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ENJOY ENGLISH
PART III

*Утверждено Редакционно-издательским советом университета
в качестве практикума*

Магнитогорск
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Практикум по дисциплине «Иностранный язык» предназначен для проведения практических занятий и самостоятельной работы студентов бакалавриата, обучающихся по направлению подготовки: 22.04.02 Металлургия.
Цель практикума – развитие навыков говорения, чтения и письма, расширение словарного запаса и лингвострановедческого кругозора.

УДК 81'367. 628

Содержание

Введение

Практикум "Enjoy English Part III" составлен в соответствии с типовой программой дисциплины «Иностранный язык». Содержание практикума последовательно отражает все разделы рабочей программы «Иностранный язык», относящиеся к четвертому семестру. Практикум содержит 8 разделов: Unit 1. World-famous Scientists, Unit 2. Inventors and their Greatest Inventions, Unit 3. Geography and Political System of Russia, Unit 4. Culture and traditions of the Russian Federation, Unit 5. Big Cities of Russia, Unit 6. Geography of Great Britain, Unit 7. Culture and Traditions of Great Britain, Unit 8. London

Каждый из разделов содержит профессионально-ориентированные тексты, лексико-грамматические упражнения и тематический словарь, нацеленные на развитие навыков говорения, чтения и письма, расширение словарного запаса и лингвострановедческого кругозора в рамках затрагиваемых направлений.

Unit 1. The Biggest Companies of the World

The secret of business is to know something that nobody else knows.
Aristotle Socrates Onassis

Starting up

1. **Choose three most important factors from those listed below that can make a company successful. Prove your point of you.**
   a) focusing on how to increase market share;
   b) having a strong company culture;
   c) having user-friendly packaging;
   d) having good designers who understand the production;
   e) responding to the needs of the workforce;
   f) starting with a simple business idea that is easy to understand.

2. **Which of these companies would you like to work for? Why?**
   1) a domestic company;
   2) a multinational company;
   3) a foreign company.

3. **Do you agree with the saying of Aristotle Socrates Onassis? Why?**

Vocabulary

4. **Remember the words.**

boardroom	зал заседаний
exhausting	узнурительный, утомительный
to litter	сорить, мусорить
not to be on speaking terms with	не разговаривать с к-л., быть в ссоре
to launch	запускать
to backfire	неожиданно приводить к обратным результатам
to defer a decision	откладывать решение
to double sales	удваивать продажи
objection	возражение, протест
chairman	председатель

to agree to the deal	согласиться с предложением
to suggest	предлагать
to remark	замечать
blueprint	план, проект
reluctant	неохотный, вынужденный
reliance	опора, уверенность
to break up into parts	разбирать на части
to ignore	игнорировать
opportunity	возможность
entrepreneur	предприниматель
to flop	потерпеть неудачу
to speak for oneself	говорить за себя
to merge	сливать, соединять
reliance	доверие, уверенность
to be worth doing smth	стоит ч-л. делать
waste of time	трата времени
to exploit	использовать
there's not much point doing smth	нет смысла ч-л. делать
a flood of complaints	наплыв жалоб
infuriatingly	раздражающе
estimate for smth comes to	оценка ч-л. составляет
to check out	выехать из гостиницы
to occur to	приходить в голову к-л.
boredom	скука
lateral thinking	широкий кругозор
vital to the survival	жизненно важный для выживания
previous	предыдущий
to confuse	путать
implementation	реализация
on a commercial basis	на коммерческой основе
counter-productive	контрпродуктивный
to turn good ideas into a commercial proposition	превращать хорошие идеи в коммерческое предложение
to borrow from	заимствовать у к-л.
to one's cost	на свою беду
foresight	предвидение, предусмотрительность
to copyright	защищать авторским правом
to cease	прекращать

5. Fill in the gaps using the words from the box.

Foresight, boardroom, launch, backfire, objection, blueprint, reluctant, entrepreneur, ignore …. remark, opportunity, reliance, exploit, estimate for … comes to, occur, implement, counter-productive, previous, confuse

1) 53% of students leave school at the earliest _____.
2) Everyone has already assembled in the _____ for the 9:00 a.m. session.
3) He is a wealthy _____ .
4) He wasted time, because he was _____ to talk about it.
5) He wrote the paper with considerable _____ on the work of other scientists.
6) His career choice shows a lack of _____.
7) I always _____ him with his brother.
8) I had met them the _____ day.
9) I wondered how I might best _____ his plan.
10) I'll _____ that last _____.
11) It did not _____ to me to mention it.
12) Sometimes it is necessary to _____ your opponent's weakness.
13) The _____ the new product _____ 2,000 $.
14) The _____ of this car was a big occasion.
15) The main _____ to the plan was that it would cost too much.
16) There is a new a _____ for a computer system.
17) Your behaviour is very _____to the attempt at saving the contract.
18) Your comments may _____ and cause you a lot of trouble.

6. Pay your attention to the constructions: it is worth doing something / something is worth doing. They should not be confused.
Compare:
The blueprint is worth implementing.
It is worth implementing this blueprint.
  Translate the following sentences from Russian into English.
1) Эту идею стоит превратить в коммерческое предложение.
2) Не стоит откладывать решение этого вопроса.
3) Эта возможность не стоит того, чтобы ее игнорировали.
4) Если мы не можем согласиться с этим предложением, стоит отложить его обсуждение до завтрашнего дня.
5) Ваш проект не стоит обсуждения.

7. **Read the text and find the words and expressions which mean**:
is frustrated (paragraph 1), has gone wrong (paragraph 1), a master plan (paragraph 4), unexpected opportunities (paragraph 4), failed badly (paragraph 5), is obvious (paragraph 5), a creative environment (paragraph 3), it's not by chance that (paragraph 4), management expert (paragraph 4), idea-generating meeting (paragraph 5), viable enterprise (paragraph 5), not telling people where you got the idea (paragraph 6).

8. Read the text and say if it is true or false:

1. It is sometimes very difficult to find a right solution to the problem, that seems to have no solution.
2. A very simple idea often turns out to be the right one.
3. Only logic can help one to find a creative idea.
4. High-technology companies seek to merge multinationally because they want to acquire a competitive edge over the rivals.
5. In the book 'Breaking Through one of the first problems the young executive has to face is a necessity to spend a lot of money on upgrading of the lift system.
6. Lateral thinking implies looking at the problem in a different and unusual way.
7. At Hewlett-Packard the majority of products were introduced due to the newest ideas.
8. Creativity does not exist without innovation.
9. Innovation is the successful implementation of creative ideas on a commercial basis.
10. To discover an idea and to exploit it are different things.

Bright Ideas

The scene is the **boardroom** of a multinational cosmetics company at the end of an **exhausting** all-day meeting. The conference table is **litter**ed with papers and empty mineral water bottles. The financial controller is in panic and the director of R&D **is no longer on speaking terms with** the head of marketing. The **launch** of a new shampoo has **backfired** badly. All **decisions** have to be **defer**red until the next meeting. Nobody even wants to think about the next meeting.

At this point a young marketing consultant cuts in. "Ladies and gentlemen, I have an idea which is guaranteed **to double sales** of your new shampoo. Now, believe it or not, my idea can be summed up in just one word and for $30,000 I'll tell you what it is." Naturally, **objection**s are raised, but the **chairman** finally **agrees to the deal**. "Here is my idea. You know the instructions you put on the back of the shampoo bottle? I **suggest** you add one word to the end. And the word is: "repeat"."

Not all good ideas are this simple, but in business a surprising number of them are. At least, they seem simple after they've been thought of - the secret is to think of them in the first place. As someone once **remark**ed, "If you can't write your idea on the back of your business card, you don't have an idea." So, what are the conditions for creativity in business? And is there a **blueprint** for having bright ideas? Here's what the psychologists think:

1. Be a risk-taker. Those who are **reluctant** to take risks don't innovate.
2. Be illogical. A **reliance** on logic kills off ideas before they have a chance to develop.
3. Let yourself be stupid from time to time. Great ideas often start out as stupid ideas.
4. Regularly re-think things. Problem-solving frequently involves **break**ing **up** problems **into parts** and putting them back together again in a different way.
5. Take advantage of lucky breaks. The most creative people never **ignore** an **opportunity**.

Maybe one reason high-technology companies seek **to merge** multinationally is so that they can combine both creative and innovative strength. Anything that won't

sell **isn't worth inventing**, it's an expensive **waste of time** to develop ideas you can't **exploit.** But it's even more expensive if your competitors can exploit them. And **there's not much point doing** the research if another company is going to take advantage of it and make the profit.

The lateral thinker

In his book on creative problem-solving, 'Breaking Through', Tom Logsdon tells the story of a bright young executive hired to manage a San Francisco hotel. One of the first problems the young executive has to face is a flood of complaints about the hotel lifts, which are **infuriatingly** slow. Guests are actually starting to demand rooms on lower floors. But an upgrade of the lift system is too expansive as the lowest **estimate for** reconstruction **comes to** $200,000. Clearly something else has to be done, and pretty quickly, before people start **check**ing **out**.

Finally, a creative solution **occur**s **to** the young executive. The key to the problem, he decides, is **boredom**. With only the lift doors and a blank wall to stare at, guests are getting bored, and when people are bored, they tend to complain. So instead of speeding up the lifts, full-length mirrors are installed both inside and directly outside the lifts on each floor - at a cost of just $4,000. Now, looking at their reflections in the mirrors while using the lift, people stop complaining, thereby saving the hotel $196,000.

This is what Edward De Bono called **lateral thinking**, and it's the result of looking at the problem in a different and unusual way. Indeed, reformulating and redefining a problem is just one of the ways in which you can create a climate for creativity in business. And an increasing number of companies now see such creative strategies as **vital to their survival**.

At 3M, for example, employees spend fifteen per cent of their time on new ideas and twenty-five per cent of every manager's product portfolio consists of products that are less than five years old. At Hewlett-Packard more than half their orders in 1992 are for products introduced in the **previous** two years. It's a similar story at Glaxo, ICL and SmithKline Beecham. But creativity would be useless without innovation, and the two terms should not be confused.

According to the team running creativity courses at the Cranfield School of Management, creativity is essentially about generating, not judging, ideas. Innovation, on the other hand, is the successful **implementation** of those ideas **on a commercial basis**. In a brainstorming session, you don't criticise ideas before they are completely formed. That would be **counter-productive**. Evaluation starts at the innovation stage, where you're **turn**ing good **ideas into a commercial proposition**. It means that you cannot be both creative and innovative at the same time.

For making a discovery is one thing; exploiting it quite another, as the Xerox Research Centre found out **to its cost** when its system for making personal computers was copied by Apple Macintosh. Apple led the market for almost ten years with the successful desktop system it '**borrow**ed' from Xerox. But Apple had the **foresight** to **copyright** the system. Xerox didn't. Unfortunately, too many companies fail to see an opportunity until it ceases to be one.

9. Answer the questions to the text.
1) What scene can be observed in a boardroom of a company at the end of an exhausting all-day meeting?
2) What idea occurred to a young marketing consultant?
3) Comment on the remark "If you can't write your idea on the back of your business card, you don't have an idea." What does it mean?
4) What advice do psychologists give to be creative in business?
5) Have you ever let yourself be stupid to create a new idea?
6) Do you regularly re-think your problems?
7) Why is it an expensive waste of time to develop ideas you can't exploit?
8) What story does Tom Logsdon tell in his book 'Breaking Through'?
9) Can you explain the concept "lateral thinking"?
10) What is vital to the survival of big companies?
11) Why does every manager's product portfolio at Hewlett-Packard consist of products that are less than five years old?
12) What is creativity according to the team running creativity courses at the Cranfield School of Management?
13) Why can't you criticise ideas before they are completely formed?
14) How did Apple Macintosh acquire a competitive edge over Xerox Research Centre?

Grammar
The Sequence of Tenses
Согласование времен – грамматическое явление, не характерное для русского языка. Основное правило: если в главной части предложения глагол имеет форму прошедшего времени, формы прошедшего времени должны быть использованы и во второстепенной части предложения. При переводе прямой речи в косвенную мы, как правило, сдвигаемся на одно время назад: present simple становится past simple, past simple становится past perfect, will переходит в would.

The Sequence of Tenses

I think that he lives in New York ⇒ I **thought** that he **lived** in New York. I **know** that the mother i**s sleeping**. ⇒ I **knew** that the mother **was sleeping**.	Одновременное действие
I say: He has returned from London. ⇒ I **said** that he **had returned** from London. I know that he has already bought a new car. ⇒ I knew that he **had already bought** a new car.	Предшествующее действие
I suppose that he will send us a letter. ⇒ I **supposed** that he **would send** us a letter.	Последующее действие

Правило согласования времен

Present Simple I do	Past Simple I did
Present Continuous He is doing	Past Continuous He was doing
Present Perfect I have done	Past Perfect I had done
Past Simple I did	Past Perfect / Past Simple I had done/ I did (Прошедшее простое остается неизменным, если используется указание на время, а именно: in 2020, 2 years ago, yesterday, last week, when he came и т.д.)
Past Continuous I was doing	Past Perfect Continuous I had been doing
Past Perfect I had done	Past Perfect I had done
Future I **will** do ….	Future-in-the-Past I **would** do ….

При согласовании времен меняется не только форма глагола во второстепенном предложении, но и обстоятельство места и времени в зависимости от контекста.

Изменение обстоятельства времени и места

here	there
this	that
these	those
now	then/ at that moment
today	that day
yesterday	the day before/ the previous day
a year ago	a year before
last night	the previous night
tonight	that night

Example: *I will see you **today**, he said. – He said that he would see me **that day**.*

10. Analyze the following examples and translate them into Russian.

He says that he knows your friend.	He said that he knew your friend.
He considers that you passed your examinations in chemistry.	He considered that you had passed your examinations in chemistry.
He knows that his friend will graduate from the university next year.	He knew that his friend would graduate from the university next year.

The teacher asks if they can speak English.	The teacher asked if they could speak English.
They wonder if you finished your project yesterday.	They wondered if you had finished your project the day before.
She says that she has seen this book in a shop.	She said that she had seen this book in a shop.
We suppose that their team is working at a new project.	We supposed that their team was working at a new project.

11. Use the required tense-aspect forms in the following sentences.
1) I did not know that my friend (fail) an exam.
2) They knew I (can) drive a car.
3) The boys said they (have) enough money to return home.
4) I knew he (write) a book at that moment.
5) We thought that she already (obtain) her Master's degree in Physics.
6) We knew it (be) just a waste of time.
7) She said that the company (defer) the decision and was going to return to that question in a month.
8) My friend said that the film (be) worth seeing.
9) The company confirmed that its sales (double) the previous year.
10)   They agreed that the blueprint (have to be implemented) on a commercial basis.

