France in 1895.
 - Valdemar Poulsen invented the tape recorder in 1899.

causative have, verbs with two objects, passive reporting verbs

(FORM

have + object + past participle

oresent simple	I have my hair cut once a month.
present continuous	They're having their house decorated at the moment
oast simple	We had the computers checked last week.
present perfect	Tom has had his nose altered.
going to future	I'm going to have my photograph taken.
oresent perfect	Tom has had his nose altered.

Use causative have

- to describe a service eg painting, decorating, haircut, operation, etc that somebody does for us. We do not usually say who performed the action unless this is important. *I'm going to have* my photograph *taken*. (by a photographer = not necessary) I'm going to have my photograph taken by a top fashion photographer. (important information)
- for unfortunate events eg accident, fire, theft etc. Sally has had her car stolen.

We can use get instead of have in everyday speech eg I get my hair cut once a month. Note: Get something done can also mean manage to do something.

Did you get your project done?

We also use get done for unfortunate events when there is no agent. Did anyone get hurt?

We can also use get instead of be in the passive in everyday speech with verbs such as *invite*, offer, choose, take, send etc.

We got invited to Jim's house. She got sent to France on a course.



Verbs with two possible objects

buy, give, lend, make something for someone, offer, prepare something for someone, promise, sell, send, take something to someone Jim gave some help to Alan.

- give Jim gave Alan some help. take
 - David took Susan a present. David took a present to Susan.

Verbs with two possible objects have two passive forms, but one is more commonly used. Alan was given some help by Jim. (more common)

Some help was given to Alan by Jim.

Susan was taken a present by David. (more common) A present was taken to Susan by David.

FORM

Reporting verbs

believe, expect, know, report, say, think, suppose, understand Present simple passive + to do / to be doing are used for reports about the present. The missing painting is believed to be in Switzerland. The government is said to be studying the proposal.

Use reporting verbs and to do I to be doing

when there is uncertainty about the report. This is common in news reports. The missing painting is in Switzerland. The missing painting is believed to be in Switzerland.

Includes exercises from Units 20 and 21.

1 Complete each sentence using present continuous causative have. Leave out the words underlined. a What are you doing on Monday? In the afternoon <u>a photographer</u> is taking my photograph. In the afternoon I am having my photograph taken. b What is Anna doing on Tuesday? In the morning a <u>hairdresser</u> is cutting her hair. In the morning she c And what is Alan doing on Wednesday? In the afternoon <u>a dentist</u> is taking out a tooth. In the afternoon he d What is happening at your house on Thursday? Some decorators are painting our kitchen. We e Are you using your car on Friday? No, the garage is servicing it. No, I f And what are Sue and David doing on Saturday? Some plumbers are fitting their new central heating. They

2 Rewrite each sentence so that it contains a past simple causative *have*. Leave out any unnecessary words.

а	Someone broke Tim's nose while he was playing football.
	Tim had his nose broken while he was playing foot
b	Someone stole Maria's bike last week.
	Maria
С	Someone damaged Mr Grover's car last week.
	Mr Grover
d	Someone took Anna's mobile.
	Anna
е	Someone sprayed paint on our garden wall.
	Our
f	Someone broke into our house.
	We
g	Someone knocked off one policeman's helmet.
	One policeman
h	Someone smashed our windows with a brick.
	We

(= a definite fact) (= that's what people believe)



ball.

causative have, verbs with two objects, passive reporting verbs 83

3 Rewrite each sentence without the words <u>underlined</u> and using a form of causative have. Make any other necessary changes.

Cosmetic surgery, which used to be only for film stars, has recently become very popular among the population as a whole.

- a <u>Surgeons</u> remove people's scars and blemishes. People have scars and blemishes removed.
- **b** <u>They</u> also lift people's faces in order to look younger.



c In a recent poll, many people admitted that surgeons had altered their noses. In a recent poll, ...

d <u>Surgeons</u> had also reshaped the eyes of several people.

