Crescent

ENGLISH COURSE For YEMEN

Terry O'Neill and Peter Snow

Pupil's Book 5

Garnet EDUCATION

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P5 99 Y

Contents

1.1 1.2

Describing holidays, people and objects

Read this conversation aloud with a partner.
Use the adjectives on the right to complete it.

Meeting a friend after a long time

Khalid: Hi, Mahmoud.
Mahmoud: Hello, Khalid. How are you doing?
Khalid: Oh, fine thanks. What was your holiday like?
Mahmoud: *(What do you think Mahmoud said?)*

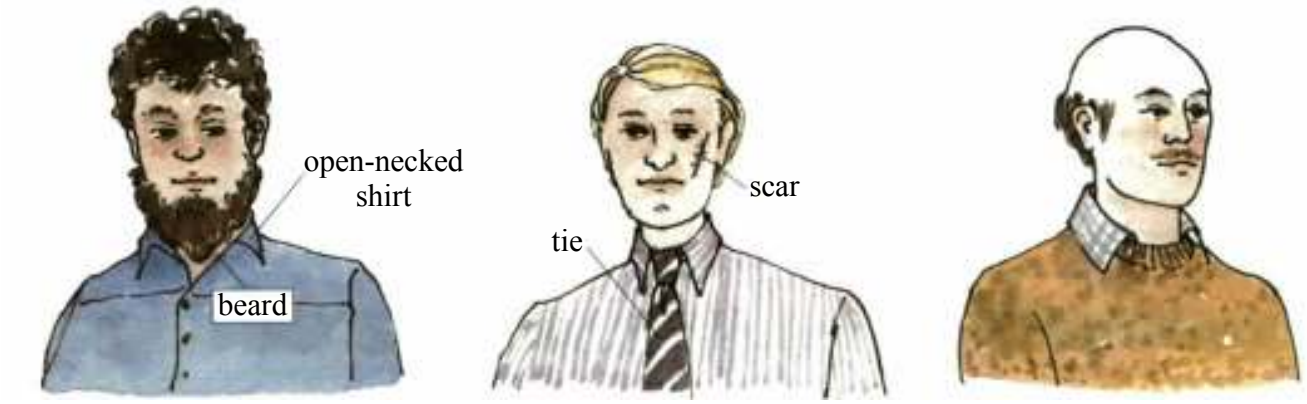
Adjectives to describe an event

Ok. Not bad. Very/Quite good. Great!
Fantastic! Amazing! Wonderful!
Marvellous! Fabulous!
Not very good. Horrible! Terrible!

Do the exercises in your Workbook now.

Which man is this?

He's about twenty-five and he's got short, fair hair. He's got a scar.
He's wearing a brown and white striped shirt and tie.



1 dark, curly hair

2 clean - shaven, with straight, fair hair

3 bald, with a moustache

Describe the other two men.

Adjectives for describing people

Build: short; tall; fat; plump; slim; thin
Age: young; old; sixteen-year-old; about thirty
Hair: long; short; dark; fair; black; straight; curly

Adjectives for describing objectives

Size: big; small; long; short; thick; thin
Shape: round; square; rectangular; cylindrical
Material: wooden; metal; cloth; plastic; rubber; leather; glass; paper

You can use this words before some adjectives: (not) very; quite; rather

Think of an object and describe it without saying it's name.
Can the other pupils guess what it is?

Asking for Information

THE DEPARTMENT STORE			
GROUND FLOOR		FIRST FLOOR	
BOOKSHOP	GARDENING	BATHROOM EQUIPMENT	FABRICS
CARPETS	LADIES' WEAR	BEAUTY SHOP	KITCHEN EQUIPMENT
COFFEE SHOP	LIGHTING	BEDDING	MENSWEAR
ELECTRICAL GOODS	PHARMACY	CASSETTES & CDs	PHOTOGRAPHY
FLOWER SHOP	SPORTS GOODS	CROCKERY & GLASS	RADIO & TV
FURNITURE	SUPERMARKET	CUTLERY	TOYS

Read these conversations aloud with a partner.

- ○ Excuse me. Where can I buy a spade?
- ● In the Gardening department on the ground floor.
- ○ Thank you very much.

- ○ Excuse me. Do you know where I can buy a spade?
- ● Yes. In the Gardening department on the ground floor.
- ○ Thank you very much.

Imagine you are in the store and want to buy some of these things.
Ask for information.

Vocabulary - learning and remembering words

- Keep a notebook for vocabulary. You can list the words in any order, in alphabetical order or in word sets.
- What kind of word is it? Write, *n, v, adj, adv, prep, or pron* next to it.
- Write the meaning of each word. You can use Arabic, or a drawing, or you can put the word in a sentence in English.
- Spend some time each evening learning the words.
- Test yourself on word sets, eg jobs, household goods, activities.
- Use a dictionary to find meanings and to check them.
- Read English apart from your textbook.

Barry Jones - London schoolboy

1 One of the boys in the picture has a dirty face. Read the story to find out who it is and why.

2 Read the rest of the story to find out who these people are: Mr. Edwards, Anne

‘Come on, Sue. Give me the cornflakes. I’m late.’

“Say please,’ said Sue, giggling.

‘Please,’ I said. ‘And hurry up! It’s half past eight!’

‘Dad can take you in his taxi,’ said Sue.

‘No, he can’t. He’s gone,’ I said.

‘Do you want an egg, dear?’ shouted Mum from the kitchen.

‘No thanks, Mum. I’m late.’

‘Sue giggled again and I wanted to know why.

‘What are you laughing at?’

‘Nothing,’ said Sue and giggled for the third time.

Sue was just thirteen, about two years younger than me, and sometimes I could not understand her.

Ten minutes later, I was sitting upstairs on the bus with my Geography textbook open on my knee. There was a test in the first period.

‘Hi, Barry,’ somebody said behind me. It was my friend, Kevin. We had been at Central Comprehensive School for almost five years. I turned round and Kevin laughed. ‘Your face!’ he said. ‘It’s all black. Don’t you wash?’

‘Sue!’ I shouted. She had put some trick soap in the bathroom before I went in. My face had got dirtier instead of cleaner.

The bus stopped. We flew downstairs and I ran to the school washroom. Then I ran to the Geography lesson.

‘I’m sorry I’m late, sir’' I panted.

‘I’m sorry too,’ said Mr Edwards, our Geography teacher. ‘Sit down and do the test.’

‘Where’s that soap, Sue?” I asked when I got home. She didn’t answer.

‘Anne’s coming,’ she said.

‘Who’s Anne?’ I asked.

‘She’s my pen-friend from France,’ said Sue. ‘She’s coming to stay next week - for a month.

Now answer the questions in your Workbook.

Four services

2.1 2.2

Who are the people in the pictures? What do they do?

I'm Issa Said and I'm a traffic policeman. My job is to make roads safe for all road users. Most motorists obey the rules of the road. They make my job easy. But some do stupid things and this makes them a danger to themselves and others. Cyclists and pedestrians can be silly too.

If everybody obeyed the rules, our roads would be much safer.

I'm Ali Abdullah. I'm an immigration officer and I work at the airport. My job is to check people entering and leaving the country. I do this by examining their passports. First-time visitors sometimes have problems with the regulations. I try to help them as much as I can. I am always polite to them and I treat every person with respect. This is part of Islam and it makes us proud of Islam.

My name is Salman Nasser and I'm in the air-wing of the police. I'm a helicopter pilot. My job is to help people in trouble. For example, someone may be very ill. He may be a long way from a hospital in a place where a car or ambulance can't get to him. Helicopters can go almost anywhere and they can get there very quickly. So I am sometimes able to save lives.

If things like these didn't happen, I'd be out of a job - a job that I love.

My name is Fuad Rashid and my job is to put out fires. I'm a fireman. My job is dangerous because fires can be extremely dangerous. And what causes fire? Accidents? Sometimes, yes, but some accidents could be prevented. Some accidents happen because people are careless.

If people were more careful, there would be fewer fires.

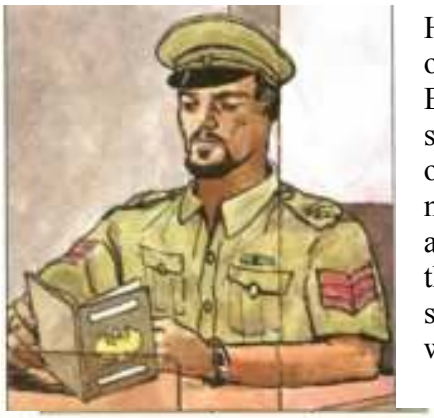
After you read

Do you know any other public service jobs?

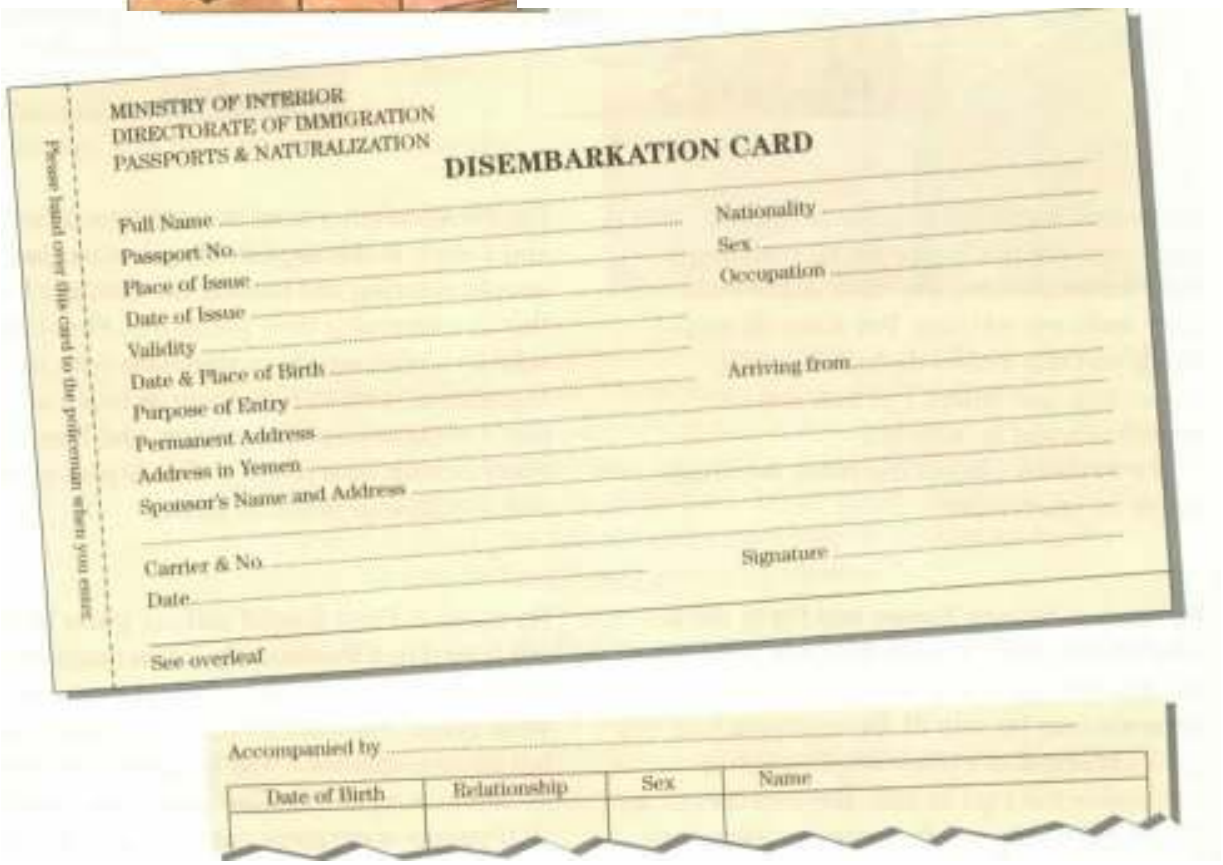
2.3 2.4

Welcome!

Read to find out more about an immigration officer's job.
Answer the questions in your Workbook.



Hello again. As you know, I'm an immigration officer. I'd like to tell you more about my job. Every day, people enter the country by road, sea and air. Everybody who is not a citizen of this country must do two things. First, they must fill in a landing card. This tells me a lot about them - where they come from, what their jobs are, why they have come here, and so on. If they didn't fill in this card, we wouldn't know who was in the country.



MINISTRY OF INTERIOR
DIRECTORATE OF IMMIGRATION
PASSPORTS & NATURALIZATION

DISEMBARKATION CARD

Please hand over this card to the policeman when you enter.

Full Name
Passport No.
Place of Issue
Date of Issue
Validity
Date & Place of Birth
Purpose of Entry
Permanent Address
Address in Yemen
Sponsor's Name and Address
Carrier & No.
Date
See overleaf

Nationality
Sex
Occupation
Arriving from
Signature

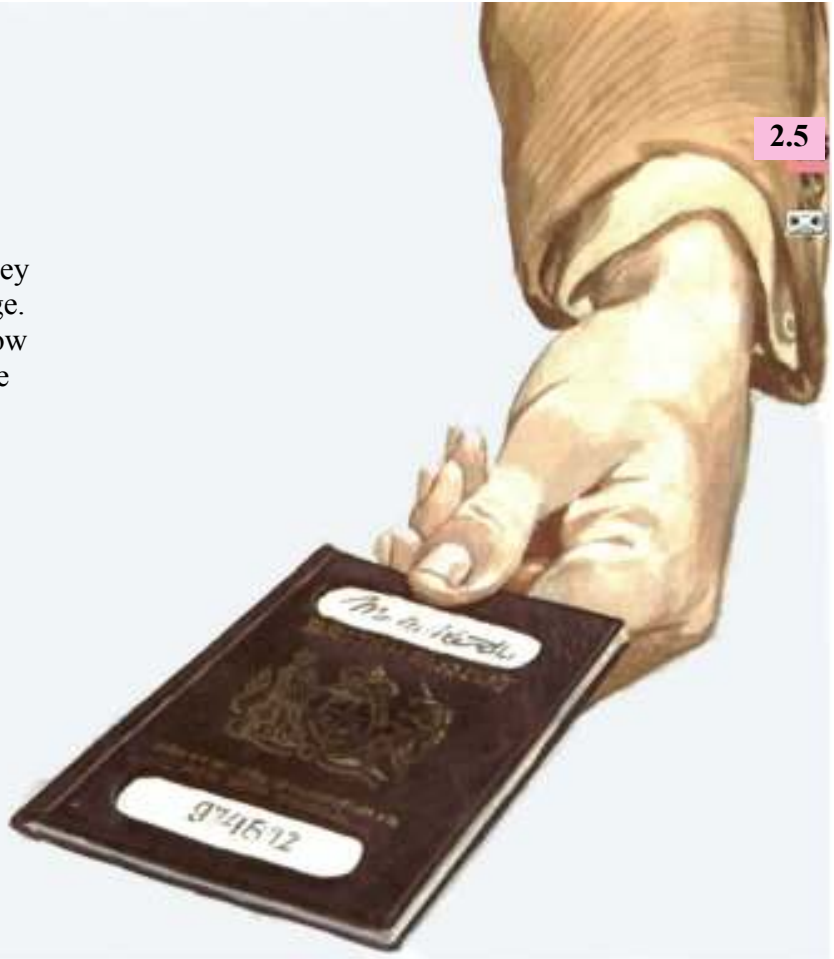
Accompanied by

Date of Birth	Relationship	Sex	Name

The second thing that they must do is show their passports. In fact, everybody must do this. Passports tell me a lot about people, including the countries they have visited. Every passport must contain a photograph of the owner. Some people must have a visa in their passports. This means that they must have special permission to enter the country. If everything is correct, I stamp their passports and wish them a pleasant stay in my country.

Being Polite

2.5



Immigration officers must learn foreign languages. They must also learn how to be polite in the foreign language. Khalid wants to be an immigration officer and he is now in an English class. His friend, Nasser, pretends that he has just got off a plane.

Listen. Is Khalid polite enough?

Khalid: You. Come here.

Nasser: Me?

Khalid: Yes. You. Give me your passport. What's your name? I can't read this.

Nasser: Ward.

Khalid: Spell it.

Nasser: W-a-r-d. Ward.

Khalid: Why have you come here?

Nasser: I work here.

Khalid: What do you do? I can't read your occupation either.

Nasser: I'm an engineer.

Khalid: This visa is no good. It's out of date. Wait here. Don't move.

Nasser: But there's a...

Khalid: Stand here and be quite.

The teacher tells Khalid what he did and said wrong. Khalid tries again.

Listen. Is he more polite?

Khalid: Excuse me, sir. Over here, please. May I have your passport? Thank you. I'm afraid I can't read your name.

Nasser: Ward.

Khalid: Can you spell that, please?

Nasser: W-a-r-d. Ward

Khalid: Thank you. What's the reason for your visit?

Nasser: I work here.

Khalid: Oh! And I'm afraid I can't read your occupation either.

Nasser: I'm an engineer.

Khalid: And I'm sorry, sir, but I think your visa is out of date.

Nasser: There's a new visa on the next page.

Khalid: Oh, yes. So there is. Where are you staying?

Nasser: At the Ramada.

Khalid: Thank you, sir. Welcome back.

2.7

A responsible job

Abla Saeed is a small , gentle girl, born just seventeen years ago. She's young, but she has a very responsible job.

Read to check your listening.

What does she do?

Abla: I'm a policewoman.

Reporter: You work at the airport, Abla, don't you?

Abla: That's right. I work in security.

Reporter: What exactly do you do?

Abla: Everybody who goes on a plane must be checked. It's my job to search ladies' hand luggage. I must make sure that there's nothing dangerous in their bags.

Reporter: How do you do that?

Abla: All the bags are X-rayed. If we see anything we're not sure of, we open them.

Reporter: So, it's a very responsible job?

Abla: Yes, it is. It means that you have to be very careful all the time. You can't relax.

Reporter: What do you do after work?

Abla: Watch TV. Visit my friends.

Reporter: What do they think about your job?

Abla: They tease me. They tell me I'm too small to be a policewoman.

Reporter: And your family?

Abla: They think it's great. In fact, it was my mother who suggested that I join the police.

Reporter: Do you enjoy your job?

Abla: Very much. I enjoy the responsibility. I make people feel safe. That makes me feel good.

Reporter: Any ambitions?

Abla: Yes. I'd like to continue with my education and maybe join the air-wing.

Reporter: So you'll stay in the police?

Abla: Definitely. If I left the police, I wouldn't be happy.

It's all part of the job.

Read to find out what fireman do apart from putting out fires.
Answer the questions in your Workbook.

Fuad Rashid is a fireman. Here, he is talking about the work of the fire brigade.

Putting out fires is not the only thing we do in the fire brigade. We give advice on fire prevention and we give advice on what to do if there is a fire. We are often called to traffic accidents to help the traffic police. And then there are the unexpected jobs, all different.