12. Translate from Russian into English.
1) Председатель сказал, что встреча была утомительной.
2) Представители компании отметили, что компания запустит новый проект в следующем году.
3) Он подтвердил, что отложил решение данного вопроса.
4) Исполнительный директор компании отметил, что компания собирается удвоить продажи.
5) Исследователи заявили, что компания не должна игнорировать возможность превращать хорошие идеи в коммерческие предложения.
6) Мы думали, что его решение контрпродуктивно.
7) Мы решили, что он уже выехал из гостиницы.

Unit 2. The Company Structure

"Success is not final; failure is not fatal: it is the courage to continue that counts." – Winston Churchill.

Starting up

1. Discuss these questions.

1) Read the saying above. Give your comments on it.
2) Would you prefer working for a company or for yourself? Give your pros and cons?
3) What competencies do you need to have if you plan to work for an international company?
4) What perks would you like to have?

2. How important are the following perks for you? Work in pairs and discuss which of them are more / less important for you? Give each one a score from 1 (not important) to 5 (very important).

a reserved parking place	having a secretary
a uniform	taking holidays when you like
a company car	flying business class
having a personal driver	having fixed working hours
your name on your door	having a flexible schedule
your own office	a company credit card

3. Which of the following words can describe good/ bad qualities of a company? Why?

Bureaucratic / decentralised/ impersonal/ caring/ democratic/ market-driven/ centralised/ dynamic/ professional/ conservative/ hierarchical / progressive

Vocabulary

4. Match the following words to their meanings. Use a dictionary to help you.

1) subsidiary	a) the most important office of an organization or company
2) call centre	b) a company that is owned by a larger company
3) service centre	c) a warehouse that stores a manufacturer's goods temporarily, before they are transported to stores or customers for sale
4) head office	d) a place where you can have products checked and repaired and where you can buy parts
5) distribution centre	e) a large office which provides information to potential customers
6) warehouse	f) a large building for keeping things that are going to be sold (not temporarily)
7) branches/ outlets	g) the main office of an organization or company
8) department	h) a person or company that pays people to work for them
9) chief executive	i) the place from where an organization is controlled
10) employee	j) a part of an organization that does a particular type of work
11) employer	k) the person with the most important position in a company or organization
12) headquarters	l) a person or organization that buys things or services from a shop or business
13) customer	m) someone who is paid to work for a person or company

5. Fill in the gaps, using the words from the box.

Workforce/ turnover/ profit/ headquarters/ subsidiaries/ employee/ priority/ performance/ demand/ efficient/ increase/ decreased/ customer/ department

1) The company's annual _____ is around $300 million.
2) We have a _____ of 2,400 people.
3) The division of a business that is responsible for selling products or services is called _____ .
4) The company _____ has reached 20,000,000 dollars.
5) The headquarters of the company are in Switzerland.
6) Businesses should always put the _____ first.
7) The company's _____ was poor for the first two years.
8) We have _____ our turnover to 20 %.
9) The company has continued its excellent _____ .
10) Sales have _____by five percent this year.
11) There was not much _____for the manufacturer's goods in winter.
12) Banks normally give _____ to large businesses.
13) How many _____ does the firm have?

14) The company is planning to open some _____ in October.

6. Remember the words given below.

hierarchical	иерарахический
pyramidal	имеющий форму пирамиды
successive	последующий
to make a decision	принять решение
superior	руководитель
subordinate	подчиненный
colleague	коллега
staff	персонал
authority	власть
holder	владелец
complicated	сложный
according to	согласно, соответственно
to carry out	выполнять, проводить
efficient	эффективный
to be concerned with	касаться ч-л.
incompatible goals	несовместимые цели
to encourage	поощрять
a range of	ряд
overlap	совпадение
to make a profit	получать прибыль
to simulate	имитировать, моделировать
to set up	создавать
to deal with	иметь дело с
inherent	свойственный, присущий ч-л (зд. внутренний)
to pass on responsibility to	передавать ответственность к-л.
solution	решение
to insist on	настаивать на
to have priority	иметь приоритет
relational	свойственный
to require	требовать
to depend on	зависеть от

7. Fill in the gaps using the prepositions from the box.

> **to/ out/ with/ of/ up/ with/**
> **to/ on/ on**

1) We will proceed according _____ plan.
2) They carried _____ the task efficiently and cheerfully.
3) The company is concerned _____ the quality of the production.
4) He has a wide range _____ business interests.

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5) The company was set _____ 10 years ago.
6) He is easy to deal _____.
7) Do not pass _____ responsibility _____ the other team members.
8) The company insists _____ the highest standards of quality.
9) Your pension will depend _____ your length of employment.

Reading
8. Read the text and say if it is true or false.

1) At the top of a company of a hierarchical type there is always a superior who is responsible for the whole company. _____

2) In organizations, having a hierarchical or pyramidal structure, power and authority are delegated downwards beginning at the top, from each manager to his subordinate. _____

3) A staff position is usually excluded from an organizational hierarchy. _____

4) Afunctional structure divides the organization into departments based on their function, for instance, marketing departments cannot take financial decisions. _____

5) There are two shortcomings of a functional structure: firstly, separating functions is unlikely to encourage innovation and, secondly, there is a great rivalry for success between departments. _____

6) As a rule, large organizations manufacturing a range of products have a single production department. _____

7) Businesses can simulate integration, setting up divisions that deal with each other using internally determined transfer prices. _____

8) In organizations with a matrix structure subordinates report to more than one superior. _____

9) As for teams they also have a shortcoming such as relational problems, as they are small and have a lot of self-discipline. _____

Company Structure
Most organizations have a **hierarchical** or **pyramidal** structure, with one person or a group of people at the top, and an increasing number of people below them at each **successive** level. There is a clear line or chain of command running down the pyramid. All the people in the organization know what **decisions** they are able **to make**, who their **superior** (or boss) is (to whom they report), and who their immediate **subordinate**s are (to whom they can give instructions).

Some people in an organization have **colleague**s who help them: for example, there might be an Assistant to the Marketing Manager. This is known as a **staff** position: its **holder** has no line **authority**, and is not integrated into the chain of command, unlike, for example, the Assistant Marketing Manager, who is number two in the marketing department.

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Yet the activities of most companies are too **complicated** to be organized in a single hierarchy of layers. Shortly before the first world war, the French industrialist Henry Fayol organized his coal-mining business **according to** the functions that it had **to carry out.** He is generally credited with inventing functional organization. Today, most large manufacturing organizations have a functional structure, including (among others) production, finance, marketing, sales, and personnel or staff departments. This means, for example, that the production and marketing departments cannot take financial decisions without consulting the finance department.

Functional organization is **efficient**, but there are two standard criticisms. Firstly, people **are** usually more **concerned with** the success of their department than that of the company, so there are permanent battles between, for example, finance and marketing, or marketing and production, which have **incompatible goals**. Secondly, separating functions is unlikely to **encourage** innovation.

Yet for a large organization manufacturing **a range of** products, having a single production department is generally inefficient. Consequently, most large companies are decentralized, following the model of Alfred Sloan, who divided General Motors into separate operating divisions in 1920. Each division had its own engineering, production and sales departments, made a different category of car (but with some **overlap**, to encourage internal competition), and was expected **to make a profit**.

Businesses that cannot be divided into autonomous divisions with their own markets can **simulate** decentralization, **set**ting **up** divisions that **deal with** each other using internally determined transfer prices. Many banks, for example, have established commercial, corporate, private banking, international and investment divisions.

An **inherent** problem of hierarchies is that people at lower levels are unable to make important decisions, but have **to pass on responsibility to** their boss. One **solution** to this is matrix management, in which people report to more than one superior. For example, a product manager with an idea might be able to deal directly with managers responsible for a certain market segment and for a geographical region, as well as the managers responsible for the traditional functions of finance, sales and production. This is one way of keeping authority at lower levels, but it is not necessarily a very efficient one. Thomas Peters and Robert Waterman, in their well-known book "In Search of Excellence", **insist on** the necessity of pushing authority and autonomy down the line, but they argue that one element - probably the product - must **have priority**; four-dimensional matrices are far too complex.

A further possibility is to have wholly autonomous, temporary groups or teams that are responsible for an entire project, and are split up as soon as it is successfully completed. Teams are often not very good for decision-making, and they run the risk of relational problems, unless they are small and have a lot of self-discipline. In fact, they still **require** a definite leader, on whom their success probably **depend**s.

9. Answer the questions to the text.
1) What company structures have you learnt about? _____
2) Describe an organization with a hierarchical or pyramidal structure: a) who is at the top of the structure? b) what is the line of command? c) give you definitions of a superior and subordinates. _____

3) Is a staff position integrated into the chain of command, according to a hierarchical structure? _____

4) How was Henry Fayol's coal-mining business organized? _____

5) What departments does a company with a functional structure have? What are their functions? _____

6) What are the shortcomings of a functional structure? Do you consider them serious for the company success? _____

7) Is it efficient for a large manufacturing company to have a single production department? _____

8) What does the decentralization of a company mean? _____

9) What is the inherent problem of hierarchies? How can matrix management help in this case? _____

10) What do Thomas Peters and Robert Waterman insist on in their well-known book "In Search of Excellence"?

11) What is the other solution to the inherent problem of hierarchies?

12) What are the advantages and disadvantages of a team structure?

Grammar

The Passive Voice
The Formation of the Passive Voice

to be + Participle II

The simple passive voice	Examples
am/ is/ are asked/ written	He is asked/ written Его спрашивают/ ему пишут
	He is not asked/ written Его не спрашивают/ ему не пишут
	Is he asked/ written? Его спрашивают? / Ему пишут?
was/ were not asked/ written	He was asked/ written Его спрашивали/ ему писали
	He was not asked/ written Его не спрашивали/ ему не писали
	Was he asked/ written? Его спрашивали? / Ему писали?
Will be asked/ written	He will be asked/ written Его спросят/ ему напишут
	He will not be asked/ written Его не спросят/ ему не напишут
	Will he be asked/ written? Его спросят? / Ему напишут?

Use the passive:
• to move important information (the object of the active sentence) to the beginning.

Two men are being questioned by the police.
• when we want to be impersonal and not mention the name of the person who performs the action.
Oil and gas are found beneath the ground or sea.

Study these examples of the simple passive forms:
   1. A lot of rise is eaten in Asia.
   2. This house was built twenty years ago.
   3. We will be taught by another teacher next year.

10. Complete the sentence with the past simple passive form of the verb in brackets.
   1) In ancient times, fires _____ (light) to use smoke as a signal over long distances.
   2) Morse code (invent) _____ by an American called Samuel Morse.
   3) The world's first television images (show)_____ to scientists in Scotland in1926.
   4) Radios _____ (use) to broadcast coded messages during the Second World War.
   5) The World Wide Web _____ (design) originally to make it easier for nuclear physics researchers to communicate.
   6) Buying books and CDs over the Internet _____ (make) popular by the company Amazon.
   7) The first mobile phones with cameras _____ (sell) in Japan.
   8) Vinyl albums and tapes _____ (replace) by CDs, which are now being replaced by mp3.
   9) The first English dictionary _____(wrote) by Robert Cawdrey in 1604.
   10)   The first mass-produced cars _____ (introduce) by the Ford company in the USA.

11. Rewrite this text using the past passive form of verbs according to the model.
They *use* a computer to plan the exact shape of the car.
Model: A computer *was used* to plan the exact shape of the car.

How a toy car was made
In the factory, they used a computer to plan the exact shape of the car. They then fed this computer program into a machine, and produced a plastic prototype. Then they produced the actual toy cars in a factory abroad. As far as construction was concerned, they made the bodies of the car s from plastic. They added small electric motors to the cars, and then they painted them. They also attached licence plates. Quality control inspected the cars and then they wrapped them and packed them into cardboard boxes. They shipped the cars to Britain.

12. Complete the text with the future passive form of the verbs in brackets.

In recent years many plans _____ (make) for large floating cities with living accommodation for as many as 50,000 people. One such project which _____ (advertise) is the Freedom Ship. According to the plans for this project, this huge ship _____ (construct) from smaller units, which _____ (take) out to sea for final assembly. The ship _____ (power) by 100 diesel engines, and the residents on board _____ (carry) around the world continuously. The large number of people on the ship _____ (provide) with all kinds of entertainment and sports facilities, and modern recycling methods _____ (use) to save energy on board. At the time of writing, this project has not been built yet, and it _____ (criticize) by some people who say it is too expensive. We shall have to wait and see whether this ambitious plan ever becomes reality.

13. Translate into English using the verbs in Present/ Past / Future Simple Passive.
1) Его спросили о новой книге. 2) В следующем году наш класс будет учить новый учитель. 3) Работу проверят завтра? 4) Эти дома были построены в прошлом году? 5) Прошлым летом меня научили плавать. 6) Эти опыты будут проведены на следующем уроке. 7) Документы были распечатаны вчера. 8) Когда было отправлено это письмо? 9) Это оборудование было куплено в прошлом году.

Unit 3 Natural and ecological disasters

Sometimes it takes a natural disaster to reveal a social disaster.
Jim Wallis

Starting up
1. **Look at the pictures above and say which of the disasters is natural and which is caused by human activities.**

2. **Discuss the following statements:**
    1) Sometimes it takes a natural disaster to reveal a social disaster.
    2) Humanity is responsible for the climate changes taking place nowadays.
    3) You have no control over natural disasters. You're helpless.
    4) We cannot stop natural disasters but we can arm ourselves with knowledge: so many lives wouldn't have to be lost if there was enough disaster preparedness.
    5) We could make our plant safer if we started doing about such simple things as sorting out our garbage, saving water and electricity, using ecologically-friendly packaging, etc.
    6) Unless we take action on climate change, future generations will be roasted, toasted, fried and grilled. (Christine Lagarde)

Vocabulary
3. **Look at the picture and remember the names of the natural disasters and environmental problems.**
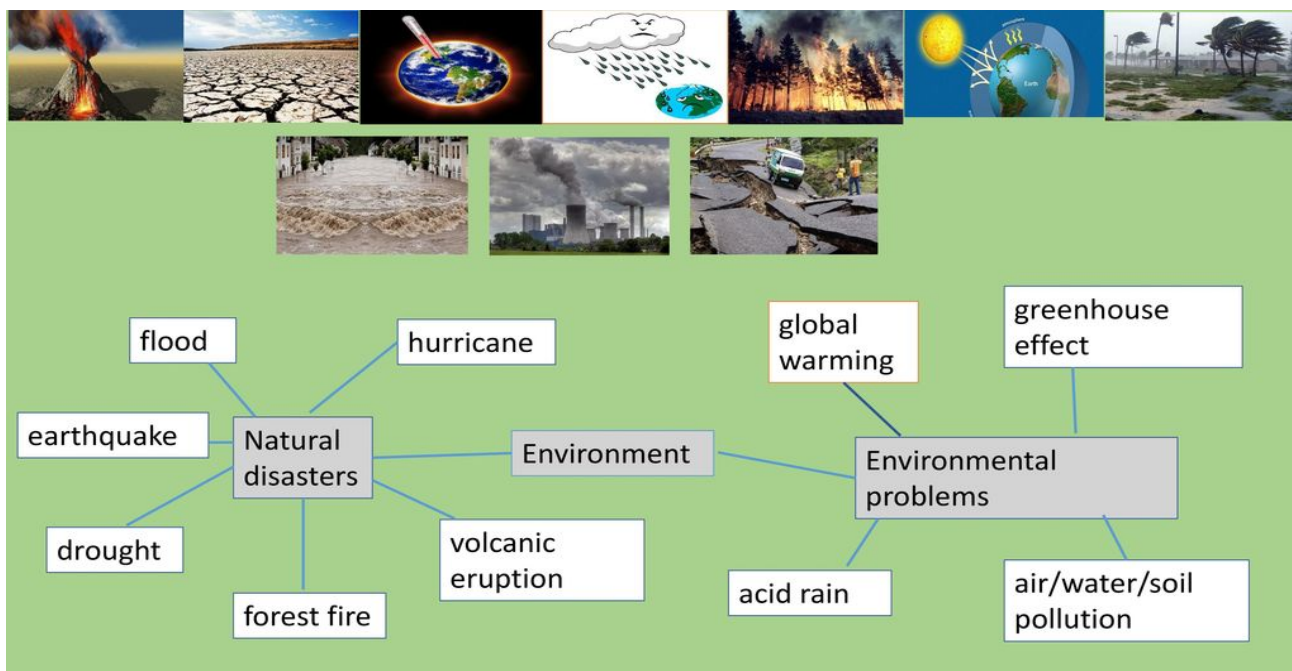
4. Match the natural disasters with their descriptions.

