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E N G L I S H

FOR THE STUDENTS OF MATHEMATICS AND PHYSICS INSTITUTES AND FACULTIES

SCIENTIA POTENTIA EST

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Навчальний посібник укладено у відповідності до програми з іноземної мови для студентів фізико-математичних інститутів і факультетів.

Навчальний матеріал розташовано за тематичним принципом (за циклами). Робота за темою в межах одного циклу організовується на базі декількох основних текстів, зразків усного мовлення та завдань комунікативного характеру, текстів для додаткового читання, системи граматичних вправ репродуктивного та творчого характеру. Посібник вміщує індивідуальні творчі ігри для самостійної роботи студентів та тести для контролю їх знань.

Навчальний посібник призначається для студентів фізико-математичних факультетів (Intermediate Level). Мета посібника – формувати у студентів навички читання та розуміння літератури фахової професійної тематики на основі активізації знань загальновживаної лексики та основ граматики. Поряд із цим у посібнику реалізується мета комплексного оволодіння студентами всіма видами мовленнєвої діяльності на основі комунікативного підходу до вивчення іноземної мови.

Навчальний матеріал посібника розподілено на п'ять тематичних циклів, текстовий матеріал яких згруповано за темами, які охоплюють життя студентів, специфіку навчання та занять з математики, особливості різних видів чисел, інформацію про обчислювальні машини, їх історію та розвиток, досягнення видатних математиків, загальнонаукові та спеціальні професійні знання. Кожний цикл, в свою чергу, вміщує декілька основних текстів, які з різних сторін висвітлюють тему, та текстів, які несуть додаткову інформацію за певною тематикою. Останній розділ посібника включає чотири тексти для додаткового читання, які можуть бути використані як матеріал для домашнього читання, для самостійного опрацювання студентами.

Кожний цикл включає серію лексичних та граматичних вправ, призначених для формування мовленнєвих, лексичних, граматичних навичок та тренування вживання мовних явищ на різних етапах оволодіння англійською мовою. Вправи вміщують також ситуативні, рольові та ділові ігри, які виконують функцію створення ситуацій для вживання засвоєного лексичного та граматичного матеріалу. Дидактичні ігри мають різноплановий вплив на навчальний процес та стимулюють пізнавальний інтерес особистості студента.

Граматичні вправи включають основні програмні явища англійської мови, які необхідні для розуміння певного лексичного матеріалу, тобто основну інформацію про всі частини мови, їх особливості та специфіку вживання. Ці вправи спрямовані на засвоєння необхідного граматичного матеріалу, ефективне його повторення та практичне застосування отриманих знань.

Посібник вміщує також навчальний матеріал для засвоєння фонетичних явищ мови, зокрема, англійські прислів'я та приказки, висловлювання та вірші, які несуть у собі певний пізнавальний зміст та можуть бути використані як фонетична зарядка.

PHONETIC MATERIAL

*Exercise 1. Read the examples of reading English vowels. Train in pronouncing these words***:**

TYPES OF SYLLABLES AND READING RULES OF VOWELS

Aa : *Face* / *Bad* / *Far* / *Rare*

Aa :	Face	Bad	Far	Rare
	make	bat	star	care
	space	band	part	air
	take	hand	card	hair
	date	match	start	fair
	late	catch	large	chair

Oo :	no	box	form	more
	go	fox	storm	bore
	note	clock	sport	shore
	smoke	not	port	ore
	bone	hot	for	roar
	rose	dog	fork	board

Ii :	fine	it	bird	fire
	line	lift	firm	firing
	mile	fill	girl	hire
	time	film	first	mire
	white	sit	sir	siren
	quite	stick	third	wire

Ee :	me	pen	term	here
	mete	ten	serve	mere
	deep	leg	nerve	sphere
	cheek	chess	learn	hear
	wheat	send	heard	clear
	meat	spend	earth	ear

Uu :	tune	sun	turn	cure
	tube	run	burn	during
	use	shun	curve	lure
	mule	cup	nurse	mural
	cube	but	purple	pure
	cute	jump	turkey	sure

Exercise 2. Read the English proverbs and sayings. Compare their meaning with the native translation. Train in pronunciation. Train your memory learning them by heart.

1. **An apple a day keeps a doctor away.** – Яблуко в день і лікар не потрібний.
2. **A friend in need is a friend indeed.** – Друг пізнається в біді.
3. **It's early bird that catches a worm.** – Хто рано встає, тому бог дає.
4. **Early to bed and early to rise makes a man healthy, wealthy and wise.**- Хто рано лягає й рано встає, у того здоров'я, заможність і розум є.
5. **A sound mind in a sound body.** – У здоровому тілі здоровий дух.
6. **Health is better than wealth.** – Найбільше богатство – здоров'я.
7. **Live and learn**. – Вік живи, вік учись.
8. **It is never too late too learn**. – Учитися ніколи не пізно.
9. **Knowledge is power**. – Знання – сила.
10. **To know everything is to know nothing.** – Знати все – значить нічого не знати.
11. **Money spent on the brain is never spent in vain**. – Гроші, витрачені на освіту, завжди окуповуються.
12. **A new language – a new world.** – Нова мова – новий світ.
13. **So many languages you know, so many times you are a man.** – Скільки мов ти знаєш, стільки разів ти людина.
14. **Time flies.** – Час летить.
15. **Time is a great healer.** – Час – найкращий лікар.
16. **Better late than never.** – Краще пізніше, ніж ніколи.
17. **Time is money.** – Час – гроші.
18. **Times change and we change with them.** – Часи змінюються й ми змінюємось разом із ними.
19. **Don't waste your time, it flies.** – Не гайте часу, він летить.
20. **One today is worth two tomorrows.** – Одне сьогодні варте двох завтра.
21. **One cannot put back the clock.** – Не можливо перевести годинник назад.
22. **Time cures all things.** – Час – найкращий зцілитель.
23. **Every day is not Sunday.** – Не кожен день неділя.
24. **He that laughs on Friday, will weep on Saturday.** – В п'ятницю сміється, а в суботу плаче.
25. **Lost time is never found again.** – Втрачений час ніколи не вернеш.
26. **When two Sundays meet together.** – На Миколи та й ніколи.
27. **He laughs best who laughs last.** – Добре сміється останній.
28. **When two Englishmen meet, their first talk is about the weather.** - Коли зустрічаються два англійці, вони починають розмову про погоду.
29. **After rain or clouds comes fair weather.** - Після бурі настає тиша.
30. **Rain before seven, fine before eleven.** - Сім п'ятниць на тиждень.
31. **The morning sun never lasts a day.** - Ніщо не вічне.
32. **Christmas comes but once a year.** - Різдво буває раз на рік. (Двічі на рік літа не буває).
33. **There is no bad weather, there are bad clothes.** - Немає поганої погоди, є поганий одяг.

34. **As you sow, so you will mow.** - Що посієш, те й пожнеш.
35. **All work and no play makes Jack a dull boy.** - Треба не тільки працювати, але й розважатися.
36. **Business before pleasure.** - Спочатку справа, потім розвага.
37. **The hardest work is to do nothing.** - Найважча робота - нічого не робити.
38. **Idleness is the mother of all evil.** - Без діла псується сила.
39. **He that would eat the fruit must climb the tree.** - Хто хоче з'їсти плід, має вилізти на дерево.
40. **What is worth doing at all is worth doing well.** - Якщо вже щось і робити, так робити добре.
41. **If you want a thing done well, do it yourself.** - Якщо хочеш зробити справу добре, зроби її сам.
42. **Jack of all trades is a master of none.** - За все братися - нічого не зробити.
43. **A bad workman blames his tools.** - У поганого майстра завжди інструмент винен.
44. **Ninety per cent of inspiration is respiration.** - Дев'яносто відсотків натхнення - потіння.
45. **Trough hardships to the stars.** - Через терни до зірок.
46. **No man is born wise or learned.** – Ніхто не народжується мудрецем і вченим.
47. **Speech is silver, but silence is gold.** – Слово – срібло, мовчання – золото.
48. **Don't trouble trouble till trouble troubles you.** – Не буди лиха, доки воно тихе.
49. **Custom is a second nature.** – Звичка – другий характер.
50. **The very best medicine that a family can have in the house is cheerfulness.** – Найкращі ліки в будь-якій родині – бадьорість.

Exercise 3. Read the English quotes. Give your opinion about them. Compare with your friends' opinions.

1. *"Language is fossil poetry."* R.W.Emerson
2. *"Language is the dress of thought."* S. Johnson
3. *"I am always sorry when any language is lost because languages are the pedigrees of nations."* S.Johnson
4. *"Brevity is the soul of wit."* W. Shakespeare, "Hamlet"
5. *"The main thing is just to go!"* Marek Kaminski, Polish explorer
6. *"Serious sport is war minus the shooting."* George Orwell, English writer (1903-1950)
7. *"Adventure is the champagne of life."* G.K.Chesterton, English writer
8. *"Drama is life with the dull bits left out."* Alfred Hitchcock, British film maker
9. *"He travels the fastest who travels alone."* Rudyard Kipling, English writer
10. *"It was long ago in my life, as a simple reporter, that I decided that facts must never get in the way of truth."* James Cameron, British journalist