Helping at traffic accidents is another part of our job. Maybe the car is on fire. We put it out. Sometimes people are trapped in the car and we have to cut them free. This often makes me angry because a lot of accidents are unnecessary. They are caused by bad driving.

Giving advice is an important part of our job. We check buildings and point out things that could start a fire. We also make sure that there are enough fire-extinguishers. We make recommendations about safety equipment such as fireproof doors and smoke-alarms. In a burning building, smoke can be as dangerous as fire, so we tell people what to do about smoke. We also carry out fire-drill practice.

Last week, we were called to a house. A little boy had been saying goodbye to his father when he put his head through the bars of the gate and couldn't get it out again. We had to bend the bars to free him. It's all part of the job. In the fire brigade, we have to be ready for the unexpected.

After you read

Does anyone know any other unexpected jobs that firemen have to do ?

2.10 2.11

Fire!

What are these newspaper articles about?

FIREMEN GO TO SCHOOL

SCHOOL HOUSES SAVED

FIRE DESTROYS SCHOOL

Which headline is best?

Fire completely destroyed a school in Salah yesterday. When the fire-engines arrived from nearby Taiz, the fire was blazing out of control.

'We couldn't save the school. But we pointed our hoses at the houses next to the school,' said Fireman Rashid, 'and we saved them.'

One fireman was injured and had to be rushed to hospital.

ELECTRICAL FAULT TO BLAME

HERO SAVES CARETAKER IN SCHOOL FIRE

CARETAKER ASLEEP AS SCHOOL BURNS DOWN

ELECTRICITY BURNS DOWN SCHOOL

Which headline is best?

A fireman from Taiz ran into the flames of a blazing school yesterday evening to save the caretaker, who was asleep. The fireman's hands were badly burned and he is now in hospital. Luckily the caretaker was not injured.

.

The fire completely destroyed the primary school in Salah. Two fire-engines rushed to the scene from nearby Taiz, but the fire was already out of control. However, the fire brigade were able to save the houses next to the school. Fireman Fuad Rashid said the fire was probably started by an electrical fault.

Yousif's story

2.12 2.14

The police have found the missing fishing boat. The three fishermen are safe. A reporter is talking to one of them.

Read the interview to check your listening.

Yousif: We left on Tuesday morning. About five o'clock.

Reporter: What was the weather like then?

Yousif: Not bad. We knew it might get worse, but bad weather doesn't worry us.

Reporter: What happened this time? What went wrong?

Yousif: Well, we were about fifteen kilometres south-west of Shuqrah when the engine stopped. And it wouldn't start again. The weather was getting worse. The wind was much stronger and it was blowing from the north-east.

Reporter: Blowing you farther out to sea?

Yousif: That's right. But there was nothing we could do. No engine. No sail.

Reporter: Were you worried?

Yousif: Of course we were worried. But we knew that somebody would be looking for us. So we just sat in the boat and waited for them to find us.

Reporter: Did you have any food in the boat?

Yousif: Yes. We had some coffee, some bread and some dates.

Reporter: How did you feel when the police found you?

Yousif: How did we feel? What do *you* think?

2.14

Saved!

Choose the best headline for this newspaper article.

Police rescue missing fishermen

Fishing boat missing

The three fishermen **Lost at sea**

Early on Tuesday morning a fishing boat left the village of Shuqrah. The three men on board were Yousif Hassan, his brother, Kamal, and his cousin, Omar. According to Yousif Hassan, the weather was reasonable at the time. They set off towards the fishing grounds, thirty kilometres south of Shuqrah, but they never reached them. About fifteen kilometres out, their engine died. When this had happened on previous occasions, Kamal had always been able to find the fault and repair it. This time, however, the engine was beyond repair. There was nothing they could do except wait to be rescued. As the north-easterly wind grew stronger, they were blown farther and farther out to sea.

Late on Tuesday night when the three men had not returned, their worried families called the police. The next morning a police boat began looking for the missing fishing boat. They searched all day without success. At four o'clock the weather was getting worse and the police asked for help from the air-wing. A police helicopter joined the search and one hour later the pilot, Salman Nasser, found the missing boat. He called the police boat on his radio and waited until it arrived. The police boat threw a rope to the fishermen and headed back to Shuqrah towing the boat. Five hours later, the three men were back with their families. Yousif Hassan told me that although they had begun to get a little worried, they were confident that the police rescue team would find them eventually.

① When?

② What?

③ What?

④ Who?

⑤ What?

⑥ Who?

⑦ Who?

Language review 1

1 Adjective order

When you use more than one adjective to describe someone or something, you usually follow the order in this list:

1 **Opinion** eg good, interesting
2 **Size** eg big, short
3 **Age** eg young, old
4 **Shape** eg round, thin
5 **Colour** eg blue, green
6 **Nationality** eg Yemeni, English
7 **Material** eg plastic, silk

Examples: It's an interesting old city.
She has short, black, curly hair.
He's a young Yemeni reporter

2 Conditional sentences

Type 1: When a condition is likely to be fulfilled, the result is likely to happen.
Example: If I **work** hard, I **will pass** the exam.
Type 2: When a condition is not likely or impossible, the result is not likely to happen.
Example: If I **had** a helicopter, I **would fly** over the mountains.

3 Direct and indirect questions with question words

Compare the order of the words:
Indirect: I'd like to know *where you come from.*
Direct: Where do you come from?

4 Talking about the past

- Use the **Past simple** tense for the general past and definite times in the past.

Examples: My mother **taught** me to cook. (*at some time in the past*)
I **went** there last year.

- Use the **Past continuous** tense for an action that continued for some time and for one that lasted longer than another.

Examples: My uncle **was waiting** for me in his car outside the hospital.
When I **arrived**, he **was listening** to a football match on the radio.

- Use the **Past perfect** for something that happened earlier than something else.

Example: The fire started because someone **had dropped** a cigarette.

5 Being Polite

Come with me, **please.**
Can/Could/Would you come with me, please?
Would you mind coming with me?
I'm afraid you'll have to come with me.
I'm sorry, but you'll have to come with me

Do the exercises in your Workbook to practice these language points.

3.1

Facts and figures

Improve your reading - *What's it all about?*

- Are there any pictures? Are there any headings? First, use these to find out what the text is about.
- Next, read the text quickly. Don't worry about new vocabulary. You can do this later. Now you'll be able to find the information. you need quite quickly.

Practice these reading points with this text.
Do the exercises in your Workbook.

The United Kingdom

There are four separate countries in the United Kingdom. There are the two kingdoms of England and Scotland, the principality of Wales and the province of Northern Ireland. Each country has its own capital. Belfast is the capital of Northern Ireland, Edinburgh is the capital of Scotland and Cardiff ifs the capital of Wales. London is the capital of England and also of the UK.

Language

There are three main languages in the UK. English is an official language everywhere, but Welsh is the second official language in Wales. There are radio and TV programmes in Welsh and it is used on road signs and official documents. Gaelic is spoken in parts of Scotland.

History

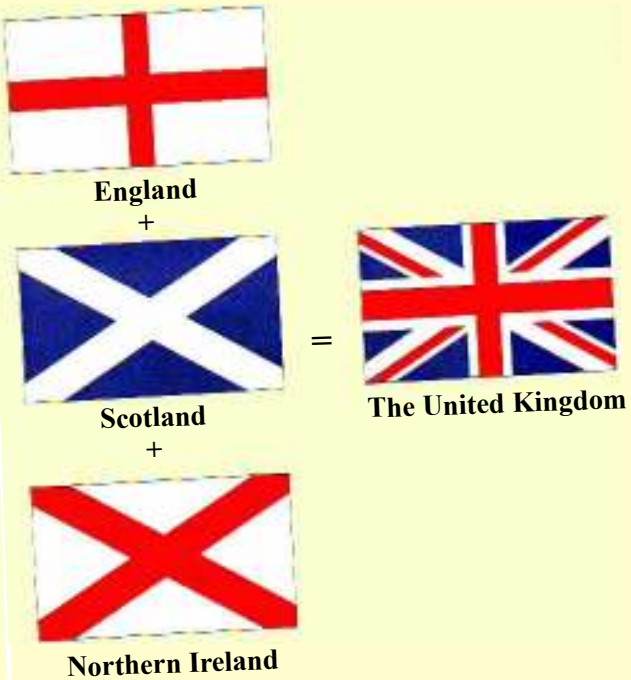
The country has been called the United Kingdom only since the beginning of the 19th century. Before that it was called Britain or Great Britain. Wales was united with England in 1282. In 1603 the king of Scotland became the king of all three countries. Ireland became part of the UK in 1801. Southern Ireland became an independent republic in 1921.

System of government

The United Kingdom is a parliamentary monarchy. This means that the monarch, the king or queen, is the Head of State but has no real power. The king or queen 'reigns', but does not 'rule'. The country is ruled or governed by a parliament. In 1649, after a long Civil War, Britain became a republic. It had no king or queen, but was ruled by a kind of president. It became a monarchy again in 1660.

The Union Jack

The flag of the United Kingdom, the Union Jack, consists of the flags of England, Scotland and Northern Ireland. It is a symbol of the unity of the country.



From Empire to Commonwealth

In 1945 the UK was still the head of the British Empire, which covered a quarter of the world's surface. A quarter of the population of the world was governed from London. Most of the countries of the Empire are now independent, but they have stayed members of a kind of international club called the Commonwealth.

After you read

How many languages are spoken in Yemen?
What is the full name of the country?
How many provinces are there in Yemen?

A famous queen

Improve your reading - *Topic sentences*

Paragraphs make long texts easier to read because each one contains a main idea or subject. You can usually find the subject of a paragraph in one sentence. This is called the topic sentence. It is often, but not always, the first sentences of the paragraph.

Find the topic sentences in this text.

Queen Victoria

Queen Victoria's life covers most of the 19th century. She became Queen of the United Kingdom in 1837 when she was only 18 years old. Three years later, she married Albert, a German prince. They had nine children. Albert died in 1861. After his death, Victoria wore black clothes for the rest of her life. She herself died in 1901 at the age of 81 and is the longest reigning British monarch.

People's daily life changed greatly during Victoria's reign. Industry became more important than agriculture and many people moved from the country to towns to work in the new factories. At first the towns were dirty and unhealthy, but slowly things improved. New sewers took away the waste water from people's homes and houses were built with gardens. Big towns had libraries, art galleries and parks. In 1837, only rich people went to school, but by 1901 education was free for everybody up to the age of twelve. Railways were built to every part of the kingdom. People became richer and were able to buy more goods. Hundreds of new shops opened. Covered shopping centres, called arcades, were built in the larger towns. Towards the end of the century, huge department stores opened. Shoppers could now buy nearly everything they wanted in one step.

The adjective 'Victorian' describes things typical of the time of the Queen's reign. Victorian buildings were often decorated with statues and carved stone. The architecture imitated the style of church buildings of five centuries earlier. Typical Victorian fashion in clothing was floor-length dresses for women and long black coats for men. Victorian values included hard work and strict discipline for children. The saying 'children should be seen and not heard' comes from this time.

A typical Victorian building - The Houses of Parliament in London

Victorian Fashion

3.5

Changes

1 **Read to check your listening**
2 **What do you learn about shopping and industry in the UK?**

THE DAILY NEWS MONDAY, JULY 20 1998

The voice of the People

A third large supermarket is to be built on the edge of the town. Johnson's engineering factory is to close next month with the loss of 150 jobs. What do the people of the town think of these changes?

Inside one of our new supermarkets

The New Supermarket

Alan Cooper - 45

I'm completely against the idea of another out-of-town supermarket. Ten years ago there used to be a good market here in the town centre every day. There were stalls that used to sell everything from meat and fish to soap and light bulbs. Now we have a market once a week. Lots of shops have closed as well. That shop there used to be a baker's and that one used to be a butcher's. It's all because of those supermarkets. You can't use them if you don't have a car and I don't drive.

Jenny Green - 35

I can't wait for the new supermarket! I'm all for it! I like to be able to get everything in one shop. It's so convenient. I don't have time to go around to different shops, carrying heavy shopping. I remember shopping in the market. It was very crowded and shopping took ages. They say that we'll soon be able to shop from home using a computer. I'm looking forward to that.

Johnson's Engineering

Sally Woodman - 25

Johnson's was an old- fashioned factory. It made things that other factories make more cheaply. It was also a dirty place to work. I'm in favour of it closing. This town needs new industries like electronics. New factories are clean, safe places to work in and the new industries create lots of jobs for women.

Fred Mason - 55

I've worked at Johnson's since I was 16. I'm an engineer. I can't do anything else. No, I'm not in favour of it closing.. I know that new industries are coming to the town, but there are no jobs for the men from Johnson's. We're all going to have to move to another town or wash cars or dig gardens. I don't know what I'm going to do.

A famous tourist sight

Read about a famous building in London. Find the topic sentences and say what you think each paragraph is about.

The Tower of London

The Tower of London is one of the oldest buildings in the United Kingdom. It stands on the bank of the River Thames in the middle of London. The central tower was built by King William the First in the11th century to show the power of the King to the people of London. It was painted white in 1241 and since then has been called The White Tower. The outer walls were added in the 12th and 13th centuries.

The building has been used in many different ways. It was first a royal palace where the kings and queens could live safely. Later it was used as a prison for traitors - people who committed serious crimes against the king or country. Prisoners were brought into the tower from the river through a special gate, now called Traitor's Gate. Many prisoners were executed for their crimes. The executioner cut their heads off with an axe.

Nowadays the Tower of London is a museum. Apart from looking at the old building itself, visitors can see many interesting exhibits. The most famous exhibit is the Crown Jewels. This is a set of very valuable jewellery. It is a symbol of the power of the king or queen. The biggest piece is the crown itself, which is put in the head of a new king or queen at a special ceremony called a coronation. The largest diamond in the world, the Star of Africa, is set in another piece of jewellery.

Visitors will also notice that many ravens live in the gardens of the Tower. There is a superstition that the building will collapse and the monarchy will fall if these big black birds ever fly away. The feathers on the ravens' wings are cut to stop this happening.

The Tower of London from the air, showing The White Tower, the outer walls and Traitors' Gate.

After you read

What is the oldest building in Yemen?
Have you ever been to a museum?
Do you know any superstitions like the one about the ravens in the Tower?

Did you know...?

The present Queen of the UK has four homes: Buckingham Palace in London, Sandringham Palace in the east of England, Windsor Castle to the west London and Balmoral Castle in Scotland.

3.10

An English tradition

Read this television interview to check your listening.

Presenter: The police want to cancel this year's cheese rolling race. With me to talk about it are John Shepherd and Sergeant Lewis, a local policemen. John Shepherd wants the race to go ahead. Sergeant Lewis doesn't. Mr. Shepherd, what is the cheese rolling race?

John Shepherd: We roll wheel-shaped cheeses down a hill and about 30 people run down after them and try to catch them.

Presenter: Do they ever catch the cheeses?

John Shepherd: No, never! The winner is the first person to reach the bottom of the hill.

Presenter: And you want to stop this race, Sergeant Lewis. Why?

Sergeant Lewis: It's just too dangerous. Last year 35 people were injured, some of them people who had just come to watch. The people running down the hill fell and broke their legs or arms. Many were taken to hospital by helicopters and ambulances.

Presenter: How were the spectators injured?

Sergeant Lewis: These cheeses are heavy - about three kilos - and they go downhill very fast. Sometimes they bounce off the ground into the crowd and cause serious injuries. The race causes too much work for the emergency services. They have better things to do.

John Shepherd: I agree that it's dangerous, but nobody has ever been killed and it's very popular. Thousands of people come to watch the races. They've taken place for hundreds of years - some people say since the Romans were here, 1,600 years ago - and we don't want to stop it now. It's tradition.

Presenter: But if people are injured, it should be stopped, shouldn't it?

John Shepherd: They choose to take part. It's just a bit of fun. We live in a time when people aren't allowed to have fun or to do anything dangerous.

Sergeant Lewis: We don't want to stop people having fun. We just want to protect the spectators and prevent injuries. It must be organized better.

John Shepherd: We'll see what we can do for the next year.

Presenter: Mr Shepherd, Sergeant Lewis, thank you.

After you read

What do you think about this tradition?
Argue for and against stopping the event.
Does anything like this happen in Yemen?

You have learned that *cheese* is an uncountable noun. However, cheese is often made in round shapes like the wheels of a car. We can count these, so we can say *a cheese, two, three* or more *cheeses.*

Another kingdom

Read this text about Scotland and answer the questions in your Workbook.

SCOTLAND

Scotland is the most northern country in the United Kingdom. Although part of the UK, Scotland still has its own and educational systems. It also competes independently in international sport, such as football and rugby. In fact, many Scots think that Scotland should become independent again.

PHYSICAL

There are three main geographical areas in Scotland. The mountainous area in the north is called The Highlands. This area contains the highest mountain in the UK, Ben Nevis, which rises to 1,343 metres above sea level. There are several lochs (lakes) in this area, the best-known one being Loch Ness.

A flat plain called The Lowlands crosses the centre of the country. Most of Scotland's population of about 5,200,000 live here. The third part of Scotland, The Southern Uplands, is hilly. Scotland has many rivers. The Spey and Tay are famous for salmon fishing and the Clyde, which flows through Glasgow, used to be famous for ship-building.

INCOME

In The Highlands, farming and fishing are the traditional sources of income. Scottish beef is world-famous and Scottish fish is exported to many countries. In the past twenty or thirty years, however, tourism has brought a lot of money into the area. Another important change was caused by the discovery of oil in the North Sea of Scotland. This has created many jobs and changed the lives of many Highlanders.

The traditional industries of The Lowlands were coal-mining, ship-building and steel making. These industries have now almost disappeared. New industries include electronics, chemicals and light engineering.

FAMOUS SCOTS

Scotland has produced many famous people, chiefly engineers and investors. James Watt, the inventor of the steam engine, was Scottish. The unit of electrical power was named after him. Thomas Telford, another engineer, built the first iron bridge in the world in 1779. In 1926 another Scot, James Logie Baird, invented television. The Scottish doctor, Alexander Fleming discovered penicillin in 1928. For a small country, Scotland has had a big influence on the world.

James Logie Baird

Did you know...?

Kilts are made of a patterned cloth called tartan. There are many different patterns. Each one shows which clan or family the wearer belongs to.

3.14

Barry Jones - tourist guide

1 Read the text. Find the names of three famous buildings.
2 Barry can't answer some of Anne's questions. What are the questions?

'Anne's coming over from France for a month,' Sue said again.

' A month!' I said, surprised. 'That's a long time.'

'And then I'll go and stay in her house for a month,' Sue continued. 'And when Anne's here, you'll take us round London and tell us all about the famous buildings.'

Ten days later all three of us were standing in front of Buckingham Palace.

'The Queen lives here when she's in London,' I said.

'Is the Queen there now?' asked Anne.

' I don't know,' I answered.

We walked through St James' Park to the Houses of Parliament.

'That's the most famous clock in the world. It's called Big Ben,' I said.

'Why is it famous?' asked Anne.