- e <u>Doctors</u> had also thickened one woman's lips.
- f Psychologists are worried that so many young people want doctors to change their appearance. Psychologists are worried that
- g So if you're thinking of asking a doctor to perform an operation, think again. So if you're thinking of
- h Plastic surgery can also ruin people's lives.

4 Rewrite each question so that it contains a form of *get*. Make any necessary changes.

- a Did you finish your project in the end? Did you get your project finished in the end?
- b Was David sent to the head teacher's office?
- c Have you done all your homework?
- d Did they choose Susan as class representative?
- e When are you sorting out the school sports programme?
- f Have you organized your revision?
- g Was Tony injured playing basketball?
- h Were you invited to Maria's party?

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5 Rewrite each sentence beginning and ending as shown.

- a At the end of her term at college, a multi-national compar At the end of her term at college, Emma was offere. by a multi-national company.
- b It wasn't very well-paid, but they promised her a good position in the future. It wasn't very well-paid, but she ...
- c They sent her a letter explaining all the details. She
- d The company explained that they would give her free accommodation. The company explained that she
- e Her parents lent her some money to buy some new clothes and a laptop. She ...
- and a laptop.
- f Her fellow students gave her some CDs as a present. She

6 Rewrite each news item beginning as shown.

- a People believe that the Prime Minister is seriously ill.

	The Prime Minister IS believed to be seriously Ill.
b	People think that she is in hospital.
	She
С	People suppose that she is flying to Washington tomorrow.
	She
d	People understand that she is remaining in London.
	She
е	People do not say that she is dangerously ill.
	She
f	People expect her to leave hospital in a few days.
	She
g	People believe that doctors are at her bedside day and night.
	Doctors
h	People know that her illness is a kind of flu.
	Her illness
i	People understand that she is taking antibiotics.
	She
j	People report that she is in good spirits.
	She

EXTENSION ACTIVITY

1 Write a sentence describing what you have done by these people. decorator mechanic photographer tailor 2 Write a sentence describing what you have done in these places. hairdresser's garage

ny offered Emma a job in Dubai.
d a job in Dubai

in the future.

the details.

free accommodation.

by her parents to buy some new clothes

as a present by her fellow students.

burglar

dry cleaner's dentist's artist's studio

Ex 4

a The teacher told John to the fill the jar with water. b The teacher asked Angela to help him. c The teacher told Michael not to spill the water. d The teacher asked Alison if she would pour / to pour a little water into the test tube. e The teacher told Steve to light the gas. f The teacher told Alan not to touch it with his finger. **g** The teacher told Sarah to heat the water gently until it boiled. h The teacher asked all of them to watch the water carefully.

- Ex 5

a1 b8 c7 d6 e2 f4 g3 h5

Ex 6

Suggested answers: a said his advice was b told, to choose a workout c told /advised them / the audience to avoid activities that were d suggested doing it a bit differently each time e explained that making sure you have f warned that overtraining can **q** reminded them / the audience to eat **h** said they / the audience shouldn't use

Unit 18

Ex 1

a If you heat water to 100°C, it boils. b If you boil water, it turns into steam. c If you cool the steam, it turns back into water d If you heat a piece of metal, it expands. e If you freeze a piece of metal, it contracts.

f If you freeze water, it expands.

Ex 2

a If everyone recycles paper, companies won't cut down so many trees. b If everyone recycles metal and glass, we won't waste valuable resources. c If everyone recycles paper, metal and glass, we won't produce so much rubbish. d If everyone turns off unwanted lights, we will save a lot of electricity. e If everyone walks or cycles, we won't waste so much oil and petrol. f If everyone insulates their houses, we won't waste so much energy for heating. g If countries use more wind and water power, they won't depend so much on power stations. h If countries use power stations less, they will cause less air pollution.

Ex 3

a What would happen if you travelled through the Earth to the other side? b What would happen if the Earth suddenly stopped going round? c What would happen if we didn't have a Moon? d What would happen if all the ice at the poles melted? e What would happen if there was no more electricity? f What would happen if aliens received messages from the Earth and decided to visit us?