11. *"People come and ask for autographs, but they don't bug you."* John *Lennon,* the day before he was shot by a fan
12. *"Advertising is the greatest art form of the twentieth century."* Marshal McLuhan.
13. *"Intellect has powerful muscles, but no personality."* Albert Einstein
14. *"Be nice to people on the way up because you'll meet them on the way down."* Wilson Mizner, American Businessman
15. *"Don't criticise what you can't understand."* Bob Dylan
16. *"Education is what remains when we have forgotten all we have been taught."* Lord Halifax (1633 – 95)
17. *"The best advice given to the young is: Find out what you like doing best and get someone to pay you for doing it."* Katherine Whitehorn, British journalist
18. *"To live in Australia permanently is like going to a party and dancing all night with one's mother."* Barry Humphries, Australian comedian
19. *"Modern man is educated to understand foreign languages and misunderstand foreigners."* G.K.Chesterton, English writer (1874 – 1936)
20. *"Science has a potential for both Good and Evil."* Maurice Wilkins
21. *"Someone said that God gave us memory so that we might have roses in December."* J.M. Barrier
22. *"Those who cannot remember the past are condemned to repeat it."* George Santayana
23. *"In plucking the fruit of memory one runs the risk of spoiling its bloom."* Joseph Conrad
24. *"Reminiscences make one feel so deliciously aged and sad."* George Bernard Shaw
25. *"Can anybody remember when the times were not difficult and money not scarce?"* Ralph Waldo Emerson
26. *"A liar should have a good memory."* Quintillian (1st century AD)
27. *"There is only one thing worse than being talked about, and that is not being talked about."* Oscar Wilde
28. *"Politics are too serious a matter to be left to the politicians."* Charles de Gaulle
29. *"A celebrity is a person who works hard all his life to become well-known, then wears dark glasses to avoid being recognised."* Fred Allen
30. *"A politician is an acrobat - he keeps his balance by saying the opposite of what he does."* Maurice Barres
31. *"When it is not necessary to change, it is necessary not to change."* Lucius Cary, English royalist politician
32. *"Money can't buy friends, but you get a better class of enemy."* Spike Milligan, Irish comedian
33. *"Tis better to have loved and lost than never to have loved at all."* Lord Tennyson
34. *"Failure is not falling down, it is not getting up again to continue life's journey."* Richard Nixon

Exercise 4. Read the English poems and a song aloud. Learn the poems you like most by heart training your memory. Sing the song "Jingle Bells".

FOUR LITTLE WORDS
There are four little words
That can help you a lot,
When you hurt your friend
On purpose or not.
So, say these words,
Don't wait too long.
If you've hurt your friend
Say: "I'm sorry. I'm wrong".

ONE THING AT A TIME
Work while you work,
    Play while you play.
That is the way
    To be happy and gay.
All that you do
    Do with your mind,
Things done by half
    Are never done right.
One thing at a time
    And that done well,
Is a very good rule
    As many can tell.

Edith Seagal

THE ARROW AND THE SONG

I shot an arrow into the air –
It fell to earth, I knew not where;
For so swiftly it flew, the sight
Could not follow it in its flight.

I breathed a song into the air -
It fell to earth, I knew not where;
For who has sight so keen and strong
That it can follow the flight of a song?

Long, long, afterward, in an oak
I found the arrow, still unbroke;
And the song, from beginning to end,
I found again in the heart of a friend.

Henry Wadsworth Longfellow

SIX SERVING MEN

I have six honest serving men –
They taught me all I knew.
Their names are what and why and
When and how and where and who.
I send them over land and sea,
I send them East and West;
But after they have worked for me,
I give them all a rest.
I let them rest from nine till five
For I am busy then,

As well as breakfast, lunch and tea
For they are hungry men.
But different folk have different views;
I know a person small,
She keeps ten million serving men,
Who get no rest at all!
She sends them on her own affairs
From the second she opens her eyes -
One million hows, ten million wheres,
And seven million whys!

Rudyard Kipling

WHAT IS GOOD?

"What is the real good?"
I asked in musing mood.
"Order", said the law court;
"Knowledge", said the school;
"Truth", said the wise man;
"Pleasure", said the fool;
"Love", said the maiden;
"Beauty", said the page;
"Freedom", said the dreamer;

"Home", said the sage;
"Fame", said the soldier;
"Equity", the seer; -
Spake my heart full sadly
"The answer is not here."
Then within my bosom
Softly this I heard:
"Each heart holds the secret;
Kindness is the word."

John Boyle O'Reilly

JINGLE BELLS

Dashing through the snow,
In a one horse open sleigh,
Over the fields we go,
Laughing all the way.

Bells on bobtail ring,
Making spirits bright.
What fun it is to ride and sing
A sleighing song tonight.

Jingle bells, jingle bells, jingle all the way.
Oh! What fun it is to ride in a one horse open sleigh.

A day or two ago,
I thought I'd take a ride,
And soon Ms. Funny Bright
Was sitting by my side.

The horse was lean and bank,
Misfortune was his lot.
He got into a snow bright bank
And we got upset.

Jingle bells, jingle bells, jingle all the way.
Oh! What fun it is to ride in a one horse open sleigh.

So now the moon is bright,
Enjoy it while you are young.
Invite your friends tonight
To sing this sleighing song.

Just get a bobtail nag
And give him extra feed.
Then hitch him to an open sleigh,
In a crack you'll take the lead.

Jingle bells, jingle bells, jingle all the way.
Oh! What fun it is to ride in a one horse open sleigh.

UNIT I INTRODUCTION TO THE UNIVERSITY STUDIES

LESSON 1 A UNIVERSITY

A university is an institution of higher education and research, which grants academic degrees in a variety of subjects.

The first universities were the University of Bologna (1088), the University of Paris (c. 1150, later associated with the Sorbonne), the University of Oxford (1167), the University of Cambridge (1209).

In the early medieval period, most new universities were founded from pre-existing schools. Many historians state that universities and cathedral schools were a continuation of the interest in learning promoted by monasteries.

The end of the medieval period marked the beginning of the transformation of universities that would eventually result in the modern research university.

By the 18th century, universities published their own research journals and by the 19th century, the German and the French university models had arisen. The German model was based on liberal ideas pertaining to the importance of freedom, seminars, and laboratories in universities. The French university model involved strict discipline and control over every aspect of the university.

Universities concentrated on science in the 19th and 20th centuries and became increasingly accessible to the masses. In Britain the move from industrial revolution to modernity saw the arrival of new civic universities with an emphasis on science and engineering. The British also established universities worldwide, and higher education became available to the masses not only in Europe.

A national university is generally a university created by a national state but at the same time represents a state autonomic institution which functions as a completely independent body inside of the same state. Universities are generally divided into a number of academic departments, schools or faculties. Many public universities in the world have a considerable degree of financial, research and pedagogical autonomy. Private universities are privately funded and generally have a broader independence from state policies.

Most universities not only offer courses in subjects ranging from the natural sciences, engineering, architecture or medicine, to sports sciences, social sciences, law or humanities, they also offer many amenities to their student population including a variety of places to eat, banks, bookshops, print shops, job centers, and bars. In addition, universities have a range of facilities like libraries, sports centers, students' unions, computer labs, and research laboratories. In a number of countries, major classic universities usually have their own botanical gardens, astronomical observatories, business incubators and university hospitals.

In some countries most students attend university in their local town, while in other countries universities attract students from all over the world, and may provide university accommodation for their students.

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VOCABULARY EXERCISES

***Exercise 1*. *Find the English equivalents of the following words and word-combinations in the text*:**
Заклад вищої освіти, науковий ступінь, науково-дослідний університет, стати доступним, незалежний орган (заклад), поділятися на відділення, пропонувати курси, пропонувати зручності, відвідувати університет, залучати студентів, забезпечувати житло.

***Exercise 2. Answer the following questions*:**
1. What is a university?
2. What were the first universities in Europe?
3. How were new universities founded?
4. What was the difference of the German and the French university models?
5. What was the peculiarity of a university in the 19-20th century?
6. What is a national university?
7. What is a private university?
8. What do most universities offer?
9. What facilities does a university have?
10. What may a university provide for its students?

Exercise 3. Work in pairs. Ask your friend about his University, his study and provided amenities here.

***Exercise 4. Match the definitions to the notions*:**

School	an institution of higher education and research which grants academic degrees in a variety of subjects and provides both undergraduate education and postgraduate education
An institution	a unit of academic instruction
University	a learner, or someone who attends an educational institution
A student	the study of topics such as quantity (numbers), structure, space, and change
A teacher	an institution designed for the teaching of students (or "pupils") under the direction of teachers
A professor	a person who provides education for students
A subject	any structure or mechanism of social order governing the behaviour of a set of individuals within a given community
Mathematics	a scholarly teacher

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Exercise 5. *Read and reproduce the dialogue*.
B: Hello, Peter. How are you?
P: Hello, Boris! Fine, how are you?
B: I haven't seen you for ages. I am really glad to see you. How are you getting on?
P: Pretty well, thank you. And how is the world treating you?
B: Quite all right, thank you. How is your mother?
P: Quite well now, thank you.
B: Please remember me to her.
P: Thank you, and now excuse me. I am in a hurry, I must be off.
B: Hope to see you soon.
P: Come and see us, Boris. My wife and I will be glad to see you. Will you come soon?
B: I will, by all means. My kind regards to your family!

Exercise 6. *Read the story and answer the questions*.

Saying Good-bye
from "The Razor's Edge" by W. Somerset Maugham
A couple of days later I went to say good-bye to Mrs. Bradley and Elliott. I found them sitting over a cup of tea. Isabel came in shortly after me. We talked about my approaching journey, I thanked them for their kindness to me during my stay in Chicago and after a decent interval got up to go.

1) Did the author go to say good-bye to Mrs, Bradley?
2) When did he go to Mrs. Bradley?
3) Where did he find the family?
4) What were they doing?
5) Who came shortly after him?
6) What did they talk about?
7) What did he thank them for?
8) When did he get up to go?

GRAMMAR EXERCISES

Exercise 7. Remember the word-combinations with the indefinite article and make up your own sentences with them:
At a quarter past five; in a loud voice; in a low voice; in an angry voice; in a thin voice; in a trembling voice; in a weak voice; to have a good time; a lot of; a great deal; to go for a walk; such a …; after a while; in a day; in a week; in a month; in a year; What a good boy! What a long story! What a day!