'I don't know,' I answered.

'You're not a very good guide,' said Sue. I did not say anything. I just went towards the Underground station.

'Follow me,' I said. 'We're going to the Tower of London.' We had just learned about the Tower of London in our History lesson at school. 'This building is nearly one thousand years old. And over there are the Crown Jewels. They' re old as well and they cost a lot of money. They belong to the Queen, I think. A long time ago this was where the kings and queens lived, but now it' just a museum lots of people come here.'

'I know all that,' said Sue.

'Barry?' said Anne. 'Why are those big black birds here?'

'I don't know,' I answered.

The next day the weather started getting colder and colder. At the bus stop in the morning I got bluer and bluer.

'Never mind,' I thought. 'It'll be Christmas soon.'

Language review 2

3.15

1 The Passive

The passive allows as to choose what we want to make more important in a sentence - the doer or the thing done. We use *by* with the doer (or *agent*). Sometimes we don't have to mention the doer.

Examples:

- *be* + past participle of a main verb
  Past: The central tower **was built** by King William.
  Railways **were built** to every part of the kingdom. (*no agent*)
  Present: The country **is governed** by a parliament.
- *have/has* + *be* + past participle
  Present perfect: Since then it **has been called** The White Tower.
- *must/should/will/can* + *be* + past participle.
  Present: Children **should be seen** and (**should**) not (**be**) **heard.**
  Future: A new airport **will be opened** next year.

2 Some tenses

- *used to* + infinitive: This shows that something happened in the past, but doesn't now.

Examples:
There **used to be** a market here. (*but there isn't now.*)
That shop **used to be** a baker's. (*but it isn't now.*)

- Use *will* + *be able to* + infinitive to make the future of *can.*
  Example: We'll be able to shop from home soon.
- Use *will* + *have to* + infinitive to make the future of *must.*
  Example: I'll have to find another job.
- Use *going to* + infinitive to talk about intentions or to make predictions about the future.
  Example: We're going to have to move to another town.
- Use *be* + *to* + infinitive to talk about a certain future event in a formal way.
  Example: The factory **is to close.**

3 Adding information with relative clauses

We can give extra information about someone or something with a relative clause. We use *who* for people and *which* for things. The extra information is put inside commas.

Examples: Queen Victoria, who reigned from 1837 to 1901, had nine children.
The cheeses, which weigh about three kilos, go downhill very fast.

4 Forming adjectives

We can use *ous* and *al* to change some nouns into adjectives.

Examples: fame → famous education → educational

5 expressing hope for the future

I can't wait for the holidays.
I'm looking forward to going to college.

6 Expressing opinions

I'm for/against the new supermarket.
Are you **in favour** of the new road?

4.1

English - a world language

Read these facts about English. They are all reasons for learning the language. Which ones are important to you? List them in order of importance.

A

English has the largest vocabulary of any language in the world.

In the largest dictionary of the English language, there are well over 1,000,000 entries.

B

English is the main language of computing worldwide.
80% (eighty per cent) of all information stored in computers is in English.

C

A lot of the world's most famous literature has been written in English.

Apart from British authors, writers from America, Africa, Australia and India have written great works in English.

D

English is widely spoken in the field of international tourism.

In hotels all over the world there is usually at least one member of staff who speaks English. Even in non-English-speaking countries, menus in restaurants often have an English translation.

E

Two out of every three scientists write their scientific papers in English.

If you intend to follow a career in any branch of science, including medicine, English is essential.

F

English has become the language of international trade.

Trade between countries is growing and businessmen need a common language more and more. Most people who work in international business, from secretary to director, know English.

G

English is the language of international air transport.
Pilots of passenger planes must use English when they are talking to traffic controllers at airports or to other pilots. All air tickets are printed in English.

H

Television stations in many countries broadcast programmes and films in English.

These programmes may have subtitles, but they are more interesting if the viewer understands English.

I

Worldwide, there are over 1,000,000,000 English speakers.

English is the first or second language in over 60 countries. In addition, thousands of people are learning it at schools or universities.

After you read

If you are able to speak English, how will this help you in the future?

Australia

1 What do you know about Australia? Tell your partner.
2 Look at the text. Can you see any familiar names in it?
3 Read the text and answer the questions in your Workbook.

Australia is bounded by the Indian Ocean on the west and south and by the Pacific Ocean on the east. It is the smallest of the continents, but it is the sixth largest country in the world. However, the population is only 17 million, so its population density is very low. There are only 2.2 people for every square kilometre (km^2). About 85% of the population live in urban areas - towns and cities. Canberra is the capital of Australia, but Sydney is the biggest city. It also has the most famous building in Australia - the Sydney Opera House.

The Aborigines were the first people to live in Australia, long before the Europeans discovered it. They are dark-skinned people, probably originally from south-east Asia. They arrived in Australia about 40,000 years ago. They were nomads, moving from place to place. The only weapons they had were wooden spears and boomerangs. They depended on hunting, fishing and gathering wild plants for their food. There were many different tribes, each living in a different part of the country and each with its own tribal language. The tribes lived peacefully with each other and respected the land they lived on.

However, things changed about 200 years ago when the first European settlers arrived in Australia. Most of the settlers were from Britain or Ireland. They set up farms to raise sheep and cattle. Quite often, these farms were on land used by the Aborigines. This led to fights between the Aborigines and the settlers. The Aborigines had no chance with their wooden spears against the settlers' guns. Large numbers were killed. Many more died from diseases brought into the country by the settlers because they had no natural protection against these diseases. Today, the Aborigines make up only 1% of the population of Australia. Their nomadic way of life has gone; they are no longer free to move from place to place. However, they still use their tribal languages as well as English, which is the official language of the country.

When most people think of Australia, they think of sheep. This is because Australia has about 15% of the world's population of sheep. In fact, for every person in Australia there are ten sheep. Some of the sheep ranches are huge and they can be hundreds of kilometres from the nearest town or city. They can also be a long way from the nearest tarmac road, so the farmers travel on dirt roads. These roads turn into mud when it rains. For this reason, most ranches have a landing strip for small planes. If a farmer becomes seriously ill, he depends on the famous Flying Doctor Service to help him.

After you read

Can you name the continents of the world?
Which continents is Yemen part of?
Can you guess what a boomerang is or does?

India

Read the text and answer the questions in your Workbook.

India is bounded by three seas. The Bay of Bengal is to the east, the India Ocean to the south and the Arabian Sea to the west. About 200 different languages are spoken in India. Hindi and English are the official languages. The population, which was 683 million in 1981, increases by about 13 million every year. Eighty-three per cent of Indians are Hindus, 11% are Muslims and 3% are Christians.

India is the world's largest producer of tea. Tea comes from the leaves of the tea plant. Most of the tea is grown in the north of India because the climate is cooler than in the rest of the country. The most famous tea comes from an area around the town of Darjeeling. Darjeeling tea is known around the world.

The Taj Mahal

The Taj Mahal is one of the most beautiful buildings in the world. Why was it built? Who built it? To answer these two questions, we have to go back to the past, to the 17th century. When we do this, we find a great love story. It is the story of Shah Jahan and his wife, Mumtaz Mahal.

Shah Jahan was the third of the Emperor of India. In 1612 he married his favourite queen, Mumtaz. He wanted to be the next emperor when his father died. Because he had older brothers, he knew he needed the support of the people of India. Therefore he travelled widely around the country, getting to know the people. Everywhere he went, Mumtaz went with him.

In 1628, his father died. Shah Jahan returned to the palace, killed his male relations, and made himself Emperor of India. He made Islam the official religion of India and ruled happily with his queen. However, his happiness ended in 1631 when Mumtaz died giving birth to their fourteenth child.

Shah Jahan was filled with grief. He took his wife's body to the city of Agra and buried it in a beautiful garden. Then he began to build her tomb, the Taj Mahal beside the river Jumna. The stone he used was white marble. It took him 20 years to build the tomb. When it was finished, he buried the body of his wife in the Taj Mahal. Then he decided to build a copy of the Taj Mahal for himself. It would be made of black marble on the other side of the river. However, this never happened.

After you read

Can you name a Yemeni queen from the past?
Who is buried in a tomb in The Great Mosque of Jiblah?
What made Mokha famous?

Did you know...?

Indian elephants have smaller ears than African elephants. They can also be trained to move heavy objects. African elephants cannot be trained to do this.

East Africa

Mark has just come back from holiday. He meets his friend, Jim. Read their conversation to check your listening.

Jim: Mark! I haven't seen you for weeks. Where have you been?

Mark: I've been on holiday.

Jim: Where did you go?

Mark: To East Africa.

Jim: That's Kenya, isn't it?

Mark: No, it's Kenya, Tanzania and Uganda.

Jim: And you went to all three, did you?

Mark: No, only two. I didn't go to Uganda.

Jim: Where did you go first?

Mark: Well, I flew to Nairobi. That's the capital of Kenya. I spent three days there. Then I drove to Mombasa. I stayed in a hotel near the beach right on the Indian Ocean.

Jim: That sounds great!

Mark: It was. I spent ten days swimming, fishing and just lying in the sun.

Jim: What were the local people like?

Mark: Very nice. Very friendly. Most of them speak English.

Jim: Really?

Mark: Yes. Swahili and English are both official languages. Of course, there are many tribal languages as well

Jim: So, ten days in Mombasa. What did you do next?

Mark: I spent five days in the Serengeti National Park. That's over the border, in Tanzania.

Jim: I've heard about Serengeti. It's full of wild animals, isn't it?

Mark: Oh, yes. Elephants, lions, leopards, buffaloes, all sorts of deer...

Jim: And you saw all of them, did you?

Mark: No, not all. Most of them. I didn't see any leopards.

Jim: Oh, that's pity.

Mark: The best part of the holiday was the two days I spent with the Masai tribe.

Jim: Oh, I've read about them. They're nomads, aren't they?

Mark: Yes. They have lots of cows, so they go where their cows can feed.

Jim: And they have those long spears, don't they?

Mark: That's right. They use them to protect their cows from wild animals - lions mostly.

Jim: These spears - what are they like?

Mark: Well, they're about two metres long. They're in three parts. The middle part is the handle. It's made of wood. On one end of the handle, there's a long straight blade with two sharp edges. On the other end, there's along spike.

Jim: You didn't bring one back, did you?

Mark: No! How could I get one on a plane? Anyway, the Masai wouldn't sell you one. They need them.

Jim: It sounds like you had a great time.

Mark: You could say that.

Canada

1 Read the introduction and think of a heading for it.
2 How many facts can you find in the introduction?

Canada is the second largest country in the world. It has an area of more than 9 million square kilometres. However, it has a population on only 30 million, one tenth the population of the United States of America, which is smaller than Canada. Its population density is 3.3 people per km^2 , one of the lowest in the world. Only about 10% of Canada is settled. Most Canadians live in the south, within 100 kilometres of the border with the USA. Very few people live in the north of Canada because it is covered by snow and ice for most of the year.

Canada has two official languages, English and French. Sixty-seven percent of the people speak only English, 18% speak only French, 13.5% speak both languages and 1.5% speak neither language. Most Canadians are Christian.

A Canadian Legend

All countries have their legends - stories from the distant past. They are not true stories. They are about things that never happened and never could happen. This legend comes from the Inuit, the native people of Canada. Like a lot of their legends, the main character in the story is Raven.

Raven sat in a tree. It was dark and had been dark for as long as he could remember. He could not see anything. He could not even see himself because all his feathers were black. Raven was not happy.

Then he heard a rumour about an old fisherman who lived by the sea with his young daughter. The girl's mother had died a few years earlier. According to the rumour, the fisherman kept a ball of light hidden in his house. The Raven decided to steal the light and set it free in the world.

He flew to a fruit tree near the fisherman's house. He knew that the fisherman's daughter came to collect the fruit. Raven flew down to the ground. Then he changed himself into a baby boy and waited. When the girl arrived at the tree, she was amazed to see the baby. She picked it up and ran back to the house. As soon as the old man saw the baby, he fell in love with him. "We don't know where this child came from, but we must take care of him, 'he said to his daughter. 'From now on, he is my grandson.'

The baby grew and grew. The old man loved him and gave him everything he wanted. One day, the boy began to cry for the ball of light that was kept in a box. At first, the old man would not give it to him, but he cried and cried. In the end, the old man said to his daughter, 'Give my grandson what he is asking for. Give him the ball of light.' His daughter got the box and took out the ball of light. 'Here's your light,' she said, throwing it to the child. Immediately, Raven changed himself back into his real shape and flew out of the house with the ball of light in his beak.

As he was flying away, he was chased by a huge eagle. The eagle made him drop the ball of light. It fell and broke into many pieces. The large pieces became the Sun and the Moon and the smaller ones became the stars in the night sky.

After you read

Can you think of a Yemeni or an Arab legend?

USA - New York City

4.12

1 What do you know about New York? Talk with a partner.
2 Read the text. Note down things that you did not know about New York. Then answer the questions in your Workbook.

Improve your reading - *What do I know about the subject?*

You should always ask yourself this question before beginning to read a text. It will help you understand the text.

Facts and figures

New York is the largest city in the United States of America. It is made up of a number of parts, most of which are on islands. The main part of New York, the centre, is on an island called Manhattan.

The original inhabitants of Manhattan were American Indians who had arrived there thousands of years before the first European settlers. In 1626, a Dutchman called Peter Hinuit bought the island from the Indians for 24 dollars. In those days, Manhattan was rural. Today, Manhattan is completely urban except for a large park called Central Park and a few smaller parks. The population density of Manhattan is very high, about 25,000 people per km^2 · Because so many people wanted to live in such a small place, they had to build upwards instead of outwards. That is why Manhattan has so many very tall buildings. They are called skyscrapers.

A famous statue

One of the most famous sights in New York is the Statue of Liberty. It is, perhaps, the most famous statue in the world. It is certainly one of the biggest. It is over 46 metres high and its right arm is nearly 13 metres long. You can go up inside the statue. First you take a lift and then you must walk 168 steps to the crown. From the top, there are magnificent views of New York City.

The Statue of Liberty was given to the United States by the people of France in 1866. It was placed on a stone and concrete base on an island in New York harbour. During the last hundred years, millions of people left their own countries to start a new life in America. They came from Europe, Asia, South America and Africa. For most of these immigrants, the Statue of Liberty was the first thing they saw in their new home. Today the great-grandchildren of these immigrants make New York one of the most multi-racial cities in the world.

After you read

Which is the second largest city in Yemen? On average, how many storeys do the old houses of Yemen have?

4.14

Barry's Christmas dinner

1 How many times does Barry hurt himself?
2 What does Barry want for his next birthday? Why?

Chemistry used to be my favourite subject. That was before the lesson last Wednesday. Kevin put his hand up.

'Yes, Smith?' said Mr Law.

'Sir, Jones is on fire,' said Kevin.

'Well, put him out!'

'What?' I shouted as Kevin threw water all over me.

'Your pullover was on fire,' he explained.

'You were standing too close to the flame of that Bunsen burner.'

Mum was not very pleased when I got home.

'That was such a lovely Christmas present from your Aunt Jean,' she said. 'Now look at it! You've only had it for a couple of months.'

I will never forget last Christmas. On Christmas Eve we all went to church and sang some carols. At about two o'clock on Christmas Day everything was ready for dinner. The turkey and all the vegetables were cooked. They looked and smelled fantastic. Mum asked me to take all the food into the dining room.

'That's easy,' I thought.

Ten minutes later everything looked different. First I burned my hand on a hot pan. I screamed. Sue put a bandage on. Then I spilled some sauce on the other hand and screamed again. Sue put another bandage on.

As I was coming into the dining room with the turkey, I slipped on something and fell backwards. The turkey flew for the first time in its life. The plate broke on the floor. Fortunately, Dad caught the bird. Unfortunately, I banged my head on the floor. Sue put another bandage on. Dad was very angry because his best sweater was covered with turkey fat. Mum said 'Merry Christmas' to herself several times, Sue laughed all through the dinner and I had a headache.

'What do you want for your birthday, Barry? asked Kevin the next day.

'A new pullover,' I said.

Language review 3

1 World order in statements and questions

- In statements, the subject comes before the verb.

Examples: Aisha was happy.
Khalid gave Faysal a book.

- In questions, the subject comes before the verb, or between two parts of a verb.

Examples: Was Aisha happy?
Did Khalid give Faysal a book?
Have you been to India?

- Questions beginning with question words *What, Who, When, Where, Why, How* follow the same rule.

Examples: Where were you yesterday?
Why did Shah Jahan build the Taj Mahal?

Compare this with the order of words in **indirect** questions.

Examples: I'd like to know where you were yesterday.
Can you tell me why Shah Jahan built the Taj Mahal?

2 Questions tags

- We can make statements into questions by adding question tags.
- We use these only in spoken or informal written English.
- We use them when we want someone to agree with what we are saying.

Examples:
The petrol station **is** next to the bank, **isn't it?** (*Expects the answer 'Yes.'*)
Amna **won't be** late, will she? (*Expects the answer 'No.'*)
You**'ve been** to India, **haven't you?** (*Expects the answer 'Yes'.*)
She **likes** reading, **doesn't she?** (*Expects the answer 'Yes.'*)

Form:

- We form a question tag using verbs, *be, do, have* or a modal followed by a pronoun.
- If the verb in the statement is negative, the verb in the tag is positive.
- If the verb in the statement is positive, the verb in the tag is usually negative.
- We can follow a positive statement with a positive question tag to show interest in something or just to be polite.

Examples: You **saw** Taha on his motor bike, **did you?**

3 Joining ideas with the present participle

The present participle is a verb + *ing*
We can sometimes use it to join two events that happened at the same time or nearly the same time in one sentence.

Examples: I'll answer it,' he said. He picked up the phone.
I'll answer it,' he said, **picking up** the phone.

My father came in. He was smiling.
My father came in, **smiling.**

Do the exercises in your Workbook to practice these language points.

5.1

Tourism in Yemen

Read this interviews and answer the questions in your Workbook.

Tourism is important to the development of any country. It brings foreign currencies into the country. In fact, in some countries, it is the only way of earning hard currencies such as the US dollar or the German mark. Our reporter interviewed an official from the Ministry of Culture and Tourism to get his views on tourism in our country.

What is the situation on tourism at the moment?
The situation is promising. Sixty thousand tourists visited the country in 1995. That number increased to 75,000 in 1996. In that year, we earned 45 million dollars from tourism.

That's good, isn't it?
Yes, but it's not good enough. We could earn hundreds of millions of dollars because we have so much to offer. There are countries that offer much less, but they get many more tourists than we do.