Ex 4A

a You won't succeed in sport unless you train hard. b You can improve your performance as long as you train regularly. c It doesn't really matter whether you succeed or not, as long as you enjoy your sport. d You won't develop as an athlete unless you eat and sleep properly.

Ex 4B

e Take a spare pair of running shoes in case you need them. f Take a waterproof coat with you in case it rains. g Take a warm jumper in case you get cold when you stop. h Take a first-aid kit in case someone gets injured.

Ex 5

a used, would be able b were, would see c turn off, won't be able d didn't, would weigh e don't have, will let f looked, would be, would be g smoke, take place h removed, would be able

Unit 19

Ex 1

a had marched, would have conquered b had gone, would have succeeded c had built, would have crossed, (would have) landed d had not hit, would not have arrived e had continued, would have sailed f had not read, would not have tried q had sailed, would have reached h had not thought, would not have conquered i had not found, would not have made | had not taken, would not have written

Ex 2

Suggested answers: a If I hadn't brought a map with me, we would be lost. b If I hadn't explained my new ideas to the Church, I wouldn't be in trouble. c If I hadn't exaggerated some of the descriptions in my book, perhaps more people would believe me. d If we hadn't gone to the theatre last night, he would be alive today. e If I had spent more time on my painting, more of them would be finished. f If I hadn't invaded Russia, I would still be Emperor of France.

Ex 3

Suggested answers: a If the Trojans hadn't taken the wooden horse into Troy, the Greeks would not have captured the city. b If the Greeks hadn't won the battle of Marathon, Darius and his army wouldn't have gone home. c If Julius Caesar hadn't made the decision to cross the River Rubicon, he wouldn't have become leader of the Roman state. d If Isabella hadn't married Ferdinand, Spain wouldn't have become one of the most powerful countries in Europe. e If Harold's army hadn't been tired, William wouldn't have become king of England.

Ex 4

a I wish I knew the answer to this problem. b I wish I had a calculator. c I wish I understood the problem. d I wish my teacher explained things to me. e I wish I was / were in a different class. f I wish I did French instead. g I wish I lived in France. h I wish I didn't have to do my homework.

Ex 5

a I wish I hadn't met him. b I wish I'd stayed at home. c I wish I hadn't decided to go to a wizard school. d I wish I had stayed in China. e I wish I hadn't sat under an apple tree. f I wish I hadn't run away with him. g I wish I hadn't made him. h I wish I had put some clothes on.

Ex 6

a I wish you'd hand your work in on time! b I wish you wouldn't make so many mistakes! c I wish you wouldn't drop litter on the floor! d I wish you would pay attention! e I wish you wouldn't talk during the test! f I wish you would listen to what I'm saying! g I wish you wouldn't interrupt people! h I wish you wouldn't throw things across the room! i I wish you would behave! | I wish you would make less noise / wouldn't make so much noise!

Ex 7

a were b would spend c stays d do not realize e go f swim g remained h would die i had been i would have seen k continue | will become

Unit 20

Ex 1

a were lit b was invented c were shown d were used e was designed f was made g were sold h were replaced i was written j were introduced

a The global expansion in tourism has been made possible by cheaper air travel. b A growth in tourism has been experienced by countries all over the world. c The popular Mediterranean resorts have been visited by millions of tourists since the 1970s. d Recently more distant locations in Africa, Asia and South America have been chosen by tourists. e Some countries have been badly affected by mass tourism. f Large hotels have been built on unspoilt coastline by international companies. g Local wildlife has been disturbed by these developments. h Coral reefs and other habitats have been damaged by tourists. i Local people have also been displaced by such developments. The idea of ecotourism has been developed by some governments to counteract some of these problems.