Exercise 8. Remember the word-combinations with the definite article and make up your own sentences with them:
In the middle; in the corner; to the right; to the left; in the morning; in the afternoon; in the evening; to play the piano; to play the guitar; in (to) the North; in (to) the South; in (to) the East; in (to) the West; What's the use? At (to) the cinema; at (to) the theatre; at (to) the shop; at (to) the market; the same; in (to) the country; the rest of the…

Exercise 9. Remember the word-combinations without any article and make up your own sentences with them:
At school; at home; at work; in front of; at night; to go home; to leave home; at half past five; to come home; to go to bed; to go to work; to go to school; after work; from work; after school; from school; to have (cook, make, prepare) breakfast (lunch, tea, dinner, supper); after (before, at, for) breakfast (lunch, tea, dinner, supper); to watch TV; to play chess (football); out of doors; from morning till night; all day long; on horseback; on board a ship; in fact; it's high time; to take care of; at sunrise (sunset); in (to) town; by bus (tram, train, car); in spring (summer, autumn, winter); from place to place; for life.

Exercise 10. Complete the sentences with articles where necessary:
Swift, … famous English writer, was travelling one day on … horseback with his servant. … weather was bad, it was raining, and … roads were muddy. In … evening the two men came to … inn. Before going to … bed Swift told his servant to clean his boots. But … servant was lazy and did not do it. In … morning Swift asked … servant why he had not cleaned … boots. "What's … use cleaning … bouts now?" said … servant. "… roads are muddy, and … boots will soon be dirty again." "All right," said … writer. "Let's go. We must continue … journey." "But I haven't had … breakfast," said … displeased servant. "Well, what's … use giving you … breakfast now?" said Swift. "You will soon be hungry again."

Exercise 11. Complete the sentences with articles where necessary:
… English king Richard the Lion Heart was … tall, strong man. He was very proud of his strength and liked to show … people how strong he was. Once, as he was riding on … horseback in … countryside, his horse lost … shoe. Luckily he was not far from … village and soon he found … blacksmith. "Give me … good horseshoe", he said to … man. … blacksmith gave … king … horseshoe. Richard took it in his hand and broke it in two. "This horseshoe is no good", he said, "give me … better one." … blacksmith did not say … word. He gave … king … other horseshoe, but Richard broke it too. … blacksmith gave him a third shoe. This time Richard was satisfied and ordered … blacksmith to shoe his horse. When … work was done, Richard offered … man … coin. … blacksmith took … coin between his fingers and broke it in two. Now it was Richard's turn to be surprised. He took … larger coin out of his pocket and handed it to … blacksmith. … man broke it too, saying: "This coin is no good, give me … better one." Richard smiled and gave … man … gold coin.

LESSON 2   THE DEFINITION OF A COMPUTER

A computer is an electronic machine which calculates all the mathematical and logical problems.

A computer is a machine that is able to take information (input), do some work on or make changes to the information, to make new information (output). Computers have existed for much of human history. Examples of early computers are the astrolabe and the abacus.

Modern computers are very different from early computers. They are now very powerful machines that are able to do billions of calculations every second. Most people have used a personal computer in their home or at work. Computers are useful for many different jobs where automatic functions are useful. Some examples are controlling traffic lights, vehicle computers, security systems, washing machines and digital televisions.

A person (called a user) can control a computer by telling it to do things. Some ways of controlling a computer are with a keyboard, mouse, buttons, touch screen. Some very new computers can also be controlled with voice commands or hand gestures.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Обчислювати, бути здатним, вносити зміни, існувати, астролябія, рахівниця, потужна машина, використовувати комп'ютер, світлофор, автомобільний комп'ютер, спосіб контролю, голосова команда.

Exercise 2. Translate the following words and word-combinations:
Electronic machine, to be different, billions of calculations, personal computer, automatic functions, security systems, washing machines, digital television, keyboard, mouse, buttons, touch screen, hand gestures.

Exercise 3. Answer the following questions:
1. What is a computer?
2. What is a computer able to do?
3. What is an example of early computer?
4. What is a modern computer?
5. Where is a computer useful?
6. What are the ways of controlling a computer?
7. How can the latest computers be controlled?

Exercise 4. Match the definitions to the notions:

Machine	electronic visual display that the user can control through simple or multi-touch gestures by touching the screen with one or more fingers
Input	a pointing device that functions by detecting two- dimensional motion relative to its supporting surface
Output	a typewriter-style device, which uses an arrangement of buttons or keys
Abacus	an exit or changes which exit a system and which activate/modify a process
Astrolabe	an entrance or changes which are inserted into a system and which activate or modify a process
Keyboard	a tool that consists of one or more parts, and uses energy to achieve a particular goal
Mouse	an elaborate inclinometer, historically used by astronomers, navigators and astrologers
Touch screen	a calculating tool used for performing arithmetic processes

Exercise 5. Describe the computer you use.

SPEAKING ENGLISH

Exercise 6. Read and reproduce the dialogue.
- May I come in?
- Yes, do!
- Am I not intruding upon you?
- Certainly not. I've been expecting you. But what has happened to you? What has kept you so long?
- I am very sorry, but you see, I happened to take the wrong tram. Please, excuse me for keeping you waiting for such a long time!
- Not at all, that's all right!

Exercise 7. Practice the dialogue with your friend.
- Peter, let me introduce Mr. Neville, he is one of my best friends.
- I shall be glad to meet him.
- Mr. Neville, this is Mr. White.
- How do you do Mr. White.
- Pleased to meet you, Mr. Neville. I have heard a lot of you. (*They shake hands.)*
- Nothing bad, I hope?
- Oh, no, on the contrary. Boris never speaks badly of his friends.
- Pleased to hear it.
- I hope we'll be good friends too!
- I am sure we will.

*Exercise 8. Make up a short dialogue of your own (**making acquaintance**).*

Exercise 9. Put the following sentences into interrogative and negative form.
1) I know Mr. Poirot quite well.
2) He speaks English well.
3) She wants to introduce me to her father.
4) We meet him very often.
5) He wants to make Peter's acquaintance.
6) They hope to see him there.

Exercise 10. Put the following sentences into the affirmative, negative and interrogative forms of the Past and Future Indefinite:
1) I introduce my brother to my friends.
2) It is a great pleasure for me to meet him
3) You make the acquaintance of all her friends.

GRAMMAR EXERCISES

Exercise 11. Choose the right form of the noun from the brackets:
1. Two (child / children) were playing on the doorstep.
2. A (woman / women) looked round the corner of the house.
3. The (room / rooms) was large, and had a faded Morris wallpaper.
4. A tall (man / men) of about fifty-seven came into sight.
5. But (people / peoples) who read my books know what he's like.
6. The (water / waters) ran twinkling across the road.
7. Why do (painter / painters) represent in pictures the faces of their fellow-men?
8. The (company / companies) was supposed to assemble at seven-thirty in the Common Room.
9. The (door / doors) opened to admit Sir Leopold.
10. The (remnant / remnants) of the feast had been removed.
11. The (new / news) from Geneva is not very good.

Exercise 12. Put the sentences into the plural form:
1. It's a very difficult question to answer.
2. I think I'll take that cake on the right.
3. Look at this pumpkin! It's the biggest one I've seen this year.
4. Is this your scarf?
5. What is the child's name?
6. The cat has caught a mouse.
7. There was a lady, a gentleman, a boy and a girl in the room.
8. In the farmyard we could see an ox, a sheep, a cow and a goose.
9. Is this worker an Englishman or a German? – He is a Frenchmen.
10. Can you see a bird in that tree?
11. Does your tooth still ache?
12. I held up my foot to the fire to warm it.

Exercise 13. Paraphrase the following using the Possessive case:
The pen that belongs to Jack; the camera that belongs to my friend; the books that belong to her pupils; the shoes that belong to the girl; the flats that belong to the workers; the car that belongs to this miner; the coat that belongs to his brother; the watch that belongs to the teacher.

Exercise 14. Paraphrase the following word-combinations:
Model: the shore of the lake – the lake shore
* holidays in winter – winter holidays*
* a house made of bricks – a brick house*
* a plant producing tractors – a tractor plant*
A gate made of iron; a dress made of silk; a town situated near the border; a forest in which pines grow; winds blowing from the West; the leader of the party; a gallery in which pictures are shown; a strike in London; a conference held in Paris; a mistake in spelling; disease of liver; the policy of the government; a farm where chickens are raised; the movement for peace.

LESSON 3   **THE USE OF A COMPUTER**

Computers can be designed to do anything with information. Computers are used to control factories, which in the past were controlled by humans. They are also in homes, where they are used for things, such as listening to music, reading the news, and writing.

Modern computers are electronic machines. A computer is only useful if it has both hardware and software. Hardware is the physical parts the computer is made of - for example keyboard, mouse, screen, tower (computer case). Software is the computer programs (mathematical instructions). Software uses the hardware by taking input and changing it in to useful output.

Computers are able to do billions of calculations each second. They can do mathematical arithmetic very quickly but computers do not really "think". They only follow the instructions in their software programs.

Computer programs are designed or written by computer programmers. Computer programs can be written in the computer's own language called machine code. Machine Code has only a few instructions and is based on logic and Mathematical arithmetic. Using machine code is difficult for most human programmers.

Today, programmers usually write programs using a programming language like C++, Java or BASIC. These programming languages can be translated into machine code later using a program called a compiler.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Бути розробленим, використовуватися для контролю, слухати музику, бути здатним виконувати, виконувати інструкції, базуватися на арифметиці, бути перекладеним на машинний код.

Exercise 2. Translate the following words and word-combinations:
Hardware, software, keyboard, mouse, screen, tower, to take input, useful output, computer's own language, compiler.

Exercise 3. Answer the following questions:
1. What are computers used for?
2. What is hardware?
3. What is software?
4. How does software use hardware?
5. Whoa are computer programs designed by?
6. What is machine code based on?
7. What is compiler?

Exercise 4. Match the definitions to the notions:

Hardware	a sequence of instructions, written to perform a specified task with a computer
Software	an artificial language designed to communicate instructions to a machine, particularly a computer
Tower	the oldest and most elementary branch of mathematics, used very popularly, for tasks ranging from simple day-to-day counting to advanced science and business calculations
Compiler	a set of instructions executed directly by a computer's central processing unit (CPU)
Program	any set of machine-readable instructions (most often in the form of a computer_program) that directs a computer's processor to perform specific operations
Machine Code	a computer program (or set of programs) that transforms source code written in a programming language (the source language) into another computer language
Arithmetic	the collection of physical elements that comprise a computer system
Programming Language	the enclosure that contains most of the components of a computer

Exercise 5. Describe how you use a computer.