_____	a situation in which a lot of water covers an area that is usually dry, especially when a river becomes too full
_____	a violent storm with very strong winds
_____	a sudden movement of the Earth's surface, often causing severe damage
_____	a long period when there is no rain and people do not have enough water
_____	A sudden throw of smoke, fire, melted rocks and ash into the atmosphere
_____	rain that contains chemicals from pollution and damages plants, etc.
_____	an increase in the temperature of the air around the world because of pollution
_____	the gradual warming of the Earth's surface caused by an increase in pollution and gases in the air.

5. Remember the following words and expressions.

success rate	доля успешных попыток
to forecast	предсказывать
increase	увеличение
accuracy	точность
dropwindsond	метеозонд

to probe the atmosphere	делать пробы атмосферы
investigation	исследование
sophisticated	сложный
to be out of reach	быть вне досягаемости
estimation	оценка
essential	существенный, важный
to reduce	снижать
property	собственность
to cause	вызывать
decade	десятилетие
precise	точный
current	течение
to resurface	повторно появляться на поверхности
to absorb	поглощать
a sensing device	чувствительный датчик
altitude	высота
revealing	зд. информативный
to weigh	весить
to stay aloft	оставаться в воздухе
to broadcast	передавать данные
receiver	передатчик
humidity	влажность
variability	разнообразие
to be beyond a solution	не иметь решения
for the time being	на данный момент
for instance	например
to fail	терпеть неудачу
to predict	предсказывать
to pinpoint	точно определять
simulation	моделирование
conceivable	возможный, мыслимый
a storm surge	штормовая волна
devastating	разрушительный
downtown	деловой центр города
destruction	разрушение
to suffer from	страдать от

6. Fill in the gaps using the words from the box.

To forecast, to increase, accuracy, investigation, sophisticated, estimation, essential, to reduce, current, to absorb, equator, altitude, the broadcast of data

1) _____ was delayed because of technical difficulties.
2) They're _____ing rain for this weekend.

3) Violent storms are on the _____.
4) Wind speed _____s with altitude.
5) I'm not sure about the _____ of their information.
6) The subjects for this _____ were selected randomly.
7) The project needs _____ calculations.
8) In my _____, the hurricane is going to strike Florida tomorrow.
9) For the experiment to be valid, it is _____ to record the data accurately.
10)   I _____ the problem to a few simple questions.
11)   The boat drifted with the _____ until it was miles from shore.
12)   Plants _____ carbon dioxide.
13)   The _____ divides the Earth into two hemispheres.
14)   We're flying at an _____ of 40,000 feet.

7. Read the text below and find synonyms for the following words:
to predict, precision, to hit, research, important, complicated, beyond reach, to enlarge, to lower, to evaluate, to do harm.

Reading
    8. Read the text about hurricanes. Choose from the list (A- G) the sentence which best summarises each part (1-6) of the article. There is an extra sentence which you do not need to use.

    A. A hurricane can cause a lot of damage if it strikes unexpectedly.
    B. GPS-dropwindsondes gather all the necessary meteorological data while staying aloft.
    C. Hurricanes can strike suddenly and the problem of predicting the time and place where they can cause damage is beyond a solution.
    D. It is the use of new research instruments that helps to make better predictions about an approaching hurricane.
    E. The cycles of hurricane activity depend on the phenomenon called the "Atlantic Conveyor'.
    F. There is always a chance that a big coastal city will be damaged by a hurricane.
    G. Though the success rate in forecasting hurricanes has improved there are still a lot of unsolved problems at least for the time being.

<div align="center">

Tracking Hurricanes

</div>

1. North American meteorologists from the National Oceanic and Atmospheric Administration 's Hurricane Research Division have recently improved the **success rate** in their **forecast**ing of where hurricanes are likely to hit land by 15 to 30%. This **increase** in **accuracy** is due to the use of instruments called   GPS-**dropwindsondes**, which can **probe the atmosphere** surrounding a hurricane while it is still out at sea.

The atmospheric characteristics of hurricanes over land are well understood because **investigation** is possible with weather balloons having **sophisticated** meteorological instruments. When hurricanes **are out of reach** of balloons, gathering information is much more difficult. Little is known of the weather conditions that guide hurricanes towards land.

2. An accurate estimation of where a hurricane will strike is **essential** in order to **reduce** loss of life and **property**. Hurricane Andrew, the most costly hurricane in U.S. history, killed 15 people and **cause**d damage of $35 billion dollars in 1902. However, the category 4 hurricane which struck southeast Florida in 1926 and killed 243 people would have caused $77 billion if it had struck today. The reason for this is the explosion in population growth and development along the south-east coast of the U.S. during the last half century.

3. Hurricanes occur in cycles every few **decades**, the last intense period in the U.S. was from 1940 to 1969. 'Camille', a Category 5 hurricane of such catastrophic force that it caused over a billion and a half dollars worth of damage at the time and killed 256 people, struck the coast of the Gulf of Mexico in 1969 with winds over 320 km/h. Yet, for the last quarter century, hurricane activity has been relatively mild. Scientists do not know the **precise** reason for the cycles of hurricane activity, but they could be caused by a phenomenon called the 'Atlantic Conveyor'. This is the name given to the gigantic **current** of water that flows cold from the top of the globe slowly along the Atlantic ocean floor to Antarctica and **resurfaces** decades later before flowing back north, **absorb**ing heat as it crosses the equator. Since hurricanes derive their energy from the heat of warm water, it is thought that an increase in the speed of the' Atlantic Conveyor' is an indicator of intensifying hurricane activity.

4. The use of GPS-dropwindsondes began in 1997. Small **sensing devices** dropped from planes at very high **altitude**s and over a wide area, they are far more **revealing** than previously used sensors. Because they **weigh** only 0.4 kilograms, they are able to **stay aloft** for longer periods and **broadcast** more data to the ground. Each sonde carries its own global positioning satellite **receiver.** The GPS signals received are used to calculate the direction and speed of wind, and data on temperature, **humidity,** and barometric pressure at half second intervals all the way down to the ocean surface.

5. Dropwindsonde information is fed into a special meteorological computer in Maryland which generates a global computer model of wind patterns. Data analysts have discovered a greater **variability** in the winds at sea level than previously believed, but many forecasting problems **are beyond a solution**, at least **for the time being**. **For instance**, it is not yet known why hurricanes can suddenly change in intensity; current computer models often **fail to predict** whether a hurricane will reach land or else cannot **pinpoint** where a strike will take place.

6.One surprising result of a recent computer simulation was the **destruction** of a large part of **downtown** New York. Hurricane researchers believe that the city is more likely than Miami **to suffer** a direct hit in the near future. Also, certain geographical features of the coastline near New York make it **conceivable** that a wall of water called **a storm surge** pushed ashore by hurricane winds would cause a **devastating** flooding of Manhattan. A storm surge was responsible for the more than 8000 deaths caused by the hurricane that destroyed the city of Galveston in 1900.

9. Read the text again and answer the following questions:
1) How do GPS-dropwindsondes gather meteorological data?
2) Why is it sometimes difficult to gather information about hurricanes?
3) What damage did hurricane Andrew cause?
4) What provides the cyclic activity of hurricanes?
5) What phenomenon do we call the Atlantic Conveyor?
6) What does the increase in the speed of the Conveyor indicate?
7) How much do GPS-dropwindsondes weigh?
8) What data do they broadcast to the ground?
9) Why are GPS-dropwindsondes so handy?
10) How is the meteorological information from GPS-dropwindsondes used afterwards?
11) Why are many forecasting problems still beyond a solution?
12) Can computers models pinpoint where a strike will take place?
13) What big coastal cities can be affected by hurricanes in future?

Grammar

Conditional Sentences

Условные предложения в английском языке – это предложения, состоящие из условия и следствия (результата), как правило, соединенных союзом if (если). Условные предложения вводятся союзами: if, in case, provided, unless, suppose. Обычно выделяют три вида условных предложений, отличающихся степенью вероятности действия. Иногда выделяют нулевой тип условных предложений. Условные предложения **первого** типа выражают реальные, осуществимые предположения, относящиеся к будущему времени: в условии глагол употребляется в Present Simple, в следствии – в Future Simple. Условные предложения **второго** типа выражают маловероятные или невероятные предположения, относящиеся к настоящему или будущему (но не к прошедшему) времени. В условии глагол употребляется в Past Simple, в следствии – would + инфинитив (без частицы to). Условные предложения **третьего** типа выражают предположения, относящиеся к прошедшему времени, а поэтому являющимися невыполнимыми – это те действия, которые могли бы произойти, но они не произошли. В условии используется Past Perfect, а в следствии – would have + Past Participle.

Усло вие	Второстепенное предложение (условие)	Главное предложение (следствие)	
реальное	If I have time, *Если у меня будет больше времени,* If the weather is fine, *Если погода хорошая,*	I will come over. *я зайду.* we usually go out of town. *мы обычно ездим за город.*	без **БЫ**

нереальное	наст. вр. / будущ. вр.	If I were you, *Если бы я был на вашем месте* If I had more time, *Если бы у меня было больше времени* If you knew him better, *Если бы ты знал его лучше* If it were not raining, *Если бы не шел дождь*	I would go there myself. *Я бы сделал это сам.* I would come over. *я бы зашел.* you wouldn't think so. *ты бы так не думал.* I could go out. *я бы пошел гулять.*	**БЫ**
	прош. вр.	If you had gone there, *Если бы ты туда пошел* If it hadn't been so hot last summer, *Если бы не было так жарко прошлым летом,*	you would have met him. *ты бы его встретил.* we could have gone to the South. *мы бы поехали на юг.*	**БЫ**

10. Make sentences, using *if* and choosing from the boxes.
Example: If we don't hurry, we will be late for the train.

We don't hurry, I can't get a flight, You come home late, I don't feel well, You have any problems,	please come in quietly. I am not going to work. we'll be late for the train. I'll try to help you. I'll fly home on Sunday.
I can understand you, It will be nice, You will be cold, What are you going to do, I am sure they will understand,	you don't wear a coat. you don't pass your exam? you explain your problem. you speak slowly. you can come to the party.

11. Choose the correct form of the verb.
1) If I *don't /won't* have time, I *will not come / do not come* over.
2) If the weather *is / will be fine*, we can go to the beach.
3) If the hurricane *struck/ had struck* yesterday, the damage *would have been/ would be* more serious.
4) If scientists *will manage/ manage* to pinpoint the time and place of a hurricane, this disaster *will become/ becomes* less dangerous.
5) If we *had probed / probed* the atmosphere in advance, we *would notice/ would have noticed* the approaching storm.
6) If we *know/ knew* the precise reason for the hurricane cycles, we *could forecast/ could have forecast* hurricane activity.

7) It will be hard to avoid victims, if we won't / don't predict the time when the hurricane will reach land.

12. Put the verbs in brackets into the correct form.

1) If I had this tool, I (give) it to you.
2) If he worked more slowly, he (not make) so many mistakes.
3) I could give you his address if I (know) it.
4) If I (know) her better, I (introduce) you.
5) The journey takes about 3 hours by train. You (get) there much sooner, if you (go) by plane.
6) If he (know) you were away, he (not come).
7) The car (break) so often, if you (have) it serviced regularly.

13. Translate from Russian into English.
1) Если бы вы помогли мне вчера, я смог бы закончить работу вовремя.
2) Если бы дорога была лучше, мы бы доехали быстрее.
3) Если бы вы позвонили вчера, я смог бы прийти.
4) Если бы ученые могли бы предсказывать активность ураганов, мы смогли бы избежать многих жертв.
5) Если бы ураганы не были настолько опасны, люди не изучали бы их так тщательно.
6) Если бы мы могли понять, почему ураганы могут потерять свою интенсивность, мы решили бы множество проблем.
7) Если завтра будет хороший прогноз погоды, мы поедем за город.
8) Мы сможем закончить проект, если у нас будут метеозонды.
9) Если метеозонд будет над морем, он сможет передать направление ветра.

14. Complete the sentences.
1) If I were you, I would _____.
2) If I had a lot of money, I would _____ .
3) If I had a chance to travel, I would _____ .
4) If you gave me a day off, I would _____ .
5) If I lived abroad, I would _____ .

Unit 4. Environment protection

Climate change is not just a problem for the future. It is impacting us every day.

Starting up

1. **Discuss these questions.**
1) What is more important: ecology or economic growth?
2) Is big business interested in the environment protection? Does it depend on the country and mentality?
3) What measures should big business take to minimize its negative influence on the environment?
4) Can ordinary people influence the ecological policy of their government? How?
5) What can an ordinary person do to protect the environment?

2. **Divide into two groups. Give your arguments for and against building a new factory in your city.**

3. **Answer the questions:**
1) Which industries pollute the most and why?
2) What sources of pollution can you name?
3) What alternative sources of energy can we use?
4) What things can we refuse from if we want to reduce the pollution?

