



ДОНСКОЙ ГОСУДАРСТВЕННЫЙ ТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ
УПРАВЛЕНИЕ ДИСТАНЦИОННОГО ОБУЧЕНИЯ И ПОВЫШЕНИЯ
КВАЛИФИКАЦИИ

Кафедра «Иностранных языков»

Учебное пособие

по развитию навыков чтения и понимания
текстов для обучающихся по техническим
и экономическим направлениям
подготовки бакалавров

«Иностранный язык (английский)»

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Аннотация

Учебное пособие предназначено для бакалавров 1 и 2 курсов всех направлений подготовки в неязыковом вузе, продолжающих изучать английский язык, рассчитано на аудиторную и самостоятельную работу. Данное учебное пособие ставит перед собой задачу формирования навыков чтения и понимания. Пособие состоит из двух частей. Первая часть включает в себя тексты и статьи информационные, научные, художественные, публицистические. Вторая часть представляет собой тексты профессионально-ориентированные, посвященные языку для специальных целей (LSP), учитывающие особенности специальности. Данные тексты ориентированы на изучение профессиональной лексики и терминологии, на общение в сфере профессиональной деятельности.

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ВВЕДЕНИЕ

Предлагаемая тематика материала для чтения позволит расширить, углубить знания студентов в той или иной области жизни и в способе языкового выражения тех или иных понятий и реалий.

В данном учебном пособии предлагаются различные упражнения по работе с текстами, которые способствуют более глубокому осмыслению новых явлений, фактов о жизни и культуре страны изучаемого языка. Учебное пособие направлено на развитие навыков в рамках просмотрового, ознакомительного, изучающего и поискового видов чтения, что позволяет наиболее плодотворно взаимодействовать с информационными ресурсами.

Работа с данным учебным пособием позволит учащимся оптимизировать процесс усвоения языкового и речевого материала.

Учебное пособие по английскому языку предназначено для бакалавров 1-2 курсов всех направлений подготовки в неязыковом вузе, продолжающих изучать английский язык, рассчитано на аудиторную и самостоятельную работу.

PART I

1.1 General English

Text №1

GREAT PLACES TO VISIT

1. Look at the title of the text and the pictures.

- What do you think this text is about?
- Do you like to travel?
- What places did you visit? What places did you like most of all?

2. Read the following text carefully.

Each month, National Geographic Magazine asks an editor from one of its international editions to answer the question. What are the best places to visit in your area of the world?

Yung Sltih Lee, the editor of National Geographic Taiwan, thinks the sights below are some of the best places to visit in Taiwan. Would, you like to visit these places?

Shih-lin Night Market



"This market is the center of Taiwanese nightlife on the north side of Taipei. It's very different from the morning markets where people shop for food to cook at home. At the Shih-Iin Night Market, people show up to have a snack or drink, buy a few things, and just hang around. Life really begins around 6 p.m. And can go on until three in the morning. On weekends the market

is open even later."

Taroko Gorges



"The word taroko means "beautiful" in the language of the Atayal people and that's exactly what the Taroko Gorge is. Visitors can take a train or a 30-minute flight from Taipei to visit this natural wonder. 12-mile (19- kilometer) bus tour takes passengers through the gorge, making stops for riders to walk through man-

made tunnels or enjoy the scenic views."

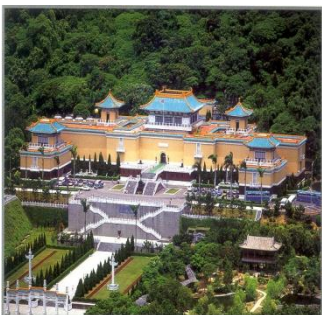
Lan Yu (Orchid Island)



"This small island about 40 miles (60 kilometers) southeast of Taiwan is home to the native Yami people. It is one of the few places in Taiwan where the traditions of native people are still well preserved. Tourists can stay in island hotels or arrange to stay in a Yami family's home. Lan Yu is

also home to many species found nowhere else in the world. Its beautiful coral reefs are also great for scuba diving."

The National Palace Museum



"When the Chinese Nationalists lost the civil wars in the late 1940s, they went to Taiwan, taking the imperial treasures with them. These treasures are now housed at the National Palace Museum in Taipei. It's the best collection of Chinese artifacts in the world. So if visitors want to know more about the cultural heritage of China, this is the place to go. However, it takes a few days

to see the museum at a leisurely pace."

3. Multiple choice. For each item below, circle the best answer:

1. This reading is primarily about:
 - a. beautiful places to visit in one city
 - b. good places to visit in Taiwan
 - c. good places to visit around the world
2. The author's purpose in writing this article was to:
 - a. give useful information about interesting places in Taiwan
 - b. tell an interesting story
 - c. help people understand the history of Taiwan
3. You can infer that the National Palace Museum is:
 - a. small
 - b. large
 - c. new
4. You can infer that Lan Yu (Orchid Island):

- a. has a lot of natural beauty
 - b. is a crowded place
 - c. is a modern place
5. In 1 paragraph of the text, the word sights means:
- a. ability to see
 - b. views
 - c. places

4. Use the information in the text to complete the chart below:

Places to visit in Taiwan	What can you do and see there
Shih-lin Night Market	1. You can have a snack or drink 2. You can see a lot of people. 3. 4.
Taroko Gorges	1. 2. 3. 4.
Lan Yu (Orchid Island)	1. 2. 3. 4.
The National Palace Museum	1. 2. 3. 4.

Text №2
THE GHOST PILOT

1. Complete the table:

Things I know about the ghost pilot	Things I don't know about the ghost pilot	Things I am not sure about the ghost pilot
1. 2.	1. 2.	1. 2.

2. Read the following text carefully.

Just before midnight on December 12, 1972, Eastern Airlines Flight 401 fell out of the sky. The airplane crashed in the Everglades area of Florida. Of the 176 people on board, 99 died, including the airplane's pilot, Bob Loft, and the flight engineer, Don Repo.

About three months after the crash, a high-ranking executive of Eastern Airlines boarded an aircraft for Miami, Florida. He spotted a man in a pilot's uniform sitting alone in the first-class section and went to sit down beside him. The executive struck up conversations with the captain. After a few minutes he realized that he was talking to the pilot Bob Loft. Then the pilot faded away.



A week later, an Eastern Airlines pilot and two of his crew went into a staff room at John R Kennedy Airport, in New York. They all saw Bob Loft in a chair. He talked to them for a while, then vanished. The men were so shocked that the airline had to

cancel their flight.

Three weeks later, a passenger was sitting in the first-class section of a flight to Miami. She was worried about the man in an Eastern Airlines uniform sitting next to her. His face was white and he looked ill, so she called the flight attendant.

The flight attendant leaned down to speak to the man but he ignored her. Then, as she touched his arm, he slowly faded away, leaving only an empty seat.

When the plane landed in Miami, the passenger was taken to a hospital in a state of shock. Later when she saw photographs, she identified the ghost as flight engineer Don Repo.

Over the next few months, more than ten flight attendants claimed to see Don Repo. The ghost seemed to appear more often on some aircraft than on others. Rumors began to spread that he appeared only on planes with replacement parts from the crashed Flight 401. It was usual practice for an airline to use undamaged parts from a crashed plane in another plane if they passed strict safety tests.

The stories must have worried the bosses of Eastern Airlines. They ordered their engineers to remove from their planes all equipment from the 401 wreck. It seemed to work. When all of the parts from Flight 401 had been removed, Bob Loft and Don Repo left

Eastern Airlines and their aircraft, in peace. No one has seen their ghosts since.

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Don Repo and Bob Loft died in an airplane crash.
2. We don't know why Flight 401 crashed.
3. The ghost of Don Repo appeared on all Eastern Airlines flights.
4. More than one person saw the ghost of Bob Loft.
5. All of the people who saw the ghost of Don Repo and Bob Loft were airline employees.
6. The word *spotted* in 1 paragraph means talked to.
7. You can infer that Flight 401 was probably using undamaged parts from another aircraft.

4. Read this summary of "THE GHOST PILOT" and add the missing words.

Summary

The GHOST PILOT is a story about some strange things that happened after Flight 401 c_____ in 1972. Several months after the accident, a number of people saw Bob Loft and Don Repo, the pilot and flight engineer of Flight 401 who d_____ in the crash. For example, an airline executive saw Bob Loft in the first-class s of an airplane. An airplane pilot saw Bob Loft in an airport s_____. Some people thought the two ghosts appeared only on flights with r _____ parts from the crashed Flight 401. After the engineers r_____ the replacement parts, Bob Loft and Don Repo stopped appearing.

Text №3

THE SCOOP AND TIGER

1. Read the following text carefully.

A man has been rescued from a near-fatal attack by a tiger in northern Malaysia by his wife.

She entered the **fray** wielding a wooden soup **ladle** at the tiger – which fled.

Tambun Gediu, now badly lacerated and recovering in hospital, had tried hitting the tiger away in vain and says his wife saved his life.

Wildlife rangers plan to **track** the tiger and send it further into **dense, unpopulated** jungle in the northern state of Perak.

"I was trailing a squirrel and **crouched** to shoot it with my blowpipe when I saw the tiger.

"That's when I realised that I was being trailed," Mr Gediu said after surgery.

The tiger **pounce** not far from the Gediu home in a jungle **settlement** of the Jahai tribe.



Mr. Gediu had tried climbing a tree to escape the animal, but was dragged down by the tiger.

His wife, 55-year old Han Besau, rushed out of the kitchen on hearing his screams and used the kitchen **implement** to good effect.

"I was terrified and I used all my strength to punch the animal in the face, but it would not **budge**," the New Straits Times newspaper quoted him as saying.

"I had to wrestle with it to keep its jaws away from me, and it would have clawed me to death if my wife had not arrived."

It was the first time anyone in the village had been attacked by a tiger.

The director of the Department of Wildlife and National Parks in the state, Shabrina Mohd Shariff, estimated that there were about 200 tigers in the jungles of Perak.

She added that five had been spotted near the major East-West Highway in the region.

Source: <http://www.bbc.co.uk/news/world-asia-pacific-12446232>

2. Decide whether these statements are True (T) or False (F). You have to explain orally when it's false:

- A tiger almost killed a man in northern Malaysia.
- The man hit the tiger and saved his wife's life.
- Wildlife rangers are going to find and kill the tiger.
- No people live in the jungle in the northern state of Perak.
- When he saw the tiger, the man shot it with his blowpipe.
- The man and his wife live in the jungle.
- His wife was in the kitchen when the tiger attacked him.
- Tiger attacks are common in that area.

3. Turn the following passive sentences from the text into active ones. Notice how the focus shifts from the action to the doer of the action.

1. A man has been rescued from a near-fatal attack by a tiger in northern Malaysia by his wife.

2. That's when I realised that I was being trailed.
 That's when I realised that

3. Mr. Gediu was dragged down by the tiger.

4. It was the first time anyone in the village had been attacked by a tiger.
 It was the first time

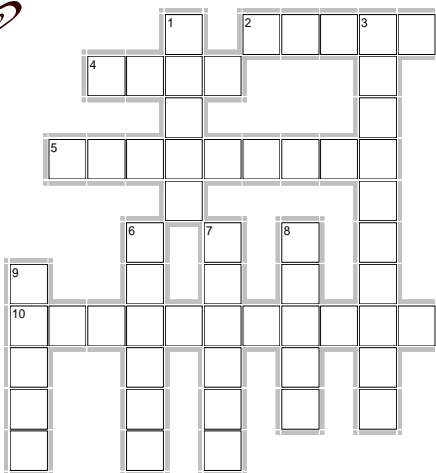
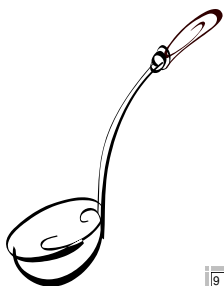
5. She added that five had been spotted near the major East-West Highway in the region.
 She added that

4. Role play

Student A: You are a reporter interviewing Mr. Gediu about the incident.

Student B: You are Tambun Gediu talking to a reporter about the incident.

5. Match the underlined words in the text with the definitions below and solve the crossword.



EclipseCrossword.com

Across

2. with a lot of trees growing close together (adj)
4. a fight (n)
5. a tool, or a simple piece of equipment (n)
10. with no people living there (adj)

Down

1. a large deep spoon with a long handle (n)
3. a small village (n)
6. to move your body close to the ground by bending your knees (v)
7. to jump quickly in order to catch something (v)
8. to find a person or animal by following the marks they have left behind (v)
9. to move slightly (v)

6. Here is a summary of the news article. Fill in the gaps with the correct articles, definite (the) or indefinite (a).

_____ man has been rescued from _____ teeth of _____ tiger in northern Malaysia by his wife and one of her cooking utensils.

Tambun Gediu was outside near his home when he was attacked by _____ tiger. When he tried to climb _____ tree to escape it, _____ animal dragged him back down.

But when Gediu's wife used her wooden soup ladle to hit _____ tiger on _____ head, it fled _____ scene.

Wildlife rangers plan to track _____ beast and send it further into _____ unpopulated jungle nearby.

**Text №4
OCTOPUSES**

1. Read the following text carefully.

What do three hearts, eight arms and one huge brain add up to? An octopus, a creature that can do amazing things.

Octopuses are extremely intelligent. They have even learnt a few tricks to get them out of sticky situations, as for example, when it is afraid of a predator. As octopuses don't have teeth or sharp claws to defend themselves, they hide themselves in the sand on the bottom of the ocean floor. Do you want to know how they do that? Well, the octopus is like a chameleon because it can change the color of its skin to match the sand. This color change happens in less than a

minute. Some octopuses like to stay in more shallow water where there are rocks and coral. Because octopuses are invertebrates, they can squeeze themselves into small spaces between the rocks to get out of reach of predators. Another way an octopus can hide is by shooting ink. An octopus uses a part of its body called a siphon to shoot ink into the water. The ink forms a cloud that hides the octopus. It's like a magician doing a vanishing act.

If an octopus is being attacked, it can actually make itself look like a venomous sea snake. It will bury itself in the sand, keeping two arms visible. It will change the color of those arms to match a sea snake. But if there's no time to hide? If an octopus is in trouble, it can



break off one of its arms. The arm will then change colors and squirm around the water to distract the predator while the octopus swims away to safety. Don't worry though. The octopus's arm will grow back. There is one kind of octopus that has venom to use in defense. The blue-ringed octopus is tiny; it could fit in the palm of your hand. Predators might think this size makes the octopus a great snack, but they know

to stay away. The blue-ringed octopus is very poisonous and can kill predators much larger than it, including humans.

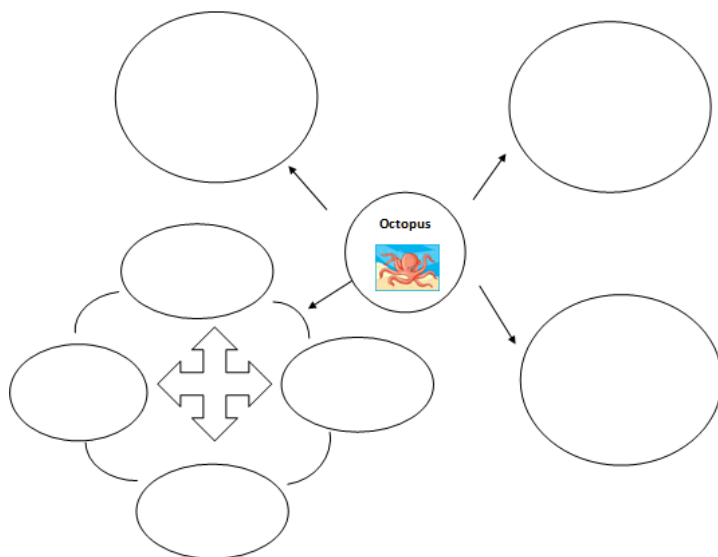
2. Answer these questions according to the text:

- 1) What is special about the octopus' body?
- 2) Why are octopuses intelligent?
- 3) What happens to an octopus if it breaks off one of its arms?
- 4) How do blue-ringed octopuses defend themselves?
- 5) But if there's no time to hide?

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Octopus likes to stay in more shallow water.
2. If an octopus is in trouble, it can break off one of its arms.
3. Octopus can kill even humans.
4. If an octopus breaks off one of its arms, its arm will never grow back.
5. The blue-ringed octopus is diminutive.

4. Complete the graphic organizer: Include its habitat, abilities, likes, and the four ways it defends itself.



**Text №5
A TERRIFIC COOK**

1. Look at the title of the text.

- a) What do you think this text is about?
- b) Can you cook? Do you like cooking?

2. Read the following text carefully.

Do you see how slim I am? It's not on purpose and it's not my nature either; there's a good reason for me keeping in shape: Mom. She's a disaster in the kitchen, and besides being unable to fry an egg properly, she always causes accidents. I can't keep track of all the times the kitchen was on fire (4? 5?) because of something weird she decided to do, despite of our advice to keep out of the kitchen – especially the stove. She doesn't pay attention to our advice and we have to eat what she prepares – or at least we eat what we can – so we live constantly on an undesired diet.

The last time she tried to prepare roast beef the result was a burning kitchen; Dad could barely save the family and extinguish the

fire. When she goes to the kitchen we start fearing for our lives (and stomachs) and thinking of a sickness we'll fake in order to avoid the "result".

Despite the bad cook we have at home, our house is always full of guests for lunch and dinner. I suspect they come just to have fun watching the disasters. And – of course – they want to be the first to tell our friends what her latest calamity was like.

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. The girl's mother is a terrific cook.
2. The girl's mom tends to cause accidents in the kitchen.
3. The girl's mother knows how to cook.
4. The girl's mom gave up cooking.
5. The family asks the woman to stop cooking.
6. The woman keeps cooking and doesn't listen to her family.
7. They have to eat what she cooks.
8. She set fire in the kitchen more than once.

4. Answer these questions according to the text:

1. Who is the "terrific cook" mentioned in the title?
2. Is she a "terrific" cook? What adjectives would you use to describe her abilities in the kitchen?
3. Do you know someone who's a terrible cook? (If affirmative) What kind of situations does this person cause?
4. Who suffers the most with the consequences of bad cooking: the cook or his / her guests / family? Explain.
5. What's the most important quality you need to be a good cook?

Text №6

A LOOK BACK AT THE YOUTH OF STEVE JOBS

1. Video:

<http://www.msnbc.msn.com/id/21134540/vp/44794794#44794794>
<http://www.youtube.com/watch?v=iKuUrbiyINw>

2. Read the following text carefully.

Steven Paul Jobs was born on February 24, 1955 in San Francisco, California. His _____biological parents, Joanne Schieble and Abdulfattah Jandali, put him up for adoption. Steve was adopted

by Paul and Clara Jobs, a _____ couple, who moved to the _____ city of Mountain View a couple of years later.



Paul Jobs and his son

The Santa Clara county, south of the Bay Area, became known as Silicon Valley in the early 1950s after the _____ of a myriad of semi-conductor companies. As a result, young Steve Jobs grew up in a _____ of engineers working on electronics and other gizmos in their garages on weekends. This shaped his interest in the field as he grew up. At age 13, he met one the most important persons in his life: 18-year-old Stephen Wozniak, an electronics wiz kid, and, like Steve, an _____.

Five years later, when Steve Jobs reached college age, he told his parents he wanted _____ in Reed College — an expensive liberal arts college up in Oregon. Even though the tuition fees were astronomical for the poor couple, they had promised their son's biological parents he would get a college education, so they relented. Steve spent only one semester at Reed, then _____, as he was more interested in eastern philosophy, fruitarian diets, and LSD than in the classes he took. He moved to a hippie commune in Oregon where his main activity was _____.

A few months later, Steve returned to California to look for a job. He was hired at the young video game maker Atari, and used his wages to make a trip to India with one of his college friends, in order to «seek enlightenment». He came back a little _____ and started to take interest in his friend Woz's new activities.

Source: <http://allaboutstevejobs.com/bio/shortbio.php>

3. Fill in the gaps in the text using the following words:

Unwed, neighborhood, suburban, incorrigible prankster, disillusioned cultivating apples, lower-middle-class, to enroll, sprouting, dropped out.

4. Decide whether these statements are True (T) or False (F). You have to explain orally when it's false:

- Joanne Schieble and Abdulfattah Jandali adopted Steven Paul Jobs 1955 in San Francisco.
- Steve was an electronics wiz kid, and an incorrigible prankster.
- Steve graduated from Reed.
- Steve moved to a hippie commune in Oregon where his main activity was cultivating apples.
- Steve's friend, Stephen Wozniak moved to a hippie commune in Oregon where his main activity was cultivating apples.
- In California Steve was hired at the young video game maker Atari, and used his wages to make a trip to India.

5. Put the correct letter into the box next to each word.

1	gadgets	a)	prevented them from coming close
2	lined up	b)	a feeling of thankfulness
3	hailed	c)	shown, displayed
4	acquiring	d)	left his position
5	commencement	e)	praised, said how good it was
6	kept reporters at bay	f)	stood in a line
7	revealed	g)	students who had just got their degrees
8	gratitude	h)	graduation ceremony
9	stepped down	i)	small useful devices or machines
10	grads	j)	getting, buying

Text №7
I CAN'T TRAVEL WITHOUT ...

1. Read the following text carefully.

Patrick Lichfield, the photographer, never goes far without his Olympus Pearlcolorer dictating machine which lets him catch up ...**(1)**... his correspondence wherever he is. The tiny tapes are ...**(2)**... posted to his secretary, Felicity, or he gives them to someone to bring back. The quality is very good but there are often some interesting background noises.



Mel Calman, the cartoonist, jokes ...**(3)**... filling his suitcase with tranquillisers and three different kinds of toothbrushes after recent, expensive dental treatment, but it is his diary and sketch-book that are always with him when he is on the move. "I don't keep a diary except when I'm away. I start a new one each trip now since I lost irreplaceable notes

on two ...**(4)**... trips on a bus in the States"

Richard Branson, who recently launched Virgin Atlantic Airways, believes ...**(5)**... travelling light. "Suntan lotion for my nose and my notebooks which are my lifeline. But I will always sling in a ...**(6)**... of cards. I love a game of cards, particularly bridge, canasta or spades, but I'm not a gambler."

Barry Norman, the film critic, who never travels anywhere without his credit card. "The days of anyone being stranded abroad are now ...**(7)**... . I remember once, before credit cards were common, the *Daily Mail* sent me to Italy at a moment's notice. It was a bank holiday. I ...**(8)**... no money and the banks were shut. There I was in Milan ...**(9)**... a beautiful sunny day sitting in my hotel because it was the only place I could eat or drink because I could sign for it."

Frank Muir, The TV scriptwriter and humorist, never ...**(10)**... off on a journey without packing his Swiss Army penknife. "It does everything." He says, "it has about 140 things that come out. It opens bottles, gets things out of horse hooves, it has scissors, screwdrivers, tweezers. I never go anywhere without it and I have never used it."