SPEAKING ENGLISH

Exercise 6. Read the story.
Making Acquaintance
From "Live with Lightning" by Mitchell Wilson
Late in the afternoon, after a few couples had already left, there was a stir of interest with the arrival of a rather handsome self-assured young man about thirty years old. Apparently he had been expected. Both Professor and Mrs. Fox went to greet him.

"That's Tony Haviland", Maxwell told Erik. "He's the man we were talking about this morning." Erik couldn't remove his eyes from Haviland's fair head. He watched him go from group to group, always with the same ease, always received with the same pleasure and interest in what he had to say. In a little while Haviland came over to greet Maxwell.

"Hello, Max," he said pleasantly. "You're getting on in years."

"Oh, I'm just getting ready for my finals, then I'll bloom again. How do you like working in England?"

"Wonderful. They're going to have a big year in nuclear physics. When I come back here there's going to be a lot of work to do. I'm sorry you won't be here to work with me. What are you going to be doing in Washington?"

"Taking life easy, I guess, while you're beating your brains out. But if I won't be here, Gorin will. This is Erik Gorin, Tony. Gorin, Dr. Haviland."

Exercise 7. Answer the following questions:
1) When did Mr. Haviland arrive?
2) How old was he?
3) Was he expected?
4) Who went to greet him?
5) Was Mr. Haviland a pleasant man?
6) Why do you think so?
7) What did Mr. Haviland say greeting Maxwell?
8) What was Maxwell's answer?
9) What did Mr. Haviland say about the work in nuclear physics in England?
10) What did Maxwell intend to do after his final examinations?

GRAMMAR EXERCISES

Exercise 8. Complete the sentences using the correct form of the adjectives in brackets:
1. As the day went on, the weather got (bad).
2. She has been to Britain, her English is (good) than mine.
3. Ann's younger sister is still at school. Her (old) sister is a nurse.
4. His illness was (serious) than we thought.
5. My toothache is (painful) than it was yesterday.

6. Sorry I am late. It took me (long) to get there than I expected.
7. Health and happiness are (important) than money.
8. I like the countryside. It is (healthy) and (peaceful) than living in the town.
9. This clock is ten minutes (fast) than mine.
10. Today your marks are (bad) than they were yesterday.

Exercise 9. Complete the sentences using the correct form of the adjectives in brackets:
1. It is the (cheap) restaurant in the town.
2. She is the (intelligent) student in the group.
3. He is the (good) player in this volleyball team.
4. It is the (old) building in the city.
5. It was the (popular) song of the year.
6. What is the (large) city in your country?
7. What was the (happy) day in your life?
8. What is the (bad) habit that you have?
9. Who is the (good) student in your group?
10. What is the (expensive) thing that you have ever bought?

Exercise 10. Answer the following questions:
1. What is the biggest country in the world?
2. What is the deepest lake in the world?
3. What is the highest mountain in the world?
4. What is the longest river in the world?
5. Which month is longer: March or April?
6. When are days longer: in winter or in summer?
7. Which is the longest day of the year?
8. Which is the shortest day of the year?
9. Which is the shortest month of the year?
10. When is it colder: in October or November?

Exercise 11. Paraphrase the following sentences using as…as, not so … as, not as…as:
1. The Dnieper is long. The Volga is longer than the Dnieper.
2. My room is neither larger nor smaller than his room.
3. This watch is neither better nor worse than that.
4. Snowdon is high. Ben Nevis is higher.
5. Paul is neither older nor younger than his friends.
6. It is warm today. But it was warmer yesterday.
7. July is neither longer nor shorter than August.
8. I shall be busy tomorrow. Today I am busier.
9. English is difficult. German is also difficult.
10. His songs are popular. The Beatles' songs are more popular.

Exercise 12. Translate into English:
1. Він не такий стомлений як вона.
2. Вправа 2 така ж важка, як і вправа 3.
3. Вона думає, що додавання така ж основна арифметична операція, як і віднімання.
4. Сьогодні вода в річці не така тепла, як учора.
5. Індія не така велика, як Китай.
6. Темза така ж красива, як Нева.
7. Російський музей такий же багатий, як Ермітаж.
8. Минулого року серпень був такий же спекотний, як і липень.
9. Екзамен був не таким важким, як ми очікували.
10. Цей пристрій такий же потужний, як і той.

LESSON 4   FOUR BASIC OPERATIONS OFARITHMETIC

We cannot live a day without numerals. Numbers and numerals are everywhere. On this page you see number names. They are zero, one, two, three, four, and so on. And here are the numerals: 0, 1, 2, 3, 4 and so on. In a numeration system, numerals are used to represent numbers, and the numerals are grouped in a special way. The numbers used in our numeration system are called digits.

In our Hindu-Arabic system we use only ten digits: 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 to represent any number. We use the same ten digits over and over again in a place-value system whose base is ten. These digits may be used in various combinations. Thus 1, 2, and 3 are used to write, 123, 132, 213, and so on. One and the same number could be represented in various ways. For example, take number 3. It can be represented as 2 + 1, 4 - 1 and so on.

A very simple way to say that each of the numerals names the same number is to write an equation - a mathematical sentence that has an equal sign (=) between them. For example, 3 + 4 = 5 + 2, or 3 − 1 = 6 - 4. The + is a plus sign. The - is a minus sign. We say three plus six equals five plus four, or three minus 1 is equal to six minus four. Another example of an equation is 3 + 5 = 8. In this equation three is an addend. Five is also an addend. Eight is the sum. We add three and five and we get eight.

There are four basic operations of arithmetic that you all know of. They are *addition*, *subtraction*, *multiplication* and *division*. In arithmetic an operation is a way of thinking about two numbers and getting one number. As you remember from the above in the operation of **addition** the two numbers with which you work are called *addends* or *summands* and the number that you get as a result of this operation is *the sum*. In **subtraction** again you use two numbers. In the equation 7 - 2 = 5 seven is *the minuend* and two is *the subtrahend*. As a result of this operation you get *the difference*. We may say that subtraction is the inverse operation of addition since 5 + 2 = 7 and 7 - 2 = 5.

The same might be said about multiplication and division, which are also inverse operations. In multiplication there is a number that must be multiplied. It is

the multiplicand. There is also *a multiplier*. If we multiply the multiplicand by the multiplier we shall get *the product* as a result. When two or more numbers are multiplied, each of them is called *a factor*. For example, in the expression 5 x 2 (five multiplied by two), the 5 and the 2 will be factors. The multiplicand and the multiplier are names for factors.

In the operation of division there is a number that is divided and it is called *the dividend*; the number by which we divide is called *the divisor*. As a result of the operation of division we shall get *the quotient*. In some cases the divisor is not contained a whole number of times in the dividend. For example, if you divide 10 by 3 you will get a part of the dividend left over. This part is called *the remainder*. In our case it will be 1.

Since multiplication is the inverse operation of division you may check division by using multiplication.

There are two very important facts that must be remembered about division.

a) The quotient is 0 whenever the dividend is 0 and the divisor is not 0. That is, 0 : *n* for all values of n except n = 0.

b) Division by 0 is meaningless. If you say that you cannot divide by 0 it really means that division by 0 is meaningless. That is, *n* : 0 is meaningless for all values of *n*.

VOCABULARY EXERCISES

***Exercise 1. Find the English equivalents in the text*:**
Без; цифра, символ числа; пам'ятати; знак, підписувати; доданок 1, від'ємник; користуватися, використовувати; цифра; над, вище, понад.

***Exercise 2. Translate the following words and word-combinations*:**
A page, the divisor, which, to say (said); meaningless, the summand.

***Exercise 3. Answer the following questions*:**
1. Can we live without numerals?
2. How many digits do we use in our Hindu-Arabic system?
3. What is the base in this place-value system?
4. How much is eight minus three?

***Exercise 4. Match the definitions to the notions*:**

Addition	a mathematical operation that represents the operation of removing objects from a collection
Dividend	the third basic mathematical operation of arithmetic, the others being addition, subtraction and division
Subtraction	the multiplicand and the multiplier
Factor	the number that you get as a result of addition
Division	the mathematical process of putting things together
Subtrahend	the inverse of multiplication
Multiplication	a number that is divided
Sum	two in the equation 7 – 2 = 5

***Exercise 5. Tell your friends about four basic operations of arithmetic*.**

SPEAKING ENGLISH

***Exercise 6. Read and reproduce the dialogue*.**
- Excuse me, would you mind telling me the shortest way to the central square?
- Do you want to walk there?
- Oh, no, I am afraid it will take me too long. You see, I am a stranger in this city, so I don't know how to get there.
- What means of communication do you prefer?
- I prefer either the metro or a bus; trams are too overcrowded nowadays.
- Then take bus two, it stops just over there on the other side of the street.

***Exercise 7. Answer the following questions*:**
1) What is the shortest way from your home to the University?
2) How long does it take you to get to the University?
3) What means of transport do you use?
4) Do you have to change on your way to the University?
5) What is the fare on a bus?
6) Is there a bus stop near your house?
7) Does the bus fare depend on the distance the passenger travels?
8) Can you make the bus stop wherever you want to get off?
9) Do people usually queue (line) up at the bus stops?
10) What means of communication do you prefer?

***Exercise 8. Form as many questions as you can on the following sentences*:**
1) Every day he walks to the Institute.
2) Last year my friend lived very far from the Institute.
3) Next year they will live near the metro station.

***Exercise 9. Put the following sentences into the interrogative and negative form*:**
1) This metro station is the best.
2) The trams are very slow.
3) There is a tram stop round the corner.
4) There are many buses running in this direction.
5) He has a season ticket.
6) They have a motor-car.