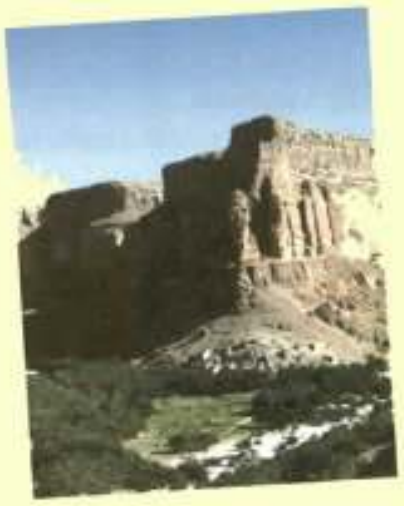
What's the reason for this?
Quite simply, people don't know about us. For example, most Americans don't know where Yemen is and they don't know anything about the attractions of this country. If they did, they would come here in their thousands bringing their dollars with them.

So, what's the answer?
There's more than one answer. We have to promote the tourist industry. We have to advertise. We have a very rich historical and cultural heritage. Our archaeological sites tell the history of Yemen's past. Our handicrafts are unique - there's nothing like them anywhere else in the world. We also have wonderful scenery. Our coastline is more than 2,000 kilometres long with many beautiful beaches. Our mountains are magnificent and they are full of wild life of all kinds. When the rest of the world learns about all these things, we'll have a power tourist industry.

You said there was more than one answer.
Yes. When people come here, they have to have somewhere to stay. So we have to build more four - and five - star hotels. We have to develop our airports. We have to improve some of our roads so that tourists can get up into the mountains, to the archaeological sites and to the most beautiful parts of our rural areas.

But all this would cost a lot of money, wouldn't it?
Yes, but it would be money well spent. Remember that tourism is an industry. You have to invest money in any industry if you want to make a profit.

Is there anything else we should do?
Yes. We should use the television, radio and newspapers to let our own people know about the benefits of tourism. Tourism means more jobs for everybody. It also means that we have to protect our environment. If our environment is damaged or destroyed, tourism will collapse. We can't let that happen.



After you read

Do you think the number of tourists coming to Yemen will grow?
Give reasons for your answer.

What's your opinion?

There are four children in the Al-Oudi family: Salma (19), Saleh (17), Laila (15) and Faysal (14). They have been watching a programme about the development of tourism in Yemen. Now they are talking about it.

Listen to what they say. Then decide what you think.

Salma: Well, what do you think?

Laila: It was a very good programme.

Salma: No, that's not what I meant. What do you think about all these tourists coming to Yemen?

Faysal: I think it's a great idea. I like it.

Saleh: I'm not sure. In fact, I don't think it's a good idea.

Salma: Why not?

Faysal: Hey! What about me? I spoke first.

Laila: Yes, but you're the youngest, so you should speak last.

Faysal: That's not fair. Anyway, you're only a year older than me.

Laila: What's that got to do with it?

Salma: Stop it, you two! Why don't you think it's a good idea, Saleh?

Saleh: Well, we have our own religion, our own customs and habits. What happens when we get all these tourists coming in with their different religions, different habits and so on? I just worry a bit.

Salma: You don't need to worry, Saleh. Our religion and our culture are strong. Tourists aren't going to damage those.

Faysal: That's right. You tell him , Salma!

Laila: I'm in favour of tourism. We need the hard currency it will bring in.

Faysal: What's hard currency?

Laila: See! You don't know anything.

Salma: Stop it, Laila! A hard currency is one that's used in international trading, like the American dollar, the German mark, the Swiss franc, the British pound, the...

Saleh: What's wrong with our riyals?

Salma: Nothing. But if we want to buy something from abroad, we have to pay in a hard currency. We can't pay in riyals.

Laila: That's right. So, if tourists come here, they'll change their dollars, say, into riyals. And they'll spend their riyals here. So, we'll still have the riyals and we'll also have the dollars to pay for our imports.

Faysal: That sounds good to me. But I want tourists to come here so that I can meet them.

Saleh: How are you going to meet them? They'll be in their hotels, or on tourist buses.

Faysal: But they'll go to the souk to buy things. I'll meet them there.

Saleh: How?

Faysal: Easy! I'll go up to them and introduce myself in English.

Saleh: What if they're French or German?

Faysal: No problem. French and German children learn English in school, like me. I'll ask them what it's like to live in their countries. I want to know.

Laila: Salma, you haven't said anything about tourism. What do you think?

Salma: I'm for it, but for a different reason.

Laila: What's your reason?

Salma: I'm proud of my country. It's an old and a beautiful country. America, for example, may be richer than us in money, but we're richer than them in history and culture. I'd like them to come here and learn about us. It's as simple as that.

5.6

Umar's dream

Umar is in his last year at secondary school. He was asked to write about what he wants to do when he leaves school.

Read what Umar wrote and answer the questions in your Workbook.

My Dream

I was born in a small village south of Hodeida eighteen years ago. There are only two children in my family, my older brother and myself. My brother is 22 years old and is already the captain of his own fishing boat. He bought his boat a year ago. To do this, he saved his money and he borrowed some more from the bank. He works on the boat with a crew of three. His three crewmen are all young men like himself and all come from the same village. My brother has a lot of responsibility. He has to pay his crewmen and he has to pay back the money he owes to the bank. When he has done that, he does not have much money left. I will do things differently.

My dream is to have my own boat. I can already see it in my mind. It will be an open boat, five and a half metres long and one and a half metres wide. It will have an outboard motor. However, unlike my brother, I won't have a crew on the boat. I won't use for fishing, or, at least, I won't be doing the fishing. I will use it to take tourists fishing. Why? Fishing is a hard life. If you don't catch fish to sell, you won't make any money. On the other hand, if you take tourists fishing, you will get your money before you leave the shore. They hire your boat and you take them out to sea. If the tourists catch a lot of fish, they will be very happy. If they don't catch many fish, they will still be happy because they will have had a good day out on the sea.

And it is not just fishing. Tourists like to swim and lie in the sun. There are many islands off the coast of Yemen and I can take tourists to one of them in the morning. I can even supply them with packed lunches. When they are ready to come home, I can go back and pick them up. They will pay me for the use of my boat. I cant lose and it is easier than fishing.

If all goes well, I will buy a bigger boat and then another and another. By the time I am 25 years old, I hope to have a good business. I am not sure where this business will be. There are wonderful beaches in the Hadhramaut between Mukkala and Aden. I might work from there. Who knows? Will all this happen or its just a dream? Again, who knows?

After you read

Do you think Umar's dream will come true? Why (not)?
Should he stay near Hodeida, or should he go to the Hadhramaut?

Did you know...?

There are 112 islands off the coast of Yemen.

Nadia's dream

Nadia is just fifteen. However, like Umar, she knows exactly what she wants to do when she leaves school.

Read what she wrote and answer the questions in your Workbook.

My Dream

You probably won't believe this. My friends at school certainly don't believe it. They think I am mad because I want to keep bees. I want to be a beekeeper. That is my dream.

It all began when I was eleven years old. I went to visit my uncle who lives in Egypt. He is a beekeeper and I went with him when he visited his beehives. What I saw was amazing! It was then that I decided to be a beekeeper and I haven't changed my mind. If I tell you what I learned about bees, maybe you will understand why I am fascinated by them.

There are three kinds of bees in a beehive. There are more than 10,000 worker bees. They are sexless - they neither male nor female. They make the honey and protect the hive. There is a small number of drones. They are male and one of them will mate with the Queen. When that happens, all the drones are thrown out of the hive and they die. There is only one Queen. She is female and she lays thousands and thousands of eggs. The amazing thing is that queen bees are made. The grub, the early stage of a worker bee, will be a worker bee if nothing is done to it. However, if the other worker bees feed it with a substance called Royal Jelly, it will turn into a queen bee.

I will start with two beehives. However, I will have to be careful. I will have to watch out for ants. Ants love sweet things and they can clean out a beehive in one day. However, ants don't swim. Therefore I will put my beehives on small tables. Each table will have four legs. I will put the legs of the table into tin cans and fill each can with a mixture of water and oil. That should stop the ants.

I hope to get about 20 kilograms of honey from each hive one yield and I hope to get three yields during one year. I will sell my honey to the big hotels, I know they use honey from other countries now, but I think they will be happy to use my Yemeni honey instead. If all goes well, I will get more and more beehives. When that happens, I will sell my honey direct to tourists.

That is my dream and it gives me a buzz. Do you get it?

After you read

Is beekeeping a strange job for a girl?
What do you think?

5.10

Towards a greener land

Read this article about forestation and desertification in Yemen and answer the questions in your Workbook.

The Forestry Directorate is part of the Ministry of Agriculture. It has a very important part to play in Yemen's future because it is responsible for forestation and for fighting desertification. Forestation stops the disappearance of trees and plants and makes sure that there are more trees for the future. Desertification is the process by which fertile land is turned into desert. At the moment, about 95% of the country is desert. The remaining 5% is also in danger of turning into desert.

Trees are very important because they have direct effects on the environment. On the side of a mountain, for example, trees prevent the topsoil being washed away by heavy rains. This is called soil erosion. Trees also slow down the flood waters, giving the water time to soak into the soil. Because of soil erosion, farmers cannot sow plants. As a result, more erosion takes place because, like trees, plants also hold the soil together.

Trees also have indirect effects on the environment. Bacteria live in the roots of trees. These bacteria increase the amount of nitrogen in the soil and make the soil more fertile. In areas surrounded by deserts, trees act as wind-breaks. They prevent the wind from moving sand dunes onto fertile soil. Trees also release oxygen into the atmosphere, cool down the environment and provide shade for people and animals.

Desertification happens when trees and plants disappear. Trees and plants need water, which we can get by thrilling wells. However, if we drill wells too close together, the water will disappear. This is because a number of wells use up the underground water quicker than one well does. When a well runs dry, the farmer moves on and the area he leaves behind becomes desert. Another cause of desertification is the growth of towns and cities. As they grow, people move onto what used to be agricultural land. This causes more erosion.

Many people either do not know that there is a problem, or do not know the causes. We must educate them. If they understand the problem, they will do something to solve it. In fact, some people are already trying to do this. In the Hadhramaut, for example, people put fertiliser on a piece of land. Then it is 'protected' for six months. No grazing by animals, no cutting of trees or brushes is allowed on protected land until it is ready to be used again. Another tribal custom allows people to cut off only the dead branches and save the rest of the tree.

Yemen is already a beautiful country. More trees would make it even more beautiful. Tourists would like this but, more importantly, so would Yemenis.

After you read

Can you think of anything you can do to make Yemen look more beautiful?

Opportunities

This is an advice page from a magazine for young people in Kenya. Read it and decide if you can benefit from the advice.

Hi, there!
More and more tourists are coming to our country every year. That means more and more jobs and more business opportunities. Who for? Why not you? Just think about it. Then go for it.

Here are some ideas, but there are plenty more. If you have an idea, write to me. I promise I'll answer every letter.
The Editor

We're building new hotels. New hotels mean plenty of new jobs.

Aim for the best jobs. Take a course in hotel management, or go on a cookery course and learn how to be a chef.

There are other good jobs in a hotel. Find out what they are.

Tourists from colder countries travel to countries that have lots of sunshine. They like to lie on the beach and relax. They want to be comfortable on the beach. If it gets too hot, they want to lie in the shade. Sometimes they get hot and thirsty, or just a little bit hungry.

Ask yourself these questions:
What could you hire out to them?
What could you sell to them?

Hang-gliding is a worldwide sport. People strap themselves to a hang-glider, jump off a high mountain and soar like birds. Kenya is ideal for hang-gliding. We've got the mountains, so why not set up a business?

First, you need to learn how to hang-glide yourself. Next, you have to go on a course so that you can teach other people how to hang-glide. Then you're ready.

An easy one-person business is being a tourist guide. You don't have to invest any money. You have to be able to speak English. You have to know everything about your area - its history, its culture, its wildlife, its most beautiful areas, even the best places to take photographs. You have to be able to talk non-stop.Tourists will pay for these skills.

Have you thought about horse-riding? NO? Why not think about it now?

Hundreds of thousands of people around the world are fascinated by birds. They are known as bird-watchers. They will go anywhere to see birds they haven't seen before in the wild. Now there's an opportunity!

Learn about all the birds in your area. Find out where they live and nest. Then go for it!

After you read

What other opportunities can you think of? Don't forget Yemen's handicrafts.

5.14

Barry's birthday

1 How old is Barry today?
2 What was the big surprise?

It was May 22nd - my birthday!

'Happy birthday, dear,' said Mum when I got downstairs. 'The postman's just been. There are some cards for you. And there's a nice surprise.'

'What is it?' I asked.

'You'll find out tonight,' said Mum. 'At your party.'

On the bus to school, I tried to read my Chemistry book because Mr Law was giving us a test. But I couldn't think about Chemistry. I was thinking about my surprise. What could it be?

'What do you think it is?' I asked Kevin when I got to school.

'The Crown Jewels?' he suggested.

'The bell went. The Chemistry test began. The Chemistry test finished. I had answered one question. I was still thinking about my surprise.

'I came top today,' said Sue when I got home. 'We had a test in Chemistry and I came top.'
I didn't say anything about my test.

'And I've made you a cake.'

At the party later, Sue brought the cake in with sixteen candles on it and everybody sang 'Happy birthday, dear Barry.' What a noise! When they had finished, I blew out all the candles.

'No surprises so far,' I thought.

The cake was delicious. Thanks, Sue,' I said. 'This is good.'

'Here's your present,' said Sue, giving me a small parcel. It was a pen. Mum and Dad gave me a nice watch and a new pullover. From Kevin I got a big book about football.

'Thank you, everybody,' I said. Still no surprises. Then the phone rang.

'That's your surprise, Barry,' said Dad. 'Go on, it' for you.'

'Hello,' I said. 'Barry Jones speaking.'

'Barry!' a voice boomed. 'Happy birthday! Uncle Tim here! From America! I want to invite you and your friend Kevin over for the summer. Do you want to come?'

Language review 4

1 Expressing obligation and necessity

We use *have* to and *must* + the infinitive of a main verb to express obligation and necessity in the present and the future. We cannot use *must* in the past.

Examples:
Drivers **must stop** when the traffic lights are red.
I **must/have to walk** to school because I've missed the bus.
I **had to walk** to school because I missed the bus this morning.
You **must/will have to stay** in bed if you want to get well.

Note that *must not* doesn't mean the same as *don't have* to.
Examples: You mustn't eat in class.
You don't have to wear a uniform if you don't want to.

2 Sense verbs

We have five senses: sight, hearing, taste, touch and smell. The verbs that expresses the senses are: *look, sound, taste, feel, smell*. They are usually followed by adjectives.

Examples:
The old houses **look** wonderful.
That word doesn't **sound** right.
This meat **tastes** very good.
Don't you **feel** well?
What's for dinner? It **smells** great!

3 Giving advice and making suggestions

We can use the imperative structure to give advice or make suggestions. This pattern is often used in advertisements. The verb is in the infinitive form. There is no subject.

Examples: **Come** to Green Stores. Our vegetables are the best in town!
Aim for the best jobs.
We can also use these patterns. They are not quite as strong as the imperative.

Why not	set up your own business	?
You should		.
You could		.

4 Sequence words

When we describe a sequence of events, we can use these words to introduce the events: *First, Next, Then, After that, Finally.*
We must begin with *First* and end with *Finally*, the others can be in any order.

5 Word signposts

When you are reading, look out for words that act like signposts - they tell you what is coming next. Use them in your writing too. *However* and *On the other hand* introduce a contrast. What follows is likely to contrast with what came before.

Examples:
My dream is to have my own boat. **However,** unlike my brother, I won't have a crew.
Rashid is very clever. **On the other hand,** he is very lazy.
Therefore, Because of this and *As a result* introduce a result.
Example: I don't have a car. **Therefore/Because of this/As a result,** I'll have to travel by bus or taxi.

Do the exercises in your Workbook to practice these languages points.

Irregular verbs

Infinitive	Past tense	Past participle	Infinitive	Past tense	Past participle
be	was/were	been	leave	left	left
beat	beat	beaten	lend	lent	lent
become	became	become	let	let	let
begin	began	begun	lie	lay	lain
bite	bit	bitten	light	lit	lit
blow	blew	blown	lose	lost	lost
break	broke	broken	make	made	made
bring	brought	brought	mean	meant	meant
build	built	built	meet	met	met
buy	bought	bought	must/have to	had to	had to
can	could	_	pay	paid	paid
catch	caught	caught	put	put	put
choose	chose	chosen	read	read	read
come	came	come	ride	rode	ridden
cost	cost	cost	ring	rang	rung
cut	cut	cut	run	ran	run
dig	dug	dug	say	said	said
do	did	done	see	saw	seen
draw	drew	drawn	sell	sold	sold
drink	drank	drunk	send	sent	sent
drive	drove	driven	shake	shook	shaken
eat	ate	eaten	shut	shut	shut
fall	fell	fallen	sing	sang	sung
feed	fed	fed	sink	sank	sunk
feel	felt	felt	sit	sat	sat
fight	fought	fought	sleep	slept	slept
find	found	found	speak	spoke	spoken
fly	flew	flown	spend	spent	spent
forget	forgot	forgotten	spread	spread	spread
get	got	got	stand	stood	stood
give	gave	given	steal	stole	stolen
go	went	gone	sweep	swept	swept
grow	grew	grown	swim	swam	swum
have	had	had	take	took	taken
hear	heard	heard	teach	taught	taught
hide	hid	hidden	tell	told	told
hit	hit	hit	think	thought	thought
hold	held	held	throw	threw	thrown
hurt	hurt	hurt	understand	understood	understood
keep	kept	kept	wake	woke	woken
kneel	knelt	knelt	wear	wore	worn
know	knew	known	win	won	won
lead	led	led	write	wrote	written

Arts reader

Crime and punishment

Although different countries have different laws and different legal systems, the basic purpose of all these laws is the same. They are there to protect the people in the community and punish those who break the laws.

Study the words and phrases in this list. How many of them have equivalents in your language?

to commit a crime: to do something against the law
to suspect somebody of a crime: to believe that somebody has committed a crime
to arrest: to hold somebody in the name of the law
to accuse somebody of a crime: to say to somebody that they have committed a crime
to charge somebody with a crime: to make an official accusation
lawyer: an expert in the laws of a country
trial: the event in which arguments for the charge are presented by prosecuting lawyers, and arguments against it are presented by defending lawyers, or by the person charged
court: the place where trials take place
guilty of a crime: responsible for committing a crime
innocent: not guilty
judge: the lawyer who manages the trial and who decides on the punishment
jury: twelve ordinary citizens who are chosen to attend the trial, listen to the evidence and decide if the accused person is guilty or not
sentence: the punishment given to the guilty person
to be sentenced to 3 months imprisonment: to have to spend 3 months in prison

How many of these words and phrases can you find in this story?

THE STORY OF DOCTOR CRIPPEN

In 1892 Doctor Hawley Crippen married Cora Turner, an American singer. They lived in London for many years, but they were never really happy together. Cora despised her husband because he had no ambitions to become very rich. He tried hard to please her, but they still argued a lot. Then Crippen fell in love with his secretary, Ethel Le Neve. At the end of January 1910, he killed Cora and buried her under their house. Ethel knew nothing about it.