2. Choose the right word:



Английский язык

- | | | | |
|------------------|----------|--------------|-----------|
| 1. A with | B in | C for | D at |
| 2. A - | B or | C either | D but |
| 3. A with | B about | C over | D at |
| 4. A before | B last | C previous | D early |
| 5. A in | B on | C at | D about |
| 6. A pack | B packet | C bunch | D set |
| 7. A finish | B end | C back | D over |
| 8. A didn't have | B hadn't | C didn't had | D had |
| 9. A - | B on | C in | D at |
| 10. A sets | B starts | C parts | D travels |

3. Answer these questions according to the text:

1. Who likes to take as little luggage as possible?
2. Who likes to keep a record of his travels?
3. Who takes something he hasn't tested?
4. Which two people seem to take their work with them when they travel?
5. Which 2 people take something to avoid bad experiences they've had in the past?
6. Who takes the strangest thing, in your opinion?
7. Who takes the most useful thing, in your opinion?

4. Find synonyms in the text:

1. allows him to _____
2. very small _____
3. travelling _____
4. set up/founded _____
5. especially _____
6. left behind/lost _____

5. Write a short paragraph about the things you can't travel without and why they are so important to you.

Text №8
THE INVENTION OF UMBRELLAS

1. Read the following text carefully.

It seems natural to open an umbrella when it rains. But actually the umbrella was not invented for protection against rain. It was first used as a shade against the sun. Nobody knows who first invented it, but the umbrella was used in very ancient times. The first people to use it were probably the Chinese in the eleventh century B.C. The umbrella spread to ancient Egypt and Babylon. At that time it was a symbol of honor and authority, the umbrella was only for royalty or by those in high offices.

It is believed that the first people to use the umbrella as protection against rain were the ancient Romans.



During the Middle Ages, 1100-1500 AD in Europe, the use of the umbrella disappeared completely. Then it appeared again in Italy in the late sixteenth century. By 1680, the umbrella was used in France and later in England.

By the eighteenth century, the umbrella was used against rain in most of Europe and started to become popular worldwide. Umbrellas have not changed much in style during all this time; however, it wasn't until the twentieth century that umbrellas began to be made in a variety of colors.

2. Answer these questions according to the text:

1. What was the umbrella first used as?
2. Who were the first people to use the umbrella?
3. Where did use of the umbrella spread to?
4. When and where did the umbrella disappear completely?
5. When did umbrellas start becoming popular worldwide?
6. Who first invented the umbrella?
7. When did the first people start to use the umbrella?
8. Who were the first people to use the umbrella for protection from the rain?
9. When and where did the umbrella reappear?
10. When did umbrellas began being made into different colors?

3. Find the definition and put the correct letter into the box next to each word:

1. Invent		A. members of a royal family
2. Protection		B. a period of 100 years
3. Shade		C. someone or something that represents a particular quality or idea
4. Probably		D. when someone or something is safe from harm, damage, or illness
5. Century		E. used after a date to show that it was before the birth of Christ
6. B.C.(E.)		J. darkness or shelter from the light of the sun made by something blocking it
7. Symbol		I. to say that something is likely to happen, likely to be true
8. Authority		H. things of the same type that are different from each other in some way
9. Royalty		G. the power you have because of your official position
10. Variety		F. to make, design, or think of a new type of thing

**Text №9
EATING DISORDERS**

1. Read the following text carefully.

Usually when you read an article about anorexia and bulimia it's pretty depressing. There are stats about how many people have the disease, how many people don't report it, how many new cases there are, how many girls (and boys too) worry about their weight, how much power the media has on body image...whew!

This article is going to be a bit different.



The image above covers most of the prevalent numbers in the eating disorder realm. Not too many people are completely in the dark about Eating Disorders (ED) anymore. In the last 20 years the amount of information and awareness of ED has improved to the point where almost everyone, in the western world, has heard of Anorexia and Bulimia

(and their lesser recognized cousins, Binge Eating and Excessive Exercise).

Most often articles on ED focus on these numbers. The ones in the image. The devastating reach of the disease.

We feel that there are far too few articles, movies and Facebook pages that focus on recovery and optimism.

The reality of an ED is that people who have one are society's most ardent followers. They see what western civilization views as "perfect" and they strive to fulfill that requirement. Sometimes they are so successful that they are actually killing themselves to meet the demand for perfection.

The film, No Numbers – Identity Beyond Measure, acknowledges these people in a way that no other film has. It examines the reasons why so many young people find themselves struggling with an eating disorder but it goes far beyond that to examine the roads to recovery.

As much as we would love this film to help people to learn to love themselves the way they are, we are targeting those people that are suffering now. Some are doing it alone, with no support and no treatment. Some likely believe that they are successful at meeting society's expectations.

We want them to see that they do not have to live up to some randomly, media-driven model of perfection. We want to show them how "perfect" comes in a million packages and that finding their way starts with that first step, the step towards self-acceptance.

February is Eating Disorder Awareness Month all over North America and the UK. Throughout the month our goal is to have the film No Numbers – Identity Beyond Measure screened in as many places as possible.

2. Answer these questions according to the text:

1. According to the author of the text there aren't resources that show how to recover and how to be optimistic. Quote from the text a sentence that illustrates this statement.

2. What's the first step to recovery?

3. Which film does the author of this text suggest us to see?

4. What is the film about?

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. The article about anorexia and bulimia is pretty depressing.

2. The devastating reach of the disease.
3. It examines the reasons why so many young people find themselves struggling with an eating disorder.
4. June is Eating Disorder Awareness Month all over North America and the UK.
5. Western civilization views as "perfect" and they strive to fulfill that requirement.

Text №10

HOW SAFE IS NUCLEAR POWER?

1. Read the following text carefully.

On September 30, 1999, there was an accident at a nuclear plant in Tokaimura, Japan. On that day, three plant employees accidentally poured too much uranium into a tank, which led to a leak of radiation. At least 90 people were exposed to high radiation. One



worker died. Other countries have had similar accidents. There was a close call at a nuclear plant at Three Mile Island in the United States. On March 28, 1979, there was a reactor

meltdown at this plant. A reactor meltdown happens when the fuel inside a reactor melts. Unless immediate safety measures are taken, a meltdown can lead to radiation leaking into the atmosphere.

Probably the most famous nuclear accident occurred at a plant in Chernobyl, in the former Soviet Union. The accident happened on April 26, 1986, when things went terribly wrong during an experiment. This caused a meltdown so serious that the top of a reactor exploded into the sky. Radiation leaked into the atmosphere for more than a week. Wind carried some of the radioactive pollution over large parts of Europe. Many deaths and birth defects throughout Europe have resulted from this horrible event.

The idea of using nuclear power as a form of energy grew out of Nuclear power was first used to make electricity on December 20, 1951. By the 1960s, nuclear energy was becoming cheap to produce, and utility companies were building plenty of plants. However, in the 1970s, there were concerns about the possibilities of nuclear disasters

and environmental problems. Then, those concerns came true with the tragedy at Chernobyl and the near-disaster at Three Mile Island.

Today, supporters of nuclear energy say it is a necessary source of power. This is especially true in countries like Japan, which depends on nuclear energy for about 35 % of its power. Obviously, taking away that source of energy could badly hurt the economy. Also, while minor accidents sometimes happen at nuclear plants, most are contained without deaths or serious injuries.

For now, nuclear energy is probably not going away. Citizens should demand that government agencies have very strict safety measures for nuclear power plants. At the same time, we must find other safer and cheaper sources of energy.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. The main idea of this reading is that nuclear energy is a safe source of power.
2. The accident at a nuclear plant in Tokaimura, Japan occurred because workers forgot to put uranium into a tank.
3. A reactor meltdown occurs when the fuel inside a nuclear reactor melts.
4. A meltdown is dangerous because radiation can leak into the atmosphere.
5. As a result of the accident at Chernobyl, people in the area were exposed to small amounts of radiation.
6. The words taking away in paragraph 5 mean removing.
7. You can infer from paragraph 4 that nuclear power was not used to generate electricity in the 1940s.

3. What are the advantages and disadvantages of using nuclear power?

4. Make a chart like this on a piece of paper. Add these ideas to it.

- radiation might leak into the atmosphere
- people might be exposed to radiation
- radioactive pollution can cause birth defects
- serious nuclear accidents are rare.

Advantages	Disadvantages

**Text №11
COOPERATION IN SPACE**

Things I know about Russia's place in space development	Things I don't know about Russia's place in space development	Things I am not sure about the Russia's place in space development
1. 2.	1. 2.	1. 2.

1. Read the following text carefully.

A little over 70 years ago, when the idea of space flights was considered to be the product of imagination, the great Russian



scientist Konstantin Tsiolkovsky published his book "Outside the Earth". It was supposed to be only a science-fiction novel written by someone who lived and taught in a small provincial town of Kaluga. Nobody believed the ideas described in the book to be realized in

future. Years passed and Tsiolkovsky's ideas proved to have been used in studying space and constructing rockets. Many pages of his book were devoted to internationalism. His imaginary spaceship described in the book was inhabited by scientists from all over the world. Each one of them appeared to be highly competent in the particular field, and all of them taken together formed a friendly crew. Now the time has come when this dream was realized. The cosmonauts of different countries exercise mutual scientific programmes in space. Ten countries are known to have been participating in intercosmos programmes. This is really a wide scale cooperation when the scientists want their individual programmes to serve the world science. More than 20 satellites of the Intercosmos series and a dozen of high-altitude rockets of the "Vertical" type were

equipped with instrumentation for scientific research designed in different countries. With the help of Russian sputniks other countries develop weather forecasting, telecommunications and television transmissions. Space research is reported to have provided findings in the study of natural resources. The achievements in space efforts are also connected with manned flights. We know citizens of nine countries to have participated in space missions. The international crews organize real scientific laboratories on board the spaceships for making research in astrophysics, medicine, geology and technology.

2. Decide whether these statements are True (T) or False (F). You have to explain orally when it's false:

1. Tsiolkovsky lived and worked in Kaluga.
2. He was a teacher there.
3. His book contained the information about a scientist who worked in space.
4. His book remained only a science-fiction.
5. More than 20 countries participate in manned flights.
6. Rockets of the "Vertical" type were equipped with Russian instrumentation.
7. Scientific laboratories on board the spaceships will soon appear.

3. Answer these questions according to the text:

1. Why was Tsiolkovsky's book "Outside the Earth" supposed to be a science fiction novel?
2. Why is his book supposed to be devoted to internationalism?
3. What kind of cooperation in space did Tsiolkovsky describe in his book?
4. What are the main functions of Russian sputniks, according Tsiolkovsky's book?
5. How many countries are supposed to have been participating in intercosmos programs?

Text №12 THE BOOK OF THE FUTURE

1. Read the following text carefully.

Will people still read books 100 years from now? A few years ago, many people would have said no. It seemed likely that computers and the Internet would replace books. Now; however, most experts think that books **are here to stay**.



There are **a number of** reasons why computers won't replace books entirely. One reason is that books on paper are much cheaper than computers. Books don't need a power source either. You can read a book for as long as you want and wherever you want. You never have to worry about

losing power. Also, many people feel more comfortable reading words in a book than reading words on a computer screen. It's less tiring to the eyes. Will books in the future be similar to the books you can buy today? The answer to that question is no. In the future, you may only need to buy one book. With this one book, you will be able to read novels, plays, and even today's newspaper. It will look like today's book, but it will be electronic. One of the people working on the book of the future is Professor Joseph Jacobson from the Massachusetts Institute of Technology in the U.S. Professor Jacobson's book will have a small button on the side. When you **press** the button, words will **instantly** appear on the page. When you want to read a different story you can push the button again and a new story will quickly appear.

What is the technology behinds Professor Jacobson's book? Two important inventions will make this new kind of book possible: electronic ink and radio paper. Electronic ink – or "e-ink" – is a liquid that can be printed on paper, metal, or anything else. E-ink looks and feels like printed words on paper. Unlike regular ink, however, words in e-ink are not **permanent**. They can be changed by pushing a button. When you push the button, all of the words on the page go away and new words appear. The other new development is radio paper. This paper looks and feels like a page in a book. In reality, however, radio paper is made of plastic.

Professor Jacobson calls his book of the future "the last book." This book, he says, will be the last book you will ever need.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Electronic books will be like the books we have today.
2. You will be able to read many different stories in one electronic book.
3. You will be able to get the news in an electronic book.
4. The words in an electronic book will be permanent.
5. Radio paper is made of paper.

3. Use context clues to choose the correct meaning of the italicized words. Circle the letter of the best answer:

1. The words **are here to stay** mean ...
 - a. are nearby
 - b. are useless
 - c. won't disappear
2. The phrase **a number of** is similar to the word ...
 - a. all
 - b. one
 - c. many
3. The word **press** means ...
 - a. push
 - b. iron
 - c. pull
4. The word **instantly** is similar to ...
 - a. very quickly
 - b. very slowly
 - c. seriously
5. The word **permanent** means ...
 - a. powerful
 - b. serious
 - c. unchanging

4. What are the advantages and disadvantages of the e-book? Write these 5 ideas in the appropriate column of the chart below. Then add one more advantage and disadvantage.

1. It will be easy to use.
2. Students won't need to carry a number of books to class.
3. We won't need to cut down trees to make the paper.
4. It could stop working.
5. The words aren't permanent.

5. Complete each sentence with a reason from the list on the right.

Sentences about e-books:

- a. Electronic paper will be more expensive than regular paper because .
- b. You will only need one book in the future because...
- c. E-ink is more useful than regular ink because...
- d. People will feel comfortable reading an e-book because . . .
- e. You won't need a bookshelf in the future because...

Reasons:

- it will look and feel like a regular book.
- you will own just one book.
- it will be made of plastic.
- it isn't permanent.
- you will be able to change the stories in the book.

Text №13

SUCCESSFUL BUSINESSPERSON

1. Read the following text carefully.

Have you ever wondered why some people are successful in business and others are not? Here's a story about one successful businessperson. He started out washing dishes and today he owns 168 restaurants.

Zubair Kazi was born in Bhatkal, a small town in southwest India. His dream was to be an airplane pilot, and when he was 16 years old, he learned to fly a small plane. At the age of 23 and with just a little money in his pocket, Mr. Kazi moved to the United States. He hoped to get a job in the airplane industry in California. Instead, he ended up working for a company that rented cars.

While Mr. Kazi was working at the car rental company, he frequently ate at a nearby restaurant. To save money on food, he decided to get a job with KFC. For two months, he worked as a cook's assistant. His job was to clean the kitchen and help the cook. "I didn't like it," Mr. Kazi says, "but I always did the best I could."



One day, Mr. Kazi's two co-workers failed to come to work. That day, Mr. Kazi did the work of all three people in the kitchen. This really impressed the owners of the restaurant. A few months later, the owners needed a manager for a new restaurant. They gave the job to

Mr. Kazi. He worked hard as the manager and soon the restaurant was making a profit. A few years later, Mr. Kazi heard about a restaurant that was losing money. The restaurant was dirty inside and the food was terrible – greasy and undercooked. Mr. Kazi borrowed money from a bank and bought the restaurant. For the first six months, Mr. Kazi worked in the restaurant from 8 a.m. to 10 p.m., seven days a week. He and his wife cleaned up the restaurant, remodeled the front of the building, and improved the cooking. They also tried hard to please the customers. If someone had to wait more than ten minutes for their food, Mrs. Kazi gave them a free soda. Before long the restaurant was making a profit. A year later Mr. Kazi sold his restaurant for a profit. With the money he earned, he bought three more restaurants that were losing money. Again, he cleaned them up, improved the food, and retrained the employees. Before long these restaurants were making a profit, too. Today Mr. Kazi owns 168 restaurants, but he isn't planning to stop there. He's looking for more poorly managed restaurants to buy. "I love it when I go to buy a restaurant and find it's a mess," Mt. Kazi says. "The only way it can go is up."

2. Sequence of events. Number these events in Mr. Kazi life from 1 (the first) to 9 (the last).

1. He sold his first restaurant at a profit.
2. He got a job as a cook's helper.
3. He bought his 168ft restaurant.
4. He moved to the United States.
5. He got a job at a car rental company.
6. He learned to fly a plane.
7. He bought his first restaurant.
8. He bought three more restaurants.
9. He became the manager of a restaurant.

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Mr. Kazi moved to the United States because he wanted to be a restaurant manager.
2. He got a job in a restaurant because he wanted to save money on food.
3. His first restaurant job was as a cook's helper.
4. Mr. Kazi enjoyed working as a cook's helper.

5. To buy his first restaurant, Mr. Kazi borrowed money from his family.
6. Mr. Kazi was married while he owned his first restaurant.
7. The first restaurant Mr. Kazi bought was a mess.
8. Mr. Kazi lost money when he sold his first restaurant.

4. What inferences can you make about Mr. Kazi from the information below? Circle the best answer:

1. One day Mr. Kazi's two co-workers didn't come to work. That day, Mr. Kazi did the work of three people. From this information, you can say that ...
 - a. Mr. Kazi probably worked very hard that day.
 - b. Mr. Kazi is probably a tall man.
 - c. Mr. Kazi probably didn't know his co-workers very well.
2. Mr. Kazi sold his first three restaurants for more money than he paid for them. From this information, you can say that ...
 - a. Mr. Kazi is a good businessman.
 - b. Mr. Kazi is an honest man.
 - c. Mr. Kazi became a millionaire when he sold the restaurants.
3. What can you infer about Mr. Kazi from each statement below?

5. Write your ideas:

1. Mr. Kazi started with very little money, but he now owns 168 restaurants.
You can infer that _____.
2. Mr. Kazi had very little money when he came to the United States.
You can infer that _____.
3. When the owners needed a manager for their new restaurant, they gave the job to Mr. Kazi.
You can infer that _____.

6. Choose the correct form of the word in parentheses to complete each sentence:

1. (succeed / successful / successfully)
Mr. Kazi is a _____ manager of 168 restaurants.
Mr. Kazi manages 168 restaurants.
2. (rent / rented / rental)

For a while, Mr. Kazi worked at a car _____ company.

For a while, Mr. Kazi worked at a company that _____ cars.

3. (manager / managed / managerial)

Mr.Kazi was the _____ of a KFC restaurant. Mr.Kazi _____ a KFC restaurant.

4. (impression / impressed / impressive)

Mr. Kazi's work _____ his employers. Mr. Kazi's work made an _____ on his employers.

5. (profit / profited / profitable)

Mr.Kazi made a _____ from the sale of each restaurant.

Mr.Kazi _____ from the sale of each restaurant.

6. Mr. Kazi is a successful businessperson.

7. There is a hotel called the Grand Hotel in Taipei, Taiwan.

Text №14

THE GRAND CANYON

1. Read the following text carefully.

A Wonderful Place to visit

Last year, about 6.5 million people visited the United States from overseas. Most visitors entered the country through one of the largest cities – New York, Boston, Miami, Los Angeles, San Francisco. Then, having landed in a city, the newcomers simply “stayed put,” not realizing that the interior of the country offered travel opportunities of unusual beauty and interest. Did you know that between Maine and California there are 41 national parks? Some parks cover thousands of acres. Each has its own distinctive scenery and character. If you like nature study, hiking, camping, bird-watching, clean air, quiet, or just getting away from the city, you will love the national parks. On the East Coast, for example, there is Acadia NATIONAL Park, Maine. It faces the Atlantic Ocean and has a long, rocky coastline. On the West Coast, in California, there are Yosemite, with majestic mountains, forests, and rivers; and Death Valley, with desert plants and animals. In between are enough national and state parks to satisfy every taste and interest: Cape Hatteras, North Carolina; Great Smoky Mountains, Tennessee; Shenandoah, Virginia. Above all, there is the Grand Canyon, Arizona, that mighty chasm carved in the earth by the Colorado River. Visiting a national park need not to be expensive for

the overseas visitors, but does require advance information and careful planning.

Visiting the Grand Canyon

(1) The Grand Canyon is an impressive sight. It is 277 miles long, between 4 and 18 miles wide, and more than a mile deep. No one knows for sure how the canyon was made, but geologists generally agree that over millions of years, the Colorado River, which runs down the center of the canyon, gradually cut through the sand and rock to carve this mighty chasm. This wearing-down process is called erosion. The wind and natural land movements did the rest. Today the Grand Canyon is a geologist's dream. The rock layers in the sides of the canyon are exposed to view. Each layer is a record of all the natural events that happened to the land through the eons of time. In one layer, there is dust from an ancient volcano. In another layer, there is sand from a lake that once covered the area. In a third layer, there are the bones of prehistoric animals. The canyon is like a storybook. If you had enough knowledge, you could unravel the history of the earth.

(2) But studying geology is not the only interesting thing to do there. It is an ideal place to hike, to ride a bike, to take a boat ride down the river, to camp out overnight, to take photographs and see beautiful scenery. To add further interest, the canyon has six different climate zones, and many kinds of plants, trees and animals.

(3) "We've got to see the Grand Canyon," said José to his friend Ibrahim. José is from Colombia, South America, and speaks Spanish. Ibrahim is from Egypt, and speaks Arabic. To communicate, they have to speak English.

(4) "Let's go," said Ibrahim. "School doesn't start for three weeks. We'll just have time. I saved some money from my summer job, but how will we get there? We don't have a car."



(5) "There are three ways," José said. "We could fly or go by train, but that would be expensive, so let's take the bus. It explains how in this booklet. There are two major interurban bus lines in the U.S. – Greyhound and Trailways," said José, reading from the booklet. "These two companies

operate 6700 busses and carry over 350,000,000 passengers each year – more than the railroads and the airline combined. Best of all, bus travel is relatively cheap.”

(6) This sounds like a great trip, and practical, too. When do we start?” asked Ibrahim.

(7) “What about Monday? That would give us plenty of time to pack.”

(8) “Monday is okay with me,” Ibrahim said. “I’m taking one suitcase, some casual clothes, and my hiking boots.”

(9) “Travel light.” That’s my motto,” José said. “And carry traveler’s checks. They are safer than cash.”

(10) Monday rolled around in no time. The two friends caught the bust at the depot. Next morning, they were in Flagstaff, Arizona, gateway city to the Grand Canyon. A local bus took them the rest of the way, about 80 miles, and dropped them at the Park entrance.

(11) Now their excitement began to rise. They could hardly wait to view the canyon itself. But they were in for a surprise. At first there was nothing special to see. Dark green pine trees surrounded the boys on every side. They seemed to be in the middle of a forest. Fortunately, the trail to the canyon was well marked. “Grand Canyon this way,” read a sign.

(12) It took ten minutes of rapid walking to reach the canyon. The boys stumbled on it, really, for there was no preparation, no gradual slope, just flat, wooded country that suddenly disappeared into the mile-deep abyss.

(13) “Wow,” said José. “Look at that!”

(14) “Wow,” repeated Ibrahim, unable to find better words.

(15) It was a thrilling sight. The rocky precipice at the top fell straight down the canyon floor, which was very uneven and covered with rocks. Cutting down the middle was the wild Colorado River, although from this distance it looked like a harmless stream. The other side of the canyon was clearly visible. Overhead, a hawk flew lazily in a cloudless sky. The boys could see for a hundred miles in every direction.