***Exercise 10. Describe your way to the University*.**

***Exercise 11. Read and retell the story*.**

Rather Late

It was dark night. A man was riding a bicycle without any light. He had lost his way and wanted to make inquiries, but there was no one whom he could ask to direct him. He came to a crossroad and was entirely at a loss as he did not know which turn to take. Suddenly he noticed a pole with something white at the top of it, which looked like an inscription. Sure that it was a sign post, he decided to climb to the top of it to read the inscription. He felt in his pocket for matches and found that there was only one match in his match box. Climbing to the top of the pole he lit that match carefully and read "Fresh paint".

Exercise 12. Answer the following questions:
1) When was the man riding a bicycle?
2) Was the night very dark?
3) Had he a light on his bicycle?
4) Why did he want to make inquiries?
5) Was there anybody in the street whom he could ask the way?
6) What did he notice at the crossroad?
7) Why did he climb the pole?
8) What inscription did he see there?

GRAMMAR EXERCISES

Exercise 13. Write in words what time it is:
11.05; 22.10; 3.15; 5.25; 7.30; 9.40; 10.35; 11.45; 12.55; 6.50; 1.05; 2.20.

Exercise 14. Write in words:
a) 13, 14, 40, 80, 19, 90, 82, 67, 79, 53, 82, 35;
b) 143, 258, 414, 331, 972, 205, 101, 557, 999, 313;
c) 15 500, 57 837, 45 971, 92 017, 65 331, 11 443, 4 125 963.

Exercise 15. Form ordinal numerals from the following:
a) 7, 4, 8, 9, 5, 12, 1, 2, 13, 15, 11, 10;
b) 20, 21, 30, 32, 40, 43, 50, 54, 60, 75, 80, 98;
c) 100, 120, 125, 200, 230, 231, 300, 450, 563, 892.

Exercise 16. Read and write the following dates:
9.03.1814; 22.06.1941; 9.05.1945; 23.11.1928; 12.04.1961; 27.10.1977; 1.12.1991; 28.06.1996.

Exercise 17. Answer the following questions:
1. How much is 17 plus 19? 2. How much is 25 plus 33? 3. How much is 120 plus 205? 4. How much is 13 minus 4? 5. How much is 200 minus 45? 6. How much is 7 multiplied by 8? 7. How much is 42 divided by 6?

LESSON 1   **BASE TWO NUMERALS**
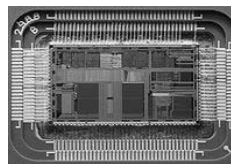
During the latter part of the seventeenth century a great German philosopher and mathematician Gottfried Wilhelm von Leibnitz (1646 - 1716) was doing a research on the simplest numeration system. He developed a numeration system using only the symbols 1 and 0. This system is called a base two or binary numeration system.

Leibnitz actually built a mechanical calculating machine which until recently was standing useless in a museum in Germany. Actually he made his calculating machine some three centuries before they were made by the modern machine makers.

The binary numeration system introduced by Leibnitz is used only in some of the most complicated electronic computers. The numeral 0 corresponds to "off" and the numeral 1 corresponds to "on" for the electrical circuit of the computer.

Base two numerals indicate groups of ones, twos, fours, eights and so on. The place value of each digit in 1101 in base TWO as shown by the above words (on or off) and also by powers of 2 in base TEN notation as shown below.

The numeral 1101 in base TWO means "one multiplied by two in the cube" plus "one multiplied by two in the square" plus "zero multiplied by two" plus "one multiplied by one" equals $(1 \times 8) + (1 \times 4) + (0 \times 2) + (1 \times 1) = 8 + 4 + 0 + 1 = 13$. Therefore 1101 in base TWO = 13.

…two in the cube	two in the square	two in the first power	One
Eights	Fours	Twos	Ones
1	1	0	1

A base ten numeral can be changed to a base two numeral by dividing by powers of two. From the above you know that the binary numeration system is used extensively in high-speed electronic computers. The correspondence between the two digits used in the binary system and the two positions (on and off) of a mechanical switch used in an electronic circuit accounts for this extensive use.

The binary system is the simplest place-value, power-position system of numeration. In every such numeration system there must be symbols for the numbers 0 and 1. We're using 0 and 1 because we're well familiar with them.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Перемикати, перемикач; будувати (3 форми); відповідати; тому; вимикання; ланцюг, контур.

Exercise 2. Translate the following words and word-combinations:
The latter, to account for, complicated, recently, correspondence, because, on, high, as.

*Exercise 3. Answer the following questions***:**
1) Was Leibnitz doing his research in the twentieth century?
2) Did he develop a base-five system?
3) Did he use the binary system in his machine?
4) How many symbols did he use?
5) Was the machine made by him used in the nineteenth century?

*Exercise 4. Match the definitions to the notions***:**

Numeration system	a tool containing one or more parts that uses energy to perform an intended action
Calculating machine	a writing system for expressing numbers, that is, a mathematical notation for representing numbers of a given set, using digits or other symbols in a consistent manner
Machine	a general purpose device that can be programmed to carry out a set of arithmetic or logical operations automatically
Computer	a mechanical device used to perform automatically the basic operations of arithmetic

*Exercise 5. Tell your friends what you know about the base two numerals***.**

SPEAKING ENGLISH

Exercise 6. Read and retell the story.

The Secretary's Watch

The first American President, George Washington, was a very punctual man, and he demanded punctuality from his subordinates. One morning Washington's private secretary was a bit late and found the president already waiting for him. The secretary tried to excuse himself by saying that his watch was slow, but Washington replied quietly, "I am afraid you will have to get another watch, or I - another secretary."

Exercise 7. Answer the following questions:
1) Are you a punctual person?
2) Are you never late for your work (lectures)?
3) Do you demand punctuality from others?
4) Do you like to wait for anybody?
5) How do you excuse yourself when you are late?
6) Are your excuses usually accepted?

Exercise 8. Make up short stories illustrating the following proverbs:
1) Early to bed and early to rise makes a man healthy, wealthy and wise.
2) Make hay while the sun shines.
3) Better late than never, but still better never late.

GRAMMAR EXERCISES

*Exercise 9. Replace the pronoun any or its derivatives by no or its derivatives making other necessary changes***:**
1. The little boy hasn't any toys and he can't play any game.
2. There isn't any water in the jug on the shelf.
3. There aren't any fruit trees in the garden of this strange man.
4. We haven't any classes on Sunday and usually work at books in the library.
5. It was so dark and we couldn't see anything.
6. We haven't learned any new words at our French lessons this week.
7. She didn't ask anyone to help her and was proud of it.
8. I didn't see anyone here who could solve that problem.
9. I didn't know anything about it. Ask somebody else.
10. There wasn't any theatre in our town before the revolution.

*Exercise 10. Fill in the blanks with much, many, little, a little, few, a few***:**
This is my mother's favourite recipe for fruitcake, and everybody says it's out of this world!
1. Put … cups of flour into a mixing bowl.
2. Add … sugar.
3. Slice … apples.
4. Cut up … oranges.
5. Pour in … honey.
6. Add … baking soda.
7. Chop up … nuts.
8. Add … salt.
9. Mix in … raisins.
10. Bake for 45 minutes.
Enjoy, dear!

*Exercise 11. Translate into English using necessary prepositions***:**
1. Пройдіть цим коридором, поверніть за ріг і уввійдіть у першу кімнату.
2. Через п'ять хвилин усі сиділи за столом і слухали бабусю.
3. Він дивився на човни, що пливуть по річці.
4. Минулого року ми подорожували по Європі.
5. Він ішов вулицею і дивився на обличчя перехожих.
6. Він перейшов дорогу і увійшов у кафе.
7. Іди цією стежкою через поле і через ліс, через дві години ти підійдеш до річки.
8. Вони блукали містом від світанку до заходу сонця.
9. Увечері вони повернулися до готелю втомлені, але задоволені.
10. Том Сойер перестрибнув через паркан і побіг вулицею.

Exercise 12. Transform the following sentences using adverbs instead of the given adjectives:

Model: **His answer was good**. – **He answered well**.

1. John is a slow eater. 2. Mary's translation of the sentence is correct. 3. My companion was a quick walker. 4. She was a careless cook. 5. His arrival was unexpected. 6. My friend is an excellent dancer. 7. His death was sudden. 8. Her speech at the meeting was wonderful.

LESSON 2   **INVENTION AND AUTOMATION**

Nobody knows who built the first computer. This is because the word "computer" used to mean a person who did math as their job (a human computer). Because of this, some people say that humans were the first computers. Human computers got bored doing the same math over and over again, and made tools (mostly mechanical calculating devices like abacuses) to help them get the answers to their problems. It is said that the inventor of the 'modern' computer was Charles Babbage.

Humans have a problem with math. To show this, try doing 584 x 3,220 in your head. It is hard to remember all the steps! People made tools to help them remember where they were in a math problem. The other problem people have is that they have to do the same problem over and over and over again. A cashier used to make change every day in her head or with a piece of paper. That took a lot of time and people made mistakes. So people made machines that did those same things over and over. This part of computer history is called the "history of automated calculation," which is a fancy phrase for "the history of machines that make it easy for me to do the same math problem over and over without making mistakes."

The abacus, the slide_rule, the astrolabe and the Antikythera mechanism (which dates from about 150-100 BC) are examples of automated calculation machines.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Набридати, виготовити інтрумент, пристрій для обчислення, винахідник, запам'ятати всі кроки, касир, здача, забирати багато часу, логарифмічна лінійка.

Exercise 2. Translate the following words and word-combinations:
To do math, calculated device, to do the same over and over again, to make mistakes, automated calculation, to make it easy.

Exercise 3. Answer the following questions:
1) What did the word "computer" use to mean?
2) Who was the inventor of the modern computer?
3) What problems do people have?
4) What are the examples of automated calculation machines?

Exercise 4. Match the definitions to the notions:

Invention	a mechanical analog computer
Automation	a tool used by explorers to help them figure out where they were
Tool	a new thing that someone has made
Device	a thing used to make tasks easier
Calculation	the use of machines, control systems and information technologies to optimize productivity in the production of goods and delivery of services
Abacus	a machine or tool or information appliance
Slide rule	doing mental math
Astrolabe	a very old tool used for arithmetic

Exercise 5. Tell your friends about your ideas of invention and automation history.