Ex 2

a As a first step, a computer is used to plan the exact shape of the car. b Then this computer programme is fed into a machine and a plastic prototype is produced. c The actual toy cars are produced in a factory abroad. d The bodies are made from plastic. e Small electric motors are added to the cars, and they are painted. Licence plates are also attached. f At the next stage, the cars are inspected, then they are wrapped and packed into cardboard boxes. g Finally, the cars are shipped to Britain.

Ex 3

a have been made b has been advertised c will be constructed d will be taken e will be powered f will be carried g will be provided h will be used i has not been built j has been criticized

Ex 4

Ex 5

a have been redeveloped b has / have been transformed c had been built d had been lost e had been closed f has been spent g have been improved h have been built i have been created have been constructed k have been planted | have been created m have been opened n have been done o has been given

Ex 6A

a Ships with sails were built more than 5,000 years ago. b A hot-air balloon was constructed in 1783. c The steam ship was developed in the 19th century. d The first successful passenger railway was opened in 1830. e The first passenger airlines were started after the First World War.

Answer key

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Ex 6B

f The first books were probably printed by the Chinese more than a thousand years ago. g The first modern typewriters were sold by the Remington company in the 1870s. h The first words were recorded on a gramophone record by Edison in 1877. i The first modern cinema was created by the Lumière brothers in France in 1895. j The tape recorder was invented by Valdemar Poulsen in 1899.

Unit 21

Ex 1

a I am having my photograph taken. b is having her hair cut. c is having a tooth taken out. d are having our kitchen painted. e am having it

(my car) serviced. f are having their new central heating fitted.

Ex 2

a Tim had his nose broken while he was playing football. b Maria had her bike stolen last week. c Mr Grover had his car damaged last week. d Anna had her mobile taken. e Our garden wall had paint sprayed on it. f We had our house broken into. g One policeman had his helmet knocked off. h We had our windows smashed with a brick.

Ex 3

a People have scars and blemishes removed. b People also have their faces lifted in order to look younger. c In a recent poll, many people admitted that they had had / admitted having their noses altered. d Several people had also had their eyes reshaped. e One woman had also had her lips thickened. f Psychologists are worried that so many young people want to have their appearance changed. g So if you're thinking of having an operation performed, think again. h People can also have their lives ruined by plastic surgery.

Ex 4

a Did you get your project finished in the end? b Did David get sent to the head teacher's office? c Did you get all your homework done? d Did Susan get chosen as class representative? e When are you getting the school sports programme sorted out? f Did you get your revision organized? / Have you got your revision organized? g Did Tony get injured playing basketball? h Did you get invited to Maria's party?

Ex 5

a was offered a job in Dubai b was promised a good position c was sent a letter explaining all d would be given e was lent some money f was given some CDs

Ex 6

a is believed to be seriously ill. b is thought to be in hospital. c is supposed to be flying to Washington tomorrow. d is understood to be remaining in London. e is not said to be dangerously ill. f is expected to leave hospital in a few days. g are believed to be at her bedside day and night. h is known to be a kind of flu. i is understood to be taking antibiotics. j is reported to be in good spirits.

Unit 22

Ex 1

a can't reach b can hear c can't open d haven't been able to take e can't come f to be able to use g can't swim h haven't been able to sleep

Ex 2

a mustn't b must c mustn't d mustn't e must f mustn't g mustn't h must

Ex 3

a mustn't b don't have to c don't have to d mustn't e don't have to f mustn't

Ex 4

a can cause b has to provide c have to produce d have to have e can't grow f have to control g have to take h have to ask i have to be i have to ask

Ex 5

a should b should c should d should e shouldn't f should g shouldn't h shouldn't

Ex 6

a We'd better take an umbrella. b You'd better call a taxi. c You'd better not play in the match. d We'd better take some sandwiches. e You'd better wear a hat. f We'd better leave now. g We'd better not wake him up. h You'd better check it in the dictionary.