(16) “What will we do first?” José asked

(17) Just at that moment, the boys noticed a park ranger standing beside a big picture of the canyon. “Right now, we’re standing on the south rim, or edge, of the canyon, just about here,” the ranger said, indicating a place on the picture. “That’s the north rim over there,” he said, pointing across the canyon. “Did you notice how the rocks and earth are arranged like layers in a cake, and that

each layer has a different color? The layer at the bottom of the canyon is the oldest. It is called Early Precambrian," the ranger said, giving the scientific name. "These rocks must be about 1.7 billion years old. The rocks on the top are younger. Each layer has a different age, and has characteristic deposits that correspond to the geological and natural events occurring at the time. We find evidence of animal life at this level," said the ranger, pointing to a layer near the top. "Probably dinosaurs, extinct animals that lived millions of years ago."

(18) "Isn't this interesting," said Ibrahim. "When I get back to school, I'm going to do some research in geology and write a paper for my science class."

(19) Yes, it is interesting", said José, "but I'm getting hungry. Isn't it time for supper?"

(20) There were several places to eat. The boys could get fast food at a lunch stand or dinner in the restaurant.

(21) "Let's go to the restaurant," said Ibrahim. "I'm starved."

(22) After a short wait, they were seated at a table. The waiter arrived to take their order.

(23) "I am so hungry, I could eat a dinosaur," said José, glancing at the menu. "I'm going to have vegetable soup, steak, mashed potatoes, lettuce salad, and ice cream for dessert."

(24) Ibrahim ordered mushroom soup, veal stew with rice, tomato salad, and apple pie.

(25) When the boys had finished eating, they glanced out the windows. The sun was just setting. If they hurried, they could just get outside in time to watch the sun drop below the canyon rim, which it did with a burst of many colors.

(26) "Wasn't this a great day?" José said. "What'll we do tomorrow?"

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. ___ The national parks in the States have similar sceneries and character.

2. ___ Death Valley is famous for its mountains, and forests.

3. ___ National parks must be expensive for the local visitors.

4. ___ Geologists suggest that the Colorado River carved this chasm.

5. ___ There are several ways to have fun in the Grand Canyon.

6. ____ Interurban busses transport less people than railroads and airlines combined.

7. ____ When you arrive at the canyon, you see nothing special but pine trees.

8. ____ The boys approached the canyon from the bottom, near the river.

9. ____ The Colorado River looked very scary in the distance.

10. ____ Some layers of the canyon have the same age.

11. ____ Neither of the boys were hungry at dinner time.

12. ____ The boys missed the sunset.

3. Answer these questions according to the text:

1. What does Yosemite National Park offer for its visitors?

2. What do the layers of the canyon show?

3. What can you do in the canyon?

4. Why don't the two boys speak with each other in Spanish?

5. Where does Ibrahim have money from for this trip?

6. How many ways are there to reach the Grand Canyon?

7. Does José like to travel with a lot of luggage?

8. How long does it take to reach the canyon from the park entrance?

9. What kind of bird did the boy see flying?

10. Who was standing beside a bid picture of the canyon?

11. What does the ranger compare the layers of the canyon to?

12. What does Ibrahim want to research?

13. What did José have for dessert?

14. What was Ibrahim's main dish?

15. Did José find their day great?

4. Underline the following words in the text, numbered accordingly to the paragraph where each occurs then write them into the correct places.

canyon (1) geologist (1) erosion (1) layer (1)

volcano (1) interurban (5) motto (9)

traveler's check (9) rim (17) lunch stand (20)

1. _____ is a process that changes the earth's surface through the action of natural forces.

2. A _____ is a deep valley or crack in the earth, often with steep sides.

3. A _____ is a small restaurant, usually out of doors, serving mainly fast food.

4. A _____ studies the history and structure of the earth by analyzing rocks.
5. The _____ is the upper edge of the canyon.
6. A _____ is a check issued by a bank or travel agency for the convenience of travellers.
7. A _____ is one thousand thousands.
8. A _____ is a thickness of material, usually one of several, that forms a distinct division.
9. A _____ is a mountain that releases steam and molten rock from beneath the earth's surface.
10. _____ refers to a bus or other system that connects two or more cities.

5. Use the words above to fill in the blank places.

1. The rocks in the canyon wall are arranged in horizontal _____.
2. I only carry _____ when I travel because it's safer than cash.
3. The process of the wind blowing away the soil is called _____.
4. When you are in a hurry, you might prefer eating at a _____.
5. The Grand _____ is a very famous national park.
6. Why don't we take the _____ bus from London to Bristol?
7. My _____ is: "Never give up anything."
8. My nephew is a _____. He studies minerals and rocks.
9. Etna is a famous _____ in Italy.
10. Don't go too close to the _____! It is very dangerous.

6. Select the words from the list below to complete the sentences. Do not use any word more than once.

- | | | | |
|--------------------|-----------------|--------------|----------------|
| <i>deposits</i> | <i>research</i> | <i>major</i> | <i>booklet</i> |
| <i>boat ride</i> | <i>trail</i> | <i>abyss</i> | <i>hawk</i> |
| <i>park ranger</i> | <i>suitcase</i> | | |

1. Why don't we take a _____ down the river?
2. The girls walked along a _____ to reach the Canyon.
3. A _____ contains useful information for visitors.

4. The Canyon is a mile-deep _____.
5. Geologists study rock _____ in the Canyon walls.
6. If you want to have more information on a subject, do some _____ in the library.
7. A _____ flew lazily overhead.
8. The _____ tells interesting facts to the tourists.
9. If you want to travel light, you should take only one _____ with you.

7. Rewrite the following sentences by replacing the word or phrase in italics with the best synonym from the word list. Use each synonym only once.

one billion *rapidly* *flat* *casual* *cheap*
trail *interurban* *glanced rim* *chasm* *barely*
burst *gateway* *dinosaurs* *major* *a million*
scientific *Arizona* *extinct* *ice cream*

1. The *canyon* was deep and very wide. It was beautiful.
2. The boys decided to wear *informal* clothes for their trip.
3. There are two main *between-cities* bus lines in the U.S.
4. Travelling by bus is quite *inexpensive*.
5. The bones of *ancient reptiles* were found at the site.
6. You can have the best view from the *edge* of the canyon.
7. The Spanish boy ordered *frozen milk* for dessert.
8. The sun set in an *explosion* of color.
9. One of the boys *looked quickly* at the menu.
10. Dinosaurs are *no longer living*.
11. Early Precambrian is a *technical* word.
12. The boys could *hardly* wait to see the canyon.
13. The land was *level*.
14. They walked very *quickly* in order to arrive as soon as possible.
15. These rocks are *1,000,000* years old.

8. Study the following words then fill in the blank spaces with the correct form of the words in the same order as it given in the chart. So you must use a form of the word nature in the first sentence, geology in the second, impression in the third, etc.)

PARTICIPLE	NOUN	VERB	ADJECTIVE	ADVERBS
	nature		natural	naturally
	geology geologist		geological	geologically
	impression	impress	impressive	impressively
studied studying	study student	study	studious	studiously
	knowledge	know	knowledgeable	knowledgeably
	history		historic	historically
	expense		expensive	expensively
	visibility		visible	visibly
	hunger	hunger	hungry	hungrily
	distance		distant	distantly

1. People like walking in the _____ at weekends.
2. Several studies of the rocks were made _____.
3. Her knowledge was very _____.
4. My girlfriend is very _____ but she is very pretty at the same time.
5. The park ranger was very _____. He knew everything about the park.
6. These facts are very _____ so you can learn a lot from them.
7. Keep a record of your _____ so you can check how much you spend.
8. There were no clouds so the _____ was perfect.
9. _____ is a serious problem in the Third World.
10. We could see a beautiful hawk flying in the _____.

Text №15

HISTORY OF THE THERMOMETERS

1. Look at the title of the text and the picture.

- a) What is the thermometer used for?
- b) Who constructed the first thermometer?

2. Read the following text carefully.

The very first step in the development of heat engineering made it necessary to find a device to indicate temperature and to

measure its changes. As is well known the thermometer is the very instrument to serve this purpose. The word comes from two Greek words, namely "thermos" meaning "warm" and "measure" meaning "meter", that is a measuring instrument. As earlier as 1602 Galileo invented an air thermometer. It consisted of a glass bulb containing air and connected to a glass tube; the latter being immersed into a colored liquid. Gallileo's air thermometer was not sensitive to all changes of atmospheric pressure. The type of thermometer familiar to everyone at present was first put into general use as early as 1654.



To make these first instruments was not an easy thing at all. The most difficult problem of all was to mark the degrees on the thermometer that is to graduate the scale. At last it was decided to take two fixed points and to divide the

interval between them into the same number of degrees. In 1701 Isaak Newton, the famous British scientist, constructed a scale in which the freezing point of water was taken as zero and the temperature of the human body as 12. Some time later the German physicist Fahrenheit proved that the temperature of boiling water was always the same at the same atmospheric pressure. It might therefore be used as a second fixed point instead of the temperature of the human body . As for the liquid used it was mercury which has been mostly employed since that time.

On the Fahrenheit scale the boiling point of water is taken as 212' and the freezing point as 32'. This scale is mainly used in English-speaking countries. In Europe the Centigrade scale is most popular.

3. Answer these questions according to the text:

1. Who invented the first air thermometer?
2. Was it sensitive to all changes in atmospheric pressure?
3. When did the first thermometer appear?
4. What was the most difficult thing to do?
5. Who constructed the first scale?
6. What liquid is used in thermometers?
7. Which scale is used in English-speaking countries?
8. Which scale is used in Europe?

4. Decide whether these statements are True (T) or False (F). You have to explain orally when it's false:

1. The faster the molecules of a substance move, the higher is the temperature of the substance.
2. The larger the water pipe, the more water passes through it.
3. The more we read, the more we learn.
4. The shorter the wire, the less is its resistance to current flow.
5. In Europe the Fahrenheit scale is most popular.

**Text №16
MY DAY WAS A NIGHTMARE**

1. Look at the title of the text and the pictures.

- a) What do you think this text is about?
- b) Have you ever had nightmare day?

2. Read the following text carefully.

My day was a nightmare! I had a job interview this morning but I forgot to set the alarm clock. I overslept and couldn't have a shower or breakfast. I went to the garage putting on my shoes and setting my hair at the same time.

The car wouldn't start, and I was only able to make it work at the third time I tried. The traffic was awful and I arrived at the parking garage 5 minutes before the interview. Luckily I found a spot, but a guy in a red Mercedes tried to take it. I cut him off and managed to put my car there and – of course – he didn't like it, he complained not in a nice way and I had to tell him what I think of people like him.



I was quarreling with the jerk when I slammed my finger in the car door, and I was so nervous that I didn't notice the keys were still in the car and locked it.

I didn't have time to deal with it at that moment, so I rushed to arrive for the interview on time and guess who the interviewer was: the guy I met at the parking garage! I wish I hadn't gotten up today.

3. Explain the title

4. Answer these questions according to the text:

1. Have you ever had a day like that? Tell how it was.
2. Do you believe bad things always happen together? Why do you think so?
3. Have you heard about "Murphy's laws"? What are they about?
4. Number the bad things that happened to the woman.
5. What would you do if you were in the woman's place?
6. What would you have done differently? Why?
7. How would you feel after a day like that?
8. Do you agree that when a day starts in a bad manner, everything tends to go wrong? Why (not)?
9. When was the last time you had a really bad day? What happened to make you think it was really bad?
10. Do you believe in good and bad luck? Why?

5. Rewrite the woman's story. This time she'll have a nice day. If she had started her day differently, how would things go?

Text №17

A COLDBLOODED MURDER OR AN ACCIDENT

1. Read the following text carefully.

"Columbo" was my favorite TV series when I was a child, so it sounded natural when I told my family I decided to be a detective. After years of hard work I realize my duties have less to do with the glamour of Hollywood movies than I thought at the beginning, but it's still more challenging and full of emotion than most of the jobs my friends have.

When I arrive at a crime scene my first duty is to pay attention to every detail and collect proof of what had happened. I have to check the suspects list and discover if they have any motives to want the person dead. When I find a clue I have to use it in order to find a solution to the crime.

Fortunately there aren't many murders where I live, so in most of the days I investigate bank assaults or house invasions. There aren't nice either, but it's much better to try to catch a thief than an assassin.

Columbo is an American crime fiction TV series, starring Peter Falk as Lieutenant Columbo, a homicide detective with the Los Angeles Police Department. It was created by William Link and Richard Levinson. The show popularized the inverted detective story format. With the exception of a couple of special episodes with added twists, almost every episode began by showing the commission of the crime and its perpetrator. As such, there is no "whodunit" element. The plot mainly revolves around how the perpetrator, whose identity is known, would finally be exposed and arrested. The show's creator once referred to it as a "howcatchem".

2. Match the words and expressions below to their definitions:

*assault, challenging, clue, crime scene, glamour,
invasion, investigate, to proof, suspect,
suspects list, thief:*

- A** – excitement, adventure, and unusual activity
- B** – stimulating, interesting, and thought-provoking
- C** – the place where a crime has been committed
- D** – evidence to establish something as true, or to produce belief it is true
- E** – a person who is suspected, especially of a crime, offense or the like
- F** – a list of people who are suspected of committing a crime
- G** – anything that serves to guide or direct in the solution of a crime, mystery, etc.
- H** – to examine, study, or inquire into systematically; search or examine into the particulars of; examine in detail.
- J** – an unlawful physical attack upon another; an attempt or offer to do violence to another
- K** – the act of breaking into a house or building
- L** – a person who steals

3. Complete the sentences with one of the words / expressions from the previous exercise (make the necessary changes):

1. The detectives couldn't find any _____ to accuse Jimmy.
2. I like this kind of exercises because they're always so _____!
3. Now we have to analyze the _____ to see if one of them was elsewhere when the crime was committed.

4. The police officer _____ carefully the _____.
5. We need to install window bars to avoid an _____ while we are away.
6. The detective found hair strand on the victim's clothes, and that'll be an important _____ to solve the case.
7. Most of the teenagers who want to be models don't mind about the difficulties they'll face, they are fascinated by the job _____.
8. Let's check all the _____ again and see where they were at the time of the murder.
9. The police arrested the _____ who stole your jewelry, Ana.
10. The woman passed out during the bank _____.

4. Answer these questions according to the text:

1. Why wasn't a surprise for the man's family when he decided to be a detective?
2. What did he realize about his job?
3. How does he describe it?
4. What's his first duty at a crime scene? What does that mean?
5. What does he do next?
6. What does he do when he finds a clue?
7. What does he investigate in most of the days? Why?

**Text №18
ELECTRONIC BOOKS**

1. Read the following text carefully.

Electronic books, or e-books, provide a new, cool, environmentally-friendly, and inexpensive way to read. Differing from their paper cousins only in the binding, e-books are stored and used as computer files rather than as ink on paper.



One arena that might soon see the leap to e-book use is the classroom. Students would take their handheld e-book readers to the electronic bookstore, load **their** texts, carry the lot in their bookbag, and not notice the extra weight of a dozen full-length texts.

E-books can be purchased directly on the Internet from hundreds of publishers or retail e-bookstores. In either case, pay with your credit or debit card, then download it directly as with a free book, or wait for it to arrive as an e-mail attachment, a disk or a CD.

E-books can be viewed on a computer screen or using a book reader. About the size of a large trade paperback, these handheld e-book readers have high-resolution, easy-to-read screens, and a computer or telephone connector to obtain files. Better yet, **they** have enough memory to store many book files at once.

Few conventional bookstores carry e-books yet, but it's a simple matter for a savvy person to find them. The best bet is an Internet search engine, directory, or specialty information centre. There, locate e-books by author, subject, genre, ISBN, or title. The online versions of some giant bookstore chains also have searchable e-book sections.

E-publishers and many of their authors have web pages. These have further information, plot summaries, reviews, pictures, and other good stuff. They usually provide several chapters to read free so **you** can try-before-you-buy, just as in a paper bookstore. If you read a book and like **it**, you could always write a review and send it to the author. Maybe it'll get published on the net with your name and web site attached.

A few big-name authors such as Stephen King, Anne Rice, Frederic Forsyth, Diana Gableton, and Colleen McCullough, as well as some large paper houses like Simon and Schuster have already put a toe in the e-book waters, and the field gets more crowded all the time.

If you love paper books to death and just can't imagine reading any other way, don't panic. So far, e-books are an alternative to the traditional ones. They haven't replaced **them** ... yet. However, you don't have to be much of a prophet to note that since distributing books electronically is easier, faster, cheaper, and offers greater variety, we should soon see a lot more of **them**.

Some promise to make the experience better than paper with multimedia readers. Others produce audio versions where the author reads it to you.

Ah, indulgence.

Keep in mind, you take the same chances buying an electronic book as a paper one. Maybe you won't like it after all. But the majority of electronic publishers screen **their** books carefully, insist on professional editing, and publish only the best. If you read an excerpt

first and buy only from reputable publishers, you won't often be disappointed.

THE FUTURE OF READING

Electronic Books

by Rick Sutcliffe

2. Say who or what the underlined words in the text refer to.

- | | | |
|----------|---------|----------|
| 1. their | 4. it | 7. their |
| 2. they | 5. them | |
| 3. you | 6. them | |

3. Match the antonyms.

- | | |
|----------------|--------------|
| 1. inexpensive | a) minority |
| 2. retail | b) upload |
| 3. many | c) wholesale |
| 4. download | d) expensive |
| 5. big-name | e) few |
| 6. majority | f) nobody |

4. Answer the questions about the text.

1. What's the difference between traditional books and e-books?
2. Where can we buy e-books?
3. What are the advantages of e-books comparatively to printed books?
4. Explain the meaning of the expression "put a toe in the e-book waters".
5. Is it possible to read some chapters of an e-book before you buy it? Quote from the text.

Text №19

SAVING THE PLANET

1. Look at the title of the text and the picture.

- a) What do you think this text is about?
- b) What can you do to help our planet survive?

2. Read the following text carefully.

Years ago there wasn't a problem with rubbish because things like plastic and disposable nappies hadn't been invented. There wasn't

so much packaging on items you bought either. But now with everything so over packaged wrapped and disposable we are suffering the consequences of far too much waste. The trouble is not everything can be recycled or will rot away. You used to be able to get a refund on glass bottles when you took **them** back to the shop. Now **they** are either collected from your house by the council or you can take them to a bottle bank.



The fact that paper can be recycled and is easy to dispose is great, but remember paper is made from trees, which are important to the environment. The rainforests have been slowly disappearing for a while now. We need **them** not just because it helps with the climate. They are important as like all plants they give **us** oxygen. They are also a home to many animals **who** rely on them for their survival.

The best waste is organic, dead leaves; carrot tops, onion skins and so on all rot down and make fertile soil. This in turn will help the plants and vegetables giving **them** much needed food. So if you are able to have a compost heap in your garden you'll be helping the environment and your garden will love you for it.

Acid rain is another serious problem it is damaging to plants and is caused by pollutants such as sulphur dioxide and nitrogen oxides. **These** come from the burning of coal, oil and gas.

Dropping litter is not just a lazy thing to do **it** makes work for other people, is bad for the environment and looks ugly. So think before you drop litter either bin it or keep it and then bin it.

When rivers and seas are polluted by waste we are not only stealing **their** beauty but were spoiling it for ourselves too. Our health can also suffer. Sadly accidents do occur; oil slicks sometimes happen and wreck the environment. Animals tend to suffer the most from **these** incidents. **We** should really have in place something that will prevent so much destruction, rather than just waiting for it to happen, then trying to clean up the damage.



Nuclear waste has been the cause of controversy over the years. Radioactive material leaking out would be very serious indeed, it can cause real harm. This is why it is the most worrying.

Although we are trying to stop the hole in the ozone layer getting any bigger, nuclear waste is still a serious problem. The ozone layer protects us from harmful ultra – violet rays. Its hole has been caused by chlorofluorocarbons (cfc's) a chemical that was found in some products. Refrigerators used to contain **them**. So do we care enough about the earth we have inherited and our passing onto future generations? Or is it now all too late to do anything? Each one of us can make a difference and each and every one of us is responsible to the environment. **It** takes care of us; we should take care of it.

Source:

<http://www.childrenswebmagazine.com/Environment.htm>

3. Say who or what the following words refer to:

- | | | |
|---------|-----------|----------|
| 1. them | 6. them | 11. we |
| 2. they | 7. these | 12. them |
| 3. them | 8. it | 13. it |
| 4. us | 9. their | |
| 5. who | 10. these | |

4. Go through the text and enumerate some of the environmental problems mentioned in it.

Decide whether these statements are True (T) or False (F). You have to explain orally when it's false:

1. Some years ago diapers weren't used.
2. Nowadays products are over packaged.
3. Some products are difficult to destroy.
4. Both animals and humans need trees to survive.
5. Acid rain is caused by organic waste.
6. Ozone layer depletion and nuclear waste are two most serious problems.
7. It's useless for us to try and make a healthier environment

Text №20
THE AMERICAN CIVIL WAR

1. Read the following text carefully.

The American Civil war began in 1861 and went on until 1865. Abraham Lincoln had been elected President of the United States of America in 1860. He wasn't a popular President; his supporters amounted to less than half. Lincoln wanted to abolish slavery. But it



split the country, southern's didn't like the idea. The south relied on the slave trade for workers for there farms. The north however disagreed with slave labour. The disagreement meant 11 states in the south broke away. They decided to set up on their own and be independent they were known as the confederacy. Jefferson Davis became the Confederates president. It caused the civil war, on

one side you had the confederates and on the other the union, which was the north. The civil war suffered great losses 600,000 Americans died. Hundreds of thousands of soldier's lost their lives as well as civilians. Due to the many battles fought over the 4 years.

In 1863 Abraham Lincoln spoke at the place where the Battle of Gettysburg had occurred at a dedication ceremony. In what would become known as The Gettysburg Address. He started by referring to the United States independence. He said "Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal." The newspapers of the time highly praised his speech. Sadly it would be almost another 18 months before slaves would be truly free. Abraham Lincoln by standing up for what he believed to be morally the right thing managed to achieve what he set out to do. He never wavered or gave in. The war had made him a strong leader and he won re-election when he stood again in 1864.

Source:

<http://www.childrenswebmagazine.com/american%20civil%20war.html>

2. Match the antonyms.

- | | |
|--------------|--------------------------|
| 1. basic | a) dishonest, insincere. |
| 2. frequent | b) rare, infrequent. |
| 3. favorable | c) unnecessary. |

- | | |
|--------------|---------------------------|
| 4. huge | d) small, tiny. |
| 5. loud | e) quiet, soft. |
| 6. necessary | f) harmful. |
| 7. honest | j) secondary, additional. |

3. Decide whether these statements are True (T) or False (F).

- The American Civil war lasted for 4 years.
- Lincoln did not want to free slaves.
- The south relied on the slave trade for workers for there farms.
- The north disagreed with slave labour.
- Confederacy was a government set up by states which permitted slavery, that had declared their secession from the [United States](#).

**Text №21
HENRY FORD**

1. Look at the title of the text and the pictures.

- a) What kind of text is it?
- b) What do you know about Henry Ford?

2. Look quickly through the text to find this information.

- 1) What did Henry Ford revolutionize?
- 2) What was his hometown name?
- 3) How many brothers/sisters did he have?
- 4) What happened in 1879?
- 5) Where did he become chief engineer?