Crippen told the police that Cora had gone back to America and had died there. At first they believed him. However, Crippen became worried and decided to run away with Ethel. The police returned to Crippen's house to ask some more questions and found that he had gone. They now suspected him of murder. They searched the house and found Cora's body. By this time Crippen and Ethel were on a ship in the Atlantic. They called themselves Mr and Mrs Robinson. The Captain of the ship received radio messages about the murder with descriptions of the Doctor and his friend. He suspected the Robinsons and sent a radio message to the police. A week later a detective boarded the ship just before it arrived in Canada. Crippen and Ethel were arrested and charged with murder. They were brought back to London to be tried.

During the trial the lawyers asked Crippen questions about why no-one had seen his wife leave the house and why he had sold Cora's jewellery. Crippen could not answer. He said that the body at the house was not the body of his wife, but doctors said that it was. On the fifth day of the trial the jury found Doctor Crippen guilty and the judge sentenced him to death. Ethel was found not guilty. On the 23rd of November 1910, Doctor Crippen was hanged for the murder of his wife.

The Crippen case was the first in which radio was used to catch a criminal.

Detectives and detection

Detectives belong to the Criminal Investigation Department (CID) of a police force. Their job is find criminals and bring them to trial. Here are some of the ways they do this.

Fingerprints
When you touch something with you finger, you leave behind small traces of moisture. In this moisture is a copy of the patterns in the skin on your finger. This is your fingerprint. Everybody's fingerprints are different, so fingerprinting is an important aid in fighting crime. Detectives use a computer to compare prints from the scene of a crime with others on their records.

Identikit pictures
A witness to a crime is always asked to described the person who did the crime. The police have many different photographs of the parts of the face. They show these photographs to the witness so that a picture of the criminal can be built up. This picture is then sent to other police stations and printed in newspapers.

Genetic printing
The human body is made up of millions of cells. In each cell there is an acid called DNA. This acid controls everything about the body - how it looks and how it works. Everybody's DNA is different.

In genetic printing a picture of a suspect's DNA is built up. Only a small drop of blood, a single hair or tiny piece of skin is needed to make a print. The print is then compared with a print found at the scene of a crime. If the two prints match, the criminal is caught as surely as if somebody had used a camera to take a photograph of him committing the crime.

Questioning
Detectives first question witnesses - people who might have seen something. Then they question suspects - people who might have committed the crime. Interviews with suspects usually take place at the police station. They are recorded in writing on tape and sometimes on video.

Discussion
- Think of some of the questions the police might ask a witness and a suspect.

Sherlock Holmes: The World's Most Famous Detective

The world's famous detective never existed. Sherlock Holmes was the invention of a medical doctor, Arthur Conan Doyle. He wrote stories in which a detective called Sherlock Holmes worked in a similar way to a doctor. He observed things, connected them together and then came to a conclusion - not about illness, but about who committed the crime. In one of the stories, Sherlock Holmes describes his method of coming to a conclusion. "Eliminate the impossible and what is left, however improbable, must be the truth." (Take away what cannot have happened and is left must be the truth, even if it looks very unlikely.)

This method is called deduction. Sherlock Holmes used it to catch criminals. In real life, some police forces have followed Sherlock Holmes' methods and have used the stories as their official training book.

Sherlock Holmes. The first story was written over one hundred years ago

Young people and the law

Not all laws forbid you to do something, or say that if you do something wrong, you will be punished. Some laws say that certain things are allowed or even compulsory - you have to do them.

These are some of the laws that effect young people in Britain.

5 At five an infant becomes a child and has to pay a fare on trains and buses. Going to school is compulsory.

12 A child of twelve is considered responsible enough to buy a pet.

13 A young teenager may have a part-time job, but only for two hours on school-days and on Sundays. A lot of schoolchildren work in the early morning before they go to school. They deliver newspapers to people's houses.

14 Fourteen-year-old boys and girls are allowed to use a shotgun, an air pistol or an air rifle for hunting animals and birds.

15 At fifteen, a young person can open a Post Office banking account. However, he or she must have an adult guarantor - someone who will pay any debts.

16 Sixteen-year-olds may leave school and get full-time jobs. They may go into a shop and buy cigarettes. They may also get married, but only if their parents agree to it. This is true in England, Wales and Northern Ireland. Parental consent is not needed in Scotland. Sixteen-year-olds may also join the armed forces if their parents consent.

17 At seventeen, young men and women are allowed to drive a car if they have a licence.

18 At eighteen, young people can vote in elections and gain contracts. They are now legally responsible adults.

Now you be the judge. Read these three cases. Have these young people broken the law? Give reasons for your answers.

Case 1
June, age 14, and Sandra, aged 11, are sisters. Sandra's birthday is next week. She wants a kitten that she saw in a pet shop. The girls go to the pet shop. June buys the kitten as a birthday present for her sister.

Case 2
Tom, aged 15, and his brother John, aged 10, are in their garden. Tom is shooting an air rifle at a target. John is watching. Suddenly a large rat appears. Tom is going to shoot it, but John says, 'Let me do it.' Tom gives his brother the rifle and John shoots the rat.

Case 3
Peter is 13. He is saving his money to buy a computer. He has a part-time job. Every Saturday he works in a fruit and vegetable shop from 10 o'clock until 3 o'clock.

Discussion
- Compare the laws for young people in Britain and in Yemen. Which ones are the same? Which ones are different?

The Olympic Games

Origins

Nobody is really is sure when the ancient Greek Olympic Games began. However, it seems that Games were held regularly every four years from 776 BC until 393 AD. Originally there was only one race called a *stade*. It was run over the length of the stadium, a distance of about 170 metres. The first winner of this race was a cook called Coroibos. As time passed, other events were added, such as longer races, chariot racing, boxing, wrestling and the pentathlon - running, long jump, discus, javelin and wrestling.

Javelin

Discus

Women were not allowed to take part in the early Games. In fact, they were banned from even watching them. If they were caught watching, they were taken away. In time, however, women had their own Games.

The Games were for amateurs; the only prize was a laurel wreath placed on the head of a winner. However, some people gave the winners various presents such as houses and money. This led to bribery and corruption, and the Games were banned in 393 AD.

The modern Games

Baron Pierre de Coubertin of France is the father of the modern Olympic Games. He first suggested the idea in 1892. He spent the next three and a half years looking for support. The strongest interest in restarting the Games was shown by Greece. As a result, the first modern Olympics were held in Athens. There were 500 competitors from 13 nations. Some of them were just tourists passing through Athens.

The Greek spectators were very enthusiastic and showed a lot of good sportsmanship, cheering the winners from every country. They were rewarded when the most important event of the Games, the marathon, was born by a Greek farmer. As Baron de Coubertin wished, the Games were for amateur, not professional, athletes. These changed when famous tennis players who were professionals, were allowed to take part in the Games. Nowadays, most of the athletes taking part are professionals.

Discussion

- Baron de Coubertin wanted to improve national and international understanding through sport. Do you think the Olympic Games do this?

Compare these results from the 1952 and the 1992 Olympic Games. What is the main thing you notice?

Event	1952			1952		
	hr	min	sec	hr	min	sec
100 m			10.4			9.96
200 m			20.7			20.01
400 m			45.9			43.50
800 m		1	49.2		1	43.66
1,500 m		3	45.1		3	40.12
5,000 m		14	6.6		13	12.52
10,000 m		29	17.0		27	46.70
Marathon	2	23	3.2	2	13	45.00

The world

The total area of the Earth's surface is approximately 510 million square kilometres. The area covered by water is approximately 361 million square kilometres.

This map shows the main geographical features of the world.

Look at the map and answer these questions.

1 Which continent has the largest area?
2 Which ocean is between the Americas and Africa?
3 Is Europe north or south of Africa?
4 Which is the smallest continent?
5 Why do you think Antarctica is mainly white?

The Arab World

The phrase 'the Arab World' is used to described all those countries where Arabic is the main language and which have a common religion, Islam. The area includes all the countries of North Africa from Mauritania in the west to Sudan and Somalia in the east, and all the countries of the Arabian Peninsula, from Syria in the north to Yemen in the south.

It stretches from the Atlantic Ocean to the Arabian Gulf and from the Mediterranean to the Indian Ocean. The largest country in the Arab World is Sudan with an area of 2,506,000 square kilometres. Egypt has the largest population, approximately 55 million. The total area of the Arab World is approximately 14 million square kilometres. The total population is over 190 million.

Discussion

- Can you name all the countries in the Arab World and their capital cities?
- What are they best-known for?
- What do you know about them?

Children at work - London, 1850

Read about two English children in the 19th century. Compare their lives.

In London in the middle of the last century there were thousands of poor children. To live, they had to go to work, usually in terrible conditions and for very little money. Below are the stories of two such children. Only their names have been invented. The rest is true.

BILL SPICER

a 'mudlark'

Most days of the year Bill Spicer goes down into the mud of the River Thames. He looks for things, anything, that he can sell. 'Nails, pieces of metal,' he said. 'Sometimes a coin,' he added, smiling.

According to Bill, winter is the worst time. He is frozen by the cold and his clothes are covered with icy mud. He has no shoes and his feet are in danger of being cut on broken glass. 'I used to have father,' he went on, 'but he died. My mother works a lot. She washes clothes whenever she can find the work. I give all the money I get to my mother and she buys bread and tea with it. If I can't find anything in the mud, we don't have much to eat. I've been doing this for six years now,' he said finally. 'What else can I do?'

Bill went to school once, but only for a month. His mother comes from Scotland, but Bill does not know where Scotland is. He knows that he lives in London and he thinks that England is a place somewhere in London. He cannot read or write. He thinks that he is now too old to learn. Bill Spicer is nine years old.

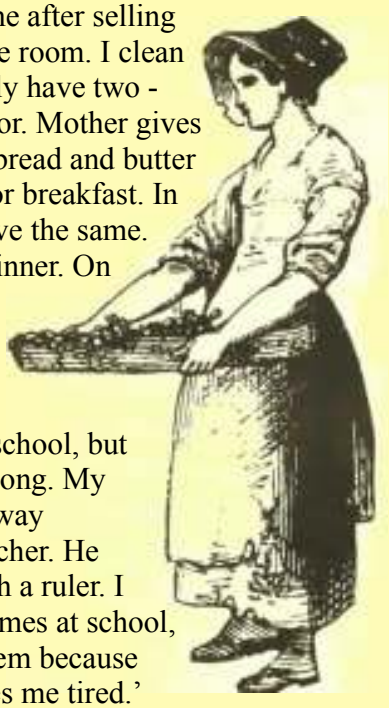
EMILY COOK

a water-cress seller

Emily is eight. She walks the streets of London in all kinds of weather selling water-cress, a plant that is used in salad. Her day begins early.

'I get up dawn. I go to the market to buy my cress. I never go home to breakfast until I've sold it all. I don't get much money selling cress and I always give it to my mother. She's very good to me. She doesn't often hit me. She's very poor and goes out cleaning rooms sometimes. My father sharpens scissors. He's very good to me as well.

When I get home after selling my cress, I tidy the room. I clean the chairs - we only have two - and I wash the floor. Mother gives me two pieces of bread and butter and a cup of tea for breakfast. In the afternoon I have the same. I don't have any dinner. On Sundays we have meat. Of course, I would like to have it every day.



I used to go to school, but I wasn't there for long. My mother took me away because of the teacher. He used to hit me with a ruler. I learned a lot of games at school, but I don't play them because selling cress makes me tired.'

Discussion

- Why do you think people realized it was bad for such young children to work?
- At what age do you think children should be allowed to work?

Two poems by William Wordsworth

A rainbow

Wordsworth often wrote about the God-given beauty of nature and the effect it has on people. In the first poem below, he describes the happy feeling he has when seeing one of the most beautiful sights in nature, the rainbow.

rainbow	*(Look at the photograph.)*
so be it	*let it be like this*
could wish	*would like*
bound each to each	*tied to each other*
piety	*religious duty*

My Heart Leaps Up

My heart leaps up when I behold
A rainbow in the sky:
So was it when my life began;
So is it now I am a man:
So be it when I shall grow old.
Or let me die!
The Child is father of the Man;
And I could wish my days to be
Bound each to each by natural piety.

The second poem is one of the most famous poems in English. In it Wordsworth describes the view from one of London's bridges one morning in September, 1802.

Upon Westminster Bridge

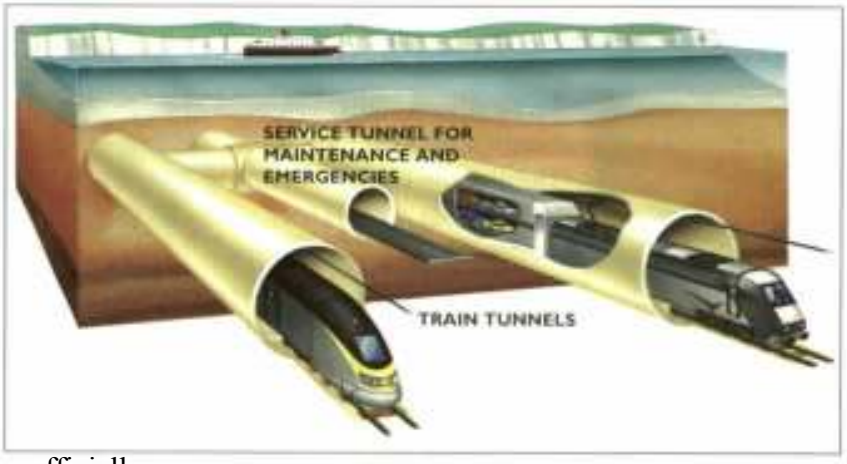
September 3, 1802

Earth has not anything to show more fair:
Dull would he be of soul who could pass by
A sight so touching in its majesty:
This city now doth like a garment wear
The beauty of the morning: silent, bare,
Ships, towers, domes, theatres, and temples lie
Open unto fields, and to the sky,
All bright and glittering in the smokeless air.
Never did sun more beautifully steep
In his first splendour valley, rock, or hill;
Ne'er saw I, never felt, a calm so deep!
The river glideth at his own sweet will:
Dear God! the very houses seem asleep;
And all that mighty heart is lying still!

fair	*beautiful*
dull	*unfeeling*
majesty	*greatness*
doth	*does*
garment	*piece of clothing*
bare	*not covered*
dome	*a rounded part of a roof*
temple	*big church*
glittering	*shining like gold*
steep	*cover*
splendour	*magnificence*
glideth at his own sweet will	*moves smoothly, exactly as he, the river, wishes*
mighty	*powerful*

ARTS 8

The Channel Tunnel



The English Channel is the name of the sea that separates the island of Great Britain from France and the rest of the continent of Europe. At its narrowest point it is about 38 kilometres wide. A long time ago the two pieces of land were connected, but the land sank, the sea poured in and Britain became an island. On the 6th of May, 1994, at a ceremony in France, the Queen of great Britain and the President of France officially opened a tunnel under the Channel. Britain was linked to the rest of Europe for the first time for 10,000 years.

The tunnel is for trains only. Passenger trains carry people from the centre of London to the centre of Paris, a distance of over 400 kilometres. The trains are 400 metres long and have a top speed of 300 kilometres an hour. Of course, they cannot travel at that speed all the time and the journey between the two capitals takes two and a half hours. Cars and lorries are carried through the tunnel on special trains that only travel from one side of the Channel to the other. The journey through the tunnel takes 35 minutes. The cars and lorries then continue their journeys by road.

A tunnel under the Channel was first suggested in 1802 and work on a tunnel has started many times. Each time, however, digging had to stop because it was too difficult and dangerous. Engineers have only recently developed the technology to make such a tunnel possible. Work on this tunnel started in December, 1987 on both sides of the Channel. French and British workers first met under the sea in December, 1990. The finished tunnel is 50 kilometres long and is the longest undersea tunnel in the world.

Everything has been done to make the tunnel as safe as possible. If there is a fire, extinguishers will start automatically. If these do not put out the fire, the passengers can escape into a service tunnel, which is between the two main tunnels. Each train has two engines so, if one breaks down, the other can pull the train out of the tunnel. Finally, there is a danger of animals carrying disease coming through the tunnel; electric barriers have been put up to prevent this.

There are other ways of crossing the Channel. The quickest crossing by boat takes one and half hours. You can also fly from London to Paris. The flight takes about 45 minutes. However, you first have to get from the centre of London to the airport and then into the centre of Paris from the airport nearest to the city. The whole journey can take over three hours.

Up to twenty trains can pass through the tunnel in each direction every hour. They carry cars, passengers and goods. People no longer have to get on or off boats or planes to travel between England and France. Because of the Channel Tunnel, Great Britain is once again a part of Europe.

Discussion

- How do you think the British feel now that they no longer live on an island?
- Would you travel in such a long tunnel? Why? Why not?
- It cost £10,000,000,000. Do you think it was worth the money?
- This tunnel is sometimes called the 'Chunnel', How is this word made up?

Famous writers in English

George Bernard Shaw, 1856 - 1950
Irish playwright

Shaw was born in Dublin, the capital of Ireland, but moved to London in 1876. He wrote more than 60 plays. His most famous play is probably *Pygmalion*. In this play, a professor takes a poor flower-seller called Eliza Doolittle and teaches her how to speak and behave properly. In modern times, *Pygmalion* has been made into film called *My Fair Lady*. Shaw's best play is probably *Heartbreak House*, which he wrote in the middle of World War 1. This play looks at the possible destruction of the world and the rise of a new, better world from the remains of the old. Shaw received the Nobel Prize for Literature in 1925.

Agatha Christie, 1890 -1976, English crime writer

Agatha Christie was one of the most successful mystery writers ever. A mystery novel or play contains a crime, usually murder, and a detective to solve the crime. Christie created two famous detectives, Hercule Poirot and Miss Marple. She also set some of her books in the Middle East, the best known one being *Murder on the Nile*. Equally famous is *Murder on the Orient Express*, a famous train that went from London to Istanbul in Turkey. As with Dickens, many of her novels have been turned into plays, films and TV programmes. Her best-known play is *The Mousetrap*. It first went on the stage in London in 1952 and it has been running six nights a week, every week, since then. This makes it the longest running play in history.

Charles Dickens, 1812 - 1870, English novelist

A part from being a great story - teller, Dickens is important for the picture of life in London contained in his novels. He had personal experience of the very bad conditions in which poor people lived and worked in the city and the unfairness with which they were treated. He began writing novels when he was 24. His novels were printed in episodes in a monthly magazine and Dickens quickly became popular.

His first novel, *The Pickwick Papers*, is full of humour, but is also an attack on the legal system as it was at that time. *Oliver Twist* is the story of a young boy who is treated very badly by society. *Hard Times* attacks the system of education and the terrible lives of factory workers.

Dickens' novels are still read today. Many of them have been made into plays, films and TV dramas.