SPEAKING ENGLISH

Exercise 6. Answer the following questions about yourself:
1) How old are you?
2) Do you live with your parents or in the hostel?
3) Have you a large family?
4) How many people does your family consist of?
5) Who is older, you or your brother (sister)?
6) Who is the eldest in your family?
7) Are you married?
8) When did you get married?
9) Have you grandparents?
10) Whom were you brought up by?
11) What education did you get?
12) Will you give me your address?

Exercise 7. Make up short stories illustrating the following proverbs:
1) There's no place like home.
2) East or West, home is best.

Exercise 8. Read the story.

Of Two Evils Choose the Lesser

A rich man in one of the Western states of America had two sons. He was very fond of them but unfortunately, he showed his love for them by letting the boys do whatever they liked and giving them whatever they wanted, so that they were quite spoiled.

An earthquake was expected in the region of this town and in alarm the loving father sent his precious boys to a friend of his in New York, who was willing to do much for the alarmed father. For several days he greatly suffered from his noisy guests, who were turning the whole house upside down, but at last, not being able to stand their company any longer, he sent his friend the following telegramme: "For goodness' sake send us the earthquake and take back the boys."

Exercise 9. Answer the following questions:
1) Where did this loving father live?
2) How did he show his love?
3) Why did the father send his precious boys to New York?
4) Why was the father alarmed?
5) Did their father's friend willingly accept the visit of the boys?
6) How did the boys behave at the house of their father's friend?
7) What telegramme did the father receive from his friend?
8) What did the telegramme mean?

GRAMMAR EXERCISES

Exercise 10. Put the verb in brackets into the right form of the Present Indefinite Tense:
1. You (to be) rather old-fashioned in your views, I think.
2. His wife (to be) a fine lady from London.
3. His wife (to have) a headache and has gone to lie down.
4. By the way, you (to be) a friend of the Eliots, I believe.
5. The whole thing (to seem) fantastic.
6. Her father (to work) at one of the local farms – Paterson's, I think.
7. "I really (to know) nothing about her", said Miss Brewes.
8. I (to be) not mad and I (to be) not drunk", said Mrs. Oliver.
9. Life (to be) full of surprises.
10. Well, they (to seem) a very nice young couple.
11. The police (to be), I believe, very efficient. They (to have) ample facilities for tracing the whereabouts of missing persons.
12. She (to wait) for him to return.

Exercise 11. Write three forms of the following verbs:
Break, catch, choose, draw, fall, fight, keep, lose, run, set, shoot, spread, swim, throw, win.

Exercise 12. Put the verb in brackets into the right form of the Past Indefinite Tense:
1. I (to see) my friends yesterday and (to accept) their invitation.
2. I (to write) to my cousin three weeks ago and (to get) no reply.
3. She (to look) pleased because George (to give) that lovely ring to her.
4. He (to meet) you both in here about two month ago.
5. I (to call) you at five, but you (to be) not in.
6. I (to teach) that girl to drive myself when she (to be) fifteen.
7. His mother (to die) three or four years ago but he (not to tell) anybody about it.
8. I should like to tell you what (to happen) eighteen months ago.
9. I'm not much of a theatre-goer myself, but my wife (to go) along and (to see) the play last week.

Exercise 13. Make the sentences negative:
1. The policeman suspects Ralph, I think.
2. They know everyone in this densely populated district.
3. The coach repeated his strict instruction twice.
4. Ronald set the record for short distance.
5. Steven broke the record some months ago.
6. Usually my friend repeats these rules before the examination.

Exercise 14. Put questions to the italicized words:
1. Devonshire is a very lovely place *when it doesn't rain*.
2. I know *some exciting stories* about the Inspector.
3. Jane entered this Department *because she went in for gymnastics at school*.
4. Cyclists usually train *on highway or cycling track*.
5. *Alex took part in the 26th Olympic Games in Atlanta*.

Exercise 15. Translate the following sentences into English;
1. Коли ви почали вивчати англійську мову? – Ми почали вивчати англійську мову шість років тому.
2. Що ви робите на уроці англійської мови? – Ми читаємо та перекладаємо тексти, виконуємо вправи та складаємо діалоги.
3. Де ви були вчора? – Ми брали участь у шаховому турнірі.
4. Ви часто берете участь у змаганнях? – Ми регулярно змагаємося між групами та факультетами.
5. Хто виконав завдання першим? – Я думаю, це студент з університету.

LESSON 3 **WHOLE NUMBERS**

Many statements in mathematics are concerned not with a single number but with a set of numbers that have some common property. For example, such a set of numbers is the set of odd numbers 0, 2, 4, 6… or the set of even numbers 1, 3, 5, 7 … What property is common to all even numbers? What property is common to all odd numbers?

You ought to know that the result of multiplication is called a product, and the numbers to be multiplied are called factors. When you write 6X3 = 18 it means that you write number 18 as a product of two whole number factors.

Another pair of whole number factors will be 9 and 2, since 9X2 = 18. Will you be able to name other factors of 18? Because 6X3 = 3X6 let us agree to call 6 and 3 just one pair of factors of 18.

When you use 0 as one of the factors, what should the product be? That is, 0 times 5 equals what number? Or 7 times 0 equals what number? The answers to these questions are summarized in the following statement: For any statement a, ax0 = 0 = xa. In some cases when we have to name a whole number in a factorial name more than two factors can be used. We can, for example name 60 as a product of 3 factors.

Since multiplication is associative, we know that (3X4)X5 = 3X4X5 = 3X(4X5). We may also write 60 = 3X4X5; 60 = 3X5X4, and so on.

Since aX1 = a for any number a, we know that 1 is a factor of every whole number. Let us agree to omit 1 as a factor when naming a number in factored form.

In each of the above equations the same set of factors is used, namely, 3, 4 and 5. Regardless of the order in which they're written, 3, 4 and 5 should be considered just as one set of three factors of 60. Also 60 can be written as the product of four factors as shown in the equation 60 = 3X2X2X5. In previous exercises you probably noticed that some of the factors you used could be factured further and others could not.

In the equation 18 = 6X3, the factor 6 can in turn be written as 3X2. If you do this, you will get 18 = 2X3X3. None of these three factors can be written in factured form if you do not use 1 as a factor. Hence 2X2X3 is the form containing the smallest factors of 18.

You will be able to do the same with an odd number, say 105, where 105 = 3X35 = 3X5X7. You already know that every whole number has 1 and itself as a factor. That is 9X1 = 9 and 11X1 = 11. Some such numbers have only 1 and themselves as a factor. Since its only factors are 1 and 5, 5 is such a number.

A whole number is called a prime number, or just a prime if:
1. It is greater than 1.
2. Its only factors are 1 and itself.

Any whole number other than 0 and 1 which is not a prime number is called a composite number, or just a composite.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Торкатися (мати, відношення); навіть, парний; один, єдиний; дієслово «слід», розкладати на співмножники; черга (оберт), обертати; незалежно від; сам, собі, саме; вправа, дозволити.

Exercise 2. Translate the following words and word-combinations:
Common, none, odd, the former, able, to be able, to agree, further.

Exercise 3. Answer the following questions:
1. Is the set of numbers like 2, 4, 6 and so on a set of even numbers?
2. Can odd numbers be devided by two?
3. Is it possible to divide even numbers by two?
4. Is the result of multiplication called difference?
5. Can you say that 20 is the product of two whole number factors?
6. When you multiply 0 by 7 is the product equal to 7?
7. Can more than two factors be used in multiplication?
8. Can we say that 100 is the product of four factors?
9. Is division associative?
10. Is 1 a factor of every whole number?
11. Is the order in one set of numbers important?
12. Can the factors in the equation 2X3X3 = 8 be factured further?
13. Is 0 a prime number?
14. Is 25 a composite number?

Exercise 4. Match the definitions to the notions:

Counting numbers	an integer which is not a multiple of two
The mode of a set of numbers	a number in mathematics
An odd number	the natural numbers and their negatives
Even numbers	a concept from mathematics, used to count or measure
Integers	the numbers used for counting things
A factor	the number that appears most often in the set
A number	integer multiples of two

Exercise 5. Discuss with your friend what you know about whole numbers.

SPEAKING ENGLISH

Exercise 6. Answer the following questions about your study:
1) Where do you study?
2) When did you enter the University?
3) When will you graduate from the University?
4) What year are you in now?
5) How many years does the training course at your University last?
6) Into how many semesters is the academic year divided?
7) How long does each year last?
8) What subjects did you study during the last term?
9) Did you pass your examinations?
10) What will your future speciality be?
11) At what time do your studies begin?
12) How many lessons do you have every day?
13) How long does it take you to get to the University?
14) Do you take part in research work?

Exercise 7. Put the following sentences into the interrogative and negative forms:
1) He had passed all entrance examinations by the 25th of June.
2) She will have passed her exams by July.
3) They have handed in their applications to the University.
4) We shall have learned two foreign languages by the time of our graduation from the University.

Exercise 8. Speak about your University and your studies.

Exercise 9. Make up a short story illustrating the following proverbs:
1) It is never too late to learn.
2) Better do than wish done.

Exercise 10. Relate what you know about education in England.

The University of Oxford

One of the largest and most ancient aristocratic universities in England was founded in the city of Oxford in the 12th century. Practically it is not a single university, but a collection of colleges, each self-governing and independent.

Admission to the Oxford colleges is somewhat restricted. Much attention is paid to the development of sports. The students pay for their education, examinations, accommodations, libraries and laboratories. Some students, however, hold scholarship from public and private funds.

The Oxford University consists of many faculties including theology, medicine, humanitarian and natural sciences, engineering and others. The University, though a self-governing institution, receives aid from the State, mainly in the form of direct grants which are made on the advice on the University Grants Committee.

The Oxford University is known for its tutorial system. The individual tuition provided by Oxford University is, perhaps, one of the main reasons why admission there is so eagerly sought after.

A characteristic feature of the Oxford University is that many traditions of the Middle Ages are still current there now. Many eminent well-known scholars and scientists have been educated at Oxford.