Henry Ford was an inventor, philanthropist and successful American businessman. Ford was the founder of the still popular Ford Motor Company which had its first success with the Model T Ford car that was released in 1908. Henry Ford revolutionized the way cars were designed and built, introducing assembly line factories for producing mass amounts of vehicles that led to lower prices for consumers and an explosion in car ownership throughout the United States.

Henry Ford was born on July 30, 1863 in Dearborn, Michigan, United States, in what was then known as Springwells Township. Ford's parents were Irish immigrants and the family lived on a farm, with Henry Ford being the eldest of six children. The family had a

comfortable upbringing on the farm with a decent income, but even as a young person, Ford believed there was too much work and not enough income living from the land. Ford began his career as an apprentice machinist in 1879, then returned to his family farm in 1882 before starting work with the Westinghouse company to service their steam engines. Ford then went to work at the Edison Illuminating Company where he became chief engineer in 1893.

Henry Ford had always enjoyed mechanical things and was always trying to improve or create more useful machinery. In 1893 he created his first gasoline driven buggy or Quadricycle that was completely self propelled. He then started the Detroit Automobile Company with several other investors to improve on his design, but the company went bankrupt soon after. Ford then started the Henry Ford Company, which he also left, before eventually starting the Ford Motor Company in 1903.



The Ford Motor Company released the successful Model T car in 1908. Generally cars were built one at a time and were only accessible to the very wealthy, but Ford continued to improve the way the cars were manufactured. In 1913 the cars were being mass produced by one of the first moving assembly lines. In 1918, half of the total amount of cars in the United States were Model T's, 15 million cars were sold, and production of the Model T was finally stopped in 1927.

by one of the first moving



Henry Ford created the Ford Foundation in 1936 to promote human welfare through research grants, educational grants and development. In 1947, at the age 83 Henry Ford died of a cerebral hemorrhage and was buried in the Ford Cemetery in Detroit.

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Ford returned to his family farm before starting work with the Westinghouse company to service their steam engines.
2. Ford was an Irish immigrant.
3. Henry Ford was not only a inventor.
4. Ford created his first Quadricycle that was not completely self propelled.
5. His foundation had the purpose of promotion welfare through research grants.
6. In 1947, at the age 83 Henry Ford was buried in the Ford Cemetery in Detroit.

Text №22 TECHNOLOGY AND YOUR HEALTH

1. Read the following text carefully.

I have believed for a while that mobiles, mobile phone masts and another technology is harmful to our health, due to the exposure of radiation. Scientists at the very least think mobile phones should be used as little as possible. They think it is better to be cautious about using mobiles and a lot of scientists believe they are harmful to your health. Mobile phones are particularly bad for children. The phone companies will tell you that they are safe. But remember they are selling a product so they are hardly going to put you off buying their product by telling you it is unsafe. Where there is a lot of money involved there tends to be corruption. So don't think that they or the government, who get a tax of the money from the use of masts and mobile phones that are put up, have your best interests in mind.



After all people said that smoking, asbestos, a medication called Thalidomide, pesticides and so on were either safe or wouldn't cause you serious harm. However they were wrong as they caused cancer, disability and terrible illnesses.

I think technology will be to the next generation what drink, smoking and drugs have been to previous generations. In fact research claims mobile phones could kill more people than smoking.

Wireless (wi-fi) can cause headaches, nausea, tiredness and memory loss in some people. Technology can be particularly

hazardous if you are sensitive to it. We have so much technology now there is 24 hour television, computers, Nintendo games, phones and so on. It is not just mobiles but Dect phones (cordless) too and on top of all this there is wireless as well. Electrical gadgets in the bedroom can also cause sleep problems. It is best to have no electronic items in your bedroom. But if you can't do without them at least make sure you don't have a computer, cordless phone or mobile in your bedroom or at least make sure that are turned off. Cordless phones emit a high amount of radiation this is because they have to be on all the time so that the phone can be charged up. If you didn't do this the phone wouldn't work. So keep your technology use to a limited amount of time each day. Particularly keep your use of mobile phones to a minimum and use a landline instead, because mobile phones can cause cancerous brain tumors if they are used for a long period of time over the years.

Always remember that your health is very important as you might find you are unable to return to good health once you have lost it.

2. Answer these questions according to the text:

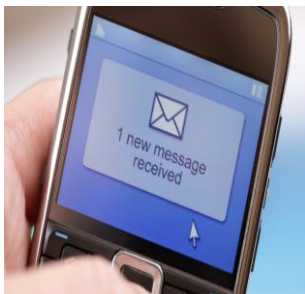
1. What's the author's position about the use of technology?
2. Why do phone companies say mobile phone use is safe?
3. Which symptoms may wireless cause in human beings?
4. Why does the author advise us not to have turned on wireless gadgets in our bedrooms?
5. Which possible hazard may excess use of mobiles cause?

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. The author of the text is against the use of technology.
2. We should use mobile phones as much as possible.
3. Scientists consider mobile phones shouldn't be used by children.
4. Scientists and phone companies' opinion on mobile security diverge.
5. Research claims smoking kills much more than mobile phone use.
6. Electrical appliances in the bedroom are advisable.

Text №23
TEXT MESSAGE

1. Read the following text carefully.



A British woman, Melissa Thompson has broken the world record for typing the fastest text message, after typing a 26 word message in 25.94 seconds. The previous record holder typed the same words earlier this year in 35.54 seconds.

Thompson told *Sky News* that she was shopping with her boyfriend when she was approached by Samsung to try and break the record: "I used to send a lot of

text messages – 40 or 50-a-day to Chris alone so we both knew I could type fast. But since we moved in together and I started my job I haven't been texting as much and, you could say, my fingers were out of shape." Obviously not *that* out of shape.

The message she typed in 25.94 seconds:

The razor-toothed piranhas of the genera *Serrasalmus* and *Pygocentrus* are the most ferocious freshwater fish in the world. In reality they seldom attack a human"

Officials from Guinness World Record must approve her victory before entering her into the record books. And this is the world we live in.

2. Answer the questions about the text:

1. How many text messages do you send on a monthly basis? (A new study shows that teens send 3,339 texts per months. It is more than 6 per hour they are awake).
2. What do you text message about?
3. When do you use your cell phone?
4. What do you think about text messaging during meals?
5. Are there places or situations when you think text messaging is absolutely wrong?
6. What do you think of text messaging and driving? –Or what do you think about using the cell phone when driving?
7. Are you addicted to text messaging?
8. What do you use your cell phone for?
9. Why have you got the cell phone you have? (What made you decide on that particular phone).

Text №24
RMS TITANIC SHIP – THE BIRTH OF A LEGEND

1. Complete the table:

Things I know about Titanic	Things I don't know about Titanic	Things I am not sure about Titanic
1.	1.	1.
2.	2.	2.

2. Read the following text carefully.

RMS Titanic world's probably most famous ship was built in 1912. At this time she was the biggest vessel in the world. Her gross tonnage was 46 328 tons. Titanic was 882 feet long and 92 feet broad. She was owned by White star line and was intended to stole the initiative from the main rivals Cunard's Mauritania and Lusitania. RMS Titanic was slower, but her gross tonnage exceeded her competitors' by around 30%. Construction of Titanic started in 1909 in Northern Ireland at the Harland & Wolff shipyard and was completed in 1912.

On April 2, 1912 **RMS Titanic** left the docks for speed test, turns and emergency stop. At around 20:00 Titanic, set sail to Southampton. By the 10th of April supplies were stored and crew was recruited. On April the 10th, afternoon the Titanic ship departed for her maiden voyage. Titanic first stopped at Cherbourg, then turned back to Irish port Queenstown (nowadays Cobh) and headed to his final destination New York, through the North Atlantic. Titanic had 2224 passengers on board.

Titanic ship hits the iceberg

Captain Edward J. Smith passed the command of the Titanic ship to first officer William Murdoch and retired to his cabin at 21:20. Most passengers also went to bed. Crew was aware of the possible danger ahead. Lookouts were instructed to watch out for ice and growlers. The air was clear but the night was moonless and the ocean freezing waters were rather calm. This made the icebergs much more difficult to spot as there were no waves to make the icebergs more visible.



At 23:30 slight haze on the horizon drove the attention of lookouts **Reginald Lee** and **Frederick Fleet**, but this was followed by no action. Nine minutes later Fleet saw the **iceberg** in the path of Titanic ship. He rang the lookout bell three times and

telephoned the bridge. Murdoch ordered a left turn maneuver. **Titanic** avoided frontal collision but just 37 seconds after Fleet's call, the iceberg hit the ship with its **underwater spur** scraping along starboard side for about 7 seconds.

Captain Smith realized something was going wrong and went to the bridge. Smith launched a survey and found out that the ship was taking too much water. **Titanic ship** was constructed to float even with **3 of his 16** bulkheads filled with water, but that night six of them were filling dangerously fast. The captain soon got to the conclusion that Titanic ship was sinking and at 00:05 ordered to uncover the lifeboats. Wireless operators sent their first distress call after just five minutes.

Source: <http://www.titanic2ship.com/titanic-sinking/>

3. How could the disaster have been prevented?

Make five sentences like these:

If the water had been warmer, more people would have survived.

1. _____
2. _____
3. _____
4. _____
5. _____

4. Put the verbs in brackets into the correct tense:

1. If I _____ (be) you, I would phone your mother tonight.
2. Unless we _____ (leave) now, we'll be late.
3. If I hadn't woken up early, I _____ (be) late for work.
4. If you _____ (have) a toothache, go to the dentist.
5. _____ you _____ (give) me a call if you have time tomorrow?
6. Cameras are very expensive these days. If they _____ (not/cost) so much, we _____ (buy) one.
7. Water _____ (turn) into ice if the temperature _____ (fall) below 0°C.
8. If you _____ (look) both ways before crossing the street, you wouldn't have been knocked down.

5. Fill in unless or if:

1. We won't go on holiday _____ we can take our dog.
2. _____ you go to bed late, you'll be tired in the morning.
3. I can't finish my homework _____ you help me.
4. We'll have a picnic on Saturday _____ the weather is bad.
5. I'll open the window _____ I get too hot.

**Text №25
MOBILE PHONE**

1. Look at the title of the text and the picture.

- a) What do you think this text is about?
- b) Determine the most popular mobile phone models and find out why people choose them.
- c) Determine in which purpose people use mobile phones more often.
- d) Find out if there any influence of mobile phones on humans health; If it is dangerous; how to protect your health.

2. Read the following text carefully.

Millions of people are using cell phones today. In many places it is actually considered unusual not to use one. In many countries, cell phones are very popular with young people. They find that the phones are more than a means of communication – having a mobile phones shows that they are cool and connected.

The explosions around the world in mobile phone use has some health professionals worried. Some doctors are concerned that in the



future many people may suffer health problems from the use of mobile phones. In England, there has been a serious debate about this issue. Mobile phone companies are worried about the negative publicity of such ideas. They say that there is no proof that mobile phones are bad for your health.

On the other hand, why do some medical studies show changes in the brain cells of some people who use mobile phones? Signs of change in the tissues of the brain and head can be detected with modern scanning equipment. In one case, a traveling salesman had to retire at a young age because of serious memory loss. He couldn't remember even simple tasks. He would often forget the name of his own son. This man used to talk on his mobile phone for about six hours a day, every day of his working week, for a couple of years. His family doctor blamed his mobile phone use, but his employer's doctor didn't agree.

What is it that makes mobile phones potentially harmful? The answer is radiation. High-tech machines can detect very small amounts of radiation from mobile phones. Mobile phone companies agree that there is some radiation, but they say the amount is too small to worry about.

As the discussion about their safety continues, it appears that it's best to use mobile phones less often. Use your regular phone if you want to talk for a long time. Use your mobile phone only when you really need it. Mobile phones can be very useful and convenient, especially in emergencies. In the future, mobile phones may have a warning label that says they are bad for your health. So for now, it's wise not to use your mobile phone too often.

3. For each item below circle the best answer:

1. This article is about ...
 - a. the possible dangers of mobile phone use
 - b. why mobile phones are popular
 - c. how mobile phones work
2. The writer's purpose in writing this article was to ...
 - a. convince people that cell phones may be dangerous
 - b. convince people that cell phones are dangerous
 - c. convince people to buy cell phones....
3. Paragraph 4 is about ...
 - a. the increase in mobile phone use
 - b. what makes mobile phones potentially dangerous
 - c. how to avoid the possible dangers of mobile phones
4. Another word for means in line 3 is ...
 - a. unkind
 - b. method
 - c. expression
5. In Paragraph 4, the word potentially means ...
 - a. certainly
 - b. possibly
 - c. privately
6. You can infer from the information in paragraph 2 that mobile phone companies ...
 - a. know that cell phones are dangerous to your health
 - b. have proof that cell phones are not dangerous to your health
 - c. are afraid that information about cell phone health problems will hurt their business.

4. What are the advantages and disadvantages of the mobile phone? Write these 7 ideas in the appropriate column of the chart below. Then add one more advantage and disadvantage.

Advantage	Disadvantage
-----------	--------------

1. They are easy to carry.
2. They are small.
3. They sometimes ring during concerts and movies.
4. They are expensive.

5. They easy to lose them.
6. You can talk on the phone anywhere.
7. Cell phone users have more car accidents.

5. Mark Fact or Opinion according to the text:

1. Millions of people use mobile phones today.
2. In the future, many people may suffer health problems from the use of cell phones.
3. High-tech machines can detect very small amounts of radiation from mobile phones.
4. The amount of radiation from cell phones is very small.
5. Cell phones aren't dangerous because the amount of radiation from them is very small.
6. There are more cell phone users today than in 1995.
7. Many Asian students study in England and the United States every year.
8. In the future people won't read as many books as they do today.

PART II

2.1 ECONOMY

Text №1

THE SCIENCE OF ECONOMICS

1. Read the following text carefully and answer the questions about the text:

1. What is economics?
2. What do economists study?
3. Why do most people work?
4. What is economic system?
5. What is economics concerned with?

Economics is a science. This science is based upon the facts of



our every day lives. Economists study our everyday lives and general life of our communities in order to understand the whole economic system. They try to describe the facts of the economy in which we live, and to explain how it all works. The science of economics began with Aristotle and it didn't stay still. This science seems to apply to every nook and cranny of human experience.

There is an economics of money and trade, of production and consumption, of distribution and development.

Whenever decisions are made, the law of economy is called into play. Whenever alternatives exist, life takes on an economic aspect. It has always been so. But how can it be?

It can be because economics is more than just the most developed of the sciences of choice and control. It is a way of looking at things, a system of thought, an element of knowledge. It can be useful in many ways. Most people work to earn their living, and they produce goods and services. The work people do is called economic activity. All economic activities together make up the economic system of a town, of a country or the world. Such an economic system is very complex, and the science of economics tries to analyze and explain

the way it functions. The work people undertake either provides what they need or provides the money with which they can buy essential commodities.

Human beings certainly have a wide and very complex range of wants. The science of economics is concerned with all material needs of people. To be brief, the science of economics can be defined as a social science chiefly dealing with description and analysis of the production, distribution and consumption of goods and services.

2. Pay attention to the definitions of these terms:

1. economy – the structure of economic life in a country, area, or period;
2. economics – a social science concerned chiefly with description and analysis of the production, distribution, and consumption of goods and services;
3. economist – an expert in the science of economics or political economy.

3. Explain the meaning of these words in English:

1. economic activity;
2. to earn one's living;
3. commodities;
4. to stay still;
5. to undertake.

Text №2 WHAT ARE TAXES?

1. Look at the title of the text and the pictures.

- What are taxes?
- Do you pay taxes?
- Who is obliged to pay taxes?

2. Read the following text carefully.



People often say there are only two things a person can be safe of in life: death and taxes. What are taxes? Taxes are defined as financial burdens borne by individuals and legal entities according to their ability to contribute towards the expenditures of public authority without a specific compensation.

Taxes are compulsory levies that are regularly imposed and, as a rule, not destined for a special purpose; they are regarded as a contribution to the State Budget from which most government expenditures are financed in the common interest of the society. Taxes differ from other mandatory levies in that they are unrequited – i.e., they are not paid in exchange for some specific services or any particular benefit but represent a general obligation of taxpayers. In other words, there is no relationship between the tax paid by the person and the benefits received as a result of public expenditure. In modern economies taxes are the most important source of government revenue.



Taxes are considered to have three functions:

1. fiscal or budgetary, to cover government expenditures, to provide the public authorities with the revenue required for meeting the cost of defence, social services, interest payments on the national debt, municipal services, etc.;
2. economic, to give effect to economic policy, to promote such general aims as full employment, monetary stability, to influence the stable satisfactory rate of economic growth of the nation, and also to influence the macroeconomic performance of the economy (the government's strategy for doing this is called its fiscal policy. To achieve this aim tax exemptions are used);
3. social or redistribute, to increase the welfare of the community, to lessen inequalities in the distribution of income and wealth by redistributing resources between individuals or classes of the population. Historically, the nobility were supported by taxes on the poor. Modern social security systems are intended to support the poor, the disabled or the retired by taxes on those who are still working.

Taxes are compulsory involuntary payments and every citizen of the country is legally bound to the tax imposed on him. Failure to pay taxes, or paying less than one owes, can lead to substantial penalties (besides just the tax owed). If the failure to pay or the payment of incorrectly low amount is deemed intentional, not merely a mistake, it is a crime subject to more sever penalties, including large fines and imprisonment.

3. Answer the questions about the text:

1. What is the difference between taxes and other compulsory levies?
2. What is the most important source of government revenue?
3. What can failure to pay taxes lead to?
4. Is there any relationship between the tax paid by the person and the benefits received by him?
5. What functions of taxes do you know?

4. Guess the meaning of the words by their definitions:

- income which the government receives as tax,
- money gained by trade or business
- to charge a tax
- money received regularly as payment for work or interest from investment
- the system by which a country wealth is produced and used
- money paid regularly for the use of something
- that part of the money made by a business, which is divided among those who own shares in the business
- something owed to someone else.

5. Look through the text again and find English equivalents for the following Russian phrases:

- Считается преднамеренным;
 покрыть государственные расходы;
 в соответствии с их способностью;
 повлиять на удовлетворительный темп экономического роста;
 чтобы достичь этой цели, используется освобождение от уплаты налогов;
 увеличить благосостояние общества;
 уменьшить неравенство в распределение доходов;
 система социального страхования предназначена для поддержания бедных;
 источник государственных доходов;
 всеобщая обязанность налогоплательщиков.

Text №3
ADVERTISEMENT

1. Read the following text carefully.



No matter where you look you will see ads or advertisements. They are everywhere: In newspapers, _____, on TV, on the radio, on the internet, when you play games on the computer, on clothing on balloons and blimps, on... Well, they are a part of your life. There are so many that you might not even notice them. To advertise means to call something to _____ of the public. That can be done in many different ways. Street

vendors advertise by calling out loudly: "Bananas – 10 for 2 dollars!" Others prefer to advertise their products on posters that can be found everywhere. Others again use television and radio for the purpose. Advertisements have been around for a long time. In the old days you "advertised" _____ and had election posters, baths, pubs etc.

It is hard to imagine a world without advertisements. They are everywhere and they pay for many things. Just think of all _____ that are sponsored by a company or magazines that are full of ads. You would have to pay much more if they were not part of the magazine. When you surf the net or play a game online, they are there.

Advertisements are necessary –that's what a lot of companies have experienced. Just look at the Coca-Cola and Pepsi story. Coca-Cola used to be the preferred product when it came to cola. Pepsi took _____ and invented the Pepsi Challenge. In blind tests Pepsi was preferred by a lot of people.

Ads are not the same in every country. You have to pay attention to traditions, history and culture. What works in one country might not work in another country.

An important part of _____ and selling products is the idea of brands. When you buy a particular brand, you are not just buying a product; you are buying an identity and a lifestyle. In the old days _____ meant something hot or burning. Today it is an identifying logo, a mark or symbol that distinguishes one company or _____ from others. A good logo is unique and not easily confused with logos of other companies. Many logos are famous and have been around for a long time.

2. Fill in the gaps in the text using the following words:

***The programs on television the attention politicians,
in magazines the challenge advertising
products a brand***

3. Task:

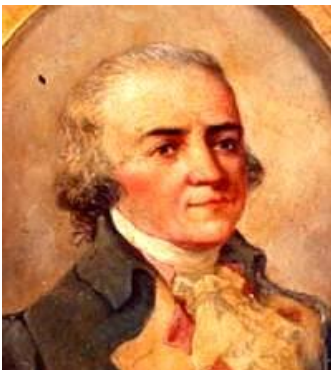
1. Make a list of all the brand names you usually wear.
2. Make a list of all the brand names you can think of.
3. Try to imagine on a day where you don't want to wear anything with a brand name on –will it be easy or difficult for you to dress that day?
4. Why do you wear brand-name clothes/ Why don't you wear brand-name clothes?

Text №4

THE MERCANTILISTS. THE PHYSIOCRATS.

1. Read the following text carefully.

The Mercantilists. Between the 16th and 18th centuries, the major countries of Europe believed in the economic theory of mercantilism. Mercantilists argued that nations should behave as if they were merchants competing with one another for profit.



Accordingly, governments should support industry by enacting laws to keep labor and other production costs low, and exports high. In this way the nation could achieve what was called a "favorable balance of trade". "Favorable balance of trade" described a situation in which exports exceeded imports. To achieve this, the major European powers sought to acquire colonies. Colonies, it was thought, could provide the "mother country" with cheap labor, raw materials and a market for its manufactured goods.

Today there are people who still argue that their country should promote a "favorable balance of trade", that their national government should do what it can to restrict imports and promote exports. For that reason, they are often described as neomercantilists or "new" mercantilists.

The Physiocrats. For one group of 18th-century French philosophers and economists, the suggestion that nations should go out of their way to protect business and industry made no sense at all. These were the physiocrats. The physiocrats argued that the products of agriculture and other natural resources were the true



source of wealth. Since real wealth came from the land, it followed that the wisest thing government could do would be to keep its hands off business and let nature take its course. This idea was expressed in the slogan "laissezfaire" (let people do as they choose). The 200-year-old argument between those favouring regulation of

the economy and those supporting laissez faire is still with us. Whether the problem involves individuals or institutions, there are those who find the solution in government intervention, and others who favor "laissezfaire", letting natural economic forces take their course.

2. Answer these questions according to the text:

1. What two groups are discussed?
2. How were they different from each other?
3. What is a "favorable balance of trade"?
4. What is "laissezfaire" and with which group is the term associated?

3. Find the definition:

economics economy economist

- a) the structure of economic life in a country, area, or period;
- b) a social science concerned chiefly with description and analysis of the production, distribution, and consumption of goods and services;
- c) an expert in the science of economics or political economy.

4. Say five sentences of your own using words from the list above.

5. Pay attention to the definitions of these terms:

1. balance of trade – the difference between the value of exports and the value of imports;

2. “laissez-faire” – the idea that governments should do as little to the economy as possible and allow private business to develop without the state controlling or influencing it;

3. production costs – combined costs of raw materials and labour incurred in producing goods.

4. raw materials – materials in their natural or unmanufactured state which will be synthesized or analyzed to produce marketable products.