Vocabulary
4. **Remember the following words.**

to take advantage of	воспользоваться преимуществом
fossil fuel	ископаемое топливо
to run out	исчезать, истощаться
to supply smb. with smth.	снабжать к-л. ч-л.
efficient	эффективный
to fulfil commitments	выполнять обещания
emissions	выбросы
capacity	мощность
put together	зд. вместе взятые

to promise	обещать
renewable	возобновляемый
to issue	выпускать, издавать
support	поддерживать
to pay premiums	выплачивать премии, надбавки
to maintain a competitive edge	поддерживать конкуренцию
to foster	ускорять
tax incentives	налоговые льготы
to provide smb. with smth.	обеспечивать к-л. ч-л.
coastline	прибрежная линия
elevated spot	возвышенное место
to obstruct	мешать, препятствовать
to erect	возводить
conventional	обычный
offshore	не на суше
to create pollutants	создавать загрязнение
to meet manufacturing costs	окупать производственные расходы
to be regarded as	расцениваться как
inescapable	неизбежный
noticeable	заметный
controversial	противоречивый

5. Fill in the gaps using the words from the box.

take advantage of / run out / supply / emissions / promise/ issue / support / a competitive edge / foster / tax incentives/ obstruct / erect/ offshore / regard / inescapable / controversial

1) Drilling _____ oil is still profitable.
2) Electrical power is _____ed by wind turbines.
3) It took a couple of years to _____ the wind farm.
4) It's an _____ truth that these problems have no easy solution.
5) Reducing the consumption of energy and increasing its efficient use would help control _____.
6) The business needs to innovate in order to maintain _____.
7) The company has not been _____ed with a licence.
8) The government has _____ed that they'll reduce taxes.
9) The government is trying to _____ an interest in renewable sources of energy.
10) The government offers special _____ for wind farms.
11) The information is _____ ed as strictly confidential.

12) The question was very _____ as it caused a lot of discussion.
13) These wind turbines _____ the view of the mountains.
14) They _____ed the ecological monitoring report with facts.
15) We are little by little _____ing _____ of fossil fuels.
16) When installing wind turbines, builders _____ elevated spots.

6. Read the text and fill in the gaps using the missing sentences from the list below.
1) For example, last year Germany increased **capacity** by 44%.
2) It is clean, efficient and comparatively inexpensive and it **creates no pollutants** or emissions during operations.
3) It is here, particularly in **elevated spots** clear of trees or buildings which **obstruct** the current of air, that wind farms have mostly been **erect**ed.
4) **Tax incentives** have also been offered.

Wind Energy

People have **taken advantage of** the wind energy for years. Images of milling corn and transporting water present a familiar picture of English countryside and in the past innumerable wooden mills could be located around Europe. Now countries are planning for the **fossil fuels run out** and they are considering wind again to **supply us with** a future energy source. Using energy from the wind is also an easy and **efficient** method for countries to **fulfill their commitments** concerning **emissions** of greenhouse gases. Many European states, with their long winters and little sunshine, now favour wind power over solar-based methods of producing power. a) _____ __ . Denmark, the Netherlands, Spain, Sweden and the United Kingdom are examples of other countries with large wind power capacity.

As the windiest country in Europe, the UK' s wind power potential is larger than the rest of Europe **put together**. Half of this resource is in Scotland. The UK's government has **promised** to generate 10 % of their electricity using **renewable** resources. Wind power is seen to be the answer to doing this. The UK has **issued** wind farm licences to produce as much electricity as about six nuclear power stations. This policy has found favour with the public who **support** the search for cleaner energy sources.

Until 1989, Denmark was the only European state that had installed wind turbines for generating electricity. After 1989, other European countries followed suit developing support mechanisms for developing renewable energy and particularly wind power. Since 1994 the remaining European countries have also really started to support wind power station installation. Countries offer different levels of support. Some governments have **paid** companies **premiums to maintain their competitive edge** while others have given investment subsidies **to foster** the development of

technology. b)
_____ .
Nature **provides** us **with** indications for the best sites for wind turbine installation. Wind force and direction can be observed by leaning trees. This can most frequently be seen in open countryside and areas near **coastlines.** c)
_____
_____. Massive wind turbines, twice the size of **conventional** turbines, are also been developed for use **offshore**, as it is there that the strongest and most constant winds are found.

Believing that wind energy has no disadvantages is easy. d)
_____
_____ . The electricity generated in the first 6 to 9 months of operation by a typical wind turbine will usually **meet its manufacturing costs**. However, wind farms **are** frequently **regarded as** a type of visual pollution because of their common locations on hilltops. It is **inescapable** that sites with the most winds are usually the most beautiful, and because they are built in wild, remote and untouched settings their impact is all the more **noticeable**. This is one of the most **controversial** questions when deciding on wind farm locations. Thus, the siting of wind farms should be done with the greatest sensitivity. When turbines are due for decommission, the entire structure can be wholly recycled or removed and the cost of total site restoration can usually be completely met by the scrap value.

7. Answer the questions to the text.
1) What future energy source do countries consider as an alternative of the fossil fuel? Why?
2) Why do many European countries favour wind power over solar one?
3) What European country has the largest wind power potential?
4) What measures did the UK take to foster the use of renewable sources?
5) What kinds of support did European countries began to offer?
6) What are the best sites to install wind turbines?
7) Are wind turbines used offshore?
8) What are the advantages and disadvantages of wind energy?
9) How long does it take to meet the manufacturing costs of a typical wind turbine?
10) What is one of the most controversial questions when deciding on wind farm locations?

Grammar
The Participle
Причастие – неличная форма глагола, сочетающая в себе признаки прилагательного или наречия и глагола. Существует два вида причастий (причастие совершенного и несовершенного вида). Причастие несовершенного вида называют Participle I или Present Participle. Оно может иметь и простую форму (глагол + ing, например, *playing, watching, smiling*), и сложную аналитическую форму (having + глагол + ed или глагол в 3 форме, например *having played, having watched, having smiled*).

Participle I выполняет в предложении функции определения и обстоятельства:

1) определения *a smiling teacher – улыбающийся учитель, a flying plane – летящий самолет, a factory polluting air – завод, загрязняющий воздух*

2) обстоятельства

Обстоятельственный оборот часто вводится союзами **when** или **while**, которые либо не переводятся, либо переводятся словом **при**.

When considering different levels of support, the government put forward an initiative to reduce taxes.

While fulfilling the commitments concerning emissions of greenhouse gases, the government offered to develop alternative energy sources.

8. Find and translate the participial constructions in the text below.

People living in Japan have some customs different from ours. For example, having washed our face we wipe it with a dry towel, they do it with a wet one. Entering a house our men take off their hats, the Japanese take off their shoes. We give presents when arriving, they leave them when departing. When in mourning (траур) we wear black, they wear white. We frown (хмуриться), when being scolded, they smile.

a. Translate from English into Russian.

a) a plant polluting the atmosphere, the running out fossil fuels, the existing level of production, the growing consumption of energy, scientists carrying out a new research, supporting measures, operating costs;

b) using new methods, constructing wind turbines, achieving good results, considering new possibilities, refusing to issue unpopular laws, receiving important data, observing the manufacturing process.

9. Change the following sentences using Participle I.

1) Wind turbine blade *which has* a diameter of 30 to 60 meters are made of glass fibre.

2) *If we take into account* the speed of the wind and its availability, we can calculate the energy to be produced.

3) The major factors *which influence* the overall cost of wind power are the cost of the turbine and its supporting systems, *which include* land, and operating and maintenance costs.

4) *If we use basic physical laws*, we can predict how much a known volume of water would expand for a given increase in temperature.

5) Industrial pollution has become a type of environmental pollution *that is continuously increasing* after the industrial revolution.

6) Water pollution harms the aquatic life *and affects* the entire food chain.

10. Translate from Russian into English.

1) Имея самый большой ветряной потенциал, Великобритания использует энергию ветра как источник возобновляемой энергии.

2) Поддерживая развитие альтернативных источников энергии, правительство германии предлагает налоговые льготы.

3) При определении места для ветряной фермы, строители выбирают возвышенности.

4) Используя энергию ветра, мы сохраняем полезные ископаемые и не загрязняем атмосферу.

Unit 5. Modern Materials

A modern material is a material that has been engineered to have improved properties.

Starting up

6. Discuss these questions.
1) Read the saying above. Give your comments on it.
2) Can you think of the names of materials in English? What are they?
3) Can you name any modern and smart materials? What is the difference?
4) What are modern materials in chemistry?
5) Why are modern materials better?

Vocabulary
2. Remember the words given below.

ferrous metal	черный металл
non-ferrous metal	цветной металл
carbon	углерод
relatively	относительно, сравнительно
lightweight	легкий
concrete	цемент, бетон
reinforce	укреплять
construction materials	строительные материалы
take for granted	принимать как должное
feasible	возможный, целесообразный
expansion	дополнение, расширение
coincidence	совпадение, стечение обстоятельств
disintegrate	разрушаться
precious metal	драгоценный металл
resist corrosion	противостоять коррозии
duralumin	дюралюминий

titanium	титан
alloy	сплав
oxidize	окислять
expose	подвергать
surface	поверхность
reduce	сокращать
application	применение
chemical composition	химический состав
constituent	составляющая
compound	соединение
chemically bound	химически связанный
hydrogen	водород
oxygen	кислород
mixture	смесь, сочетание
reinforcement	укрепление
composite materials	композитные материалы
grade	класс, категория, сорт
stainless steel	нержавеющая сталь
tool steels	инструментальная сталь
cutting tools	режущие инструменты
galvanizing	гальванизация, оцинкование
molten	расплавленный
anodizing	анодирование
electroplating	гальваническое покрытие
negative (positive) terminals	положительные, отрицательные клеммы (выводы)

3. Complete the sentences using the words in the box.

> metal / non-metal / metallic / non-metallic / ferrous / non-ferrous / stainless steel / reinforcement / chemically bound / mixture

1) Carbon (C) is a _____ .
2) Copper (Cu) is a _____metal.
3) Aluminium (Al) is a common _____.
4) Steel (Fe + C) is a widely used _____ metal.
5) Although it is used in steel, carbon is _____ .
6) Aluminium is relatively lightweight for a _____ material.
7) Over 80% of the world's ferrochrome is utilised in the production of

_____.
8) At the next session we hope to have more _____ from the region.
9) The mean kinetic energy is always the same, whether its atoms are _____ or not.
10) The resultant _____ is used for preparing injection solutions.

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4. Complete the extract about concrete and steel, using suitable forms of the word *reinforce*. Sometimes there is more than one possible answer.

(1)_____ concrete is one of the most widely used construction materials, and one we take for granted. However, using steel bars to (2) _____ concrete structures located outdoors is only possible thanks to a fortunate coincidence: concrete and steel have practically the same coefficient of thermal expansion — in other words, as atmospheric temperature varies, the concrete and the steel (3)_____ expand and contract at the same rate, allowing uniform movement. Using a (4)_____material with a different coefficient of expansion would not be feasible. For example, (5) aluminium-_____ concrete would quickly disintegrate.

5. Complete the table with words related to corrode, oxide and rust. Then use the words to complete the sentences below. There is more than one possible answer.

Verb	Noun	Adjective
		corroded
		oxidized
/ go rusty		

1. When steel is exposed to air and water, it _____.
2. A brown/red material on the surface of steel is called _____.
3. The strength of steel is reduced if it is _____.

6. Make correct sentences using one part from each column. Use the information in the text to help you.

1. Duralumin	can be mixed with copper to make	silver.
2. Titanium	resists corrosion better than the other precious metal	brass.
3. Zinc	has a high strength-to-weight ratio and is often alloyed with.	aluminium
4. Copper	is an aluminium alloy that also contains	copper and bronze.
5. Gold	can be mixed with tin and lead to produce	magnesium.

7. Complete the word groups below using the names of the metals from the box. You will need to write some names more than once. Look at the text to help you.

Metal   elements
_____.
Alloys
_____.
Precious   metals
_____.

Reading

8. Read the text and answer the questions:
1) What types of materials are widely used to make products or structures?
2) Say what materials can be used a) as the matrix, and b) as reinforcement?
3) What metals are called non-ferrous metals?
4) What are engineering applications of some non-ferrous metals?

Engineering Materials

Engineering materials can be divided into: **metals** –examples of **metallic** materials are iron and copper; **non-metals -** examples of **non-metallic** materials are carbon and silicon. As iron is such a widely used material, metals can be divided into: **ferrous metals –** those that contain iron; **non- ferrous metals –** those that do not contain iron. With regard to the **chemical composition** of materials – the chemicals they contain, and how those chemicals are combined – three main categories can be used:
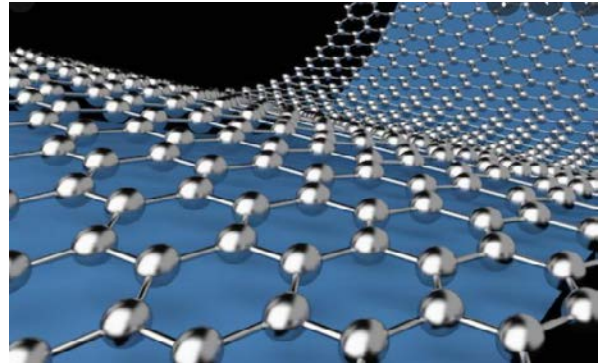
1. **Elements** are pure materials in their most basic form. They cannot be broken down into different **constituents**. Examples of elements widely used in engineering materials are iron, carbon and aluminium.
2. **Compounds** consist of two or more elements that are **chemically bound –** that is, combined by a chemical reaction. An everyday example is water, which is a compound of hydrogen and oxygen.
3. **Mixtures** consist of two or more elements of compounds which are mixed together, but which are not chemically bound. In engineering, common examples are **alloys** – that is, metals which have other metals and/or non-metals mixed with them. A common example is steel, which is an **iron-carbon alloy**, and can include other **alloying metals –** metals which are added to alloys, in small quantities relative to the main metal. Examples of widely used alloying metals are chromium, manganese and tungsten.

When you think of examples of hi-tech materials, **composite materials** come to mind — such as carbon-fibre, used in aerospace and Formula1 cars. But although we think of **composites** as hi-tech and highly expensive, that's not always true. The earliest examples of composite materials were bricks made from mud and straw. Or, to use the correct composite terms, from straw reinforcement — the structural network that reinforces the material inside, and a mud **matrix** — the material surrounding the **reinforcement**. These terms explain what a composite material is: a matrix with a reinforcing material inside it. A modern, everyday example is fibreglass — correctly called **glass-reinforced plastic (GRP)** — which has a plastic matrix **reinforced with** glass fibres.

Steel is the most widely used engineering material. Technically, though, this well-known alloy of **iron** and **carbon** is not as simple as one might think. Steel comes in a

huge range of different **grades**, each with different characteristics. For the inexperienced, it can be difficult to know where to begin. A good place to start is with the two main types of steel. The first, **carbon steels**, consist of iron and carbon, and contain no significant quantities of other metals. Carbon steels can be divided into three main grades: *Mild steel* - the most widely used grade — is a low carbon steel which contains up to approximately 0.3% carbon. *Medium carbon steel* contains between approximately 0.3% and 0.6% carbon. *High carbon steel* contains between approximately 0.6% and 1.4% carbon. The second main category of steel is alloy steels, which consist of iron, carbon and one or more alloying metals. Specific grades of alloy steel include: *low alloy steels,* which contain 90% or more iron, and up to approximately 10% of alloying metals such as chromium, nickel, manganese, molybdenum and vanadium; *high strength low alloy steels (HSLA),* which contain smaller quantities of the above metals (typically less than 2%); *stainless steels,* which contain chromium as well as other metals — such as nickel and which do not rust; *tool steels,* which are extremely hard, and are used in cutting tools. They contain tungsten and/or cobalt. A widely used grade of tool steel is high-speed steel, which is used in cutting tools that operate at high temperatures, such as drill bits.