Exercise 11. Form five questions on the text.

Exercise 12. Retell the text.

GRAMMAR EXERCISES

Exercise 13. Put the verb in brackets into the right form of the Future Indefinite Tense:
1. But I (to be) fine tomorrow, I (to do) everything you (to tell) me.
2. Queenie, you (to go) with me tomorrow?
3. I (not to do) anything to make him mad, I promise.
4. I (to explain) everything tomorrow, about six.
5. I (to say) something to the press in some days, not now, later.
6. You have no business to sit up so late. You (to be) very sleepy tomorrow morning.
7. "You (to go) and (to get) his things ironed", he ordered.
8. They (to come) back in half an hour. Wait and you (to talk) to them then.
9. You fear he never (to return). But I know he (to return).
10. It (to be) clear tomorrow and hot as in June.

Exercise 14. Put the verb in brackets into the right form:
1. I (to catch) the train if I (to take) a taxi.
2. You (to miss) the train if you (not to hurry).
3. I (to ring) him when I (to get) tickets.
4. I (to go) skating if it (not to be) very cold.
5. Mother said: "We (to have) dinner as soon as father (to come)".
6. He said: "I (to wait) till the clock (to strike) nine".
7. The teacher said: "Paul (to fail) at the examination if he (not to work) hard".
8. The pupils said: "We (to work) in our village after we (to finish) school".
9. I (to go) there now and I (to go) to bed before the boats (to start).
10. They (to keep) my luggage till I (to give) my new address.

Exercise 15. Put the verb to be into the right form:
Ronald Frank … a managing director of the First Bank of Kingsville on Main Street. He … always on a business trip. Yesterday he … in Geneva. Tomorrow he … in London. Last week he … in Chicago. Next week he … in New Orleans. At the moment he … in Amsterdam. In two hours, he … in Paris. Three days ago, he … in London. At the end of his trip, he … usually very tired but happy. He … with his family now. Everybody in the family … very glad to see him at home again.

LESSON 4   **MATHEMATICAL SENTENCES**

You will remember that a mathematical sentence containing an equal sign is an equation. The two parts of an equation are called its members. A mathematical sentence that is either true or false but not both is called a closed sentence. Both true and false sentences are closed. To decide whether a closed sentence containing an equal sign is true or false, we check to see that both elements, or members of the sentence name the same number. To decide whether a closed sentence containing an ≠ sign is true or false, we check to see that both elements do not name the same number.

The relation of equality between two numbers satisfies the following basic axioms for the numbers a, b, and c.

Reflexive: a = a *Symmetric*: If a = b, then b = a. *Transitive*: If a = b and b = c then a = c.

In all branches of mathematics you need to write many sentences about numbers. While the symbol = in an arithmetic sentence means is equal to, another symbol, ≠, means is not equal to. When an = sign is replaced by ≠ sign, the opposite meaning is implied. Thus 8 = 11 - 3 is read eight is equal to eleven minus three while 9 + 6 ≠ 13 is read nine plus six is not equal to thirteen.

The important feature about a sentence involving numerals is that it is either true or false, but not both. There is nothing incorrect about writing a false sentence; in fact in some mathematical proofs it is essential that you write a false sentence. Since mathematical language is so direct and concise we must have a good understanding of the meaning of each symbol that we use.

We already know that if we draw one short line across the symbol we shall change it to ≠. The symbol ≠ implies either of two things - is greater than or is less than. In other words the sign ≠ in 3 + 4 ≠ 6 tells us only that the numerals 3 + 4 and 6 name different numbers, but does not tell us which numeral names the greater or the lesser of the two numbers.

To know which of the two numbers is greater let us use the conventional symbols < and >. < means is less than while > means is greater than. These are inequality symbols or ordering symbols because they indicate order of numbers. 6 < 7 is read six is less than seven. 29 > 3 is read twenty nine is greater than three.

The signs which express equality or inequality (=, ≠, <, >) are called relation symbols because they indicate how two expressions are related.

VOCABULARY EXERCISES

Exercise 1. **Find the English equivalents in the text**:
Частина, ділити; стислий, сполучник «чи», розуміти, відносити до; звичний, загальноприйнятий; у той час як, між тим; виражати; вміщувати в себе, тягти за собою.

Exercise 2. **Translate the following words and word-combinations**:
Direct, to direct; a member, understanding, the relation, to satisfy, to replace, a property, either.

Exercise 3. **Answer the following questions**:
1. Is every mathematical sentence called an equation?
2. Are the two parts of the equation called its members?
3. Can a mathematical sentence be both true and false?
4. Does the expression a = a satisfy the transitive axiom?
5. Does the expression if a = b then b = a satisfy the symmetric axiom?
6. Does every branch of mathematics deal with numbers?
7. Will the meaning of the expression be changed if you replace the plus with the minus?
8. Is it incorrect to write a false sentence?
9. Is mathematical language direct and concise?
10. Must we have a good understanding of each symbol used?

Exercise 4. **Match the definitions to the notions:**

A number sentence	an element in a set
An equation	a formula that contains no free occurrence of any variable
Members	typically an equation or inequality expressed using numbers and common symbols
Closed sentence	an equality containing one or more variables

SPEAKING ENGLISH

Exercise 5. **Form four sentences according to the examples given below**, **using the verbs to enter**, **to join**, **to follow**, **to approach**.
1) I entered the Aviation Institute two years ago.
2) The study of mathematics, chemistry and mechanics is followed by the study of special subjects.
3) This year I have joined the students' research society.
4) When I was given an essay to write I did not know how to approach the task I was given, but our dean helped me.

Exercise 6. **Read the text and write eight questions on it**.

Research Work

from "Live with Lightning" by M. Wilson

Erik knew that the purpose of any physical experiment is to make a measurement and express the result in terms of numbers, whether the measurement is the mass of a particle in grams, or the temperature of a red-hot wire in degrees Centigrade. Any experiment has three distinct stages: the designing of the apparatus so that the desired measurement can be made, the careful building of the apparatus, and lastly the actual performance of the measurement.
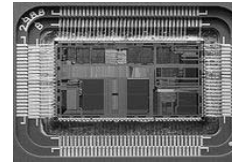
Eric had learned enough to know that the first stage, the design of an experiment, was actually invention of the most creative sort, and that it required not only a complete theoretical background but also an engineer's knowledge of construction.

He had been taught modern physics involved the manipulation of minute quantities of matter, and that, to avoid errors and interference by extraneous details, he would have to perform most of his experiments under vacuum. He

would have to learn to build vacuum chambers of glass and metal to house all the equipment, and a pumping system to create this vacuum. There would have to be pressure-measuring device in order to be sure that the vacuum had been created, and there would have to be some electrical means of manipulating the experimental devices within the vacuum chamber.

So, the second step of any experiment, the building and assembling, demanded that he possesses three separate techniques: glass blowing, machine-shop practice, and electrical circuit work. Even if he planned to have all the apparatus built by skilled workmen following his specification, he still would have to master the techniques himself, for he would not be able to design a workable piece until he knew the possibilities and limitations of each art.

The three main techniques of research physics had to be mastered by him to be of any use to Haviland and himself in his career.

Exercise 7. *Give the examples illustrating the following proverbs*:
1) Strike the iron while it is hot.
2) A stich in time saves nine.

GRAMMAR EXERCISES

Exercise 8. Rewrite the text in the Past Indefinite Tense:
Boris wakes up when it is already quite light. He looks at his watch. It is a quarter to seven. Quick! Boris jumps out of bed and runs to the bathroom. He has just time to take a cold shower and drink a glass of tea with bread and butter. He is in a hurry to catch the eight o'clock train.

At the railway station he meets three other boys from his group. They all have small backpacks and fishing-rods. In less than an hour they get off the train at a small station near a wood. They walk very quickly and soon find themselves on the shore of a large lake. The boys spend the whole day there fishing, boating and swimming.

They return home late at night, tired but happy.

Exercise 9. Put different questions to the sentences:
1. The policeman knows everyone in this tiny village.
2. She promised to have dinner with me any time I wanted.
3. Harry will teach her to drive a motor cycle next week.

Exercise 10. Translate the following sentences:
1. Мій друг дуже добре знає іспанську й охоче вам допоможе.
2. Хто телефонував вам дві години тому?
3. Ви витратили багато часу, щоб знайти цей будинок?
4. Єлизавета друга народилася у 1926 році, а стала королевою Англії у 1952.
5. Він обіцяв, що ми прибудемо до Едінбургу до початку конгресу.
6. Ви запізнилися на збори й робите це щоразу, принаймні, протягом останнього місяця.
7. Коли ви будете піклуватися про цю стару привітну леді?
8. Вони завжди зберігають багаж протягом двох годин?
9. Я думаю, це буде приємна несподіванка для його шефа.
10. Лікар сказав, що прийде завтра, якщо я почуватиму себе погано й зателефоную йому.

UNIT III   COMPUTER PROGRAMMING AND FRACTIONAL NUMBERS

LESSON 1   **PROGRAMMING**

Some people did not want a machine that would do the same thing over and over again. For example, a music box is a machine that plays the same music over and over again. Some people wanted to be able to tell their machine to do different things. For example, they wanted to tell the music box to play different music every time. They wanted to be able to program the music box- to order the music box to play different music. This part of computer history is called the «history of programmable machines» which is a fancy phrase for «The history of machines that I can order to do different things if I know how to speak their language».

One of the first examples of this was built by Hero of Alexandria (c. 10–70 AD). He built a mechanical theater which performed a play lasting 10 minutes and was operated by a complex system of ropes and drums. These ropes and drums were the language of the machine – they told what the machine did and when. Some people argue that this is the first programmable machine.

Most historians agree that the «castle clock», an astronomical clock invented by Al-Jazari in 1206, is the first known programmable analog computer. It showed the zodiac, the solar and lunar orbits, a crescent moon-shaped pointer travelling across a gateway that made some doors to open every hour, and five robotic musicians who play music when levers hit them. The length of day and night could be changed (AKA re-programmed) every day in order to account for the changing lengths of day and night throughout the year. Ada Lovelace is considered to be the first programmer.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Виконувати одне й те ж знову і знову; бути здатним; програмована машина; керуватися складною системою; замковий годинник; бути винайденим; півмісяць; важіль.