Text №5

WHAT IS MANAGEMENT?

1. Read the text summarizing the different functions of management.

Management is important. The success or failure of companies, public sector institutions and services, not-for-profit organizations, sports teams, and so on, often depends on the quality of their managers. But, what do managers do? One well-known classification of the tasks of a manager comes from Peter Drucker. Drucker was an American business professor and consultant who is often called things like «The Father of Modern Management».

Drucker suggested that the work of a manager can be divided into five tasks: planning (setting objectives), organizing, integrating (motivating and communicating), measuring performance, and developing people.

- First of all, senior managers and directors set objectives, and decide how their organization can achieve or accomplish them. This involves developing strategies, plans and precise tactics, and allocating resources of people and money.

- Secondly, managers organize. They analyze and classify the activities of the organization and the relations among them. They divide the work into manageable activities and then into individual tasks. They select people to perform these tasks.

- Thirdly, managers practice the social skills of motivation and communication. They also have to communicate objectives to the people responsible for attaining them.



They have to make the people who are responsible for performing individual tasks form teams. They make decisions about – pay and promotion. As well as organizing and supervising the work of their subordinates, they have to work with people in other areas and functions.

- Fourthly, managers have to measure the performance of their staff, to see whether the objectives or targets set for the organization as a whole and for each individual member of it are being achieved.

- Lastly, managers develop people – both their subordinates and themselves.

A company's top managers also have to consider the future, and modify or change the organization's objectives when necessary, and introduce the innovations that will allow the business to continue. Top managers also have to manage a business's relations with customers, suppliers, distributors, bankers, investors, neighbouring communities, public authorities, and so on, as well as deal with any crisis that arises.

Although the tasks of a manager can be analysed and classified in this fashion, management is not entirely scientific. There are management skills that have to be learnt, but management is also a human skill. Some people are good at it, and others are not. Some people will be unable to put management techniques into practice. Others will have lots of technique, but few good ideas. Excellent managers are quite rare.

2. Write a brief summary of each of the five tasks listed by Drucker.

3. Match up the following words and definitions:

- | | |
|---------------------|---|
| 1. consultant | A plan for achieving success |
| 2. crisis | B a new idea or method |
| 3. innovation | C a person with a less important position in an organization |
| 4. objective (noun) | D a person who provides expert advice to a company |
| 5. promotion | E a situation of danger or difficulty |
| 6. public sector | F something you plan to do or achieve |
| 7. strategy | G the section of the economy under government control |

8. subordinate

H when someone is raised to a higher or more important position.

4. Use the word combinations below to complete the sentences:

allocate resources, deal with, crises, make decisions, perform tasks, measure, performance, set objectives, supervise, subordinates.

- After an organization has _____, it has to make sure that it achieves them.

- Managers have to find the best way to _____ all the human, physical and capital _____ available to them.

- Some people _____ better on their own, while others work better in teams.

- Managers _____ the _____ off their stuff to see whether they are reaching their targets.

- Top managers have to be prepared to _____ if they occur and then have to _____ quick.

5. Selecting a Chief Operating Officer

Three companies are looking for a senior manager – a Chief Operating Officer who will be responsible for managing the company’s day-to-day operations, and making sure that all operations are efficient and effective.

Company A is a cigarette manufacturer that has to modernize its production systems in order to become profitable, in an industry that has an increasingly bad reputation.

Company B is a software developer that employs a lot of young, creative, talented and rather undisciplined people.

Company C is a private television channel whose objective is to broadcast programmes that get as big an audience as possible, in order to maximize advertising revenue.

Which of the following candidates might be the most suitable for the positions? Here are some extracts from their letters.

Candidate 1

My skills involve helping businesses achieve their objectives. Throughout my career I have ensured that my subordinates

successfully executed the strategies developed by senior management, delivered results and maximized revenue.

Candidate 2

I see my main skills as being able to communicate with and motivate people, to help them develop and accomplish their objectives, while also working effectively in teams.

Candidate 3

At this stage in my career, I see myself in a challenging new position that involves setting objectives and deciding how the organization can achieve them. I would then concentrate on measuring the performance of the staff.

Candidate 4

My career demonstrates an ability to analyze problems, find solutions and implement them.

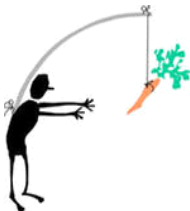
I also have strong communication skills and experience in explaining difficult decisions to employees, investors, journalists, and so on

Text №6

'SATISFIERS' AND 'MOTIVATORS'

1. Well-known theorist of the psychology of work, Frederick Herzberg, has argued that good working conditions are not sufficient to motivate people. Read the text and find out why.

It is logical to suppose that things like good labour relations, good working conditions, job security, good wages, and benefits such as sick pay, paid holidays and a pension are incentives that motivate workers. But in *The Motivation to Work*, Frederick Herzberg argued that such conditions – or 'hygiene factors' – do not in fact motivate workers. They are merely 'satisfiers' – or, more importantly, 'dissatisfiers' where they do not exist. Workers who have them take them for granted.



As Herzberg put it, 'A reward once given becomes a right.' 'Motivators', on the contrary, include things such as having a challenging and interesting job, recognition and responsibility, promotion, and so on. Unless people are motivated, and *want* to do a good job, they will not perform well.

However, there are and always will be plenty of boring, repetitive and mechanical jobs, and lots of unskilled workers who

have to do them. How labour relations, good working conditions, job security, good wages, and benefits such as sick pay, paid holidays and a pension are incentives that motivate workers.

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However, there are and always will be plenty of boring, repetitive and mechanical jobs, and lots of unskilled workers who have to do them. How can managers motivate people in such jobs?



One solution is to give them some responsibilities, not as individuals but as part of a team. For example, some supermarkets combine office staff, the people who fill the shelves, and the people who work on the checkout tills into a team and let them decide what product lines to stock, how to

display them, and so on. Other employers encourage job rotation, as doing four different repetitive jobs a day is better than doing only one. Many people now talk about the importance of a company's shared values or corporate culture, with which all the staff can identify: for example being the best hotel chain, or hamburger restaurant chain, or airline, or making the best, safest, most user-friendly, most ecological or most reliable products in a particular field. Unfortunately, not all the competing companies in an industry can seriously claim to be the best.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

- Herzberg argued that 'hygiene factors' motivate workers.
- Challenging jobs and responsibility are hygiene factors.
- Some unskilled jobs will always be boring and repetitive.

- Workers might be motivated by having responsibilities as part of a team.
- Job rotation can make a day's work more interesting.
- You can always motivate workers by telling them that they work for the best company in the field.

3. Find the words in the text that mean the following:

- interactions between employers and employees, or managers and workers.
- knowing that there is little risk of losing one's employment.
- money paid (per hour or day or week) to manual workers.
- advantages that come with a job, apart from pay.
- things that encourage people to do something.
- to be raised to a higher rank or better job.
- without any particular abilities acquired by training.
- regularly switching between different tasks.
- a company's shared attitudes, beliefs, practices and work relationships.

Text №7

OUT-OF-WORK ACTIVITIES

1. Read the following text carefully.

JANINE GEORGE



I had a few team members in my operational team who were working in their jobs for about 40 years. It was a detergent factory, they came in every single day for 12-hour shifts, and can you imagine working in that role for 40 years? I came in and people were really bored, right, and what I did

is, we set up small group meetings for each of the shifts, right, to find out what sports they were interested in, right, and what things they were doing outside of work. I found that there were many entrepreneurs, and also other people interested in things like driving HIV/Aids activities – in South Africa that's quite a big problem at the moment. And I just mean outside of work. I mean, if it's reading a book, if it's kicking a soccer ball, perhaps they want to organize a staff soccer team, right, perhaps they want to start a book club inside work, and I'm not just talking about, and I'm talking about things

outside of things related to the bottom line, and I feel that those things could make people more passionate, just about coming into work, getting up in the morning and coming to their jobs. People then wanted to be trained, and what we found is they were even willing to come in on the off-shifts, and even not get paid for these types of things. So I think the one thing you need to learn about motivation is how do you ensure that you mobilize people by finding out what they really enjoy doing and you need to be extremely creative about these things. And I think it relates in some ways very much to jobs that secretaries do. People think that they're OK with just sitting behind a desk, and organizing your inbox, and sending out meeting requests. They're *not*, so I think it's really up to these managers and leaders to become creative, understand their people, and really think about things – and I don't want to use this word – outside of the box, to try and motivate their staff.

2. Answer these questions according to the text:

- How long had some of Janine's operational team been working in their jobs?
- What kind of company is Janine talking about?
- How long are the working days?
- How did she find the workers when she arrived at the company?
- What did she do to rectify the situation?
- What did she find out at the meetings?
- What examples does she give of out-of-work activities that the company was able to draw on to motivate staff?
- What was the lesson of this experience for Janine?
- Janine talks about activities that are not 'related to the bottom line'. What does this mean?
- Janine says managers should 'think outside of the box'. What does she mean by this and why do you think she apologizes for using this expression?

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Janine George organized group meetings for shifts and found out people out of work activities.
2. People wanted to organize a staff soccer team.
3. Out of work activity could make people more passionate.

4. According Janine opinion, it is up to managers to become creative.
5. Janine says managers should not 'think outside of the box'.

Text №8 MANAGING ACROSS CULTURES

1. Read the following text carefully.

*Richard Lewis is well known in the field of cross-cultural communication and the author of *When Cultures Collide: Managing Successfully Across Cultures* and *The Cultural Imperative: Global Trends in the 21st Century*. Read about his model of three types of cultures, and answer the questions.*



Managing a global multinational company would obviously be much simpler if it required only one set of corporate objectives, goals, policies, practices, products and services. But local differences – cultural habits, beliefs and principles specific to each country or market – often make this impossible. The conflict between globalization and localization has led to the invention of the word 'localization'. Companies that want to be successful in

foreign markets have to be aware of the local cultural characteristics that affect the way business is done.

Richard Lewis has classified different cultures according to three 'poles' representing different types of behavior. Businesspeople in 'linear-active' cultures such as Britain, the USA and Germany are generally organized and rational, try to act logically rather than emotionally, plan in advance, and like to do one thing at a time. They believe in respecting rules, regulations and contracts, and so are what the Dutch theorist Fons Trompenaars calls 'universalists' – they think rules apply to everybody. They are not afraid of confrontation but will compromise when necessary to achieve a deal. They are essentially individualist.

«Multi-active cultures» in Southern Europe, Latin America and Africa attach more importance to feelings, emotions and intuition, and relationships and connections. People like to do many things at the same time; they are flexible, good at changing plans and happy to improvise. They believe in social or company hierarchy, and respect

status. They are essentially collectivist, and also what Trompenaars calls "particularist" – they believe that personal relationships and friendships should take precedence over rules and regulations.

People in "reactive cultures" in Asia prefer to listen to and establish the other's position, and then react to it. They try to avoid confrontation, and don't want to lose face' or cause someone else to. They rarely interrupt speakers and often avoid eye contact. They try to formulate approaches which suit both parties.

Other countries have cultures which show combined characteristics of two of these poles, and can be represented along the sides of a triangle.

2. Answer these questions according to the text:

- Why is it important for companies to be aware of local cultures?
- What are the differences between individualists and collectivists?
- Who is more likely to think: «let them speak first».
- Who is more likely to say, about other people: «They can't be trusted because they will always help their friends or family" – universalists or «particularists»?
- Who is more likely to say: "Oh, you can't trust them; they wouldn't even help a friend"?

3. Decide whether these statements are True (T) or False (F). You have to explain orally when it's false:

- Companies that want to be successful in foreign markets take into account the local cultural characteristics.
- 'Multi-active cultures' in Southern Europe, Latin America and Africa are flexible, good at changing plans and happy to improvise.
- People in «linear-active» cultures try to avoid confrontation.
- People in «linear-active» cultures are flexible, good at changing plans and happy to improvise.
- People in «linear-active» cultures formulate approaches which suit both parties.

4. Match the words in the box with the definitions below

Collectivist, compromise, confrontation, connections, eye contact, improvise, interrupt, intuition, logic, lose face, status, localization.

- an invented word combining worldwide and regional concerns
- thought based on reason and judgment rather than feelings and emotions
- a face-to-face disagreement or argument
- reducing demands or changing opinions in order to agree
- understanding or knowing without consciously using reason
- people of influence or importance with whom you are associated
- to do something when necessary without having already planned it
- respect, prestige or importance given to someone
- believing that the group is more important than the individual
- to be humiliated or disrespected in public
- to cut into someone else's turn to speak
- looking directly at the people you are talking or listening to.

**Text №9
YOU'RE FIRED!**

1. Read the following text carefully.

Imagine you're one of the 13 men on this all-male board of a large company and are told five of you must go to be replaced by women. Unlikely? Not in Norway, where they're enforcing a law that 40% of directors must be female. By [Yvonne Roberts](#),

[The Guardian](#),
<http://www.theguardian.com/lifeandstyle/2008/mar/06/women.discriminationatwork>

Rolf Dammann, the co-owner of a Norwegian bank, recently had his skiing holiday interrupted by some unwelcome news. The government had published a list of 12 companies accused of breaking the law by failing to appoint women to 40% of their non-executive board directorships. His company, Netfonds Holding ASA, was one of the dirty dozen – attracting international attention.

"I work in a man's world. I don't come across many women and that's the challenge," Dammann says. "The law says a non-executive director has to be experienced, and experience is difficult to find in women in my sector. People have had to sack board members they've worked with and trusted for 20 or 30 years, and replace them with someone unknown. That's hard."



This month, Norway set a new global record. It now has, at 40%, the highest proportion of female non-executive directors in the world, an achievement engineered by the introduction of a compulsory quota. Two years ago, after several years of voluntary compliance had failed to lead to a sufficient number of female board members, 463 "ASAs" – publicly listed companies over a certain size – were told to change the composition of their boards or risk dissolution.

"A woman comes in, a man goes out. That's how the quota works; that's the law," says Kjell Erik Oie, deputy minister of children and equality, in the centre-left "Red-Green" coalition government in Oslo. "Very seldom do men let go of power easily. But when you start using the half of the talent you have previously ignored, then everybody gains."

In 2012, only 7.1% of non-executive directors of ASAs were female. (...)

Business leaders argued that experienced senior women were impossible to find, especially in the oil, technology and gas industries. "I'm a responsible man," one CEO told me in Oslo last week. "I have a duty to do the best I can for our shareholders. I've been forced to appoint two women whom I know are apprentices. Give them 10 years and I'd be happy to have them on the board; not now." (...)

Dammann, like many opponents of the quota I met, is now pragmatic. "The law is passed. We are making an investment in diversity that should be good for business. I hope it pays off."

Under the law, the remaining 10 rebel companies now theoretically face closure. "They will find the women," Anne Margaret Blaker, political adviser to the minister of trade and industry, says. "You can be sure."

In the UK, the pace of change continues at tortoise pace. Jacey Graham, co-author of *A Woman's Place is in the Boardroom: the Road*

Map, which will be published in June, says, "Nobody in the corporate world is in favour of quotas. What big companies are doing is putting targets in place at different levels within the organization but not at board level."

In June, the TUC and the CBI are due to publish a joint paper, Talent not Tokenism, arguing in favor of promoting diversity on a voluntary basis. The goal is the same as Norway's, the road however may take much longer to travel. "It's a natural instinct to recruit those who are like you," says Marion Seguret, the CBI's senior policy advisor. "Men need to be trained to look to the other 50% of the population."

Back in Oslo, the irrepressible Fagerland says she plays a game with her daughters based on the Swedish fictional character Pippi Longstocking, a girl who believes in herself and is utterly unconventional. "We break all the rules. Everything is turned upside down. We wear pyjamas in the garden and eat sweets before dinner. They love it.

"I want them to constantly question why things should be as they are. In business, you can always find ways of playing the game differently and better. But first, you have to know your own level of competency and your price – and never sell yourself cheap. For your own sake, and for the sake of all those women who come after."

2. Answer these questions according to the text:

- What is the new Norwegian law?
- What reasons does Rolf Dammann give for not having complied with the new law?
- What does the CEO say about the two women he has had to appoint as directors?
- What does Dammann say will happen as a consequence of the new law?

3. Find words in the article that mean the following:

- meet or find unexpectedly or by accident
- required, obligatory, necessary according to the law
- an officially imposed number or quantity
- done by choice, without legal obligation
- obeying laws or regulations
- the ending or termination of an organization
- trainees, people still learning their job
- someone who changes their beliefs
- being officially responsible for something.

Text №10 THE ECONOMIC ENVIRONMENT

1. Read the following text carefully.

The economy comprises millions of people and thousands of firms as well as the government and local authorities, all taking decisions about prices and wages, what to buy, sell, produce, export, import and many other matters.



All these organizations and the decisions they take play a prominent part in shaping the business environment in which firms exist and operate. The economy is complicated and difficult to control and predict, but it is certainly important to all businesses. You should be aware that there are times when businesses and individuals have plenty of funds to spend and there are times when they have to cut back on their spending. This can have enormous implications for business as a whole. When the economy is enjoying a boom, firms experience high sales and general prosperity. At such times, unemployment is low and many firms will be investing funds to enable them to produce more. They do this because consumers have plenty of money to spend and firms expect high sales. It naturally follows that the state of the economy is a major factor in the success of firms.

However, during periods when people have less to spend many firms face hard times as their sales fall. Thus, the economic environment moves into a recession. At that time, total spending declines as income falls and unemployment rises. Consumers will purchase cheaper items and cut expenditure on luxury items such as televisions and cars. Changes in the state of the economy affect all types of business, though the extent to which they are affected varies. In the recession of the early 1990s the high street banks suffered badly. Profits declined and, in some cases, losses were incurred. This was because fewer people borrowed money from banks, thus denying them the opportunity to earn interest on loans, and a rising proportion of those who did borrow defaulted on repayment. These so – called «bad debts». Cut profit margins substantially.

2. Fill in the gaps with the words and expressions from the text:

1. The economy is complicated and difficult to _____ .
2. When the economy _____ firms experience high sales and _____ .
3. The economic environment _____ as the economy moves into _____ .
4. Changes in the state of the economy _____ all types of business.
5. During a _____ fewer people borrowed money from banks, thus _____ to earn interest on _____ .
6. So-called «bad debts» cut _____ substantially.

3. Answer the questions:

1. What does the economy comprise?
2. What is a boom in the economy? What characterizes the state of the economy at that time?
3. What happens when the economy moves into a recession?
4. What are «bad debts»?
5. What happened to some banks in the early 1990s and why?

**Text №11
THE VAT**

1. Read the following text carefully.

The VAT is a general consumption tax used in virtually every major country except the U.S. In some countries, including Singapore, Australia, New Zealand and Canada, this tax is known as “goods and services tax” or GST.



The VAT is assessed on goods and services, applied at each stage of the production of a commodity, and charged only on the value added at that stage. It is a general tax because the tax applies to all commercial activities that involve the

production and distribution of goods and the provision of services, and a consumption tax because the burden ultimately falls on the final consumer. It is not a charge on companies.

Although VAT is theoretically a tax on “value added”, in practice it resembles a sales tax in that each trader adds the tax to sale invoices issued and accounts for the appropriate tax authority department. However, the trader is permitted to deduct the amount of tax paid on invoices received for goods and services (but not for wages and salaries). Thus VAT is a form of “indirect taxation”, its burden being borne not by traders but by the ultimate consumers of their goods and services. The system is designed to avoid the cascade in which tax is paid on tax, as goods and services pass through long chains of activity.

VAT is often said to be an example of a proportional tax, since the amount of tax paid is proportional to the size of the tax base, i.e. VAT is a tax with a single rate. It is charged as a percentage of price, which means that the actual tax burden is visible at each stage in the production and distribution chain. Thus being calculated as a specified percentage of the total invoice value of goods rather than the number of items, VAT is an example of an ad valorem tax (Latin: according to value).

VAT is collected fractionally, via a system of deductions whereby taxable persons (i.e., VAT-registered businesses) can deduct from their VAT liability the amount of tax they have paid to other taxable persons on purchases for their business activities. This mechanism ensures that the tax is neutral regardless of how many transactions are involved.

Personal end-consumers of products and services cannot recover VAT on purchases, but businesses are able to recover VAT on the materials and services that they buy to make further suppliers or services directly or indirectly sold to end-users. In this way, the total tax levied at each stage in the economic chain of supply is a constant fraction of the value-added by a business to its products.

The VAT was created by Maurice Laure, joint director of the French tax authority, in the 1950s. The VAT was invented because very high sales taxes and tariffs encourage cheating and smuggling. For example, a 30% sales tax was so often cheated that most of the retail economy would go off the books. This is not the case with VAT. The entire economy helps in the enforcement by collecting the tax at each production level, and requiring the previous production level to collect the next level tax in order to recover the VAT previously paid by that production level.

2. Read the text again and answer the following questions:

1. What is the VAT?
2. What is the GST?
3. What countries use the VAT?
4. Why is the VAT a general tax?
5. What is the difference between the VAT and sales tax?
6. Why is VAT said to be an example of a proportional tax?
7. Why is VAT considered neutral?
8. What was the reason for inventing the VAT?

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. The VAT is a charge on companies.
2. Besides the U.S. the VAT is a general consumption tax used in virtually every major country.

3. The VAT is assessed on profits.
4. The VAT is a form of direct taxation.
5. An end-user fails to recover the VAT.

4. Guess the meaning by its definition:

1. The worth that is placed on a product by a particular stage in the production process.

2. To take (especially goods) illegally in or from one country to another whereby to avoid paying necessary tax (customs duty).

3. To provide a satisfactory record, especially money received and paid.

4. To cause something new to exist; to produce something new.

5. The act of causing a rule or law to be obeyed or carried out effectively.

6. To produce a new idea or thing for the first time

7. In spite of everything; without worrying about or taking account of.

8. To look like or be alike

9. To state exactly; describe fully.

10. In Latin the tax that is calculated as a percentage of the value of the goods

2.2 AUTOMOBILE. TRANSPORT AND LOGISTICS

Text №12

AUTOMOBILE PRODUCTION

1. Read the following text carefully.

Specialists in automobile industry deal with designing and manufacturing cars, so they should know that the production of the automobile comprises the following phases:

- 1) Designing,
- 2) Working out the technology of manufacturing processes,
- 3) Laboratory tests,
- 4) Road tests.
- 5) Mass production (manufacturing).

Why is it necessary to know all these facts?

It is important to know them as before the automobile (car or truck) is put into mass production, it should be properly designed and the automobile must meet up-to-date requirements.

What are these requirements?

The automobile must have high efficiency, long service life, driving safety, ease of maintenance and pleasant appearance.

In order to obtain all these qualities engineers should develop up-to-date methods of designing cars, using new types of resistant to corrosion light materials. Also it is important to know computer science because it is intended to shorten the time between designing and manufacturing. Computers offer quick and optimal solutions of problems.

But before the car is put into mass production all its units and mechanisms are subjected to tests, first in the plant's laboratory, then the car undergoes a rigid quality control in road tests. Only then the car is put into mass production. Why are these tests required? What qualities are required of the automobile? The modern automobile must be rapid in acceleration, must have smooth acting clutch, silent gearbox, dependable brakes and steering system, as well as pleasant appearance. Also it must be comfortable and have all conveniences.