One weakness of mild steel is that it corrodes — its surface progressively deteriorates due to a chemical reaction. This reaction takes place between the iron in the steel and the oxygen (O_2) in the air, to form iron oxide. When iron corrodes, we say that it rusts. In some metals, such as aluminium (Al), the presence of corrosion is not a problem, as the layer of oxide around the metal remains hard, which prevents it from oxidizing any further. However, when mild steel goes rusty, the rust on the surface comes off continuously, and a new rusty layer forms, progressively 'eating into' the metal.

Aluminium is widely used, often in alloy forms.

An example is duralumin, an alloy used in aircraft manufacturing, which also contains **copper** (4.4%) and **magnesium** (1.5%). Aluminium can also be alloyed with **titanium** to produce very strong, lightweight metals. Good ductility also makes it suitable for pipes. Copper is widely used in alloys, notably brass (copper and **zinc**) and **bronze** (copper and **tin**, and sometimes **lead**). Copper is an excellent electrical conductor, which makes it ideal for use in electric wires.

Silver is a **precious metal** - a reference to its high cost. It is a better electrical conductor than any other material, so it is often used for electronic connections. Another precious metal — **gold** - is also an excellent conductor, and is highly corrosion-resistant. Non-ferrous metals can be used to protect steel from corrosion by plating it — that is, covering it with a thin layer of metal. An example is **galvanizing** (zinc plating).

Steel can be **hot-dip galvanized**, by placing it in **molten** (liquid) zinc. It can also be **electro-galvanized**, which is a type of **electroplating**. With this technique, the steel component is placed in a liquid (often an acid) — called the **electrolyte** — and connected to the **negative terminal** (-) of an electrical supply, to become the **cathode** (the negative side). A piece of zinc is also placed in the electrolyte, and is connected to the **positive terminal** (+) of the supply. This then becomes the **anode** (the positive side), An electric current then flows between the pieces of metal, through the electrolyte. This causes a chemical reaction, which deposits zinc on the cathode, plating the component. A related process, called **anodizing**, is used to protect aluminium. The component to be anodized is connected to the positive terminal (to become the anode) and placed in an electrolyte, with a cathode. As electricity flows, **aluminium oxide** is deposited on the anode. As this is harder than aluminium metal, it provides protection.

9. Decide whether the sentences below are true or false, and correct the false sentences.
1) The elements that make up a compound are chemically bound.
2) Alloys are chemical compounds that are frequently used in engineering.
3) Alloys can contain both metallic and non-metallic constituents.
4) In an alloy, an alloying metal is the biggest constituent, by percentage.
5) Steel is a metallic element.
6) Steel is an alloy of iron and carbon.
7) Mild steel is a high carbon steel.
8) Alloy steels contain carbon.
9) Chromium and nickel are used as alloying metals in steel.
10)   Low alloy steels contain more chromium than iron.
11)   Stainless steel is an alloy steel.
12)   Tungsten is added to steel to make it softer.
13)   High-speed steel is suitable for making cutting tools that get very hot.

10. Read the text below and find two elements, two compounds, an alloy and a composite.

Element	Compound	Alloy	Composite

Generally, the steel used in reinforced concrete will have previously been exposed to water and to the oxygen in the air. As a result, it will usually be partly corroded, being covered with a layer of iron oxide (rust). However, once the steel is inside the hardened concrete, it will be protected from air and water, which prevents further rusting. Additionally, the cement in concrete does not react aggressively with the iron in steel.

11. Summarize the text and speak about engineering materials.

12. Discuss with your partner. Think of some items you are familiar with that are made of steel, but which are not protected (for example by paint). How serious is

the potential problem of corrosion? How is it prevented or limited – for example, by using a specific grade of steel?

Grammar
Participle II

Причастие относится к неличным формам глагола и обладает признаками как прилагательного (иногда наречия), так и глагола. Глагольными признаками причастия являются его способность иметь прямое дополнение, определяться наречием и иметь формы времени и залога. Но время, выраженное причастием носит относительный характер, т. е. соотносится с действием глагола-сказуемого предложения и выражает либо одновременность, либо предшествование этому действию. Participle 2 имеет свойства глагола, прилагательного (определения) и обстоятельства.

Форма причастия II (причастия прошедшего времени) стандартных (правильных) глаголов совпадает с формой прошедшего времени этих глаголов, т.е. образуется прибавлением к основе глагола суффикса -ed с соответствующими орфографическими изменениями: *to solve решать - solved решил - solved решенный (-ая, -ое).*

Форма причастия II нестандартных (неправильных) глаголов образуется разными способами и соответствует 3-й форме этих глаголов: *to speak - spoke - spoken, to make - made - made, to go - went - gone.*

Функции причастия II в предложении	
1. Определение В этой функции причастие II употребляется либо перед определяемым словом (слева от него), либо после (справа). В последнем случае, если нет относящихся к нему слов, при переводе причастие переносится влево. На русский язык причастие II обычно переводится причастием страдательного залога на -*мый, -щийся, -нный, -тый, -вшийся*	*the **solved** problem, the problem **solved** - решенная задача* *the houses **built** - построенные дома* *the **opened** book - открытая книга* *the method **used** - используемый метод*
2. Обстоятельство причины Соответствует в русском языке причастиям на -*мый, -щийся, -нный, -тый, -вшийся* или придаточным предложениям причины	**Well-known** all over the world the Russian book on electronics was also translated into English. *Так как русская книга по электронике известна во всем мире, она была переведена и на английский язык.*
3. Обстоятельство времени Соответствует в русском языке придаточным предложениям времени. Такие обстоятельственные	When **given** the book read the article about environment protection. *Когда вам дадут книгу, прочтите статью об охране окружающей среды.*

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причастные обороты могут иногда вводиться союзами *when когда, while в то время как, во время*	
4. Часть сказуемого В этом случае причастие II вместе с глаголом to have является сказуемым предложения в одном из времен группы Perfect	He had **translated** the text before I came. *Он перевел текст, прежде чем я пришел.*

13. Choose the right form of the verb.
1) We listened to the girls (singing, sung) Russian folk songs.
2) We listened to the Russian folk songs (singing, sung) by the girls.
3) The girl (washing, washed) the floor is my sister.
4) The floor (washing washed) by Helen looked very clean.
5) Who is that boy (doing, done) his homework?
6) The exercise (doing, done) by the pupils were easy.
7) The house (surrounding, surrounded) by tall trees is very beautiful.
8) The wall (surrounding, surrounded) the house was very high.
9) The girl (writing, written) is our best pupil.
10) Everything (writing, written) here is quite right.
11) Read the (translating, translated) sentences one more.
12) The pupils (translating, translated) a very difficult text are tired.

**14. Use the verbs in Present Participle / Perfect Participle.**
1. (to live) in the south of our country, he can not enjoy the beauty of Moscow.
2. (to read) the story, she closed the book and put it on the shelf.
3. (to buy) some fruit and cakes, we went home.
4. (to sit) near the fire, he felt very warm.
5. (to sell) fruit, he looked back from time to time, hoping to see his friends.
6. (to sell) his fruit, he went to see his friends.
7. (to write) out and (to learn) all the new words, he was able to translate the text easily.
8. (to look) through some magazines, I came across an interesting article about UFOs.
9. (to do) homework he was thinking hard.
10. (to do) homework he went for a work.

15. Translate from Russian into English.
1) Видели, как он упорно тренировался в водных видах спорта. Наверное, он собирался принять участие в соревнованиях.
2) Видно было, как спортсмены достигли финиша.
3) Часто видели, как она занималась художественной гимнастикой в спортивном зале.
4) Видно было, как спортсмен прыгнул и сбил планку.

5) Заметили, что он начал заниматься альпинизмом.
6) Ее нашли наблюдающей за ходом тренировки.
7) Он оставил ракетку лежащей на корте.
8) Было слышно, как фигуристка скользит по катку.
9) Судья! Я видел, как он забил гол!
10) Было слышно, как тренер говорил что-то спортсменам перед началом матча.
11) Видели, как он пересек поле и «отбил» мяч у противника.

Unit 6. Nanotechnology and Nanomaterials
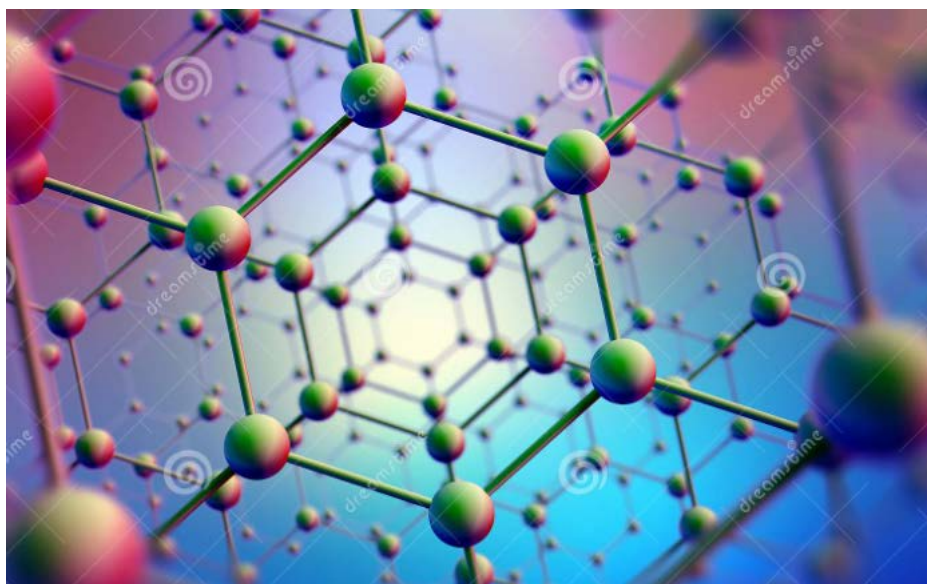
"Nanotechnology is an idea that most people simply didn't believe". Ralph Merkle

Starting up.
1. Answer the following questions.
1) Read the quote above and give your comments.
2) What do you know about nanotechnologies and nanomaterials? How do you think it works?
3) What does the prefix "nano" mean?
4) Where do you think we can use Nanotechnology and nanomaterials?
5) What is nanotechnology and why is it important?

Vocabulary
2. Match the following words to their meanings. Use a dictionary to help you.

1. dimension	a) to use fuel, energy, or time, especially in large amounts
2. scale	b) an object or objects that belong to someone
3. raw materials	c) the way that someone behaves
4. consume	d) to contain something as a part of something else, or to make something part of something else
5. confinement	e) to make something or bring something into existence
6. continuum	f) a measurement of something in a particular direction, especially its height, length, or width
7. unique	g) to include someone in something, or to make them take part in or feel part of it
8. manage	h) in fact or really
9. interface	i) a condition giving a greater chance of success
10. property	j) something that changes in character gradually or in very slight stages without any clear dividing points
11. preponderance	k) to succeed in doing or dealing with something, especially something difficult

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12. behavior	l) any material, such as oil, cotton, or sugar in its natural condition, before it has been processed for use
13. include	m) not long ago, or at a time that started not long ago
14. produce	n) the situation in which a person or animal is kept somewhere, usually by force
15. involve	o) the relation between the real size of something and its size on a map, model, or diagram
16. actually	p) the set of colours into which a beam of light can be separated, or a range of waves, such as light waves or radio waves
17. recently	q) intentionally
18. advantage	r) a situation, way, or place where two things come together and affect each other
19. spectrum	s) the largest part or greatest amount
20. deliberately	t) being the only existing one of its type or, more generally, unusual, or special in some way

3. Fill in the gaps, using the words from the box.

preponderance / confinement / recently / include / behavior / involve / manage / interface / raw materials / dimensions / unique / unique / spectrum / actually / property / deliberately / scale / advantage /

1. Until very _____ he worked as a teacher and he still shudders at the memories.
2. Children need to be taught to have respect for other people's _____.
3. I was wondering whether I could _____ a meal out of what's left in the fridge.
4. I'm sure he says these things _____to annoy me.
5. I'd recognize your handwriting anywhere - it's _____.
6. Please specify the _____ (= the height, length and width) of the room.
7. He was notorious for his violent and threatening _____.
8. I can't _____ all this work on my own.
9. This map is large _____(= things are shown in detail).
10. It's unclear what _____happened that night.
11. She spent most of those years under house arrest or close _____.
12. We need a clearer _____between management and the workforce.
13. It would be difficult not to _____the child's father in the arrangements.
14. The cost of _____ was going up.
15. The _____of evidence suggests that he's guilty.
16. The colours of the _____- red, orange, yellow, green, blue, indigo, and violet - can be seen in a rainbow.
17. The _____of booking tickets in advance is that you get better seats.
18. Sheila asked to be _____among the people going on the tour.

4. Remember the words given below.

dimension	измерение
interaction	взаимодействие
catalyst	катализатор
layer	слой
solid	твердое тело
scale	уровень
to deal with	иметь дело с
diverse	разнообразный
extension	расширение
range	спектр
speculation	предположение
to warrant	гарантировать
continuum	сплошная среда
ductile	пластичный, вязкий
subtle	едва различимый
refine	усовершенствовать
confinement	ограничение
property	свойство
meaning	значение
allow	позволять
regulation	положение, регулирование
equivalent to	приравниваемый к чему-либо
lead to	приводить к чему-либо
computational tools	вычислительные средства
originate	происходить
impact	влияние
composition	состав
implication	применение
particle	частица
involve	включать в себя

Reading
5. Read the text to find out more about nanotechnology and nanomaterials.

Nanotechnology and Nanomaterials

Nanotechnology, shortened to "nanotech", is the study of the controlling of matter on an atomic and molecular scale. Nanotechnology deals with structures of the size 100 nanometers or smaller in at least one dimension, and involves developing materials or devices within that size. Nanostructures are assembled a single atom, molecule, or atomic layer at a time, as part of a vast new field of research in nanomaterials synthesis and assembly. In other words it is the engineering of functional systems at molecular scale. It offers ways to create smaller, cheaper, lighter and faster devices that can do more and cleverer things, use less raw materials and consume less energy.