Ex 7

a You need to think about all the information given. b You needn't worry about spelling, but you should try to be as accurate as you can. CYou need to identify all the necessary steps to solve a problem. d You need to understand technical words eg equation. e You need to be able to use methods of multiplication and division. f You need to know when to use an example.

Ex 8

aD bD cB dB eD fC gA hC

Unit 23

Ex 1

a couldn't b could c couldn't d could e could, couldn't f couldn't g could h couldn't i could j could

Ex 2

a I needn't have worked so hard! b I didn't need to work at the weekend. c I didn't need to borrow any books. d But I needn't have given up so much of my spare time. e I needn't have spent a lot of time reading and writing every evening. f But I managed to do it on my own, and I didn't need to ask for any help. g And I didn't need to give up playing tennis. h I needn't have used the Internet so much. i But it was quite easy in the end, and I didn't need to think too hard! | In the end, I needn't have worried about it so much!

Ex 3

a didn't have to go b couldn't pay c had to find d had to work e had to sign f had to climb g had to be h had to use i had to pay j couldn't employ k could work | could put m had to limit

Ex 4

Suggested answers: a He should have conducted an experiment. b He should have worn warm clothes. c He shouldn't have tested it on his students. / He should have tested it on himself. d He shouldn't have carried radioactive substances in his trouser pockets. e He should have told people about his sister. f The French revolutionary authorities shouldn't have executed him.

Ex 5

a should have been b couldn't find c had to look for d had to avoid e could kill f shouldn't have told g needn't have worried h had to work i couldn't stop j should have shown k couldn't tell | had to admit

a If the world becomes warmer as some scientists predict, Europe could change dramatically over the next century. b There might be no snow-covered mountains in Europe by then. c And areas in the south of Europe could become deserts. d Heavy rain might become normal in northern Europe. e While southern Europe could be always short of water. f There might be some benefits for some people. q Summers could become longer, and hotter, and winters could become warmer. h On the other hand, some species of plants and animals might become extinct.

B,

Ex 1

a You could have damaged the computer! b You might have been more careful! c You might have asked for help! d You could have broken the printer. e The computer could have got a virus. f You might have checked the name of the sender! g You could have lost all your work. h That could have been a very serious problem. i You might have told me you hadn't used a computer before! | You might have turned the computer off when you finished!

Answer key

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Unit 24

Ex 1

a may b may not c may d may e may not f may g may not h may i may j may

Ex 2

a might b can, may not c may be d can e might f will g will, might h could

Ex 3

a You must know the difference between a solid and a gas! b If a substance does not contain hydrogen, then it can't be an acid. c If we put some litmus paper in a solution and it turns red, then the solution must be an acid. d If we add a substance to a red cabbage solution and it stays red, then the substance can't be an alkali. e If we add a substance to a red cabbage solution and it turns green, then the substance must be an alkali. f If we put some litmus paper in a solution and it turns red, then the solution can't be an alkali. q If it's not an acid, or an alkali, then it must be neutral. h If we use a universal indicator to check a substance, and it turns purple, then the substance can't be an acid.

Ex 4

Ex 5

a A, B	b A, B	∈ B, C	d C	e B, C	f B	g A, C	hA,
B, C	і А, С ј	A kA,	B, C	A, C	m A	n A	o C

Unit 25

relative clauses

These come after relative pronouns who I whom for people, which I that for things, whose for possession. Relative clauses can refer to the subject of the sentence or the object. They behave in different ways. In object clauses, it is possible to leave out the relative pronoun which I that.

Glaciers are rivers of ice which form in cold climates on mountains. The amount of fresh water (that) glaciers contain is greater than all other lakes and rivers on Earth.

Subject: which form in cold climates This refers to glaciers, the subject of form. This refers to water, the object of contain. that glaciers contain Object: Note that in a subject clause there is never a subject pronoun after the relative pronoun. Glaciers are rivers of ice. They form in cold climates on mountains.

Glaciers are rivers of ice which they form in cold climates on mountains.

subject: who or that

Use who / that to refer to people in subject relative clauses. When we refer to a named person we generally use who, and that in informal speech and writing.