2. Answer these questions according to the text:

1. What phases does the production of the automobile comprise?
2. What requirements must the automobile meet?
3. Why are cars subjected to road tests?
4. What qualities are required of the automobile?

5. Why is it important for the specialists in automobile industry to know computing methods?

3. Choose an appropriate variant to complete the sentences:

1. *The cars are subjected to road tests in order....*

a) to shorten the time between designing and manufacturing

b) to meet up-to-date requirements

c) to work out new technological processes

2. *The car must have the following units....*

3. *The car must have the following qualities....*

a) high efficiency, long service life, driving safety and pleasant appearance;

b) smooth acting clutch, silent gearbox dependable brakes and steering system.

Text №13

COMPONENTS OF THE AUTOMOBILE

1. Read the following text carefully.

Basically, the automobile consists of three parts: the power plant, or the engine, the chassis and the body. To these may be added the accessories: the heater, lights, radio, speedometer and other devices.

The power plant or engine is the source of power that makes the wheels rotate and the car move. It includes electric, fuel, cooling and lubricating systems. Most automobile engines have six or eight cylinders.

The chassis consists of a power train, frame with axles, wheels and springs. The chassis includes brakes and steering system.

The power train carries the power from the engine to the car wheels and contains the clutch, gearbox, propeller or cardan shaft, differential and the final drive.

The clutch is a friction device connecting (or disconnecting) the engine crankshaft to the gears in the gearbox. It is used for freeing the gearbox from the engine and is controlled by the clutch pedal.

Brakes are important mechanisms of the car. They are used to slow or stop the car. Most braking systems in use today are hydraulic. They are operated by the brake pedal. When the driver pushes down on the brake pedal, they are applied and the car stops.

2. Match the words on the left with their Russian equivalents on the right:

- | | |
|-------------------------|-------------------------------|
| 1. body | a. тормоза срабатывают |
| 2. car wheels | b. силовая передача |
| 3. power train | c. главная передача |
| 4. power plant | d. коленчатый вал двигателя |
| 5. springs | e. нажимать на педаль |
| 6. steering system | f. силовая установка |
| 7. clutch | g. колеса автомобиля |
| 8. final drive | h. рама с осями |
| 9. engine crankshaft | i. топливная система |
| 10. push down the pedal | j. рулевая система |
| 11. brakes are applied | k. сцепление |
| 12. frame with axles | l. вспомогательные устройства |
| 13. fuel system | m. система смазки |
| 14. lubricating system | n. кузов |
| 15. accessories | o. рессоры |

3. Answer these questions according to the text:

1. What are the main basic parts of the automobile?
2. What does the chassis consist of?
3. What units does the power train contain?
4. What is the function of the clutch?
5. Why are brakes needed?

4 . Choose an appropriate variant to complete the sentences:

1. *The mechanism used for changing the speed is....*
 - a) clutch
 - b) gearbox
 - c) brakes
2. *The mechanism used for connecting (or disconnecting) the engine from the gearbox is*
 - a) brakes
 - b) clutch
 - c) steering system
3. *The unit carrying the power from the engine to the car wheels is....*
 - a) power plant
 - b) power train

- c) chassis
4. *The instrument measuring the speed of the car is...*
- a) heater
b) lights
c) speedometer
5. *The mechanism used for stopping the car is...*
- a) clutch
b) gearbox
c) brakes

Text №14 ENGINE LATHE

1. Read the following text carefully.

The engine lathe is the most commonly used machine-tool. It is used for a great variety of metal operations, such as turning, drilling, screw cutting and many others.

The principal units of the lathe are the bed, the headstock, the tailstock and the carriage with the apron.

The bed is the base of any machine-tool and it is made of grey iron casting on which the saddle and the tailstock slide along special guide ways. The headstock is also located and bolted on the bed.

The headstock contains the spindle and the speed gearbox. The spindle is the part of the machine to which power is applied to rotate the work. The changing of the spindle speed is effected by levers.

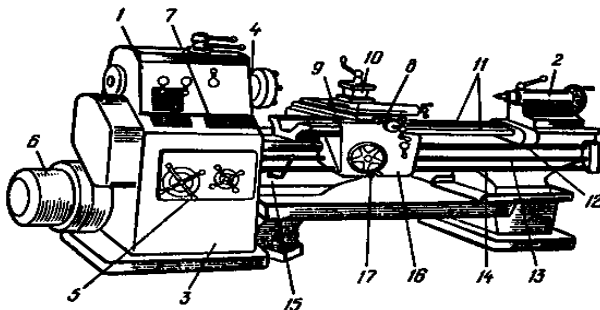
The tailstock consists of a casting fitted to the bed. The function of the tailstock is to support one end of the work turned between centers and to mount the tools.

The carriage of the lathe, which carries the tool, is made up of two principal parts: the saddle and the apron. The saddle travels along the guide ways of the bed. The apron represents the front wall of the carriage. On the front of the apron are mounted the handles and levers by which the actions of the tool are controlled.

2. Match the words on the left with their Russian equivalents on the right:

- | | |
|------------------|-------------------------------|
| 1. engine lathe | a. задняя бабка |
| 2. turning | b. фартук (суппорта) |
| 3. drilling | c. каретка |
| 4. screw cutting | d. передняя бабка |
| 5. headstock | e. сверление |
| 6. tailstock | f. токарно-винторезный станок |

- | | |
|----------------|--------------------------|
| 7. saddle | g. нарезание винтов |
| 8. lever | h. рычаг |
| 9. apron | i. рукоятка |
| 10. carriage | j. суппорт |
| 11. guide ways | k. обточка |
| 12. handle | l. направляющие (станка) |



1. gearbox and headstock; 2. tailstock; 3. frame; 4. spindle; 5. feed gearbox;
 6. electric motor; 7. control panel; 8. cross slide; 9. carriage; 10. tool block; 11. ways;
 12. lead screw; 13. feed rod; 14. operating lever shaft; 15. operating and reverse handle;
 16. apron; 17. hand feed wheel

3. Answer these questions according to the text:

1. What operations are the engine lathe used for?
2. What are the principal units of the lathe?
3. What units are located on the bed?
4. What is the function of the tailstock?
5. Where are the handles and levers mounted?

4. Choose an appropriate variant to complete the sentences:

1. *The unit that contains the spindle and the gearbox is called...*
 - a) headstock
 - b) the saddle and the apron
 - c) levers and handles
2. *The unit that supports one end of the work turned between centers is called ...*
 - a) the carriage
 - b) the headstock
 - c) the tailstock

3. *The unit which carries the tool is called....*
 - a) the carriage
 - b) the headstock
 - c) the tailstock
4. *The units, by which the actions of the tool are controlled, are called....*
 - a) guide ways
 - b) the saddle and the apron
 - c) levers and handles

Text №15 THE ENGINE

1. Read the following text carefully.

The engine is the source of power that makes the car move. It is usually called an internal combustion engine because gasoline is burned within its cylinders or combustion chambers. Most automobile engines have six or eight cylinders.

The operating cycle of the four-stroke engine that takes place in the engine cylinder can be divided into four strokes. The upper limit of the piston movement is called the top dead centre. The lower limit of piston movement is called the bottom dead centre. A stroke is the piston movement from the top dead centre to the bottom dead centre or from bottom dead centre to the top dead centre. In other words, the piston completes a stroke each time it changes the direction of its motion.

Where the entire cycle of events in the cylinder requires four strokes (two crankshaft revolutions), the engine is called a four-stroke cycle engine. The four strokes are: intake, compression, power and exhaust.

Two-cycle engines have also been made, and in such engines the entire cycle of events is completed in two strokes or one revolution of the crankshaft.

On the intake stroke the intake valve is opened. The mixture of air and vaporized gasoline is delivered into the cylinder through the inlet valve. On the compression stroke the inlet valve is closed so that the mixture can be compressed. On the power stroke both valves (inlet and exhaust) are closed in order to raise pressure during the mixture combustion. On the exhaust stroke, the exhaust valve is opened to exhaust the residual gas.

2. Match the words on the left with their Russian equivalents on the right:

- | | |
|-------------------------------|------------------------------------|
| 1. internal combustion engine | a. поршень |
| 2. combustion chamber | b. верхняя мертвая точка |
| 3. stroke | c. четырехтактный двигатель |
| 4. piston | d. коленчатый вал |
| 5. top dead centre | e. отверстие клапана |
| 6. bottom dead centre | f. двигатель внутреннего сгорания |
| 7. four-stroke cycle engine | g. нижняя мертвая точка |
| 8. two-cycle engine | h. топливная система |
| 9. crankshaft | i. такт впрыска (<i>топлива</i>) |
| 10. intake stroke | j. двухтактный двигатель |
| 11. valve opening | k. камера сгорания |
| 12. fuel system | l. ход, такт (<i>поршня</i>) |
| 13. power stroke | m. выхлоп |
| 14. exhaust | n. рабочий ход поршня |

3. Answer these questions according to the text:

1. What is the top dead centre?
2. What is the bottom dead centre?
3. When the engine is called a four-stroke cycle engine?
4. When the engine is called a two-cycle engine?
5. What kind of strokes can the events in the engine cylinder be divided into?

4. Choose an appropriate variant to complete the sentences.

1. *An internal combustion engine is called so because gasoline is burned....*
 - a) inside the combustion chamber
 - b) outside the combustion chamber
2. *The upper limit of the piston movement is called...*
3. *The lower limit of the piston movement is called....*
 - a) the bottom dead centre
 - b) the top dead centre
4. *The four-cycle engine requires....*
 - a) two strokes of piston movement
 - b) four strokes of piston movement
5. *The mixture of air and gasoline is delivered into the cylinder....*

- a) on the power stroke
- b) on the exhaust stroke
- c) on the intake stroke
- d) on the compression stroke

Text №16 PREFLIGHT

1. Read the following text carefully.



While you prepare for your flight by checking in your bags and walking to the gate, your pilot inspects your plane and files a flight plan with the control tower. All pilots must file a flight plan at least 30 minutes prior to pushing back from the gate. Your pilot reviews the weather along the intended route, maps the route and files the plan.

The flight plan includes:

- airline name and flight number;
- type of aircraft and equipment;
- intended airspeed and cruising altitude;
- route of flight (departure airport, centres that will be crossed and destination airport).

Your pilot transmits this data to the control tower. In the tower, a controller called a flight data person reviews the weather and flight plan information and enters the flight plan into the FAA (Federal Aviation Administration) host computer. The computer generates a flight progress strip that contains all of the necessary data for tracking your plane during its flight and is constantly updated. Once the flight plan has been approved, the flight data person gives clearance to your pilot (clearance delivery) and passes the strip to the ground controller in the tower. The ground controller is responsible for all ground traffic, which includes aircraft taxiing from the gates to take-off runways and from landing runways to the gates. When the ground controller determines that it is safe, he or she directs your pilot to push the plane back from the gate (airline personnel operate the tugs that actually push the aircraft back and direct the plane out of the gate area). As your plane taxis to the runway, the ground controller attaches all of the airport's taxiways and uses ground radar to track all

of the aircraft (especially useful in bad weather), ensuring that your plane does not cross an active runway or interfere with ground vehicles. The ground controller communicates with your pilot by radio and *gives* him instructions, such as which way to taxi and which runway to go to for take-off. Once your plane reaches the designated take-off runway, the ground controller passes the strip to the local controller. The local controller in the tower watches the skies *above* the airfield and uses surface radar to track aircraft. He or she is responsible for maintaining a safe distance between planes as they take off. The local controller gives the pilot final clearance for take-off when it is safe, and provides the new radio frequency for the departure controller.

Once clearance is *given*, the pilot must decide if it is safe to take off and in this case he accelerates the plane down the runway. As the plane leaves the ground, the local controller hands it *over* electronically to the departure controller of the departure airport, but still monitors the plane until it is 5 miles from the airport. The pilot now communicates with the departure controller.

2. Answer these questions according to the text:

1. What does the pilot do before taking off?
2. What sort of data does the flight progress strip contain?
3. What happens once the flight plan has been approved?
4. What is the role of the ground controller?
5. When does the ground controller direct the pilot to push the plane back from the gate?
6. What happens when the plane reaches the designated runway?
7. What does the local controller then do?
8. Does the local controller stop controlling the plane after take-off?

3. All the world's major airports can be identified by a 3-letter code. Match the following codes with the airports they represent, then write the city and country where they are found:

- | | |
|-------|-----------------|
| a JFK | 1 San Francisco |
| b LHR | 2 Johannesburg |
| c ORY | 3 Heathrow |
| d SFO | 4 Malpensa |

e MXP

5 Orly

f JNB

6 Kennedy

Text №17 A SHIP'S STRUCTURE

1. Read the following text carefully.

Modern ships are, almost without exception, built of steel. Shipbuilders today use steel which has good corrosion resistance when exposed to seawater, and which does not get brittle at low temperatures (below freezing) since many ships are at sea during cold storms in wintertime. Steel typically has a fatigue limit, below which any quantity of stress will not cause metal fatigue and cracks. Ship design criteria generally assume that all normal loads on the ship should be below the fatigue limit for the steel used in its construction. It is wise to assume that the ship will regularly operate fully loaded, in heavy weather and strong waves, and that it will encounter its maximum operating conditions many times over during its lifetime.

Naval architecture is an engineering discipline dealing with the design, construction, maintenance and operation of marine vessels and structures.



Naval architecture involves preliminary design of the vessel, its detailed design, construction, trials, operation and maintenance, launching and dry-docking. Naval architecture also

involves formulation of safety regulations and damage control rules and the approval and certification of ship designs.

Due to the complexity associated with operating in a marine environment, naval architecture is a co-operative effort between groups of technically skilled individuals who are specialists in particular fields, often coordinated by a lead naval architect. A naval architect is an engineer who is responsible for the design, construction, and/or repair of ships, boats, other marine vessels, and offshore structures, both commercial and military.

Modern engineering on this scale is essentially a team activity conducted by specialists in their respective fields and disciplines. Naval architects integrate these activities. This demanding leadership role requires managerial qualities. In addition to this leadership role, a naval architect also has a specialist function in ensuring that a safe,

economic, and seaworthy design is produced. Naval architects typically work for shipyards, ship owners, design firms and equipment manufacturers, classification societies, navies and governments.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Very few ships are made of steel nowadays.
2. Steel can withstand any adverse strength .
3. Ships don't sail in stormy weather.
4. A naval architect has a degree in engineering.
5. A naval architect is often a manager.
6. A naval architect usually works for his own enterprise.

3. Answer these questions according to the text:

1. What is it wise to assume when building a ship?
2. What does naval architecture involve?
3. Why is naval architecture a co-operative effort?
4. What special function does a naval architect have?

**4. Use the words below to complete the sentences:
*themselves design multi-skilled fatigue limit steel***

1. _____ has good corrosion resistance.
2. Cracks in steel are caused by an excess in the _____.
3. Naval architecture is also about the preliminary _____ of the ship.
4. The naval architect is a _____ engineer.
5. Naval architects rarely work for _____.

5. Match these words below with their definitions:

stability hydrostatics propulsion trim
structures arrangements construction
controllability hydrodynamics

A – it concerns the vessel's ability to remain afloat. This involves computing buoyancy (displacement) and other hydrostatic properties.

B – it refers to the longitudinal inclination of the vessel.

C – the ability of a vessel to return to an upright position after being inclined by wind, sea, or loading conditions.

D – it concerns the flow of water around the ship's hull, bow and stern.

E – the movement of the vessel through water using propellers, thrusters, water jets, sails.

F – it involves controlling and maintaining the position and direction of the vessel.

G – it involves the selection of construction material and the structural analysis of the global and local strength of the vessel.

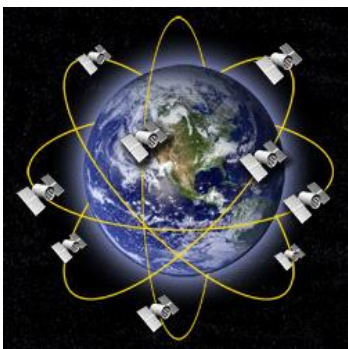
H – this involves concept design , layout and access, fire protection, allocation of spaces, ergonomics and capacity.

J – construction depends on the material used. When steel or aluminum are used this involves the welding of the plates and profiles, marking, cutting and bending, followed by erection and launching.

Text №18 THE GPS SYSTEM

1. Read the following text carefully.

GPS, which stands for Global Positioning System, is a radio navigation system belonging to the American Ministry of Defense, that allows land, sea, and airborne users to determine their exact location, velocity, and time 24 hours a day, in all weather conditions, anywhere in the world.



The complete name of the system is NAVSTAR GPS, which means 'Navigation Satellite Timing And Ranging Global Positioning System'. It was born as a top secret project of the American Department of Defense during the final years of the Cold War so initially it was intended just for military purposes.

Today the GPS service is provided free of charge by the United States Air Force to the entire world. It is a constellation of satellites (21 active and 3 spare ones) orbiting at 11,000 nautical miles above the Earth and a series of ground stations that control and monitor those satellites. The satellites are spaced so that from any point on Earth, four satellites will be above the horizon.

On the ground, any GPS receiver contains a computer that 'triangulates' its own position by getting bearings from three of the four satellites. The result is provided in the form of a geographic position – longitude and latitude – for most receivers , with in a few meters. If

the receiver is also equipped with a display screen that shows a map, the position can be shown on the map. When a fourth satellite can be received, the receiver/computer can calculate the altitude as well as the geographic position. If you are moving, your receiver may also be able to calculate your speed and direction of travel and give you estimated times of arrival to specified destinations.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. The GPS system is the property of each country in which it is used .
2. The GPS system cannot be used in the air.
3. At the beginning it was used as a military tool.
4. The use of the GPS system is free .
5. The GPS system is made up of more than 20 satellites.

3. Answer these questions according to the text:

1. How many satellites is the GPS appliance currently receiving?
2. What is the speed of the vehicle?
3. What is its final destination?
4. What is its next foreseen change of direction?
5. How long will it take?

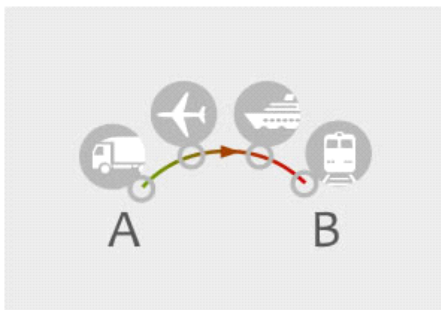
Text №19

INTERMODAL FREIGHT TRANSPORT

1. Read the following text carefully.

Transport is everywhere! In the air, by rail or road, on the water, by cable or pipeline and *even* in space – people, animals and goods are constantly on the *move*. Transport is fundamental both for trade between people and for establishing cultural exchanges and increasing understanding between different cultures. As a field of study transport can be divided into three categories: infrastructure, vehicles, and operations. Infrastructure for transport is all around us – from airports, railway and bus stations to warehouses, trucking terminals, refueling depots and sea-ports. Vehicles include automobiles, bicycles, buses, trains, trucks, people, ships, helicopters and airplanes.

Operations deal with the way the vehicles are op-



erated, and the procedures set for this purpose, including financing, legalities and policies. Passenger transport may be public or private. Freight transport is today focused on containerization. Transport plays an important part in economic growth and globalization, but can also cause air pollution and use large amounts of land.

It is commonly heavily influenced by governments, both in terms of subsidies and planning, which is essential to make traffic flow and control urban sprawl.

A freight village is a complex set of facilities where all the activities relating to transport, logistics and distribution of goods are carried out on a commercial basis by various operators, who can either be the owners or the tenants of the spaces (warehouses, storage areas, offices, car parks etc.). It must be equipped with public facilities and, if possible, include public services for the staff and users. Other names for a freight village are: logistics park/centre, transport centre or logistics hub.

A freight village enables change from one given transport mode to another (modal shift) through a set of technologies that facilitate the transfer. It is served by several transport modes (road, rail, deep sea, inland waterway, air) to encourage intermodal transport for the handling of goods. The most common examples of modal shifts are: train (rail) to lorry (road); barge (inland waterway) to train or lorry; airplane (air) to lorry.

A freight village requires different activities such as warehousing, economic activities, support activities, unified management. The warehouse is the infrastructure where the transport operator mostly performs his business.

This activity may include the division of the goods into smaller quantities for a more functional distribution. Logistics hubs need active distribution centers and several industrial activities in the neighborhood that can exploit the modal shift facilities within the village. Support activities include support services like lorry rest areas, office space, restaurants, banking, shops and hotels. Unified Management requires that the village is often under the management of a single entity. A freight village is the right solution to satisfy the increasing requirements of a complex business based on transport. In order to work well it is imperative that the village is run by a single body, either public or private.

2. Answer these questions according to the text:

1. What are the most common forms of transport?

2. Why is transport so important?
3. What are the most common forms of infrastructure re for land-based transport?
4. Which category of transportation controls its regulations?
5. Name two problems that can result from the transport industry.
6. What areas do governments need to influence in the transport industry?

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. A freight village is also called a logistics hub.
2. A modal shift train to airplane is not possible.
3. In the warehouse goods are usually assembled in bigger quantities.
4. In a freight village there are never banks or restaurants.
5. A freight village is usually run by a single person.

4. Match these words below with their definitions.

*cable goods infrastructure depots
legalities containerization subsidies flow*

A – the systems and services necessary for a country to function well

B – a place where goods are stored

C – issues connected with the law

D – thick, strong metal rope or wire

E – the process of transporting goods in enormous boxes

F – to move smoothly and constantly

G – products destined for sale , carried by truck, plane or ship

H – money that governments give to help organizations.

2.3 CIVIL ENGINEERING

Text №20 CIVIL ENGINEERING

1. Read the following text carefully.

In modern usage, civil engineering is a broad field of engineering that deals with the planning, construction, and maintenance of fixed structures, or public works, as they are related to earth, water, or civilization and their processes. Most civil engineering today deals with power plants, bridges, roads, railways, structures, water supply, irrigation, environment, sewer, flood control, transportation and traffic.



In essence, civil engineering may be regarded as the profession that makes the world a more agreeable place in which to live. Engineering has developed from observations of the ways

natural and constructed systems react and from the development of empirical equations that provide bases for design. Civil engineering is the broadest of the engineering fields, partly because it is the oldest of all engineering fields. In fact, engineering was once divided into only two fields - military and civil. Civil engineering is still an umbrella term, comprised of many related specialties.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Civil engineering deals with construction only.
2. Construction of fixed structures or public works is a part of a broad field of engineering.
3. Civil engineering makes the world a more attractive place to live in.
4. Civil engineering is a new field of engineering.
5. Civil engineering is only a small part of all engineering fields.
6. Engineering was once divided into only two fields.
7. Observations of the ways natural and constructed systems react gave development to the engineering.

3. Continue the sentence:

1. Civil engineering is a broad field of engineering that deals with ...
 - a) the planning of fixed structures only.
 - b) the maintenance of military structures.
 - c) the construction and maintenance of fixed structures or public works.
2. Civil engineering makes the world ...
 - a) more irritable.
 - b) a more agreeable place for being lonely.
 - c) more attractive for living.
3. Civil engineering is the broadest of the engineering fields, ...
 - a) partly because it is a very progressive field of engineering.
 - b) partly because it is a very ancient field of engineering.
 - c) partly because it is a very new field of engineering.