Nanotechnology originates from the Greek word meaning "dwarf". "Nano" is a prefix meaning one-billionth. A nanometer is one-billionth of a meter or it is about one hundred thousandth of the width of a hair! The world of atoms and molecules could not be visualized and managed until a new generation of microscopes were invented in 1980s in IBM in Switzerland. Generally, structures smaller than a nanometer tend to behave much like individual atoms, while materials that are hundreds of nanometers or greater in size exhibit properties of the continuum. Nanoscale properties and behaviors can be quite different as the result of unique physical and chemical interactions. The preponderance of surfaces and interfaces, and the physical confinement of matter and energy, can alter nearly all properties of materials (physical, chemical, optical, etc.), and thus produce extraordinary new behaviors. Examples include generating light from dark materials, improving efficiencies of catalysts by orders of magnitude, and turning soft and ductile materials like gold into solids with hardness equivalent to bearing steel.

The final ingredient to nanotechnology is the ability to characterize and predict nanoscale properties and behavior. New experimental tools that are able to "see", "touch", and measure the behavior of individual nanostructures allow scientists and engineers to identify subtle differences in structure and properties that control nanoscale properties. By coupling new experimental techniques with advanced computational tools, researchers can develop, verify, and refine models and simulations that will allow the full potential for nanotechnology to be explored. There has been much debate on the future implications of nanotechnology. Nanotechnology has
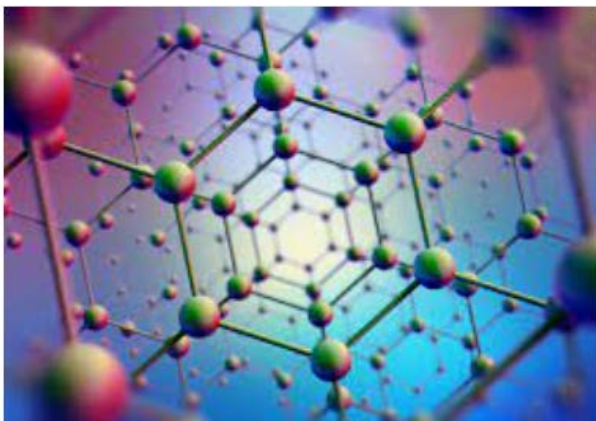
the potential to create many new materials and devices with a vast range of applications, such as in medicine, electronics and energy production. On the other hand, nanotechnology raises many of the same issues as with any introduction of new technology, including concerns about the toxicity and environmental impact of nanomaterials, and their potential effects on global economics, as well as speculation about various doomsday scenarios. These concerns have led to a debate among advocacy groups and governments on whether special regulation of nanotechnology is warranted.

It's hard to imagine just how small nanotechnology is. One nanometer is a billionth of a meter. Here are a few illustrative examples: There are 25,400,000 nanometers in an inch. A sheet of newspaper is about 100,000 nanometers thick. On a comparative scale, if a marble were a nanometer, then one meter would be the size of the Earth. Nanotechnology involves the ability to see and to control individual atoms and molecules. Everything on Earth is made up of atoms – the food we eat, the clothes we wear, the buildings and houses we live in, and our own bodies. But something as small as an atom is impossible to see with the naked eye. In fact, it's impossible to see with the microscopes typically used in a high school science classes. The microscopes needed to see things at the nanoscale were invented relatively recently – about 30 years ago. Once scientists had the right tools, such as the scanning tunneling microscope (STM) and the atomic force microscope (AFM), the age of nanotechnology was born. Although modern nanoscience and nanotechnology are quite new, nanoscale materials were used for centuries. Alternate-sized gold and silver particles created colors in the stained glass windows of medieval churches hundreds of years ago. The artists back then just didn't know that the process they used to create these beautiful works of art actually led to changes in the composition of the materials they were working with. Today's scientists and engineers are finding a wide variety of ways to deliberately make materials at the nanoscale to take advantage of their enhanced properties such as higher strength, lighter weight, increased control of light spectrum, and greater chemical reactivity than their larger-scale counterparts.

6. Answer the questions to the text.
1) What structures are investigated by nanotechnology?
2) What advantages does nanotechnology offer in creating new products?
3) What is the origin of the word "nanotechnology"?
4) What basic inventions influenced the development of the new science?
5) Why do nanomaterials behave in other way than ordinary structures?
6) What is the extraordinary feature of nanotechnology?
7) What fields of science is nanotechnology applied in?
8) How big is a nano particle?
9) Give examples of products that contain nano particles.
10) How can particles at a nano scale be different from the same material at a larger scale?
11) How may nanotechnology be used in the future?
12) What concerns do some people have about using nano particles in products?

7. Find English equivalents to the following word combinations in the text.
1) Молекулярный уровень …………………………………………………………
2) атомный слой ……………………………………………………………………..
3) синтез и сборка …………………………………………………………………...
4) сырьё ………………………………………………………………………………
5) потреблять энергию ………………………………………………………………
6) толщина волоса ……………………………………………………………………
7) проявлять свойства ……………………………………………………………….
8) изменять свойства материалов ……………………………………………………
9) по порядку величины ……………………………………………………………..
10) несущая сталь ……………………………………………………………………
11) при соединении …………………………………………………………………..
12) последствия нанотехнологии ……………………………………………………
13) поднимают многие проблемы ……………………………………………………
14) воздействие наноматериалов на окружающую среду ……………………..
15) сценарий конца света ……………………………………………………………
16) пропагандистские группы ………………………………………………………

8. Find the synonyms to the following words in the text.
1) Substance _____
2) level _____
3) huge _____
4) use _____
5) show _____
6) feature _____
7) limitation _____
8) flexible _____
9) connecting _____
10) improve _____
11) investigate _____
12) effects of smth _____
13) problems   _____
14) discussion _____

9. Insert the necessary word in the gap.
1) Nanotechnology is the engineering of functional systems at the _____scale.
a) nuclear / b) electron / c) particle / d) molecular
2) Due to nanotechnology we can create things _____less energy.
a) consuming / b) producing / c) converting / d) generating
3) Scientists could _____the world of atoms owing to the invention of new microscopes.
a) verify / b) offer / c) visualize / d) penetrate
4) New _____ of microscopes helped advance the science of nanotechnology.

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a) gravitation   /   b) generation   /   c) production   /   d) contribution

5) The science of nanotechnology attracted attention of scientists all over the world _____ its limitless possibilities.

a) in spite of / b) because of / c) instead of / d) due to

10. Discuss with your partner one of these ethical questions.

1) Should we build objects including life forms atom by atom for our purposes?
2) How would you feel about having mechanical parts in your body?
3) What would be the motivation to work if we could have machines produce everything (Would we even want to work)?

11. Outline the main ideas in the text. Retell it.

Grammar.
Gerund

Герундий — это безличная форма глагола, которая сочетает в себе признаки существительного и глагола. Он несет в себе значение некого процесса. Чаще всего герундий в русском переводе выступает существительным, глаголом или деепричастием.

Swimming is really good for your back. — Плавание очень полезно для спины.

I enjoy reading non-fiction books. — Мне очень нравится чтение научно-популярных книг.

We ran 7 kilometers without stopping. — Мы пробежали 7 км без остановок.

Для образования герундия необходимо добавить окончание -ing к глаголу в неопределенной форме.

to think (думать) – thinking (размышление)
to sing (петь) – singing (пение)
to find (находить) – finding (нахождение, находка)
to marry (жениться) – marrying (женитьба)

Особенности правописания герундия:

1) Если глагол имеет окончание -e, то перед -ing оно опускается.
to write (писать) – writing (письмо, написание)
to smile (улыбаться) – smiling (улыбка)

2) Если глагол оканчивается на одну согласную букву, перед которой есть ударный гласный звук, то согласная буква на конце удваивается.
to sit (сидеть) – sitting (сидение)
to run (бежать) – running (бег)
regret (сожалеть) – regretting (сожаление)

3) Если глагол имеет окончание -ie, оно меняется на -y.
to lie (лгать) – lying (ложь)
to die (умирать) – dying (смерть)

Отрицательная форма герундия образуется при помощи частицы not. Ставим ее перед герундием.

I love not having to get up early in the morning. — Мне очень нравится, что мне не приходится вставать рано по утрам.
Not lying is the best thing to do. — Не врать — самое лучшее, что можно сделать.

Формы герундия в английском языке

В английском языке есть две формы герундия — простая (Simple) и перфектная (Perfect). Простая форма герундия используется для действия, которое происходит одновременно с действием глагола-сказуемого. Перфектная форма герундия используется для действия, которое предшествует глаголу-сказуемому.

Кроме того, герундий можно использовать как в активном, так и в пассивном залогах. Активный залог — действие происходит с подлежащим. Пассивный залог — действие происходит над подлежащим.

Формы	Активный залог	Пассивный залог
Simple Gerund	**doing** *Excuse me for disturbing you. Простите, что беспокою вас.*	**being done** *I hate being disturbed. Ненавижу, когда меня беспокоят.*
Perfect Gerund	**having done** *He apologized for having disturbed them. Он извинился за то, что побеспокоил их.*	**having been done** *I regret having been disturbed during the conference. Я сожалею, что меня побеспокоили во время конференции*

12. Open the brackets using the correct form of Gerund.
1) When will you finish (translate) the text?
2) He decided not (play) football last year and took up (swim).
3) Please, don't pay attention to me and keep on (write).
4) I started (play) the piano when I was four.
5) When will you begin (think) about your studies?
6) She wants (take up) sports.
7) He should give up (smoke).
8) There is no sense in … (earn) more money than you can spend.
9) Do you mind … (work) overtime?
10) Normally I enjoy … (go) out but today I'd prefer … (stay) indoors.
11) The film was really worth … (see).
12) Brent is looking forward to … (take) a short break next month.
13) She is fond of … (have) picnics.
14) I can't remember … (see) him before.

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15)   Everybody enjoys … (work) with him.
16)   The boy hates … (scold).
17)   I am sorry for … (disturb) you.
18)   The windows need … (clean).
19)   It is no good … (force) him to go with us.
20)   I don't like … (cheat).

13. Change the sentences as in the example using the preposition *of* **and** *after* **with Gerund.**
Example: She thought she would go to the country for the weekend. — She thought of going to the country for the weekend.
When she bought everything she needed, she went home. — After buying everything she needed, she went home.
1. I thought I would come and see you tomorrow.
2. I thought I would go on an excursion but the weather was very bad.
3. He is thinking he will learn two foreign languages in future.
4. I am thinking I will buy some books on geography.
5. My grandparents are thinking that they will grow roses this year.
6. My son got a job after he left school.
7. After she took her daughter to the kindergarten, she went to the library.
8. When the children came home, they started playing computer games.
9. After I thought for a while, I finally decided to buy that hat.
10. When they got off the train, they went straight to the hotel.

14. Complete the sentences using Gerund.
1) He left the room without _____.
2) At last we succeeded in _____.
3) You should avoid _____.
4) He has no intention of _____.
5) I am proud of _____.
6) They are engaged in _____.
7) I ought to apologize for _____.
8) He began his working day by _____.
9) There is no probability of _____.
10)   You can help me by _____.
11)   He   has   improved   his   pronunciation   by _____.
12)   As   the   children   were   listening   attentively,   I   continued _____.
13)   He objects to _____.
14)   Last   year   he   spent   much   time   in _____.
15)   He has begun _____.
16)   He raised his hat on _____.
17)   He was accused of _____.

18)	Thank you for _____.
19)	I can't afford _____.
20)	They have no intention of _____.

15. Translate into English.
1. Перестань плакать.
2. Продолжайте писать.
3. Я думаю, что тебе следует начать заниматься спортом.
4. Ты уже закончил читать эту книгу?
5. Он бросил играть в компьютерные игры.
6. Хорошая идея начать играть на музыкальном инструменте.
7. Я ничего не имею против того, чтобы посетить Нью-Йорк.
8. Я думаю, получу удовольствие от вида небоскребов и других современных зданий.
9. Мне нравится слушать звуки города.
10. Я люблю гулять по городу.
11. Я не люблю ходить по музеям.
12. Я терпеть не могу осматривать достопримечательности.
13. Я ненавижу жить в шуме и городской суете.

Unit 7. Information Technologies

As information technology restructures the work situation, it abstracts thought from action.

Starting up

1. Read the saying above and give your comments on it. Do you agree with it? Why? Why not?

2. Discuss these questions.
1. How do you use computer in your free time?
2. Do you believe all the information you see on the Internet?
3. Are you interested in modern technology?

3. How do you think these professions might use computers? Compare answers with others in your group.

architects
interior designers
farmers
landscape gardeners
musicians
rally drivers
sales people

4. Work in pairs. Describe how you use computers in your study and in your free time.

Vocabulary

5. Match the following words to their meanings. Use a dictionary to help you.

14) determine	n) the conditions that you live or work in and the way that they influence how you feel or how effectively you can work

15) transform	o) connected with relationships between people
16) equipment	p) the process of entertaining people at the same time as you are teaching them something, and the products, such as television programmes or software, that do this
17) feature	q) not able to exist or work with another person or thing because of basic differences
18) previously	r) enjoyable, attractive, friendly, or easy to like
19) environment	s) in a way that is easy to see or by a large amount
20) edutainment	t) to control or influence something directly, or to decide what will happen
21) pleasant	u) to make something certain to happen:
22) proliferating	v) a typical quality or an important part of something
23) interpersonal	w) a part of an organization that does a particular type of work
24) incompatible	x) the set of necessary tools, clothing, etc. for a particular purpose
25) significantly	y) to increase a lot and suddenly in number
26) ensure	z) to change completely the appearance or character of something or someone, especially so that that thing or person is improved

6. Fill in the gaps, using the words from the box.

> **determined / transform / features / previously / environment / edutainment / pleasant / proliferated / interpersonal / incompatible / significantly / ensure**

1. It was _____to sit down after standing for hours.
2. The successful applicant will have excellent _____ skills.
3. The number of staff we can take on will be _____by how much money we're allowed to spend.
4. When we started living together we realized how _____we were - our interests were so different.
5. She was _____employed as a tour guide.
6. The airline is taking steps to _____safety on its aircraft.
7. The office is quite bright and airy - it's a pleasant working _____.
8. The market for _____software is growing at about 30% a year.
9. Small businesses have _____in the last ten years.
10. My piano playing has improved _____since I started with a new teacher.
11. The reorganization will _____the entertainment industry.
12. Our latest model of phone has several new _____.

7. Remember the words given below.

available	доступный
collect	собирать
expert	специалист
the disabled	немощный
remote location	удаленное расположение
sophisticated	умудренный, сложный
appliances	приборы
combine	сочетать, объединять
appropriate	подходящий, надлежащий
entertainment	развлечение
effectively	действенно, результативно
responsible	ответственный
proliferate	распространять
share	разделять, делиться
enable	позволять, обеспечивать
pinpoint	определить, указать
enhance	повышать, укреплять
suggest	предлагать
integrate	объединять, включать
impact	влияние, влиять

Reading

8. Read the text and answer these questions.

1. Name some types of devices that use 'computers on a chip'.
2. What uses of handheld computers are mentioned in the text?
3. What are the benefits of using computers with the following items?
   a Security systems
   b Cars
   c Phones
4. What smart devices are mentioned in the text?
5. What are smart cards used for?
6. What are the advantages of multimedia?
7. What can medical expert systems do?
8. How can computers help the disabled?
9. What types of computing systems are made available to people in remote locations using electronic classrooms or boardrooms?
10. What aspects of computing can people power determine?