Writers from other countries

There are many famous writers from countries where English is the native language. A large number come from the United States. Three of the most famous are Mark Twain, Ernest Hemingway and John Steinbeck. Others come from Canada, for example Margaret Atwood, and from Australia. There are also writers from countries where English is not the first language but who write in English. Among these are Joseph Conrad from Poland. V.S. Naipul from India, Chinua Achebe from West Africa, Tom Stoppard from Czechoslovakia and Khalil Gibran from Lebanon.

Discussion

- Can you think of any other famous writers in English?
- What book or books in English have you read?

English idioms

Idiomatic expressions are very common in spoken English. They are phrases of two or more words which do not mean what they seem to mean. The whole phrase has one special meaning which is quite different from the meaning of each of the words in the phase. For example, someone might say:

'When I tell my father that I've failed my exam, he'll go up the wall.' He does not mean that his father will climb a wall. He means that his father will be extremely angry.

It is often impossible to work out the meaning of idioms; they just have to be learned and remembered.

1 All these idioms use parts of the body. Read them and match them to the drawings. Then use them to complete the sentences in your Workbook.

a) see eye to eye
b) took the words out of my mouth
c) know it like the back of my hand
d) costs an arm and a leg
e) (be) down in the mouth
f) put my foot in it
g) standing on my head
h) keep an eye on

2 Try using these idioms. Tell your partner about the following:

- people you see eye to eye with/don't see eye to eye with
- things which cost an arm and a leg
- things you can do standing on your head
- times when you have been down in the mouth
- times when you have put your foot in it
- places you know like the back of your hand

Learning idioms

- Write down the idioms you like best - the ones you want to remember. If you want to translate them, translate the whole sentence, not just the phrase. Use a similar Arabic idiom if you can.
- Write the idioms in sentences in English.
- Practice saying them aloud.
- Make a collection of idioms.

An American experience

Read this story. What do you learn from it?

It was my first trip to America. I was driving along Highway 101. We have roads and motorways in England; they have highways in the US. I had rented a car, except they call it an automobile, and there was something wrong with it. The engine was getting too hot. Fortunately, about ten minutes later I saw a small garage. I stopped, got out of the car and put my jacket on.

A mechanic appeared. I told him about the engine.

'Raise your hood,' he said.

'My hood? It's not that cold,' I thought. Anyway, my jacket doesn't have a hood.' I haven't got one,' I said.

The mechanic looked at me strangely. 'Come on, buddy. I don't have all day. Raise your hood.'

I don't have a hood,' I repeated. 'Look!' I showed him the back of my jacket.

For some reason, he got angry. He started hitting the bonnet of the car. Then he stopped. 'Ok. I'll do it,' he muttered. He reached into the car, pulled a lever, raised the bonnet of the car and stuck his head in the engine compartment.

I decided to get some water in case the engine got too hot again. I approached the mechanic carefully. 'Excuse me. Where can I get some water?' I asked. He didn't look up.

'There's a spigot over there,' he said.

'A spigot? A spigot? What's that?' I wondered. Then I remembered. I knew from American films that garages sometimes had a small zoo. A spigot must be a wild animal. I decided to look at it, but first I had to get some water. 'A spigot! Great!' I said. I'd like to see it, but first can I get some water, please?'

He stood up very slowly, pointed at an outside tap and very slowly said, 'Spigot. Water. There.'

When I got back, the mechanic said, 'It's OK now. do you want any gas?

Gas? What a funny question,' I thought. 'Gas for my cigarette lighter? But I don't smoke. Gas for my camping cooker? But I'm not going camping.'

He pointed at the petrol pump. 'Do you want any gas?' he repeated.

'Ah-ha! I see. I'm beginning to understand American English,' I said to myself. 'Yes, please. Fill it up,' I said.

He did. Then he checked the air in the four tyres. 'Do you want me to check the spare? You do have a spare, don't you?' he asked.

Of course I had a spare. I'm not stupid. 'Yes. I've got one in my boot,' I told him.

'You have one in your boot. You have a spare in your boot. Great! But, if you don't mind, I'll look in your trunk.'

'But I haven't got...'

'I know. You don't have a trunk. But I'll look anyway.' He went to the back of the car, opened the boot and checked the spare. Then he closed the boot and looked at me. 'What are you? Some kind of nut?' he asked.

Now, that I did understand. I know that 'nut' in American English is somebody who is mad or crazy. I didn't answer. I paid the man and got in the car. He put his head down to the open window. 'Have a good trip. A nice, long trip,' he said. 'And keep going.' He walked away. I started the engine. He turned back. 'Your automobile is very noisy, 'he said. You've got a hole in your muffler.'

'What's a muffler?' I wondered. But I didn't ask. 'Thanks,' I said and drove back onto Highway 101.

Proverbs

A proverb is a short, well-known saying which expresses something that is generally true or is believed by many people. The meaning is often very different from the meaning of the individual words that make up the proverb. There are proverbs in most languages. Many of them express similar beliefs or truths, but the way in which these are expressed may be very different.

Read these English proverbs. Which one match the drawings.

Many hands make light work.

Two heads are better than one.

A bird in the hand is worth two in the bush.

A stitch in time saves nine.

Practice makes perfect.

Learn to walk before you run.

When in Rome, do as the Romans do.

Too many cooks spoil the broth.

Faith can move mountains.

Never put off till tomorrow what you can do today.

Don't count your chickens before they are hatched.

The early bird catches the worm.

No news is good news.

When the cat's away, the mice will play.

Blood is thicker than water.

- Which three proverbs do you like best? Find out which ones are most popular in your class.
- Do you know any Arabic proverbs or sayings that are similar to these?

World-famous tourist sights

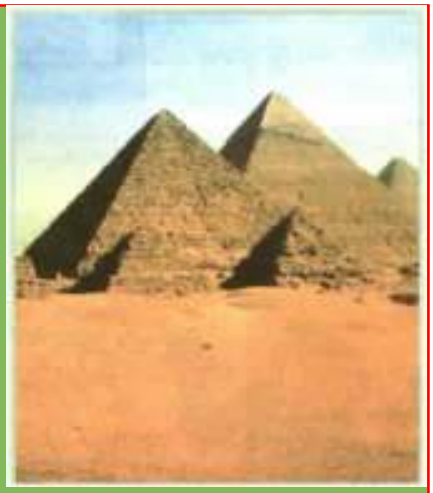
The Eiffel Tower: France

The Eiffel Tower is in the west of Paris, the capital of France. It can be seen from all over the city. It was named after the French engineer who designed it. He wanted to prove that it was possible to build such a tall structure. It was finished in 1879 and until 1930, when the first skyscrapers were built in New York, it was the tallest structure in the world. It is 322 metres high and weighs over 8.5 million kilograms. Visitors can get up to the top by lift or by stairs.

The Great Wall: China

The Great Wall of China is the largest structure in the world. It is the only one that can be seen by astronauts in space. It is 2,450 kilometres long and was built over 2,000 years ago. It is from 4 to 9 metres high and 3.5 metres wide. The purpose of the wall was to protect China from invaders, so it was built along the top of a mountain range. There are watchtowers every few hundred metres. At longer intervals, there are huge gates which were locked at night.

The Pyramids: Egypt



At Giza near Cairo stand the tombs of Khufu, Khafre and Menkawre, three Kings of ancient Egypt. They are also called the *Great Pyramids*. The oldest one is the pyramid of King Khufu. This was finished over 4,500 years ago and took thirty years to build. It is 137 metres high and each side is 230 metres long. The pyramid was made of about two million blocks of stone. They fit so well together that it is difficult to get a sheet of paper between them.

Find the answers to these questions as quickly as you can.

1 What is 322 metres high?
2 What is the largest man-made structure in the world?
3 When was the first pyramid finished?

Discussion

- Why do you think so many people go to see these things?
- What other sights do you know of?

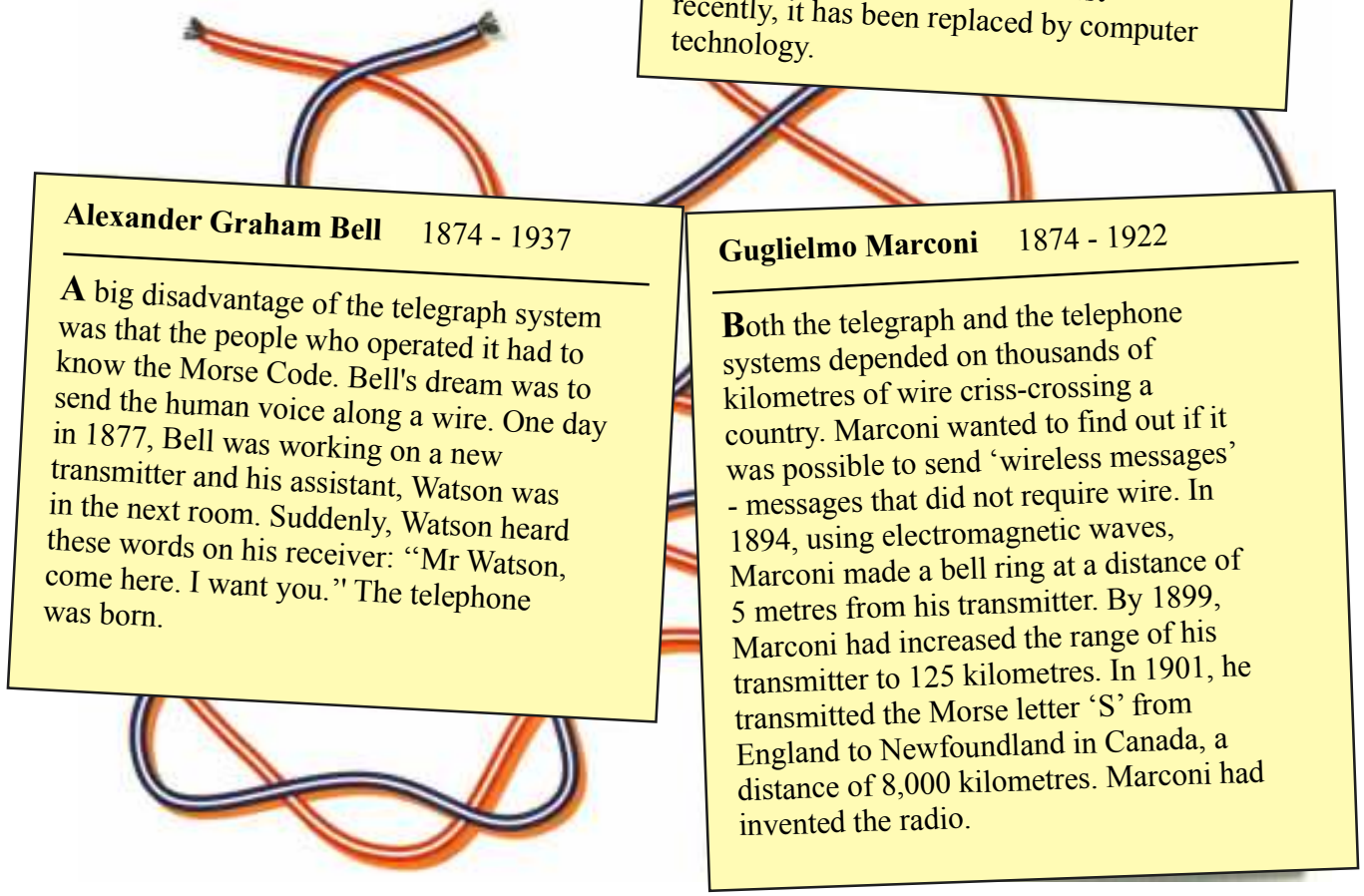
Getting the message across

Before the invention of modern machines, people found many different ways of sending messages over long distances. The simplest was a team of runners. The first runner carried the message to a nearby village. There he gave it to a second runner who took it to the next village, and so on. In America in the nineteenth century, the messengers did not run; they rode ponies - small horses - and the system was called 'the Pony Express'. American Indians sent messages with the smoke from fires. African tribesman sent messages on big drums called 'tom-toms'. Carrier pigeons - birds which always find their way home - were also used.

All these systems had disadvantages. Either they took a long time, or the message had to be very simple. Samuel Morse changed that.

Samuel Morse 1791 - 1872

Morse invented the telegraph system when he succeeded in sending long and short bursts of electricity along a wire. He then invented a code made up of dots and dashes - short and long signals - based on the bursts of electricity. Not surprisingly, it is called the Morse Code. Each letter of the alphabet is represented by a different combination of dots and dashes. For example, the letter 'S' is represented by three dots and the letter 'O' is represented by three dashes. For over a hundred years, the international signal of distress was SOS. Anybody who needed urgent help could radio these three letters. Just recently, it has been replaced by computer technology.



Alexander Graham Bell 1874 - 1937

A big disadvantage of the telegraph system was that the people who operated it had to know the Morse Code. Bell's dream was to send the human voice along a wire. One day in 1877, Bell was working on a new transmitter and his assistant, Watson was in the next room. Suddenly, Watson heard these words on his receiver: "Mr Watson, come here. I want you." The telephone was born.

Guglielmo Marconi 1874 - 1922

Both the telegraph and the telephone systems depended on thousands of kilometres of wire criss-crossing a country. Marconi wanted to find out if it was possible to send 'wireless messages' - messages that did not require wire. In 1894, using electromagnetic waves, Marconi made a bell ring at a distance of 5 metres from his transmitter. By 1899, Marconi had increased the range of his transmitter to 125 kilometres. In 1901, he transmitted the Morse letter 'S' from England to Newfoundland in Canada, a distance of 8,000 kilometres. Marconi had invented the radio.

Modern communications

It is now easier than at any time in history to communicate with other people anywhere in the world. You may want to talk to them or to send them written messages. Telephones, fax machines and computers allow you to do this easily and quickly.

Telephones
Telephones have changed greatly since Marconi's time. Most phones today are still in people's homes and are connected to the outside world by telephone lines. However, they have a number of features which make them easier to use.

They have a *memory* in which you can store the numbers you use most often. A *last number redial* facility allows you to call someone again without having to dial the number again. A *hands-off* facility allows more than two people to take part in a telephone conversation. The greatest advance, however, is the mobile phone.

Mobile telephones
These are different from ordinary telephones. They do not send messages down telephone wires. Instead, they use radio waves and satellite connections. You can carry one with you wherever you go. You can call someone who has a mobile phone anywhere in the world. He can be in a car, on top of a mountain, on a boat or in a field. And you can call from any of these places too.

Fax machines
These can be used to send all kinds of printed information, including pictures, down a telephone line. It is much faster than sending letters by post. However, advances in the design of computers mean that fax machines will probably disappear in the near future.

Computers
Computers have memories that can store a lot of information. They can 'talk' to each other if they are linked by a *modem*. When computers have modems fitted and are linked to a telephone line, information can be sent from one computer to another. The information does not have to be printed on paper. This has led to a new development called *e-mail* (electronic mail). Its main advantage is speed. It can send messages much faster than a fax machine and, of course, very much faster than by post.

Computers have another advantage. Not only can they send information, they can also give you information. This is possible if the computers is linked to the Internet.

Internet
The internet is an international network or web of telephone lines used to exchange information. People set up a store of information called a *web-site*. Each site has a code, a bit like telephone number. Anyone who wants information about a particular subject, such as the pyramids of Egypt, can type this code. The web-site then appears on the computer screen and the caller can look for the information he or she needs. It is possible to get information from around the world. It is also possible to get pictures. You can copy information and pictures into the memory of your own computer.

Discussion
- There are now very small computers that you can carry around with you, a bit like mobile phones. What do you think the result of this will be?
- Can you think of any dangers in using the Internet?

Science reader

How science helps the police

The science that helps the police fight crime is called *forensic* science. When detectives investigate a crime, they look for clues that may lead them to the person who committed the crime - the criminal.

Fingerprints

When you touch something with your finger, you leave behind small traces of moisture. In this moisture is a copy of the patterns in the skin on your finger. This is your fingerprint. Everybody's fingerprints are different, so the technique of fingerprinting is an important aid in fighting crime. At the scene of a crime, the police expert covers the area touched by the criminal with fine dust. This sticks to the moisture in the fingerprint. The police then take prints of suspects, people they think may have committed the crime. These prints are then compared with those found at the scene of the crime. Detectives also use a computer to compare prints from the scene of a crime with others on their records.

Genetic fingerprinting

Our body is made up of millions of cells. They are in our hair, skin, blood and bones. In each cell there is an acid called DNA. This acid determines genetic characteristics such as the colour of eyes, the shape of the face and so on.

DNA patterns. No two are the same. The structure of DNA is like a ladder

The structure of the DNA molecule is different in everybody. This is why every individual has different characteristics.

Genetic 'fingerprinting' is a process which produces a picture of the DNA pattern of human cells. Only a small drop of blood, a hair or a small piece of skin is needed to create a print which can then be compared with one found at the scene of the crime.

Identikit pictures

A witness to a crime is always asked to describe the person who did the crime. The police have many different photographs of the parts of the face. A basic kit consists of 195 hairlines, 99 eyes and eyebrows, 89 noses, 105 mouths and 74 chins and cheeks. The police show the witness these photographs and ask him or her to build up, part by part, a photograph of the criminal's face. Sometimes computer technology is used to make even better pictures.

Discussion

- What is a footprint?
- What is a tyre mark?
- Everybody's DNA and fingerprints are different. What other things are different in everybody?
- Do you know any other ways in which science helps the police?

The human skeleton

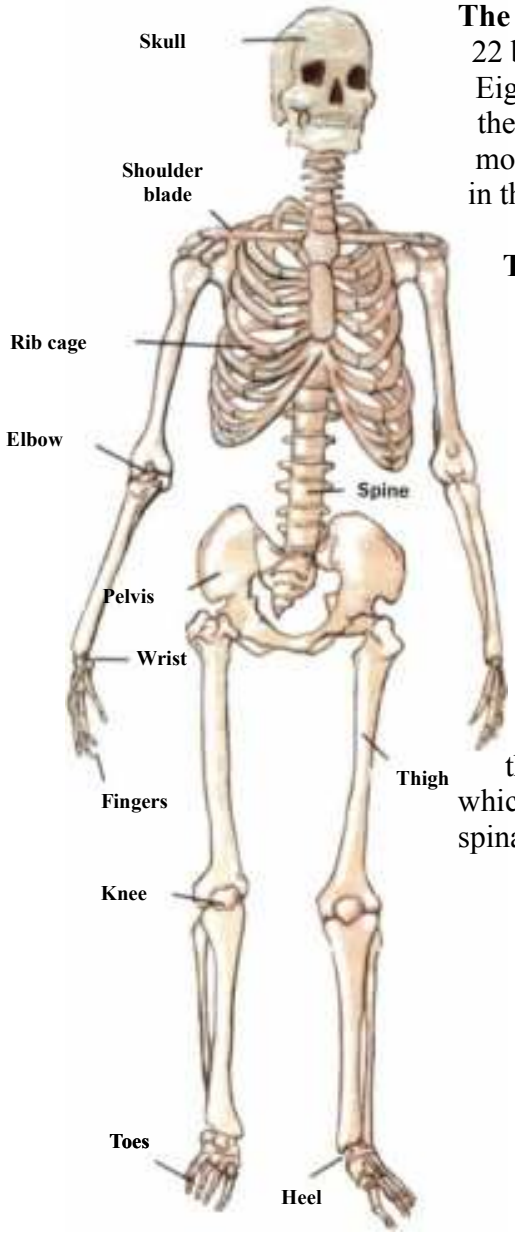
The human skeleton consists of more than 200 *bones* connected at *joints* and held together by *ligaments*. A newborn baby has 275 bones. As the baby grows, some of these bones fuse together to make one bone, which is why an adult has only 206 bones.