4. Use the words below to complete the sentences.

constructive developed maintaining
observe agreement transportation

1. Civil engineering makes the world a more ... place in which to live.
2. Civil engineering is a broad field of engineering that deals with the ... of fixed structures, or public works.
3. Engineering has developed from ... of the ways natural and constructed systems react.
4. The ... of empirical equations provide bases for design.
5. One of the tasks of civil engineering is to ... public works.
6. Civil engineering deals with railways, water supply, sewer, ... and traffic.

5. Answer these questions according to the text:

1. What does civil engineering deal with?
2. What are fixed structures and public works related to?
3. Are bridges, roads, railways a part of structures that engineering deals with?
4. How may civil engineering be regarded?
5. What has engineering developed from?
6. What provides bases for design?

7. Is civil engineering the oldest or the newest of all engineering fields?
8. In how many fields was engineering once divided?
9. What is civil engineering comprised of?

Text №21

THE PROPERTIES OF BUILDING MATERIALS

1. Read the following text carefully.

Materials that are used for structural purposes should meet several requirements. In most cases it is important that they should be hard, durable, fire-resistant and easily fastened together.

The most commonly used materials are steel, concrete, stone, wood and brick. They differ in hardness, durability and fire-resistance. Wood is the most ancient structural material. It is light, cheap and easy to work. But wood has certain disadvantages: it burns and decays. Stone belongs to one of the oldest building materials used by man. It is characteristic of many properties. They are mechanical strength, compactness, porosity, sound and heat insulation and fire-resistance. Bricks were known many thousands of years ago. They are the examples of artificial building materials. Concrete is referred to as one of the most important building materials. Concrete is a mixture of cement, sand, crushed stone and water. Steel has come into general use with the development of industry. Its manufacture requires special equipment and skilled labor.



Plastics combine all the fine characteristics of a building material with good insulating properties. It is no wonder that the architects and engineers have turned to them to add beauty to modern homes and offices.

All building materials are divided into three main groups:

- 1) Main building materials such as rocks and artificial stones, timber and metals.
- 2) Binding materials such as lime, gypsum and cement.
- 3) Secondary or auxiliary materials which are used for the interior parts of the building.

We use main building materials for bearing structures. Binding materials are used for making artificial stone and for joining different

planes. For the interior finish of the building we use secondary materials. Natural building materials are: stone, sand, lime and timber. Cement, clay products and concrete are examples of artificial building materials.

2. Answer these questions according to the text:

1. What are the properties of the building materials?
2. What are the most commonly used building materials?
3. Do building materials differ from each other?
4. What can you say about the most ancient building materials?
5. What can you say about bricks?
6. Is concrete an artificial or natural building material?
7. Into what groups do we divide building materials?
8. Can you give an example of a building material?
9. What artificial building materials do you know?
10. What natural building materials do you know?

3. Complete these sentences with properties:

- a) The polythene membrane can prevent moisture from rising into the concrete floor. This means that polythene is _____.
- b) The T-shaped aluminum section can resist chemical action, i.e. aluminum _____.
- c) The stone block cannot be lifted without using a crane. This means that stone is _____.
- d) The corrugated iron roof cannot prevent the sun from heating up the house, i.e. iron is _____.
- e) Glass wool can help to keep a house warm in the winter and cool in the summer, i.e. glass wool is _____.
- f) The ceramic tiles on the floor cannot be scratched easily by people walking on them. This means that ceramic tiles are _____.
- g) Asbestos sheeting can be used to fireproof doors. In other words asbestos is _____.
- h) Black cloth blinds can be used to keep the light out of a room, i.e. cloth is _____.

**Text №22
CONCRETE**

1. Read the following text carefully.

The most common form of concrete consists of Portland cement, construction aggregate (generally gravel and sand) and water. Concrete does not solidify from drying after mixing and placement; the water reacts with the cement in a chemical process known as hydration. This water is absorbed by cement, which hardens, gluing the other components together and eventually creating a stone-like material. When used in the generic sense, this is



the material referred to by the term concrete. Concrete is used more than any other man-made material on the planet. It is used to make pavements, building structures, foundations, motorways/roads, overpasses, parking structures, brick/block walls and bases for gates, fences

and poles. As of 2005, about six billion cubic meters of concrete are made each year, amounting to the equivalent of one cubic meter for every person on Earth. Concrete powers a US\$35 billion industry which employs over two million workers in the United States alone. Over 55,000 miles of freeways and highways in America are made of this material. China currently consumes 40 % of world cement production.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Concrete consists of Portland cement, gravel and sand.
2. Concrete hardens after mixing and placement.
3. Concrete isn't used more than any other natural material on the planet.
4. We use concrete to make cars and heavy trucks.
5. Concrete wasn't used till the year 2005.
6. Since 2005 the production of concrete has increased greatly.
7. Very few workers in the United States deal with concrete production.
8. They do not use concrete in making highways in the United States.

9. China consumes only a small part of world cement production.

3. Continue the sentence:

1. The most common form of concrete consists of ...
 - a) ... construction aggregate and Portland cement.
 - b) ... gravel, sand and water.
 - c) ... construction aggregate, Portland cement and water.
2. Concrete hardens ...
 - a) ... from drying after mixing and placement.
 - b) ... after water reacts with cement.
 - c) ... after mixing and drying.
3. Concrete is used more than any other ...
 - a) ... artificial material.
 - b) ... natural material.
 - c) ... Re-resisting material.
4. A great deal of concrete is made each year, amounting ...
 - a) ... to one cubic meter for every person on Earth.
 - b) ... six billion cubic meters.
 - c) ... to USD 35 billion industry.

4. Use the words below to complete the sentences:

reaction consumer hardener place
park absorbed employed

1. In the process of concrete production the water is ... by cement, which hardens, creating a stone-like material.
2. Concrete is used to make foundations, brick walls, building and ... structures, pavements and things like that.
3. Concrete production industry ... over two million workers in the United States alone.
4. Concrete does not solidify from drying after mixing and
5. China currently ... 40 % of world cement production.
6. The water ... with the cement in chemical process known as hydration.
7. After the water is absorbed by cement, the aggregate usually

5. Answer these questions according to the text:

1. What does the most common form of concrete consist of?
2. When does concrete harden?
3. How is this process called?

4. What is concrete used for?
5. Is concrete a popular material?
6. How much concrete is made each year?
7. How many people does concrete production employ in the United States?
8. How many miles of highways are made of concrete in America?
9. Who is the largest consumer of world cement production?

Text №23 WOODWORKING

1. Read the following text carefully.

Woodworking is the forming and shaping of wood to make useful and decorative objects. It is one of the oldest crafts and ranks as a popular hobby and an important industry. A skilled woodworker with a well-equipped home workshop can build items as simple as a birdhouse or as complicated as decorative furniture. Tools for a workshop can be purchased at hardware and department stores. Lumber retail stores and hobby shops sell a wide variety of wood. The construction industry employs carpenters who construct the wooden framework of buildings. Other kinds of woodworkers include finish carpenters and cabinetmakers. Finish carpenters do the inside trim work around windows, cabinets, and other features that must fit exactly. Cabinetmakers design, shape, and assemble furniture, built-in cabinets, and stairways.



The history of woodworking goes back to about 8,000 B.C., when people first used an ax as a woodworking tool. In the Middle Ages, woodworkers and other craft workers formed organizations called guilds. The guilds were

similar in some ways to today's labor unions.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Woodworking is a comparatively new industry.
2. Any woodworker can build simple and complicated items as well.

3. Wood for a workshop can be purchased at a department store.
4. You can find a wide variety of wood at lumber retail stores.
5. Carpenters are often employed in the construction industry.
6. Cabinetmakers do not deal with woodworking.
7. Finish carpenters usually do the work on the roof of the building.
8. An ax as a woodworking tool was first used long before Christ.
9. Today carpenters form organizations called guilds.

3. Continue the sentence:

1. A skilled woodworker with a well-equipped home workshop can ...
 - a) ... design and construct the whole project.
 - b) ... make pavements and overpasses.
 - c) ... make useful and decorative objects.
2. Wood for woodworking can be purchased at ...
 - a) ... hardware stores.
 - b) ... department stores.
 - c) ... lumber retail stores.
3. Carpenters are employed by the construction industry to ...
 - a) ... mix concrete.
 - b) ... design the modern roofs of buildings.
 - c) ... construct the wooden framework of buildings.
4. Built-in cabinets and stairways are designed ...
 - a) ... by a design team.
 - b) ... by cabinetmakers.
 - c) ... by any woodworker.
5. Finish carpenters deal with ...
 - a) ... construction of a birdhouse.
 - b) ... construction of the wooden framework of buildings.
 - c) ... the inside trim work.

4. Answer these questions according to the text:

1. What is woodworking?
2. When does the history of woodworking begin?
3. Where can a skilled woodworker build simple and complicated items?
4. Where can you buy tools for a workshop?
5. What do lumber retail stores sell?

6. Who constructs the wooden framework of buildings?
7. What other professions do woodworkers include?
8. What do cabinetmakers deal with?
9. Who does the inside trim work around wooden features that must fit exactly?
10. When did people use an ax as a woodworking tool?
11. When did woodworkers start forming guilds?
12. Were the guilds similar to any today's organizations?

Text №24

CONSTRUCTION ENGINEERING

1. Read the following text carefully.

Construction engineering concerns the planning and management of the construction of structures such as highways, bridges, airports, railroads, buildings, dams, and reservoirs. Construction of such projects requires knowledge of engineering and management principles and business procedures, economics, and human behavior. Construction engineers engage in the design of structures temporary, cost estimating, planning and scheduling, materials procurement, selection of equipment, and cost control.



Construction

Engineering is differentiated from Construction Management from the

standpoint of the use of math, science, and engineering to analyze problems and design a construction process. Construction engineers build many of the things that people use everyday. Construction engineering involves many aspects of construction including: commercial, residential, bridges, airports, tunnels, and dams. It is an extremely large industry that provides jobs to many and continues to grow. Currently there are nearly 6 million people working on construction in the United States Construction engineers are in high demand so it is easy for a CE to get a job in any part of the country.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Construction of highways, bridges, airports, railroads, buildings, dams and reservoirs requires knowledge of parts of a building.

2. Construction engineering concerns the planning and management of the construction of structures.

3. The design of structures is only a part of the activities construction engineers engage in.

4. Construction Engineering is almost the same as Construction Management from the standpoint of the use of math.

5. Construction engineering involves only residential building.

6. There are a lot of unemployed people in construction industry in the USA.

7. They don't need any construction engineers in the USA.

3. Use the words below to complete the sentences.

requirement growth design manage
selected building constructed

1. Construction of bridges, airports, railroads, buildings and things like that ... knowledge of engineering and management principles.

2. Construction engineering concerns the planning and ... of the construction of structures.

3. Construction engineering involves many aspects of ...

4. Construction engineering is an extremely large industry and continues ...

5. Construction engineers ... a lot of things that people use every day.

6. Construction engineers engage in the design of structures, planning and scheduling, ... of equipment, cost control and so on.

7. Construction engineers engage in the ... of structures.

4. Answer these questions according to the text:

1. Construction of what structures concerns the planning and management in construction engineering?

2. What knowledge does construction of highways, bridges, airports, buildings and things like that require?

3. What do construction engineers deal with?

4. Does Construction Engineering differ from Construction Management?

5. Why are construction engineers very popular among people?

6. What aspects of construction does construction engineering involve?

7. Is construction engineering a large industry?

8. Do many people work on construction in the USA?

9. Are there many unemployed among construction engineers in the USA?

Text №25
INDUSTRIAL BUILDING TYPOLOGY

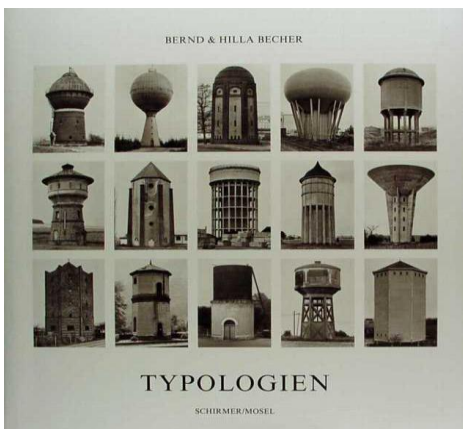
1. Read the following text carefully.

Industrial building *embraces* a much wider range of functional processes than other forms of construction, so that it is not easy *to define* it typologically. Basically, industrial construction *involves* production buildings that directly or indirectly serve the mechanical manufacture of goods. This also includes plants for the generation of energy and heat, stores for materials and finished products, and administration and transport buildings. Historically, one can identify three main phases of constructional development. At the beginning of the Industrial Revolution in the middle of the 18th century, when machine manufacture came to replace traditional *craft* production, power was supplied by direct mechanical transmission. This led to the *erection* of compact, often multi-storey structures of great depth, based on a central source of energy such as a steam engine or a water wheel. In the middle of the 19th century, industrial building was influenced by reformist ideas. Production works were located downwind of cities – and downstream, too, if possible - *to ensure* better hygienic conditions in respect of emissions. Improved means of conveying energy – as electricity or by hydraulic systems - and decentralized power generation allowed the various functions to be

accommodated in different buildings. The increasing size and weight of products like locomotives and turbines required broad, single-storey halls. The American system of Conveyor-belt production also dictated large, top-lighted halls, so that multi-storey structures gradually declined in importance.

From the middle of the 20th century, heavy industry was complemented and later replaced by production

processes that required less space and caused less pollution.



Flexibility and extendibility became increasingly important, and it was possible to integrate industry in an *urban* context once more, with work and habitation located close to each other. The great changes that have taken place in industry call for new built solutions, which require the application of intelligent systems and sustainable planning strategies. Industrial building culture also means taking the design of the structure just as seriously as that of the products. An example of this can be seen in the high-bay storage complex in Ludenscheid built for the Erco Company by Schneider/ Schumacher.

In seeking to draw up a typology of industrial buildings, one can perhaps best analyze those areas where the greatest differences exist, namely in the functional layout and form.

Structures may be additive or integrative:

- *additive* (linear) – *spine, comb*, or with head structure;
- additive (two-dimensional) – *grid*, ring or agglomerate;
- integrative – within a box-like enclosure.

In additive systems, the various functional components will be more or less independent, in which case, the *access* system is likely to provide the structuring element. The advantages of this type lie in its flexibility and extendibility.

The semiconductor factory by Richard Rogers in Newport, South Wales, is an example of a linear, spine structure with a symmetrical *layout* on both sides of the circulation and supply axis. The structure can be extended on both sides.

Gunter Behnisch's branch works for the Ley-boldt concern has a classical comb-like form. The teeth of the comb accommodate the production spaces, which are linked via the central access route with three-storey semicircular office *tracts*. Extensions can be made to both the spine and the teeth. The laser factory in Ditzingen by Barkow Leibinger has a double-comb structure with three independent production halls laid out on both sides of an access zone.

As an example of an additive development with a head structure, one might cite the administration and manufacturing building for Mors System Ceilings in Opmeer by Benthem Crouwel. The multi-storey head tract (administration and presentation) and the single-storey production hall are united within a common loadbearing structure. In Richard Horden's furniture factory near London, the head of the building is incorporated in the overall volume. With its continuous load-bearing structure, this compact development *reveals* a clear linear articulation of functions and is an example of industrial architecture at its best.

Norman Foster's central store for Renault in Swindon is a two-dimensionally additive structure based on a repetitive modular grid. The factory near Warsaw by Kurylowicz architects comprises a series of repetitive grid bays, but in this case, the internal articulation and side lighting restrict the *scope* for extension.

An additive ring form was adopted for the Volvo assembly plant in Kalmar in 1974, a much-discussed scheme because of the change from conveyor-belt to team-oriented production. The manufacturing sequence is organized around an infrastructure core zone, thereby achieving greatly improved working conditions. The hexagonal geometry also offers broad scope for extension.

The Enso Gutzeit coal-fired power station by Gullichsen Kairamo Vormala is an example of an *agglomerate* structure developed irregularly over a period of many years. In a comparable way, the various functional realms of the Louis Vuitton factory for leather goods by Jean- Marc Sandrolini are distinguished by different building elements with their own individual forms and independent load-bearing structures. With integrative systems, the many functions of an industrial undertaking are incorporated in a single building. One advantage of this is the proximity of the various zones to each other and the minimization of circulation areas. In the car industry, for example, there is a trend towards integrating the administrative functions in the manufacturing areas as a means of improving communication. A neutral, unifying building skin allows an independent layout of the working processes, although often at the expense of flexibility. Extensions can be made by inserting structures, by taking space away from other uses, or by adding further modules externally. The filling plant for the Greene King *brewery* is a good example of the way various functions can be accommodated within a single box-like building, with secondary spaces - offices, social areas, *workshops*, etc. – inserted in the form of a structure within a structure. The research and development centre in Meiningen by Kaufmann Theilig und Partner is a much more complex box enclosure. It is laid out on two storeys, with the offices and staff rooms accommodated on galleries above the ground floor production area. Various mixed types also exist, of course. In the logistics centre for a CD works in Robel by Carsten Roth, an external through-route forms a kind of spine, with high-bay storage facilities on one side and a hall for packing and distribution on the other. Similarly, the production building in Amerang by Bottler and Lutz cannot be assigned to any single category. Consisting of two linked parallel halls, it is formally a

box, but has a continuous linear load-bearing structure, while the production process follows a circular route. An interesting new development is the division of buildings according to static functions (social areas, administration, core fabrication) and dynamic functions (prefabrication, suppliers). The static functions are laid out in the form of a spine, while the zones subject to greater change are *attached* to it like limbs. In the modular Skoda plant in Mlada Boleslav in the Czech Republic by Henn Architects, the production line follows a ringlike spine route, to which the prefabrication areas are attached on the outside. This type offers a maximum degree of flexibility. What these examples show is that, with the increasing complexity of planning processes, it is important for the architect to act as a structuring, controlling figure while still fulfilling his role as a designer in a team of specialists.

Only then can industrial building become industrial culture again.

2. Answer these questions according to the text:

1. How do you understand the phrase "industrial construction"?
2. Are the efforts of engineers and constructors directed towards the same goal?
3. Construction is not the ultimate objective of design, is it?
4. What is the duty of an engineer?
5. What are the main three phases of constructional development?
6. When did the Industrial Revolution take place?
7. The great changes in industry called for new solutions in building, didn't they?
8. What types of structures do you know?
9. Should the architect act as a structuring, controlling figure while fulfilling his role as a designer?

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. It is not difficult to define industrial buildings typologically.
2. In the middle of the 18th century machine manufacture came to replace traditional craft production.
3. The 20th century brought the production processes, which caused more pollution.
4. Industrial building culture means only the design of the structure.

5. The advantage of the integrative systems is the proximity of the various zones to each other and the minimization of circulation areas.

Text №26 ARCHITECTURAL PLANNING

1. Read the following text carefully.

The architect usually begins to work when the site type and cost of a building have been determined.

Planning the environment. The natural environment is at once hindrance and a help, and the architect seeks both to invite its aid and to repel its attacks. To make building habitable and comfortable, he must control the effects of heat, cold, light, air, moisture, and dryness and foresee destructive potentialities such as fire, earthquake, flood, and disease.

The placement and form of buildings in relation to their sites, the distribution of spaces within buildings, and other planning devices discussed below are fundamental elements in the aesthetics of architecture.

Orientation. The arrangement of the axes of buildings and their parts is a device for controlling the effects of sun, wind, and rainfall.

Within buildings, the axis and placement of each space determine the amount of sun it receives. Orientation may control air for circulation and reduce the disadvantages of wind, rain, and snow.

The characteristics of the immediate environment also influence orientation: trees, land formation, and other buildings create shade and reduce or intensify wind, while bodies of water produce moisture and reflect the sun.

Architectural forms. Planning may control the environment by the design of architectural forms that may modify the effect of natural forces.

Colour. Colour has a practical planning function as well as expressive quality because of the range of its reflection and its absorption of solar rays. Since light colour reflect heat and dark colours adsorb it, the choice of materials and is an pigments is an effective tool of environmental control.

Materials and techniques. The choice of materials is conditioned by their own ability to withstand the environment as well as by properties that make them useful to human being. One of the architect's jobs is to find a successful solution to both conditions; to

balance the physical and economic advantages of wood against the possibility of fire, termites, and mold, the weather resistance of glass and light metals against their high thermal conductivity, and many similar conflicts.

Interior control. The control of the environment through the design of the plan and the outer shell of a building cannot be complete since extremes of heat and cold, light, and sounds penetrate into the interior, where they can be further modified by the planning of spaces and by conditioning devices.

Temperature, light and sound are all subject to control by the size and shape of interior spaces, the way in which the spaces are connected, and the materials employed for floors, walls, ceilings, and furnishings.

Today, heating, insulation, air conditioning, lighting, and acoustical methods have become basic parts of the architectural program.

Planning for use. While environmental planning producer comfort for the senses (sight, feeling, hearing) and reflexes (respiration), planning for use or function is concerned with convenience of movement and rest.

Differentiation. The number of functions requiring distinct kinds of space within a building depends not only upon the type of building but also upon the requirements of the culture and the habits and activities of the individual patrons. A primitive house has a single room with a hearth area, and a modern one has a separate areas for cooking, eating, sleeping, washing, storage, and recreation. A meeting-houses with a single hall is sufficient for Quaker religious services, while a Roman Catholic cathedral may require a nave, aisles, choir, apse, chapels, crypt, sacristy, and ambulatory.

Economic planning. Major expenses in buildings are for land, materials, and labour. In each case they are high when the commodity is scare and low when it is abundant, and they influence planning more directly when they become restrictive.

When land coverage is limited, it is usually necessary to design in height the space that otherwise would be planned in breadth and depth, as in the ancient Roman insula (apartment houses) or the modern skyscraper. When the choice of materials is influenced by cost, all phases of architectural design are affected, since the planning procedure, the technique, and the form of buildings are dependent on materials. High labour cost influence the choice of techniques and, consequently, of materials.

2. Choose the right word:

1) The placement and form of buildings in relation to their ... is one of the fundamental elements in the aesthetics of architecture.

- a) square
- b) comfort
- c) sites

2) The arrangement of the buildings and their parts controls the effects of sun, wind and rainfall.

- a) rooms
- b) axes
- c) spaces

3) The characteristics of the immediate ... also influence orientation.

- a) environment
- b) territory
- c) building

4) Bodies of water produce ... and reflect the sun.

- a) shade
- b) moisture
- c) wind

5) Colour has a practical planning ... and expressive quality.

- a) choice
- b) feature
- c) function

6) Planning for use is concerned with convenience of ... and rest.

- a) movement
- b) parts
- c) requirements

7) Major expenses in building are for ..., materials, and labour.

- a) habits
- b) land
- c) phase

3. Complete the sentence:

1) The architect usually begins to work when ...

- a) a project of a building has been made
- b) the site type and cost of a building have been determined
- c) the choice of materials has been made

2) The effect of sun, wind and rainfall are controlled by ...