Computers Make the World Smaller and Smarter

The ability of tiny computing devices to control complex operations has transformed the way many tasks are performed, ranging from scientific research to producing consumer products. Tiny "computers on a chip' are used in medical equipment, home appliances, cars and toys. Workers use handheld computing devices to collect data at a customer site, to generate forms, to control inventory, and to serve as desktop organisers.

Not only is computing equipment getting smaller, it is getting more sophisticated. Computers are part of many machines and devices that once required continual human supervision and control. Today, computers in security systems result in safer environments, computers in cars improve energy efficiency, and computers in phones provide features such as call forwarding, call monitoring, and call answering.

These smart machines are designed to take over some of the basic tasks previously performed by people; by so doing, they make life a little easier and a little more pleasant. Smart cards store vital information such as health records, drivers' licenses, bank balances, and so on. Smart phones, cars, and appliances with built in computers can be programmed to better meet individual needs. A smart house has a built-in monitoring system that can turn lights on and off, open and close windows, operate the oven, and more. With small computing devices available for performing smart tasks like cooking dinner, programming the DVD recorder, and controlling the flow of information in an organization, people are able to spend more time doing what they often do best — being creative. Computers can help people work more creatively.

Multimedia systems are known for their educational and entertainment value, which we call "edutainment'. Multimedia combines text with sound, video, animation, and graphics, which greatly enhances the interaction between user and machine and can make information more interesting and appealing to people. Expert systems software enables computers to 'think' like experts. Medical diagnosis expert systems, for example, can help doctors pinpoint a patient's illness, suggest further tests, and prescribe appropriate drugs.

Connectivity enables computers and software that might otherwise be incompatible to communicate and to share resources. Now that computers are proliferating in many areas and networks are available for people to access data and communicate with others, personal computers are becoming interpersonal PCs. They have the potential to significantly improve the way we relate to each other. Many people today telecommute — that is, use their computers to stay in touch with the office while they are working at home. With the proper tools, hospital staff can get a diagnosis from a medical expert hundreds or thousands of miles away. Similarly, the disabled can communicate more effectively with others using computers.

Distance learning and videoconferencing are concepts made possible with the use of an electronic classroom or boardroom accessible to people in remote locations. Vast databases of information are currently available to users of the Internet, all of whom can send mail messages to each other. The information superhighway is designed to significantly expand this interactive connectivity so that people all over the world will have free access to all these resources.

People power is critical to ensuring that hardware, software, and connectivity are effectively integrated in a socially responsible way. People - computer users and computer professionals —are the ones who will decide which hardware, software, and networks endure and how great an impact they will have on our lives. Ultimately people power must be exercised to ensure that computers are used not only efficiently but in a socially responsible way.

9. Match the terms a-e from the text with the statements 1-5.
    a Edutainment
    b Multimedia
    c Expert system
    d Telecommute
    e Information superhighway

    1. _____Software that enables computers to 'think' like experts.
    2. _____Use computers to stay in touch with the office while working at home.
    3. _____Internet system designed to provide free, interactive access to vast resources for people all over the world.
    4. _____Multimedia materials with a combination of educational and entertainment content.
    5. _____A combination of text with sound, video, animation, and graphics.

10. Mark the following statements as True or False.

a Desktop organisers are programs that require desktop computers…………………………

b Computers are sometimes used to monitor systems that previously needed human supervision. …………………………

c Networking is a way of allowing otherwise incompatible systems to communicate and share resources. …………………………

d The use of computers prevents people from being creative. ……………………………

e Computer users do not have much influence over the way that computing develops. …………………………

Grammar

The Infinitive

Инфинитивом называют неопределенную форму глагола. Эта форма выражает действие, но не показывает лицо или число. Инфинитив отвечает на вопросы «что делать?», «что сделать?»: to run – бежать/прибежать, to cook – готовить/приготовить. В предложении инфинитив может использоваться с частицей to и без нее.

Функции инфинитива. Обычно он выполняет роль:

1. Подлежащего

To walk alone late at night is very dangerous. – Гулять в одиночку поздно вечером очень опасно.

2. Части сказуемого

My decision is to stay here for a couple of days. – Мое решение – остаться здесь на пару дней.

3. Дополнения

Many people hate to lose. – Многие люди ненавидят проигрывать.

4. Определения

She was the best to solve this problem. – Она лучше всех решила эту задачу.

5. Обстоятельства

You can break this model. It was made to be tested. – Можешь ломать эту модель. Она была сделана для тестирования.

Формы инфинитива в английском языке

Infinitive	Simple	Continuous	Perfect	Perfect Continuous
Active	*to ask*	*to be asking*	*to have asked*	*to have been asking*
Passive	*to be asked*	*to be being asked*	*to have been asked*	*to have been being asked*

В русском языке нет такого разнообразия инфинитивных форм, как в английском. По этой причине при переводе чаще используется простой инфинитив или глагол в личной форме.

Употребление форм инфинитива в английском:

1.   *Simple Infinitive* – простой инфинитив

Это та форма, которую мы привыкли видеть в словаре. Обычно она используется для обозначения действия в настоящем или будущем времени.

*I am really glad **to see** you again.* – *Я очень рад **увидеть** тебя снова.*

*This work should **be done** immediately.* – *Эту работу следует **сделать** немедленно.*

2.   *Continuous Infinitive* – длительный инфинитив

Длительный инфинитив указывает на продолжительное действие. Этот инфинитив так же, как и простой, обозначает действие в настоящем или будущем времени.

*He must **be** still **reading** a magazine.* – *Наверное, он все еще **читает** журнал.*

3.   *Perfect Infinitive* – перфектный инфинитив

Перфектный инфинитив называет действие, которое произошло раньше указанного в предложении момента речи или раньше другого действия.

*I am sorry **to have told** him this secret.* – *Мне жаль, что я **рассказал** ему этот секрет.*

*There is a drawing on the table. This sketch must **have been made** by George.* – *На столе лежит рисунок. Этот набросок, должно быть, **был сделан** Джорджем.*

4.   *Perfect Continuous Infinitive* – перфектный длительный инфинитив

Этот инфинитив показывает действие, которое длится до определенного момента или другого действия в настоящем.

*He is dissatisfied **to have been living** here for five years.* – *Он очень недоволен тем, что **живет** здесь пять лет.*

11. Analyze the following examples and translate them into Russian.

The buyers want to know our terms of payment.	This is for you to decide.
To walk in the garden was a pleasure.	The plan of our work will be discussed at the meeting to be held on May 25.
I felt him put his hand on my shoulder.	Jane remembered to have been told a lot about Mr. Smith.
She seems to be having a good time at the seaside.	This writer is said to have written a new novel.
To advertise in magazines is very expensive.	They watched the boy cross the street.
He knew himself to be strong enough to take part in the expedition.	He proved to be one of the cleverest students at our Institute.
He is sure to enjoy himself at the disco.	To see is to believe.

To tell you the truth, this company has a very stable position in the market.	I called every morning to see if there was any news.

12. Put "to" before the infinitive where it is necessary.
1. My son asked me … let him … go to the club.
2. You must make him … practice an hour a day.
3. She was made … repeat the song.
4. He is not sure that it can … be done, but he is willing … try.
5. Let me … help you with your work.
6. She asked me … read the letter carefully and … write an answer.
7. You ought … take care of your health.
8. I looked for the book everywhere but could not … find it.
9. He was seen … leave the house.
10. We had … put on our overcoats because it was cold.
11. The man told me not … walk on the grass.
12. Have you heard him … play the piano?
13. You had better … go there at once.
14. I would rather not … tell them about it.
15. We shall take a taxi so as not … miss the train.

13. Use the appropriate form of the infinitive.
1. They want (to take) to the concert by their father.
2. I am glad (to do) all the homework yesterday.
3. This plant is known (to produce) tractors.
4. He wants his son (to become) a lawyer.
5. The enemy army was reported (to overthrow) the defense lines and (to advance) towards the suburbs of the city.
6. He seems (to know) French very well: he is said (to spend) his youth in Paris.
7. You had better (to call) our distributors at once.
8. We are happy (to invite) to the party.
9. That firm is reported (to conduct) negotiations for the purchase of sugar.
10. It seemed (to snow) heavily since early morning: the ground was covered with a deep layer of snow.
11. He didn't hear me (to knock) at the door.
12. I want (to inform) of her arrival.
13. Our sportsmen are proud (to win) the cup.
14. He is known (to work) on the problem for many years.
15. The representative of the firm asked for the documents (to send) by air mail.

Diagnostic Test

1. Read a text about home design and answer the questions. For questions 1 to 7, choose the correct answer.

Welcome to the home of the future

The 2009 British Homes Awards challenged the industry to design a house that can adapt to different life stages. The participants were asked to rethink the construction and design of individual homes, so that they were easily adaptable to less mobile inhabitants, and also to create communities in which ageing occupants could continue to enjoy shared amenities. The top design also had to be attractive to its potential buyers, because the competition was put to the public vote. The winner, gaining 12,000 votes from Mail on Sunday readers, was the strikingly modern SunnySideUp, designed by Kosi Architects. Here are its three main features:

1. Upside Down House

The architects took as a starting point the accepted norm for a house – rows of houses facing onto streets crammed with cars, with living rooms on the ground floor and bedrooms above. Then they scrapped it. They ended up with the living room, dining room and kitchen on the top floor where they can benefit from the light and views, and maximise energy efficiency. And they put the bedrooms on the ground floor where the garden aspect gives inhabitants increased privacy, and a cool temperature is maintained throughout the day. The two floors are linked by wide, gentle gradient stairs, which are designed to allow for a stair lift to be fitted if necessary as owners age.

2. Concealed Parking Spaces

But the feature that, according to Warren Rosing, one of the Kosi architects responsible for the design, was particularly popular with the public, is actually the parking. In a SunnySideUp development no one has to look out onto a street full of cars, or worry about their kids being run over, because the terrace zone at the first floor level link all the homes and is a car-free zone. Vehicles are tucked away on the lower floor, leaving safe and pleasant spaces outside the houses for people to meet, and kids to play. A lift takes people directly from garage to living area, so that all residents, including the elderly and those with heavy shopping, can move comfortably between the floors. The natural feel of the front area is enhanced by the planters that are placed outside the kitchens at the front to encourage residents to grow vegetables and flowers where they can be seen. The idea is that not only would they look pretty, but they would be a talking point, encouraging interaction between residents on the terrace area outside.

3. Flexible Spaces

But it's the fact that the space is designed to adapt to the changing needs, including the fluctuating income of its owners, that makes it a thought-provoking, as well as a winning, design.

The lower-floor bedrooms have separate outdoor access. The idea is that owners can get some extra money to pay for their mortgages during the first years. And later in the future, those bedrooms can be used as a granny flat, or an office, and can easily be converted into a separate one-bed flat if your kids won't leave home. And if more space is required, as well as the usual loft that can be converted, there is potential for a gallery floor to be inserted in the living room.

4. Where can you get one?

At the moment the SunnySideUp house is still just a set of drawings. But Warren Rosing says, "We are hoping to have it built." The organisers are in talks with builders, but due to the economic climate it may take longer than we would like."We're sure it will be worth the wait" they say.

1. The British Homes Awards challenged architects to design a house …
    a. for disabled people
    b. for ageing inhabitants
    c. that could adapt to all ages
    d. for young families with children
2. In the winning property, bedrooms are downstairs to …
    a. benefit from the view
    b. have easier access to the house
    c. have more privacy in the living room
    d. keep the same pleasant atmosphere the whole day
3. The parking spaces in this house design are …
    a. on the first floor
    b. on the ground floor
    c. in a separate building
    d. in the street
4. In the SunnySideUp house the ground floor ...
    a. can be rented
    b. can be sold separately
    c. is only used to store cars
    d. has a room for grandparents
5. We learn from the article that …
    a. children can play safely outside the house
    b. the houses overlook a street crammed with cars
    c. the back garden is the main talking point for the inhabitants
6. The house has been designed …
    a. to be rented
    b. to be shared if necessary
    c. for families with a small income
7. the SunnySideUp development …
    a. is being built

b. will never be built
c. will hopefully be built
d. has been recently built

2. Choose the right variant.
8. _____President of_____ United States lives in _____White House in _____ Washington D.C.
        A. – , the, the, –
        B. – , the, – , the
        C. – , – , the, the
        D. The, the, the, –
9. ____ not any glass in the windows, that is why ____ so cold in the room.
        A. There is, it is
        B. It is, there is
        C. There are, it is
        D. There was, there is
10. When the fog ____, we ____ to see where we are.
        A. lifts, may
        B. will lift, will be able
        C. lifts, will be able
        D. lifts, must
11. You looked very busy when I ____ you last night. What ____?
        A. see, do you do
        B. see were you doing
        C. have seen, are you doing
        D. saw, were you doing
12. Mary hasn't been in London, ____ she?
        A. hasn't
        B. did
        C. has
        D. didn't
13. ____ breakfast yet? – Yes, I ____.
        A. Did you have, have
        B. Had you had, have
        C. Have you had, have
        D. Do you have, had
14. I ____ a new house last year, but I my old house yet, so at the moment I have two houses.
        A. buy, don't sell
        B. bought, haven't sold
        C. have bought, sold
        D. had bought, didn't sell
15. After failing his driving test four times, he finally ____ trying to pass.
        A. gave in
        B. gave off

C. gave away

D. gave up

16. I ____ all of the questions correctly since I began this grammar exercise.

    A. am answering

    B. answer

    C. have answered

    D. had answered

17. I have my English class ____ Monday morning.

    A. in

    B. at

    C. for

    D. on

18. I was late. The teacher ____ the test when I ____ to class.

    A. has already given, got

    B. had already given, got

    C. has already given, get

    D. was already giving, get

19. They can't have ____ more strawberries. I want ____ to make jam.

    A. some, any

    B. no, some

    C. any, any

    D. any, some

20. We all ____ his story as a joke.

    A. thought

    B. intended

    C. treated

    D. found

21. They ____ to return next Monday.

    A. are sure

    B. was sure

    C. will be sure

    D. would sure

22. My hair ____ very long.

    A. grow

    B. has grown

    C. have grown

    D. are growing

23. Nothing was stolen, ____?

    A. was it

    B. wasn't anything

    C. wasn't it

    D. was anything

24. I enjoyed the film last night. ____.

    A. Neither do I

    B. Neither did I

C. So do I

D. So did I

25. You are always____excuses for not____ your homework on time.

    A. making, making

    B. doing, doing

    C. making, doing

    D. doing, making

26. I can't speak French. I wish I ____.

    A. can

    B. would

    C. could

    D. had been able

27. What time does your plane take _____?

    A. off

    B. out

    C. to

    D. from

28. When I ____ for my passport, I ____ this old photograph.

    A. look, found

    B. was looking, found

    C. will look, will find

    D. looked, found

29. I____ to the theatre for ages.

    A. wasn't

    B. hadn't been

    C. won't be

    D. haven't been

30. Did you notice Nick ____ another student's paper during the exam?

    A. looked at

    B. to look at

    C. has looked at

    D. looking at

31. I ____ to live with my family, but now I live alone.

    A. am used

    B. used

    C. am accustomed

    D. was used

32. You ____ have a passport if you want to travel abroad.

    A. have to

    B. can

    C. may

    D. might

33. She said that she ____ her present flat and ____ to find another.

    A. doesn't like, tried

B. doesn't like, was trying

C. didn't like, was trying

D. doesn't like, will try

34. If it _____ raining yesterday, we _____ the game.

A. hadn't been, would have finished

B. wasn't, will finish

C. weren't, would have finished

D. weren't, would finish

35. The new highway _____ sometime next month.

A. has been completed

B. completes

C. will complete

D. will be completed

36. I have always enjoyed travelling. My sister, _____, prefers to stay home.

A. although

B. though

C. however

D. but

37. What did you buy this computer magazine _____? To read about business software.

A. at

B. on

C. in

D. for

МЕТОДИЧЕСКИЕ РЕКОМЕНДАЦИИ ПО РАБОТЕ С ПРАКТИКУМОМ

МЕЖКУЛЬТУРНАЯ КОММУНИКАЦИЯ

Культурные контакты – важный компонент общения между людьми. Они позволяют представителям одной культуры познакомиться с традициями, обычаями, представлениями и нормами повседневного общения, присущими чужой культуре. Это способствует установлению взаимопонимания, повышению эффективности сотрудничества, обогащению духовного мира людей, расширению их кругозора.