Charles Dickens was the novelist who wrote David Copperfield. Louis Agassiz was the first scientist who argued that there had been an Ice Age in the past.

subject: which or that

Use which / that to refer to things in subject relative clauses.

Last week I bought a new computer which is much faster than the old one. In 1840 Agassiz published Etudes sur les glaciers which was the first book to describe the movements of glaciers and the way they changed the landscape.

subject: whose

Use whose to refer to things belonging to people. That was the man whose car was stolen. Louis Agassiz had a son, Alexander, whose main interest was mining.

omitting the relative pronoun

When you omit the relative pronoun in an object clause, you might also need to omit the verb after it.

The photos (which were) used on the web site are fascinating. The glaciers (which were) described in the book are in danger of melting.

object: who, that, whom or zero

Use who / whom / that in an object relative clause when we refer to people. Whom is used in formal language, or after a preposition.

He is one of the scientists who / whom / that I admire most.

It is possible to leave out the relative pronoun in this kind of sentence. He is one of the scientists I admire most.

object: which, that or zero

Use which / that in an object relative clause when we refer to people. This is Pickwick Papers, one of the first books which / that Dickens wrote.

It is possible to leave out the relative pronoun in this kind of sentence. This is Pickwick Papers, one of the first books Dickens wrote.

object: of which

Use of which in an object relative clause when we refer to one thing belonging to another. It is used in formal language.

This is his third book, the publication **of which** made such an impression.

- It is possible to use whose in informal language. It is also possible to avoid this kind of construction. This is his third book, **whose** publication made such an impression.
- This is his third book, the one that made such an impression when it was published.

- **1** Tick the sentence if the words underlined can be left out, or write 'no' if it cannot.
 - a Charles Dickens was one of the first authors whose books reached a wide public. No
 - **b** This was partly because, with the first book that he wrote, he introduced a range of mainly London characters which people found interesting and amusing. <
 - c He invented people whose names often suggested what they were like.
 - d For example, David Copperfield has an unfeeling stepfather who is called Mr Murdstone.
 - e It was also a result of changes in publishing

2 Match the famous people a to h with information 1 to 8. Then complete sentences about them, including the relative pronoun who.

a Linnaeus was a botanist who worked out a method of naming plants and animals b Marie Curie c Aristotle d Mary Shelley e André-Marie Ampère f Sonja Henie **q** Maria Montessori h Marco Polo

1 He was a physicist and made an instrument for measuring current and voltage.

- 2 She was a physicist and the first woman to receive a Nobel Prize.
- 3 She was a writer and wrote the novel *Frankenstein*.
- 4-He was a botanist and worked out a method of naming plants and animals.
- 5 She was an ice-skater and took part in the Olympic Games at the age of 11.
- 6 He was a merchant and visited China in the 13th century.
- 7 He was a philosopher and taught Alexander the Great.
- 8 She was a doctor and invented a new method of teaching young children.
- **3** Rewrite each pair of sentences as one sentence, using *whose*. Make any necessary changes.
 - a J S Bach had two sons. Their music was better known than his for many years. JS Bach had two sons whose music was better known than his for many years.
 - b John F Kennedy had a brother Robert. His death was also a political assassination.
 - c Lord Byron the poet had a daughter, Ada Lovelace. Her work in mathematics led to the development of the first computer.
 - d Pablo Picasso had a daughter, Paloma. Her fashion designs have become famous worldwide.
 - e John Lennon had a son, Julian. His music career has not been as successful as his father's.

which were introduced at around the time he began writing. f Books became cheaper because of new methods of printing which used steam-powered machinery.

- g His novels were published as serials, and people waited impatiently to read the next part that he produced.
- h He was one of the first novelists who also worked
- as a magazine editor, journalist and social campaigner.
- i The magazine that he edited, Household Words, was mainly his own writing.
- j Dickens was also famous for the dramatic readings that he gave from his own novels.