- a) the height of a building

- b) a esthetical usage of spaces
- c) the arrangements of the axes of buildings and their parts
- 3) The choice of materials and pigments is ...
 - a) an effective tool of environmental control
 - b) a device for distribution of spaces
 - c) not connected with the function of a building
- 4) Extremes of heat and cold, light and sounds ...
 - a) are regulated by fundamental elements of the aesthetics of architecture
 - b) penetrate into the interior
 - c) are of less importance for interior control
- 5) The number of functions depends not only upon the type of building but also upon...
 - a) the site type
 - b) the amount of sun it receives
 - c) the requirements of the culture and the habits and activities of the individual patrons

4. Answer the questions:

- 1) When does the architect begin to work on the project?
- 2) What are the main aspects of architectural planning?
- 3) What are the fundamental elements in the aesthetics of architecture?
- 4) What must the architect control to make buildings habitable and comfortable?
- 5) What is the planning for use concerned with?
- 6) What are the major expenses in building?

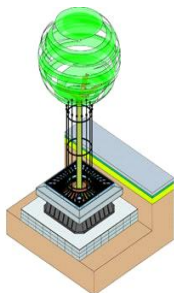
Text №27

THE LOAD-BEARING STRUCTURE

1. Read the following text carefully.

The load-bearing structure was initially conceived as a non-directional beam system laid out to a 24.50- meter square grid, which could be extended in any direction and would provide adequate column-free space for the production. The roof structure comprised a system of primary and secondary beams, with polygonal secondary beams trussed on the underside and laid on the top of primary trussed girders. Each of the roof modules was to be borne by four hinged columns. In the course of the planning, however, the media lines for services and production technology developed into dense clusters, so that the loading was concentrated along certain routes

and was no longer evenly distributed over the area of the structure. A weight of up to 350 kg/m accrued. The load-bearing behavior of nondirectional structural systems is no longer necessarily biaxial when subject to linear loading. In other words, the structure would have been over dimensioned in one direction and no longer strictly economical. The no directional bearing principle was abandoned, therefore, although the 24.50-metre square column grid was retained.



To optimize the load-bearing structure, the layouts for the mechanical services and the production technology were superimposed on the structural plans. The loads on individual areas were calculated, and the spacings of the secondary beams adjusted accordingly. Elements subject solely to tension stresses were fabricated from steel plates; for those subject to tension and

compression, narrow channel sections were used; while compression members liable to buckling were formed from rolled steel sections symmetrical about two axes. This resulted in material savings and also made the function of the various elements legible. The depth and spacing of the girders were determined in conjunction with the service runs. By creating a V-shaped load path with tie members over the round steel column, an obstacle-free triangle is formed with adequate space for the distribution of services.

The roof plane was designed as a plate structure with prestressed steel rod bracing. It serves to stabilize the upper chords of the lattice girders and to transmit wind loads to the concrete cores and vertical bracing. In the longitudinal direction, the bracing elements are located in the facade plane in the middle of the 171.50-metre-long hall. These elements allow the load-bearing structure to expand outwards in both directions from the centre, thereby effectively halving the extension length. As a result, it was possible to construct the hall without expansion joints and additional diagonal bracing in the production areas. A continuous girder system, with a maximum span of 98 m, acts as bracing in the longitudinal direction. The administration tract is separated from the production hall by a construction joint and is independently braced by stiffening elements and by fixing the roof plate to the concrete cores. The steel table structure with a stacked-plank floor in the offices is braced by the

farming effect on both sides and flexibly connected to the columns that support the roof structure.

2. Answer these questions according to the text:

1. What is the main function of load-bearing structures?
2. How did the production technology development affect building structures?
3. The process of optimization of load-bearing structures resulted in material savings, didn't it?
4. Does the roof structure depend on the load-bearing structure?
5. Was it possible to construct the hall without expansion joints and additional diagonal bracing in the production areas?

3. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Each of the roof modules was to be borne by two hinged columns.
2. The roof structure comprised a system of primary and secondary beams.
3. To optimize the load-bearing structure, the layouts for the mechanical services and the production technology were superimposed on the structural plans.
4. Elements subject solely to tension stresses were fabricated from cuprum plates.

4. Give antonyms.

Initially, a top, to abandon, individual, narrow, vertical, additional, a floor.

**Text №28
WATER SUPPLY**

1. Read the following text carefully.

Water is an important part of nature which surrounds us and of those natural conditions we are changing constantly and ever more intensively: the flora, the soil, the mountains, mineral resources, the deserts, the marshes, the steppes and the taiga.

Water passes through a very interesting natural cycle. The atmosphere which surrounds the earth's surface contains water which varies in amount in direct proportion to the temperature of its gases. Water is also evaporated into atmosphere. Atmosphere which has

become saturated with water precipitates its moisture when the temperature lowers. This phenomenon is termed rainfall.

The moisture falls to the earth and finds its way into a number of reservoirs provided by nature.

Vast depressions in the earth are filled with water through the medium of natural water sources such as rivers, lakes, etc. over the earth's surface. These bodies of water are classified as inland lakes and are excellent sources of water. Sometimes the rainfall finds its way into the soil and forms water bodies at various levels because of the impervious nature of the under soil. Often a water body deep in the soil consists of a sand or gravel stratum which connects or empties into the basin of an inland lake and provides a splendid source of water supply through the medium of a drilled well. Man uses water for domestic and sanitary purposes and returns it to the source through sewage disposal system. Industry likewise replaces water diverted to its use. Hence, the cycle is completed but it is of prime importance that the supply be protected against pollution, for if it fouls no one can predict how disastrous may be the results.

An adequate supply of pure, wholesome and palatable water is essential to the maintenance of high standards of health and to provide the convenience modern society demands. In some localities water is available in unlimited quantities and converting it to use is not a difficult problem. This is especially true of towns situated on large inland lakes or rivers. On the other hand there are cities where geographical location requires elaborate systems of water supply, and to provide a satisfactory supply of water in these localities becomes a large engineering task. The importance of a sufficient supply of water for domestic and industrial purpose has long been a deciding factor in



the location cities. The earliest settlers realized this need and took advantage of natural water sources by establishing colonies in close proximity to them. Water may be taken from any sources of water for human consumption after it has undergone a preliminary treatment to assure its purity. As man's communities grew in population, the demand for water increased and the need for protection of the source of water supply against the possibility of contamination became evident. Progress and civilization have called for elaborate and

various systems and methods of water treatment.

2. Answer these questions according to the text:

1. What natural cycle does water pass through?
2. What are the medium of natural water sources?
3. What forms water bodies?
4. What was a deciding factor in the location cities?
5. How could natural water sources be classified?
6. Why does the demand for water constantly increase?

3. Use the words below to complete the sentences:

a moving sand bed, chemical precipitation, a filter bed, chemicals, precipitation and coagulation, the filtering action, the sludge-sand mixture, the removal and washing, the sludge-sand mixture

1. The continuous countercurrent filtration system includes _____ and coagulation directly followed by filtration through _____.
2. The basic principle involved is continuous countercurrent filtration through _____.
3. _____ are added directly to the influent wastewater line.
4. _____ occur in the head tank.
5. _____ mechanically removed from the filtering face falls down into the hopper bottom of the head tank.
6. _____ occurs through the depth of the bed as well as at its face.
7. The clean sand is then returned by gravity to the hopper. _____ of the sand may be intermittent or continuous.
8. _____ mechanically removed from the filtering face falls down into the hopper bottom of the head tank.

2.4 COMPUTING

Text №29 INFORMATION TECHNOLOGY

1. Read the following text carefully.



Information systems collect, organize, store, process, retrieve and display information in different formats (text, video, and voice). Information technology allows very fast automated manipulation of digital data and their transformation from and to analogue.

Two basic technologies have been responsible for the development of the necessary hardware: integrated circuits and digital communications. Parallel advances have been made in software, particularly easy-to-use software products to create, maintain, manipulate, and query file sand records. Many of these software programs are designed for use both by computer professionals and enthusiastic amateurs. Another important factor is the development of computer networks.

As technology develops, new model sand types of computer appear. At the heart of all computers is the hardware. However without software computers are just dumb boxes, unable to perform any calculations or operations.

Models and types of computer: workstation, terminal, server, notebook, mainframe, laptop, desktop.

Computer hardware: CPU (central processing unit), dot matrix printer, keyboard, laser printer, monitor, mouse, RAM (random access memory), scanner, screen, storage devices.

Software: applet, application software, browser database software, email software, graphics software, operating system, search engine, spreadsheet word processing.

2. Combine one word from A and one word from B and match it with the appropriate definition in C:

A create, central, software, display, digital, expansion, integrated, computer.

B products, information, processing unit, card, files, network, data, circuits.

C

- a monitor will do this on a computer screen,
- this describes the format of 0 and 1 in which information is stored,
- these enable a computer to perform word,
- processing, to create databases, and to manipulate numerical data,
- when two or more components are combined and then incorporated into a single package,
- to make new programs, utilities or documents,
- a group of electronic machines connected by cables or other means which can exchange information and share equipment (such as printers and disk drives),
- the principal microchip that the computer is built around
- you plug this into a slot to add features such as video, sound, modem and networking.

3. Complete each gap in the following text with a phrase from the exercise above:

1. The computer monitor will _____ so you can see it on screen.
2. Information is stored on a computer as _____.
3. Spreadsheet and graphic software are examples of _____.
4. Digital communications and _____ have allowed developments in hardware to be made.
5. In order to organize data you should _____ where you can store data.
6. When several computers are linked together you have a _____.
7. The part of the computer which interprets and carries out instructions is the _____.
8. An _____ can be inserted in your computer to give your computer extra capabilities.

Text №30 THE FIRST COMPUTERS

1. Read the following text carefully.

The word 'computer' used to mean a person, not a machine. In the nineteenth century, builders and technicians needed to know the answers to very difficult calculations in order to do their work. They did not have the time to do these calculations themselves, so they bought books of answers. The people who did the calculations and wrote the books were called computers.

In the 1820s, a British mathematician called Charles Babbage invented a machine that did very difficult calculations automatically. He called his machine a Difference Engine. He began to build his machine, but he did not finish it because he had a better idea. (Babbage never finished anything - he always had a better idea and started working on something new.) In fact, more than a hundred and fifty years later, some technicians from the Science Museum in London built Babbage's Difference Engine. It is still in the museum today. The machine weighs about three tonnes, and it is nearly two meters tall and three meters wide. And it works: in the early 1990s, it did a calculation and gave the right answer - 31 digits long! Babbage did not finish making the Difference Engine because he started work on a machine called an Analytical Engine. The Analytical Engine could do more: for example, it had a kind of memory. This meant that it was possible to write programs for it, building on each answer and doing more and more difficult calculations. For this reason, the Analytical Engine is often seen as the first real computer. However, Babbage never finished building this machine either!

A woman called Ada Lovelace worked with Babbage. She was the daughter of Lord Byron, a famous English writer. Ada was an excellent mathematician and understood Babbage's ideas (most people did not). She knew that she could do amazing calculations with the Analytical Machine, and she wrote a program for it. Although the machine was never built, Ada Lovelace was still the first computer programmer in the world. In 1979, a modern computer programming language was named ADA.

Babbage's ideas were ahead of their time. Slowly, over the next one hundred years, inventors began to build better calculating machines. One of the best inventors of the 1930s was a German called Konrad Zuse. In 1938, he built his first machine, the Z1, in his parents' living room in Berlin. His later machines, the Z3 and Z4,

were like modern computers in many ways. They used only two digits (0 and 1) to do all the calculations. Also, Zuse wrote programs for his machines by making holes in old cinema film. When he put the film through the machines, they could 'read' the programs and do very long and difficult calculations.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. Ch. Babbage was a German scientist.
2. He built several calculating machines.
3. Ada Lovelace was Babbage`s daughter.
4. She wrote the first computer program for a Difference Engine.
5. C. Zuse was one of the best German inventors of the beginning of the 19th century.
6. His first machine Z1 became the first real computer.
7. Zuse invented the way to write programs; he made holes in old telegraph papers.

3. Explain the meaning of the following words:
to answer, to call, to weigh, to build; calculations, memory, amazing, language

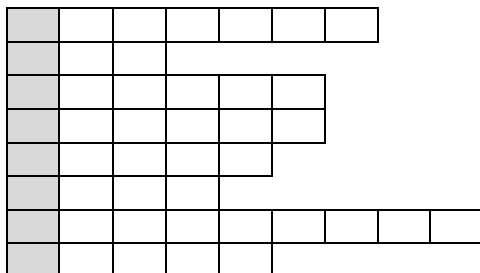
4. Make up sentences using the table:

Computer	not to have	by some technicians from the Science Museum in London
Many people	to build	a kind of memory
Babbage	to weigh	to be the first real computer
A Difference Engine	to mean	a Difference Engine
It	to consider	enough time and wish to make calculations
The Analytical Engine	not to understand	Babbage`s ideas
This machine	to have	about 3 tonnes
Many people	to invent	a person who did calculations

5. Guess the crossword:

1. a hundred years
2. not new
3. a place where different treasures are kept and may be seen by visitors

4. human beings
5. a purpose for which something may be employed
6. long about things and..... about people
7. the meaning of the mark "A"
8. not wrong and not left



Text №31
ALAN TURING

1. Read the following text carefully.

Alan Turing was born in 1912 in London. He studied mathematics at Cambridge University. In 1937, he wrote a report which talked about a Turing Machine. This was a machine that could read programs and follow any number of instructions. It was only an idea, and he did not have plans to build the machine, but his 1937 report was very important in the history of computing.

In 1939, Turing began to work for the British Government. During the Second World War (1939-1945), the Germans often sent messages from one group of soldiers to another. These messages gave important information and instructions, so of course they were secret. Although the British could get the messages, at first they could not understand them because they were written in a secret code. Turing began working on a computer to break this code.

Turing worked with other mathematicians at a secret place called Bletchley Park. They knew that the Germans were using machines called Enigma machines to send messages in code. To read and understand these messages you had to have another Enigma machine -and, of course, only the Germans had these.

Turing and the other people at Bletchley built a machine called the Bombe. (Some Polish mathematicians had already built a machine called Bombe to try to break the Enigma code. They worked with the British to build a new and better machine.) By

1942, the workers at Bletchley Park could read and understand all the German messages which used the Enigma code.

In 1943, the Germans started using a different code. The British called this code 'Fish'. It was much more difficult to understand than the Enigma code. The Bombe machine could not break this code, so the workers at Bletchley Park needed a new computer. In one year, they built Colossus. This was one of the world's first electronic computers which could read and understand programs.

Colossus got its name because of its size: it was as big as a room. It was able to understand difficult codes because it could do thousands of calculations every second. Without Colossus, it took three people six weeks to understand a message written in the 'Fish' code; using Colossus, the British needed only two hours to understand it. A modern PC from the year 2000 cannot do the work any faster.

2. Mark true (T) or false (F) according to the text.

You have to explain orally when it's false:

1. In 1937 A. Turing had a plan to build Turing machine.
2. Alan Turing and other mathematicians worked for the German government during the Second World War.
3. The British could get the messages sent by the Germans.
4. Bletchley began working in a computer to break German code.
5. The Germans had a machine called "Fish".
6. Colossus was a very small computer.
7. Colossus helped the British to break the German code in two hours.
8. Colossus could read programs but couldn't understand them.

3. Put these sentences in the right order. Check your answers with the text:

1. Turing began working on a computer to break this code.
2. Although the British could get the messages, at first they could not understand them because they were written in a secret code.
3. During the Second World War (1939-1945), the Ger-

mans often sent messages from one group of soldiers to another.

4. In 1939, Turing began to work for the British Government.

5. These messages gave important information and instructions, so of course they were secret.

4. Find words for the definitions:

- The group of people who control the country
- Words that tell you what to do
- A person who does maths as a job
- A way of writing secret messages
- Fighting between the soldiers of two or more countries

5. Use these words and word combinations to retell the text:

Important for the history of computing, to read programs, to send messages, to work for, to follow instructions, secret code, more difficult to understand, first electronic computer, do calculations, to give important information.

Text №32

THE HISTORY OF THE PC

1. Read the following text carefully and show the difference between the 610 Auto-Point and a modern personal computer

The 610 Auto-Point	A modern PC

In 1957, IBM made a computer titled the 610 Auto-Point. They said it was the 'first personal computer'. But it was not a PC like the ones millions of people have in their homes today. It was large and expensive (55,000 dollars). It was called a personal computer because it only needed one person to work it. The first real PCs were not made until fifteen years later.

The first computers (like Colossus) did not have computer chips; they used glass tubes. That is why they were so big. But in the 1960s, technicians found a way to make chips with thousands of very small transistors on them. In 1971, Intel made a computer

chip called the 4004. It had 2,250 transistors. Three years later, they made the 8080, a better and faster chip with 5,000 transistors. An American inventor called Ed Roberts used the Intel 8080 chip to make one of the first PCs. He called his PC the Altair 8800. (The name comes from the film *Forbidden Planet*.) When you bought an Altair 8800, you got a box of parts that you put together at home to make your PC. It cost less than 400 dollars, and Ed Roberts sold 2,000 in the first year. The personal computer was on its way.

In 1976, Steve Wozniak and Steve Jobs started the Apple Computer Company. In 1977, their second computer, the Apple 2, appeared. It was popular, and the company made 700,000 dollars that year. The next year, the company made 7 million dollars! Even IBM knew that personal computers were here to stay. They made their first PC in 1981.

Since Intel made the 4004 chip in 1971 with 2,250 transistors, computer chips have become much faster. In fact, the computer technician Gordon Moore made this prediction in 1965: 'The number of transistors on computer chips will double every eighteen months.' This prediction is often called 'Moore's Law' and it seems to be true. The Intel Pentium 4 chip, made in the year 2000, has 42 million transistors!

Because today's computer chips are so fast, modern PCs can do amazing things. They can put music onto CDs, and videos onto DVDs, and they can even understand spoken language. A modern PC is much faster than the very large and expensive computers from the 1970s.

2. Mark true (T) or false (F) according to the text. You have to explain orally when it's false:

1. IBM was the first to make the personal computer.
2. Colossus used chips with thousands of very small transistors on them.
3. Ed Roberts called his computer Apple.
4. Steve Wozniak started the new company alone.
5. The company was not successful and does not exist any more.
6. The "Moore`s Law" was not right and the development of computer has already stopped.
7. Modern computers can not do more than their predecessors.

3. Put the following historical events into the correct order and tell when they happened.

- a. Colossus was the first computer which used glass tubes.
- b. The Intel Pentium 4 chip consists of 42 million transistors.
- c. The 610 Auto-Point was created by IBM.
- d. Technicians found a way to make computer chip with thousands of very small transistors on them.
- e. IBM made their first PC.
- f. Ed Roberts made the Altair 8800.
- g. Steve Wozniak and Steve Jobs started the Apple Computer Company.
- h. Intel made the computer chip called 4004.

4. Explain the meanings of the following words:

to title, to put together, to sell, to double, to seem, expensive, transistor, popular, prediction, amazing

5. Make up sentences using the table:

Millions of people	not to have	a way to make chips
The 610 Auto-Point	to be	computers in their homes today
Colossus	to become	42 million transistors
Technicians	to have	only one person to work it
Altair 8800	to consist of	in 1977
Apple 2	to need	a lot of amazing things
It	to do	computer chips
"Moore`s Law"	to appear	very popular
Intel Pentium 4 chip	to find	to be true
Modern PCs	to seem	one of the first PCs

**Text №33
THE INTERNET**

1. Read the following text carefully.

Today, almost every company in the world has got a website on the Internet. Each site has got a special name (a web address) and you use this to visit the site. In the early 1990s, before most companies had really thought about the Internet, people got web addresses with the names of famous companies – for example, Panasonic and Hertz. These people were not part of the companies; they were hoping to sell the web addresses to the companies for a lot of

money one day in the future. This was called 'cyber-squatting'. Since 1999, new international laws have made cyber-squatting impossible.

Internet users can be anywhere in the world; they just need a computer and a telephone. For this reason, it is often difficult to control what happens on the Internet. In January 1999, an American University student called Shawn Fanning invented a piece of software that could copy music. In May of the same year, he started a company called Napster. Internet users could visit Napster and copy their favorite music. Suddenly, they did not need to buy CDs. Of course, the music companies were not very happy about this. A lot of musicians were also unhappy, because people could get their music free. In the end, Napster agreed to pay money to the music companies and musicians.

The Internet is not only important for business. It is also a cheap way to make contact with people from all over the world. A lot of people visit 'chat rooms': in a chat room, you can 'talk' to other Internet users and read their answers on your computer immediately. There is even a special kind of language which people use to save time. For example, they write 'HAND' to mean 'Have A Nice Day'; or they write "LOL" (laughing out loud) when they find something funny. There are also special ways to show feelings: for example, :-) means 'I'm happy', and :-(means 'I'm sad'.

As computers become more powerful, the Internet becomes easier to use. Some people now do most of their shopping at websites. But there are still a lot of people who like to go into town and visit real shops. They want to look before they buy — and they prefer to talk to a person than to a computer.

2. Put the following facts into the correct chronological order:

1. An American University student invented a piece of software that could copy music.
2. New international laws made cyber-squatting impossible.
3. Some people use web addresses with the names of famous companies hoping to sell them and get much money.
4. At last Shawn Fanning agreed to pay money to the musical companies.
5. Today almost every company in the world has got the website on the Internet.
6. This was called "cyber-squatting".
7. People did not need to buy CDs, they could copy any music from the Internet.

8. He started a company called Napster.
9. There is a special language which people use to save time.
10. Computers become more powerful and the Internet becomes easier to use.

3. Agree or disagree and correct:

1. Only few companies have got their websites.
2. Panasonic and Hertz are names which most companies use for their web addresses.
3. People who made cyber-squatting got a lot of money from the famous companies.
4. There is no way to stop cyber-squatting.
5. There are a lot of things that are necessary for using the Internet.
6. Shawn Fanning invented a piece of software that could compose music.
7. He called his company Napster.
8. Many musical companies and musicians were very happy because of Napster.
9. The Internet is very expensive way to communicate.
10. Though there are a lot of shopping websites many people prefer real shopping and talking to a person than to a computer.

4. Find in the text the answers to the following questions. Make up 5 your own questions to the sentences in the text:

1. What was called "cyber-squatting"?
2. When did new international laws make cyber-squatting impossible?
3. What did Shawn Fanning invent?
4. What feelings did musical companies have because of Napster?
5. Why did not the people who had the Internet need to buy CDs?
6. Is the Internet a comfortable and cheap way for business and friendly communication?
7. What do you prefer, to go to a shop or to buy the things in the Internet?
8. What does "LOL" mean?

5. Write down all the necessary words and read the key-word:

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1. The 1st letter from the word изобретатель _____
2. The 2nd letter from the word несчастливый _____
3. The 2nd and the last letter from the word начало _____
4. The 4th letter from the word деньги _____
5. The 5th letter from the word мощный _____
6. The 3rd letter from the word язык _____
7. The 3rd letter from the word пользователь _____
8. The 6th letter from the word _____

Make up your own story using these words.

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