Коммуникация – необходимое условие жизнедеятельности человека, одна из фундаментальных основ существования общества. Этим термином обозначают совокупность многообразных связей и отношений, возникающих в человеческом обществе. Социальная коммуникация – специфическая форма взаимодействия людей по передаче информации друг другу при помощи языка и иных знаковых систем. Одним из ее видов является межкультурная коммуникация – взаимодействие людей, принадлежащих к разным культурным сообществам, что выражается как в непосредственных контактах, так и в опосредованных формах коммуникации [1,3].

Виды межкультурной коммуникации:

• *вербальная* – речевое общение, язык;

• *невербальная* – мимика, жесты, телодвижения, позы тела, прикосновения, визуальные контакты, а также одежда, элементы оформления внешности;

• *паравербальная* – интонации, конкретизирующие передаваемую информацию, уточняющие ее смысл (удивление, сарказм, ирония), а также голосовые оттенки, громкость и темп речи, возгласы, вздохи, покашливания, смех, плач.

Межкультурная коммуникация выражается в обмене знаниями, идеями, мыслями, понятиями, эмоциями выходцами из разных культурных сред. Она осуществляется постоянно – между туристами и жителями принимающей страны, мигрантами и коренным населением, участниками международных форумов и программ обмена, представителями различных этнических общностей и субкультур внутри одной страны.

Формы межкультурной коммуникации:

• *прямая* – непосредственное взаимодействие посредством вербальных и невербальных средств общения;

• *опосредованная* – характеризуется наличием промежуточного звена между участниками коммуникации (телефон, почта, социальная сеть);

• *косвенная* – получение информации из различных источников: произведений литературы, искусства, средств массовой информации.

Межкультурная коммуникация – это специфическая форма деятельности, которая предполагает знание:

- иностранного языка;
- материальной и духовной культуры;
- религиозных и светских традиций;
- ценностных и нравственных установок;
- норм поведения и общения, этикета;
- национального характера и менталитета.

Язык – главное средство общения между людьми, основной носитель и транслятор культуры. Все знания, умения, материальные и духовные ценности, накапливаемые народами веками, хранятся в их языковых системах – фольклоре, книгах, устной и письменной речи. В языке отражаются многообразные культурные традиции, моральные и этические устои, ход истории. Язык формирует культурную среду, в которой живет человек [2].

Каждый язык – это уникальная система символов, с помощью которой одни люди кодируют и передают информацию, а другие ее принимают и декодируют. Этот код, а также принципы кодирования и декодирования формируются под непосредственным воздействием культуры, являются ее отражением. Участники внутрикультурной коммуникации используют один и тот же код. Участники межкультурной коммуникации, используя собственный языковой код и культурные установки, одновременно пытаются учитывать языковой код и культурные установки противоположной стороны [2, 4].

Для эффективной коммуникации большое значение имеет ***межкультурная компетентность*** – способность воспринимать чужую культуру, не утрачивая собственной культурной идентичности. Понятие включает в себя:

- благожелательное и уважительное отношение к чужой культуре;
- знание особенностей чужой лингвокультурной среды или способность достигать успеха в общении с представителями других культур даже при нехватке необходимых знаний;
- положительный опыт общения с представителями других культур;
- владение стратегиями межкультурных контактов, направленными на успешное протекание взаимодействия – побуждение к речевому общению, готовность к пониманию, выявление сигналов непонимания, поиск общих культурных элементов.

Культура общения коммуникантов помогает избежать коммуникативных неудач и конфликтов [5, 8, 10]. Она предполагает:

- терпимость к непохожести друг друга, принятие различий в стиле жизни, одежде, мышлении;
- преодоление стереотипов в отношении другого народа и его культуры;
- интерес и открытость новому и неизвестному.

Межкультурная коммуникация – это набор навыков, которыми можно и нужно владеть. Это особенно важно для людей, чья профессиональная деятельность связана с межкультурными взаимодействиями, а коммуникативные ошибки и неудачи приводят к провалам в переговорах, неэффективной работе коллектива, межэтническим конфликтам. Главная причина коммуникативных неудач – восприятие коммуникантами чужой культуры сквозь призму своей. Для преодоления этой ограниченности межкультурной коммуникации нужно учиться.

ПРОФЕССИОНАЛЬНЫЙ ИМИДЖ

В условиях современных тенденций развития российского высшего образования, а также мировой тенденции глобализации особую важность и актуальность приобретают вопросы управления качеством образования в вузе, его конкурентоспособности. Образовательные учреждения вынуждены разрабатывать и внедрять в собственную практику систему маркетинга, которая наиболее эффективно позволяет планировать, организовывать и контролировать усилия учебного заведения по осуществлению своей деятельности в условиях конкуренции [6, 7].

В сложившихся условиях стратегически мыслящие администрации и коллективы учреждений высшего образования стараются использовать современные технологии управления, повышающие потенциал студентов технических вузов, Одной из таких технологий формирующей успешного технического специалиста, выпускника вуза является технология имиджевой работы или имиджмейкинга представляющая собой систему процедур и операций, направленных на формирование и распространение привлекательного образа будущего специалиста [5, 11, 14, 20].

Успешное продвижение имиджа формирует привлекательный для потребителей и работодателей образ специалиста профессионала, Профессиональный имидж представляет собой один из эффективных способов реинжиниринга вузовской среды, обеспечивающего наращивание и мобилизацию внутренних ресурсов в интересах повышения качества профессионального образования [12, 15, 17, 19] .

В настоящее время нет единого общепринятого понятия профессионального имиджа, к изучению которого только приступает педагогическая наука. В настоящее время в сфере гуманитарного знания сложилось новое научное направление – профессиональная имиджелогия. Она призвана разрабатывать и использовать теорию и практику проектирования профессионального имиджа независимо от конкретного вида деятельности специалиста. Профессиональный имидж напрямую связан с профессиональной деятельностью человека, он является важной частью профессиональной культуры специалиста [13, 16, 18]. Современные рыночные отношения изменили подход к требованиям предъявляемым специалистам, и профессиональный имидж является одним из основных аспектов успешного карьерного роста специалиста [21, 22].

Исследования профессионального имиджа проводятся в разных направлениях в зависимости от определенной профессии (педагог, социальный работник, политолог, психолог).

Известно, что профессиональный имидж имеет сложную многокомпонентную структуру, в состав которой входят основные составляющие личности специалиста (интеллект, темперамент, эмоциональная сфера, нравственная сфера, психическое состояние и т.д.), его структура имеет определенные уровни и критерии сформированности в личности будущего специалиста. Теоретический анализ, проведенный А.П. Панфиловой, показал, что профессиональный имидж специалиста необходимо проектировать в образовательном процессе и далее в профессиональной деятельности, работа над его созданием должна быть поэтапной, с установленной целью и задачами, решение которых будет способствовать правильному проектированию профессионального имиджа [26, 27].

По нашему мнению, основные компоненты профессионального имиджа соответствуют компонентам имиджа, но и включает в себя элементы, отражающие опыт профессиональной деятельности [2, 24]. Поэтому профессиональный имидж ввиду специфики профессии имеет разное наполнение структурных компонентов. Профессиональная среда, условия труда, социальное окружение все это в совокупности может служить основанием для проектирования определенного профессионального имиджа специалиста [9, 23, 25]. От специалистов разных областей деятельности общество ожидает определенных характеристик и проявляемых качеств личности. Для того чтобы соответствовать современному социальному заказу общества, специалисту необходимо иметь не только высокую квалификацию, но и соответствующий представлениям большинства внешний вид, а также манеру общения и поведения [11, 16, 24, 27].

Другими словами, профессиональный имидж – это ответ на социальный заказ общества, требующий квалифицированного, конкурентоспособного, мобильного специалиста, адаптированного к современным рыночным отношениям [7, 8, 9]. В любой профессии есть определенный стандарт предъявляемый специалисту (внешний вид, качества личности), соответствие которому является гарантией успешной трудовой деятельности человека [26]. Через проектирование своего профессионального имиджа человек осознает свою деятельность как средство реализации и самовыражения в профессии и обществе.

ПЕРЕВОД ТЕКСТОВ

При переводе текстов помните о следующем:

1.   Текст, предназначенный для перевода, необходимо рассматривать как единое смысловое целое.

2.   Начинать перевод надо с названия текста. Однако, если перевод заглавия вызывает затруднения, его можно осуществить после перевода всего текста.

3.   Прежде чем переводить текст, внимательно прочтите его, стараясь понять его общее содержание и направленность. Обращайте внимание на интернациональные слова, реалии, даты и т.д.

4.   Прочитайте весь текст, приступайте к переводу отдельных предложений. Понять предложение – значит выяснить не только значение каждого слова, но и установить, в какой связи находятся друг с другом слова. Не следует выписывать слова сразу из всего текста, так как одно и то же слово часто имеет несколько значений, которые не подходят для данного текста.

5.   Первоначальный перевод может быть дословным, облегчающим понимание основного смысла текста. Затем следует приступить к его стилистической, литературной обработке, для чего надо подбирать слова и словосочетания, наиболее четко передающие смысл переводимого текста. Перевод должен быть точным, а не буквальным, дословным. Точность перевода – это краткость, выразительность, логическая последовательность, четкость изложения текста оригинала и соответствие его нормам русского литературного языка. Буквальный перевод сводится к механической подстановке русского слова вместо английского без учета его связи в предложении, что обычно приводит к бессмыслице и искажению смысла переводимого текста [1,3, 5, 6].

При переводе допускается:
a) изменение порядка слов в предложении
b) перенос отдельного слова из одного предложения в другое,
c) объединение двух или более предложений в одно или наоборот
d) добавление отсутствующих в тексте слов, но требуемых по смыслу слов и, наоборот, опущение отдельных слов оригинального текста на русском языке,
e) замена одной части речи другой [4,14, 22].

При переводе пользуйтесь словарем.
Чтобы работа со словарем не отнимала много времени, следует:
✓   хорошо знать алфавит, так как слова расположены в алфавитном порядке не только по первой букве, но и по всем последующим;
✓   помнить, что слова даны в их исходной форме, т.е. глаголы – в инфинитиве, существительные – в общем падеже, единственном числе, прилагательное – в положительной степени. После каждого слова в словаре используется сокращение, обозначающее принадлежность слова к определенной части речи [15, 23, 27].

adjective	a.	прилагательное
adverb	adv.	наречие
conjunction	cj.	союз
noun	n	существительное
numeral	num	числительное
plural	pl	множественное число
preposition	prep	предлог
pronoun	pron	местоимение
verb	v	глагол

Следует помнить!!!

Нельзя злоупотреблять on-line переводчиками, а если используете их, то необходима серьезная редактура переведенного текста [2,19, 20, 21,25]!!!

Так, например, Google Translate (http://translate.google.com/) – это система статистического машинного перевода, что означает, что GT-система не анализирует синтаксис текста на основе каких-то структурных правил [16, 45]. Она выдает наиболее вероятный перевод предложения или слова, основанный на статистике накопленных человеческих переводов. В основе анализа при этом часто лежат короткие цепочки всего из нескольких слов. Это означает, что когда системе не хватает данных для комплексного статистического анализа или когда в языках оригинала и перевода существенно различается порядок слов, то GT выдает тарабарщину или просто переносит в перевод те слова оригинала, для которых у нее нет перевода.

РАБОТА НАД ДОКЛАДОМ / ВЫСТУПЛЕНИЕМ

Доклад, согласно толковому словарю русского языка Д.Н. Ушакова: сообщение по заданной теме, с целью внести знания из дополнительной литературы, систематизировать материл, проиллюстрировать примерами, развивать навыки самостоятельной работы с научной литературой, познавательный интерес к научному познанию. Тема доклада должна быть согласованна с преподавателем и соответствовать теме учебного занятия. Материалы при его подготовке, должны соответствовать научно-методическим требованиям вуза и быть указаны в докладе. Необходимо соблюдать регламент, оговорённый при получении задания. Иллюстрации должны быть достаточными, но не чрезмерными. Работа студента над докладом-презентацией включает отработку умения самостоятельно обобщать материал и делать выводы в заключении, умения ориентироваться в материале и отвечать на дополнительные вопросы слушателей, отработку навыков ораторства, умения проводить диспут. Докладчики должны знать и уметь: сообщать новую информацию; использовать технические средства; хорошо ориентироваться в теме всего семинарского занятия; дискутировать и быстро отвечать на заданные вопросы; чётко выполнять установленный регламент (не более 10 минут); иметь представление о композиционной структуре доклада и др. [4, 8, 11,26].

Структура выступления. Вступление помогает обеспечить успех выступления по любой тематике. Вступление должно содержать: название, сообщение основной идеи, современную оценку предмета изложения, краткое перечисление рассматриваемых вопросов, живую интересную форму изложения, акцентирование внимания на важных моментах, оригинальность подхода. Основная часть, в которой выступающий должен глубоко раскрыть суть затронутой темы, обычно строится по принципу отчёта. Задача основной части – представить достаточно данных для того, чтобы слушатели заинтересовались темой и захотели ознакомиться с материалами. При этом логическая структура теоретического блока не должны даваться без наглядных пособий, аудио-визуальных и визуальных материалов. Заключение - ясное, чёткое обобщение и краткие выводы, которых всегда ждут слушатели.

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