Bones They are the hardest tissues in the body, but the inside parts of the bones are soft. They are filled with a fatty substance called *marrow*.

Marrow

Human vertebrae

The spinal cord This is the main *nerve* in the body. It carries messages from the brain, mainly to do with movement. For example, if the spinal cord is damaged in the neck, a person is paralysed; he is not able to move his arms or legs because both are below the area of damage.



The skull There are 22 bones in the skull. Eight of these protect the *brain* and do not move. The other 14 are in the face.

The spine It consists of 26 bones called *vertebrae*. The vertebrae are separated from each other by small *disks*. There is a hole in the middle of each vertebra through which the spinal cord runs.

Joints There are 230 joints in the body. They link bones together and allow the skeleton to keep its shape and, in some cases, to move. There are two kinds of joint. A *hinge* joint allows only backward and forward movement as in the knee, elbow or fingers. A *ball and socket* joint allows a circular movement as in the shoulder or hips.

Hinge joint (knee)

Ball and socket joint (hip)

The rib cage There are 12 pairs of ribs in the rib cage. They protect the heart and lungs and they move as we breathe.

The foot This is one of the most complicated structures in the body. It has to cope with standing, walking and running. It is made up of 26 bones and 33 joints held together by more than 100 ligaments.

Discussion

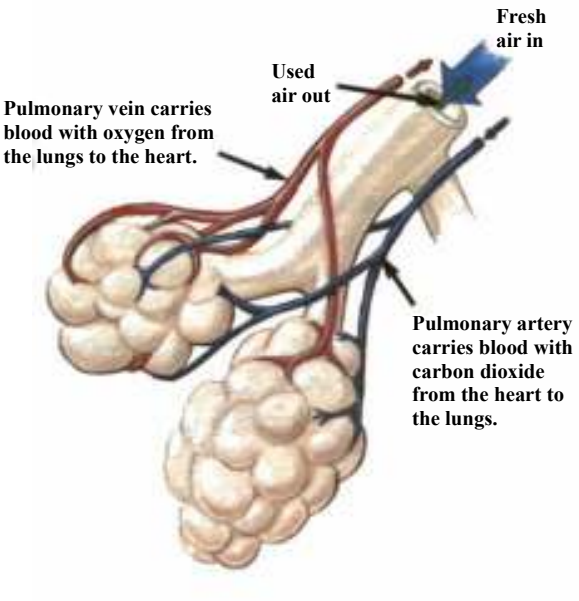
- What should we eat and drink to keep our bones strong?

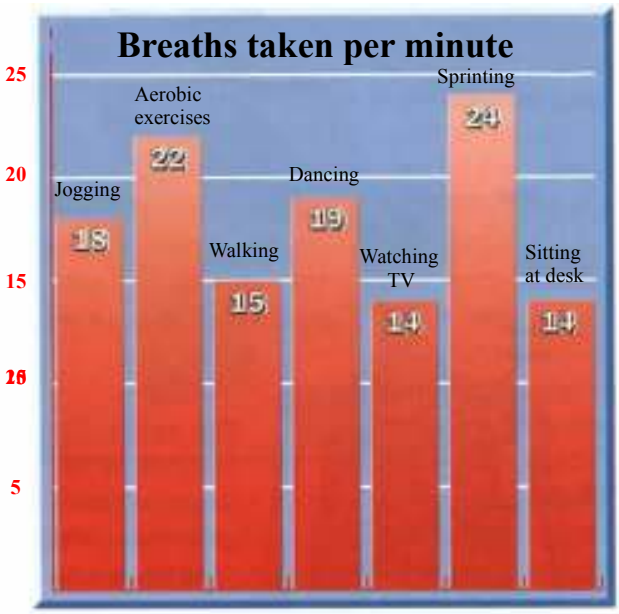
An athlete's training

If an athlete wants to perform at the highest levels, he or she must be perfectly fit. The lungs, heart and muscles are of particular importance and an athlete's training programme is designed to develop these three organs.

The lungs

The job of the lungs is to allow oxygen to enter the blood and to extract carbon dioxide so that the body's cells are not poisoned. Athletes work hard to develop their lung capacity - the amount of air the lungs can inhale in any one breath. The greater the capacity, the better the lungs work.





The heart

The heart is a pump. It pumps blood around the body. The blood contains oxygen and energy. When an athlete is at rest, his heart beats 70 to 80 times a minute. When an athlete is performing, he needs a much greater supply of oxygen and energy, so his heart speeds up and beats 140 to 180 times a minute. An athlete's heart has to be able to reach this faster heartbeat in seconds.

The muscles

Muscles allow us to make movements, so athletes have to develop their muscle. They do this by using different kinds of exercise. A sprinter has to run very quickly for short periods; he exercises to develop his *anaerobic* system. On the other hand, a long distance runner needs strength and stamina more than speed, so he has to develop his *aerobic* system.

Drugs

Drugs can improve an athlete's performance. Stimulants, sedatives and steroids are the most common. Stimulants improve the body's performance over a short period. Sedatives slow down and calm bodily functions and would help an athlete taking part in a shooting competition. The use of drugs in athletic competitions was banned in 1967. Full-scale testing for drugs began in 1972.

Tobacco

Smokers, on average, shorten their lives by one day for every week they smoke. Half of all smokers, on average, die 24 years before non-smokers.

Tobacco smoke contains up to 4,000 different substances. Some of these substances are toxic. This means they are very harmful to the human body.

Substances in tobacco smoke

Tar This is a black, sticky substance that sticks to the lungs. It is now certain that tar is carcinogenic; this means that it causes cancer.

Nicotine Nicotine is a drug and it is highly addictive. Once the body gets used to nicotine, it is very difficult for the smoker to do without it.

Carbon monoxide Carbon monoxide is a gas. The carbon monoxide in cigarette smoke is exactly the same gas that comes out of a car's exhaust. Carbon monoxide prevents oxygen entering the blood.

The effects of smoking

There are a number of smoking-related diseases. Together they cause 111,000 deaths a year in Britain. In other words, one person dies every five minutes. That is the length of time it takes to smoke one cigarette. When you take into account the numbers of smokers worldwide, the number of deaths from smoking must run into millions every year.

The lungs The best-known and the most deadly disease is *lung cancer*. If the cancer is caught in the early stages, an operation to remove the part of the lung affected may save the smoker's life. In most cases, however, the cancer has spread too far and it is too late to do anything. Even if a smoker does not get lung cancer, his lungs will still be damaged and he or she will not be able to breathe property.

The heart Smoking also increases the pulse rate and the blood pressure. This puts an extra strain on the heart which can lead to a *heart attack* and possibly death.

The blood Smoking also affects the circulation of the blood. It decreases the supply of blood to the hands and feet. Heavy smokers run the risk of amputation; their feet or legs may have to be removed to save their lives.

Giving up smoking

More and more people are giving up smoking, but many still and it almost impossible to stop because nicotine is so addictive. Hypnosis has helped some people and nicotine patches are now being used. The patches are stuck to the skin. They release a constant supply of nicotine into the blood. Weaker and weaker patches are used until, in the end, they are not needed at all.

Discussion

- Smoking is now banned in many places: on planes, on buses, in cinemas, in restaurants. Because of the dangers of smoking and of breathing in other people's smoke, should smoking be banned completely; should cigarettes be made illegal?
- How many smokers do you know? Will you tell them to stop smoking?

The World

The total area of the Earth's surface is approximately 510 million square kilometres. The area covered by water is approximately 361 million square kilometres.

This map shows the main geographical features of the world.

Earths facts

Continent	North America	South America	Asia	Europe	Oceania	Africa
Highest mountain	Mckinley 6194m	Aconcagua 6960m	Everest 8848m	Elbruz 5633m	Wilhelm 4694m	Kilimanjaro 5895m
Longest river	Mississippi 6231km	Amazon 6437km	Yangtze 5470km	Volga 2293km	Murray 2575km	Nile 6670km

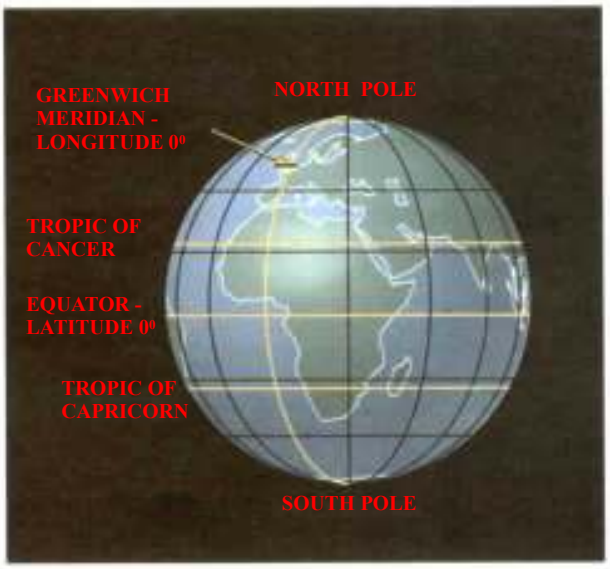
Lines of longitude and latitude

This is a system of measurement for defining the exact positions of places on maps and charts. A position longitude is a distance east or west of the Greenwich meridians. Lines of longitude are also called meridians. A position latitude is a distance north or south of the Equator.

Examples:

Amman: Longitude 36 degrees east
Latitude 32 degrees north

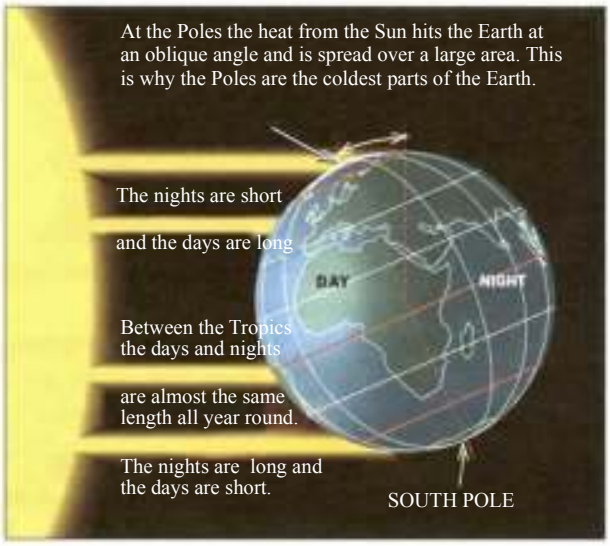
Buenos Aires: Longitude 58.3 degrees west
Latitude 34.3 degrees south



Look at your atlas. Can you give the position of your capital city like this?

The movements of the Earth

The Earth moves in two ways. It turns on its own axis, each rotation taking 24 hours. It also moves round the Sun, each orbit taking a year.



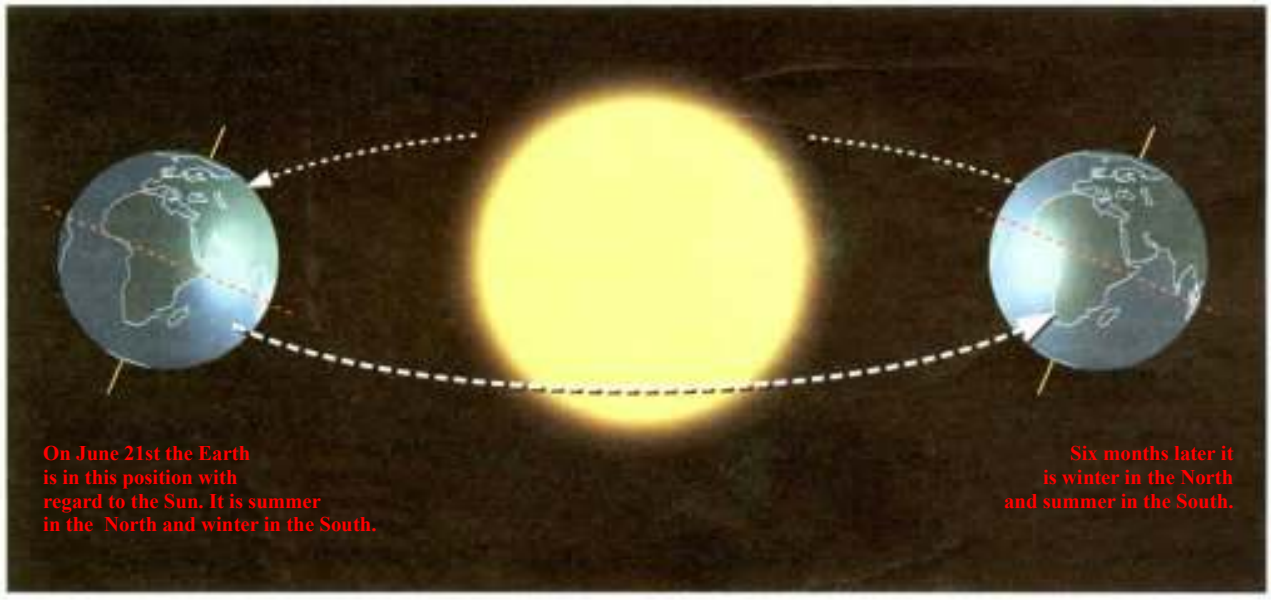
The Earth's rotation

The Earth axis is an imaginary line running through the centre of the Earth from the North Pole to the South Pole. The Sun lights only one side of the Earth so, as the Earth turns, some sections of it move into light, others into darkness.

The Earth's axis is tilted at an angle of 23.5 degrees from vertical. This explain why at any one time of the year days and nights are of different lengths in different parts of the world and why some parts are warmer than others.

The Earth's orbit

The diagram below explains the seasons. When it is summer in the Northern hemisphere, it is winter in the Southern hemisphere; six months later, it is winter in the north and summer in the south.



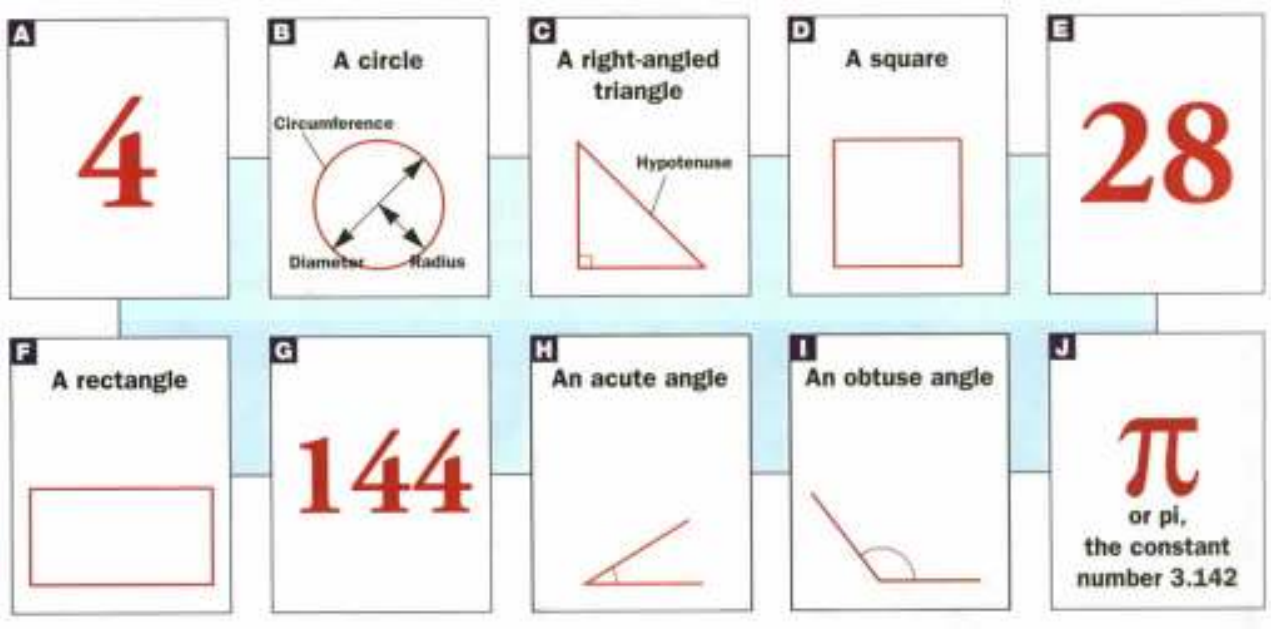
The Tropics

The Earth's orbit of the Sun lasts one year. As the planet moves round the Sun, the position of the Sun appears to change. At one time of the year the midday Sun is high in the sky, at another it is lower. The point on the Earth at which the Sun appears to be directly overhead in summer is called the Tropic of Cancer in the northern hemisphere. In the southern hemisphere this point is called the Tropic of Capricorn. Early cartographers drew lines at these points on their maps of the world. The area between the lines is called the *Tropics.*

Mathematics

Match these definitions with the examples below.

1 A three-sided figure in which one of the angles is 90 degrees.
2 The distance across the centre of a circle.
3 An angle less than 90 degrees.
4 A four-sided figure with all sides the same length and each angle 90 degrees.
5 The sum of twenty-three and five.
6 An angle between 90 degrees and 180 degrees.
7 In a circle, the distance from the centre to the edge.
8 In a right-angled triangle, the side opposite the right angle.
9 The distance round a circle.
10 The square of twelve, or twelve squared.
11 The circumference of a circle divided by the diameter.
12 The square root of 16.
13 A four-sided figure with opposite sides equal and parallel and each angle 90 degrees.



Roman numbers
In the Roman system, numbers are represented by letters. For example, V equals 5 and M equals 1,000. There is no symbol for zero.

Arabic numbers
Modern Arabic numbers were developed from an ancient Hindu system by Muhammed Ibn Musa Al-Khwarizmi, a famous Arab mathematician. His system is a decimal system, based on the number 10 and multiples of 10. Units are represented by the symbols 0 and 1 to 9. Unlike Roman numbers, large Arabic numbers are arranged in columns. Each column is worth ten times more than the column to the right of it. 4,692 means four thousands, six hundreds, nine tens and two units.

The four basic functions of arithmetic are adding, subtracting, dividing and multiplying. It is much easier to carry out these functions with the Arabic system than the Roman one. It is also easier to work with fractions in a decimal system. For example, three and half is written as 3.5 (three point five); two and a quarter as 2.25 (two point two five). Added together, they make 5.75 (five point seven five).

In 820, Al-Khwarizmi wrote the famous textbook. *The Science of Calculation and Reduction*. In it he described a procedure for solving equations, which became the basis for computer programming. The procedure is called the algorithm after him.

Computers

A computer is a machine which processes data. It is given data and a program that tells it what to do with the data. It works on the data and produces results or answers. In the1960's a computer filled a very large room. Today, a computer with the same power takes up the same space as a typewriter. Portable computers, called *laptops, notebooks or palmtops*, are even smaller.

Computer terminology

Hardware The computer equipment including the computer itself, the printer, keyboard, mouse and modem.

Program A set of instructions that tells the computer what to do.

Software Computer programs, stored on disk.

Data Information that is fed into the computer and information that the computer produces.

Input The data put into the computer.

Output The results produced by the computer.

Memory There are two types of memory inside the computer. *ROM* is a permanent store of instructions that tell the computer how to work. The instructions are built into the computer when it is made and cannot be changed. *RAM* is the second type of memory. This is where the computer stores all the input and output data temporarily. Unlike *ROM*, the data stored in *RAM* can be constantly changed or deleted. Therefore, it is important. to save your work at regular intervals and to keep a copy of it on disk before you switch off the computer. (See ***Disk***)

Disk A magnetic device which stores data from the computer's *RAM*. There are two types of disk. A *floppy disk* is put into the computer 's *disc drive* when more data is needed or when it is necessary to *store* (save) data. It is also used to transfer data to another computer. A *hard disc* does the same job, but it is built into the computer. It holds more data than a *floppy disk* and works much faster.

VDU (Visual Display Unit) A device like a TV screen which displays information from the computer. It is also known as a *monitor*.

Mouse A device used to input commands or instructions. Not all computers use a *mouse*. Some use a *keyboard* instead.

Some computer add-ons

With modern multimedia technology, you can combine words, pictures and sounds on one computer.

Modern A modern is a device which is used to connect a computer to a telephone line. Then information can be sent directly from one computer to another.

A CD -ROM is a compact disc with read-only memory. It can only be read and it cannot be changed in any way. This disk looks the same as the music CD which you can buy if you have a CD player. However, you cannot use a CD-Rom on an audio CD player. It has to be used on a computer that has a CD-ROM drive.

It can store huge amounts of information of all kinds - words, pictures, drawings and games. A whole encyclopaedia can be stored on one disk. So, you can use a CD-ROM for fun and entertainment of for learning.

Program and *disk* are American spellings of *programme* and *disc*. In British English, these spellings are used only in connection with computers.
Input is also a verb. We talk of 'inputting work into our computers.'

Find out what *lap* and *palm* mean. Why were *laptops* and *palmtops* given these names?

Discussion

- "Computers are programmed; people are not." What advantages does this give us over computers?
- What can we do that computers probably never will?

Malaria

In the 1950s, scientists thought they had also won the war against malaria, but this year more than 300 million people will get malaria. Between one and two million people will die from it. Malaria is back.

The cause
Malaria is caused by parasites carried by mosquitoes. They are injected into the bloodstream and immediately make their way to the victim's liver. They stay there and reproduce for a week or two. At the end of that time, the infected liver cells burst and release a much greater number of parasites reach the brain. People often die when this happens, particularly children under five years of age.

The carrier
The female mosquito, the *Anopheles*, is the carrier. She carries hundreds of malarial parasites in her intestine and she feeds on human blood. Her victim does not usually feel her bite because, as she bites, she injects a few drops of her saliva which acts as an anaesthetic. It is her saliva that transmits malarial because it is her saliva that contains the malarial parasites.

The history
The fight against malaria has been going on for many years. A drug called *chloroquine* was developed during World War II. It killed the parasite which causes malaria. It was based on *quinine*. At the same time, an insecticide called DDT was used to kill the mosquito that carried the disease. Not all the parasites or the mosquitoes were killed, however. Those that lived changed and became resistant to the drug and to the insecticide. Other drugs, all using quinine, were developed, but the parasite kept changing and learning how to fight every new drug. In the same way, the mosquito became resistant to new insecticides.

The future
For more than 2,000 years, the Chinese have been treating malaria with a substance called *artemisinin*, which comes from a plant. Scientists have found a way to manufacture artemisinin synthetically or artificially. Because it is not based on quinine, the parasite does not 'know' it and therefore does not know how to fight it. Which will happen first? Will artemisinin get rid of the parasite, or will the parasite develop some form of protection against artemisinin? Only time will tell.

Discussion
- The word malaria comes from the Italian words *mala aria*. They mean bad air. Why did the diseases get its name?

The polar regions

Areas which have less than 25 centimetres of precipitation per year are classified as deserts. Such areas are usually very hot, but at the top and bottom of the world there are two frozen deserts; the Arctic in the north and the Antarctic in the south. These regions are very cold. The average temperature in winter is 30^{0} C below zero and the lowest temperature ever recorded in Antarctica is minus 90^{0}C. In a year, little new snow falls here. In the coldest parts, the snow never melts.

The Arctic - the frozen ocean

The Arctic is that part of the world inside the Arctic Circle or latitude 66.32^{o} north. In the middle of it is the most northerly point on earth, the North Pole. Apart from Greenland and the northern parts of Russia, Scandinavia, Canada and the USA, the Arctic consists of the Arctic Ocean, most of which is permanently frozen.

Did you know...?

The Arctic was named by the Greeks a long time ago. In Greek the word means 'bear'. Why did they give this name to the region?

People, animals and plants

The most famous inhabitants of the area are the Inuit, who live in Greenland and Canada. They protect themselves from the harsh climate by wearing animal furs and live by hunting animals and by fishing, sometimes through holes in the ice, sometimes on the sea in their kayaks. Traditionally, the Inuit live in igloos, houses made from snow, a material easily found in the Arctic.

The animals that live there have also adapted themselves to the cold. The polar bear, which is found only in the Arctic, is white so that it cannot be seen by its enemies. In winter the Arctic fox changes colour from brown to white as a camouflage in the snowy desert. All the larger animals have thick layers of fat and fur to keep the heat in and the cold out.

In the land areas of the Arctic, plants also protect themselves from the cold. Some stay under the snow as seeds; others contain chemicals that prevent them from freezing. During the short summer, when the snow melts, grass grows and many kinds of bright flowers bloom.

Antarctica - the frozen continent

Inside the circle of latitude 66.32^{o} south is Antarctica. It is one of the coldest, driest and most inhospitable places on Earth. The temperature frequently falls below minus 60^{o} C and there is rarely more than 5 or 6 centimetres of snow per year. It is a huge continent, more than 13,000,000 square kilometres. (That is approximately three times large than the Arabian peninsula.) It is almost entirely covered with thick ice, in places five kilometres thick. Nobody has ever lived there permanently. In the last century and in the early years of this century, fisherman and explorers visited the continent, but were not able to adapt to the terrible conditions.

Wildlife and plants

Since this frozen continent is separated from any other land by many hundreds of kilometres of sea, there are no land animals in Antarctica, only seals and birds that live mainly on fish. Penguins, which are found only in Antarctica, lay their eggs on land, but depend on the sea for their food. Like animals in the Arctic, animals here are protected from the cold by thick layers of fat, called blubber.

On average, temperatures in Antarctica are lower than in the Arctic; as a result, there is comparatively little plant life.

Oil

The world's oil fields
The areas where oil is found are called oil fields. The world's most important oil fields are in the Middle East, North Africa, North America and Russia.

AN OIL-WELL

An oil reservoir may be several kilometres underground. Wells can be dug to get to water, but it is impossible to dig a well deep enough to get to oil. To reach oil, a tower called a drilling rig has to be constructed first. A drilling bit is used to drill or bore a hole through the layers of rock in the same way as a hole is drilled through wood. The bit is attached to the end of a long piece of pipe, held in position by the drilling rig. The pipe is turned by a motor. As the hole is bored, the pipe sinks into the ground. As the well goes deeper, sections of pipe are added to make one continuous pipe thousands of metres long. The deepest wells are over 5 kilometres deep. The oil under the ground is under pressure. When the oil-men find, or strike oil, this pressure pushes the oil up the bore-hole. If the pressure is very strong, the oil can rush up the bore-hole very fast. To stop the oil escaping, valves are placed over the top of the bore-hole. The flow of oil can then be turned on and off like the flow of water from a kitchen tap.

From rock to refinery
Petroleum is a natural oil that is found in rocks underground. The word 'petroleum' is made up of two words, the first meaning 'rock', the second meaning 'oil'. Petroleum, or oil, as it is usually called, was formed from animals and plants that died millions of years ago. Their remains mixed with sand and mud. This mixture was then covered by layers of heavy rock. Under pressure, the plant and animal remains turned into a thick , dark liquid consisting of hydrocarbons, sulphur, oxygen and other elements.

Finding oil under the ground is difficult. Geologists are people who study rocks and can recognize the kind of rock that is likely to contain oil. They carry out surveys to find the right kind of rock. Then an exploratory well is drilled. If oil is struck, more wells are drilled in the same area and oil production begins.

The oil that comes out of the ground is known as crude oil; it needs to be refined or cleaned at a refinery before it can be made into petrol, chemicals and other products. Oil refineries are often in different countries from the oil fields. For the first part of its journey to a refinery, the oil is pumped from the rig through long pipelines to huge tanks where it can be stored. These places are called terminals and are usually on the coast because, for the next part of the journey from rig to refinery, the oil travels by sea. At the terminal the oil is put onto tankers, huge ships that carry oil all over the world.

A BARREL

Oil is sold in units called 'barrels'

Discussion
- How many litres are there in a 'barrel' of oil?
- What things are made from oil?

Energy sources of the future

In the modern world we depend on electricity to drive our industries and to give light in our homes. At the moment oil, coal and gas are used to generate most of the world's electricity, but these fuels are not renewable. What will we do when they run out? Scientists are already looking at alternatives - other sources of energy.

Electricity from the sun

The sun has always been an important energy source. Solar energy is clean, safe and renewable. However, it is expensive to collect and store. Solar power is useful for heating water in the home, but it cannot generate enough electricity for modern industry.

Solar panels collect the sun's energy.

An old source - a new use

The wind, like the sun, is an old source of energy. Windmills have been used for centuries to pump water and to grind corn for flour.

Modern wind generators turn the power of the wind into electricity

They are still used to do these things, but not they are also used to generate electricity. The problem is that wind power is available only when the wind is blowing. The wind, of course, is free. However, wind generators are expensive to build and you need lots of them to make enough electricity for a city. Using the wind as an energy source is a good idea, but it cannot provide us with all the electricity the we need.

Streams of energy

Water covers most of the earth's surface. Rivers and streams, the waves and tides of the sea all provide an endless source of clean, safe energy. However, to use rivers for generating electricity, it is necessary to build large dams and to cover large areas of land with water. This land could be used to grow food. Wave power also has disadvantages. To generate large amounts of electricity, you would have to build wave generators hundreds of kilometres long. These generators would be a danger to coastal shipping. They would also be very ugly. So, although it is everywhere and although it is free, water cannot replace oil, coal or gas.

Getting electricity from rivers.

NUCLEAR POWER

In a nuclear power station radioactivity is used to generate electricity.

Discussion

- Which of the above alternative energy sources could be used in Yemen?
- Would it be good for the country to use alternative energy sources? Why? Why not?

SCIENCE 13

Sun, sea and land

Read about how these things help provide the conditions necessary for life on earth.

THE SUN

The sun provides us with light and heat. We need both of these to live, but we need them in the right amounts. Two layers of gases in the earth's atmosphere make sure that we get both light and heat in safe quantities. Sunlight contains ultra-violet rays, which can cause skin-cancer, blindness and can even kill. These rays can also damage plants. 15 to 40 kilometres up in the atmosphere, a layer of ozone gas stops most of the harmful ultra-violet rays reaching the earth's surface, and so protects life. Below this ozone layer is another layer of gases, mostly carbon dioxide (CO_2). The heat from the sun goes through this layer and reaches the earth. Heat rays bounce back off the surface. Some go back through the layer of CO_2 into space. However, some rays are trapped by the CO_2 and it is these trapped rays that keep the earth warm.

THE SEA

Apart from providing us with food, the sea affects out weather. The heating and cooling of the sea help decide the pattern of our winds. Secondly, most of our rain comes from the sea. The heat of the sun evaporates the surface water, turning it into water vapour. The water vapour rises into the air and forms clouds. The clouds are then driven upwards by air-currents or winds. As they rise, they become cooler and the water vapour condenses. It then falls as rain. A great part of the rainfall finds its way into rivers and eventually returns to the sea.

THE LAND

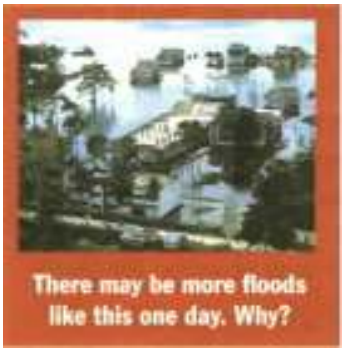
Trees and plants are essential to life on earth. People and animals breathe in oxygen and breathe out carbon dioxide. Trees do exactly the apposite, so there is a perfect balance between animal and plant life. Plants, of course, are our greatest source of food. They also help to save life because they provide cures for many of our illnesses. More than half the drugs we use today originally came from plants. Most of these medicinal plants are found in the great tropical rainforests of South America, South East Asia and Africa.

Man - the destroyer

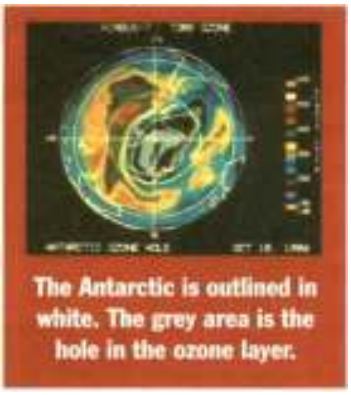
The Greenhouse Effect
A greenhouse is made mostly of glass and is used for growing plants. The glass traps some of the sun's heat and raises the temperature inside. The thicker the glass, the more heat is trapped.

The layer of CO_2 in the earth's atmosphere acts like a greenhouse. It keeps some of the sun's heat in and warms the earth. Two everyday human activities have greatly increased the amount of CO_2 in the atmosphere. These are burning fossil fuels - coal and oil - and using motor cars. Burning wood has the same effect; it also reduces the number of trees available to change CO_2 into oxygen. In all, we release 6 billion tonnes of CO_2 into the atmosphere every year. As a result, the layer of CO_2 is getting thicker and thicker and the world is getting warmer. This is called the Greenhouse Effect.

Warmer weather will bring more evaporation and, therefore, more rain. As the sea warms up, it will expand. In addition, the ice at the North and South Poles may begin to melt. If this happens, the level of the sea will rise. The land will change too. Areas that now produce crops could become deserts.


There may be more floods like this one day. Why?

Chlorofluorocarbons
CFCs, or chlorofluorocarbons, are man-made chemicals. They are used in aerosol sprays, fridges and air-conditioners. They are also used in making plastic foam for soft furniture and for packaging goods sold in shops. In the 1970s, scientists warned that CFCs could attack the ozone layer that protects us from dangerous ultra-violet rays from the sun. In 1985, a hole opened up in the ozone layer over the Antarctic. It is as big as the USA and as deep as Mount Everest. According to scientists, the more CFCs we release into the atmosphere, the bigger the hole will get. Recently, 3% of the ozone layer over the North Pole disappeared and it seems that the layer over northern Europe is getting thinner.


The Antarctic is outlined in white. The grey area is the hole in the ozone layer.

The disappearing rainforests
One of the largest tropical rainforests in the worlds is in Brazil, in South America. In 1988, 75,000 square kilometres of forest were destroyed. The trees were either burned or cut down. More of the forest disappears every year. Cattlemen burn the forest to clear areas to grow grass for their cattle. The CO_2 released by the burning trees adds to the Greenhouse Effect. Timber companies cut down the trees and sell the wood. When the forest is destroyed, plants that could be important in curing disease also disappear. If the cutting and burning continues, this rainforest could disappear in ten years.

Discussion
- If the level of the sea rose by 1 1/2 metres, how would this affect Yemen?

Modern telecommunications

Tele is a Greek word. It means 'far' or 'at a distance', so *telecommunication* means 'transferring' or 'exchanging information over a distance'.

How many English words beginning with *tele* do you know?

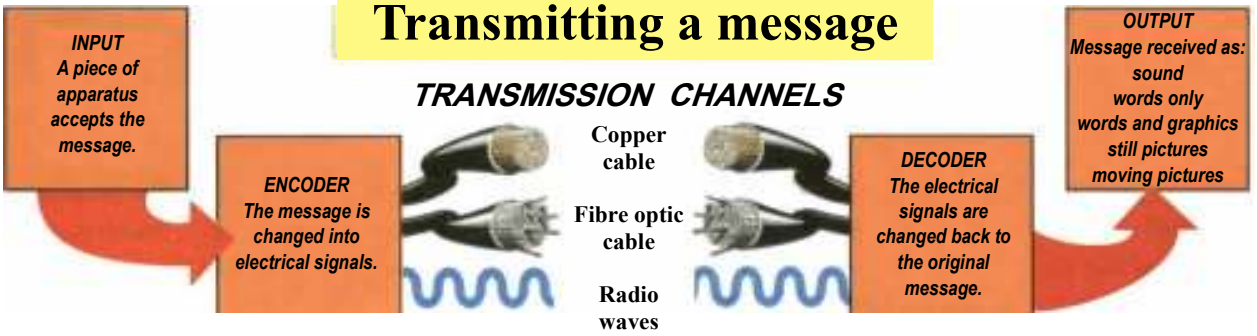
A telecommunications system consists of the following:

A transmitter The apparatus or equipment that is used to send the message.

A transmission channel This carries the message in the form of electrical signals.

A receiver The apparatus that receives and outputs the message.

Transmitting a message



What form of output do you get from these pieces of apparatus?

Modern telephones As well as the human voice, today's telephones can transmit words, pictures and computer data. Sometimes the messages travel a short distance along a cable; sometimes they are sent by radio and satellite to the other side of the world.

Mobile telephones These are small, portable, radio telephones that can used anywhere in the world to call anywhere in the world. Some have built-in palmtop computers and can be used to send fax messages and computer data. They are usually called just 'mobiles'. So, someone may say: *Call me on my mobile, please.*

e-mail (electronic mail) This is a system of sending messages from one computer to another using a modem. It is, of course, much faster than sending a letter by post.

Internet The Internet is an international network or web of telephone lines used for exchanging information. People set up a store of information called a *web-site*. Each site has a code, a bit like a telephone number. Anyone who wants information about a particular subject can call up the Internet on a computer, type this code and look for the information they want on the side. The internet is also called the *world-wide web or www* for short.

Fax machine This machine transmits text and pictures on sheets of paper. Copies are produced by the receiving machine.

Discussion

- How many other words beginning with *tele* do you know?
- How does Satellite TV work?
- When talking about modern telecommunications, people often use the words 'world village'. What does this mean?
- What is a videophone? Would you want to use one?