Exercise 2. Translate the following words and word-combinations:
To program the music box, history of programmable machines, to speak their language, to build a mechanical theatre, to last, system of ropes and drums, astronomical clock, programmable analog computer, moon-shaped pointer, to hit.

Exercise 3. Answer the following questions:
1. What do some people want the machine to do?
2. What period is called «history of programmable machines»?
3. What was the first example of such a machine?
4. What did the astronomical clock show?
5. Who is considered to be the first programmer?

Exercise 4. Match the definitions to the notions:

Program	telling a computer how to do certain things by giving it instructions
Programming	a type of written language that tells computers what to do
Programming language	a person who makes computer programs using a programming language
Programmer	a plan of how to do something

Exercise 5. Tell your friends what you know about the history of programming.

SPEAKING ENGLISH

Exercise 6. Read the story.

The Absent-Minded Professor

A very absent-minded professor was once travelling by a suburban train, and when the ticket-collector came to check the tickets, the professor could not find his.

"Never mind, sir," said the ticket-collector who knew the professor very well, "I'll come at the next station."

However, at the next station there was the same difficulty: the professor could not find his ticket anywhere.

"Don't trouble about it, it really doesn't matter," said the ticket-collector kindly.

"No, no, I must find it," said the professor turning out his pockets as he spoke, "I must find out where I am going to! I have forgotten."

Exercise 7. Answer the following questions:
1) What train was the professor travelling by?
2) What did the ticket-collector have to check?
3) Did the professor find his ticket?
4) What did the ticket collector tell him?
5) Could the professor find his ticket at the next station?
6) Why was the professor anxious to find his ticket?

Exercise 8. Retell the story.

Exercise 9. Give examples illustrating the following proverbs:
1) All's well that ends well.
2) Where there's a will, there's a way.

GRAMMAR EXERCISES

Exercise 10. Put the verb in brackets into Past Indefinite or Past Continuous:

We (to walk) down the street in the direction of Mike's house, when we (to see) him in the window of a bus that (to pass) by. He (to recognize) us, too, but he couldn't get off as the bus (to be) overcrowded. We (to be) very sorry that we (to have) no chance to speak to him. But we could do nothing and (to decide) to go back. At that very moment we (to hear) Mike's voice behind us. "How funny," he (to say), "I (to go) to your place when I suddenly (to see) you here. I am so glad to meet you."

Exercise 11. Put the verb in brackets into Past Indefinite or Past Continuous:

The sun (to go) down behind the hills when I (to reach) a village which (to be) only a few miles from the sea. The working day (to be) over, and the villagers (to come) home from the fields. Along the road two boys (to drive) cows and sheep in the direction of the village.

I (to approach) a group of people standing near the road and (to ask) them if I could find a place in the village to spend the night. An old man (to say) he would help me. He (to take) me to his small cottage at the far end of the street. A fire (to burn) in the stove when we (to enter) the house. One girl of about eighteen (to prepare) supper in the kitchen while two other girls still (to do) something in the kitchen garden near the house.

The old man (to invite) me to have supper with them. They all (to seem) to be nice people and we (to have) a friendly talk. After supper my new friends and I (to go) out into the garden. The moon (to shine) high in the sky, and the night (to be) warm and beautiful. That evening (to be) very pleasant, and I shall remember it a long time.

Exercise 12. Put six different questions to the text of exercise 7.

Exercise 13. Translate the following sentences:
1. Вони слухали новини по радіо, коли задзвонив телефон.
2. Я шукаю гарну пару рукавичок.
3. Ваш потяг від'їжджає через пів години, покваптеся.
4. Зараз автомобілі стають все більш дорожчими.
5. Йшов сніг та повівав легенький вітерець.
6. Вони були на мосту, коли почули сильний гуркіт.
7. Я відчуваю, що він втрачає контроль над машиною.
8. Я обіцяю, що робитиму доповідь протягом 30 хвилин.
9. Він сказав, що вестиме машину дуже обережно, оскільки дуже слизько.
10. Ти завжди виконуєш те, що плануєш?

LESSON 2   **FRACTIONS**

A fraction is a number expressed as the quotient of two mathematical expressions, often integers. Fractions come in the form $\frac{a}{b}$, where a is called the numerator and b is called the denominator.

Sometimes the word "fraction" means the quotient of two integers. Under this definition, $\frac{3}{4}$ is a fraction, but $\frac{1}{\pi + \sqrt{2}}$ is not.

If the numerator is larger than the denominator, it is called an improper fraction, and is greater than one. An example of an improper fraction is $\frac{51}{2}$, which is 25 wholes and a half; $25\frac{1}{2}$ as a mixed number. Also, $\frac{a}{b} = a \div b$. For example, $2\frac{6}{3}$ would be $2 \times (6 \div 3)$.

Meanwhile, if the numerator is larger than the denominator, it is called a proper fraction, and is less than one.

Multiplying fractions is very easy:
$\frac{a}{b} \cdot \frac{c}{d} = \frac{a \cdot c}{b \cdot d}$.

For nonzero a, $\frac{a}{a} = 1$. This gives us a useful identity:
$\frac{a}{b} = \frac{a}{b} \cdot \frac{c}{c} = \frac{a \cdot c}{b \cdot c}$
allowing us to "force" values of the numerator or denominator. Some call this multiplying by one creatively.

Adding fractions is somewhat harder. If both the summands have the same denominator, we can use the distributive property:
$\frac{a}{b} + \frac{c}{b} = a \cdot \frac{1}{b} + c \cdot \frac{1}{b} = (a + c) \cdot \frac{1}{b} = \frac{a + c}{b}$.

But if they're different, we can multiply by one creatively to force their denominators to line up:
$\frac{a}{b} + \frac{c}{d} = \frac{ad}{bd} + \frac{bc}{bd} = \frac{ad + bc}{bd}$.

This formula is not terribly useful to memorize; knowing the technique is much more helpful. If we're working with integers, instead of bd in the denominator, we can use the least common multiple of b and d.
$\frac{2}{9} + \frac{5}{6} = \frac{12}{54} + \frac{45}{54} = \frac{57}{54} = \frac{19}{18}$
Note that we could have taken a shortcut using the least common multiple:
$\frac{2}{9} + \frac{5}{6} = \frac{4}{18} + \frac{15}{18} = \frac{19}{18}$
We multiplied the first fraction by 2/2 and the second by 3/3.

You can convert a mixed number (a, surprisingly, mixed fraction — $5\frac{4}{5}$ is a mixed number) into an improper fraction (a fraction in which the numerator is larger than the denominator) by doing three things:

Multiply the whole number (the 5) by the denominator (the other 5) of the fractional part. In the example above, to change $5\frac{4}{5}$ to a mixed number, first multiply $5 \times 5 = 25$.

Add the numerator of the fractional part to that product. In the example, $4 + 25 = 29$.

The resulting sum is the numerator of the new (improper) fraction, with the denominator remaining the same in both the mixed number and the improper fraction. In the example, $5\frac{4}{5} = \frac{29}{5}$.

Likewise, you can convert an improper fraction into a mixed number by following another 3 rules:

Divide the numerator by the denominator. Let's say, for example, $\frac{32}{7}$. $32 \div 7 = 4$ with 4 left over (the remainder)

The quotient (without the remainder) becomes the whole number part of the mixed number. The remainder becomes the numerator of the fractional part. In the example, 4 is the whole number part and 4 is the numerator of the fractional part.

The new denominator is the same as the denominator of the improper fraction. In the example, the denominator is 7. Thus $\frac{32}{7} = 4\frac{4}{7}$.

VOCABULARY EXERCISES

Exercise 1. **Find the English equivalents in the text**:
Ніколи, обирати, знаменник, відповідно, кількість, неправильний, будь - коли, ціле число; мати місце, траплятися.

Exercise 2. **Translate the following words and word-combinations**:
A term, the nominator, low, into, to conclude, proper, to bring (brought), mixed, meanwhile, to draw.

Exercise 3. Answer the following questions:
1. Is the fraction 61/ 2 an improper fraction?
2. Are there mixed fractions?
3. Is it possible to reduce the fraction 2 / 3 to lower terms?
4. Could you change the fraction 2 / 4 to higher terms?

43   44

Exercise 4. Match the definitions to the notions:

Numerator	generalizes the distributive law from elementary algebra. In propositional logic
Denominator	a combination of a whole number and a fraction
Distributive property	the divisor of a fraction
A mixed number	the number of fractional units that are taken

SPEAKING ENGLISH

Exercise 5. Read the story.

Economy Wasted Trip

An Englishman who was in France wanted to go back to England by sea. But he had so little money that he could pay only for the ticket. As he knew that the trip would last only two days, he decided not to eat during these days.

As he bought a ticket and got on the ship the next morning, he tried not to hear the bell for breakfast. When dinner time came, he was very hungry, but he didn't go to the dining-room. In the evening he was still hungrier but when he was invited to have supper, the Englishman said that he was ill.

The next day the Englishman was half-dead and couldn't stand the hunger any longer. "I shall go and eat even if I'll be kicked out into the sea", said he to himself. So, he went to the ship dining-room and had his dinner. In the evening he had supper but didn't pay for the meals. At last, he addressed the waiter: "Bring me the bill, please". —"What bill?" asked the waiter. —"For the supper and dinner, I had in your dining-room". —"Don't trouble, Sir. The meals were paid for when you bought the ticket".

Exercise 6. Complete the sentences.
1. When did the man get on the ship?
   a) the next week; b) the next morning; c) the next month.
2. What did he try?
   a) not to see anybody; b) not to hear the bell; c) not to hear the voices
3. How did he feel during the dinner time?
   a) he was angry; b) he was sad; c) he was very hungry.
4. What did the Englishman say when he was invited to dinner?
   a) that he was ill; b) that he was upset; c) that he was tired.
5. How did he feel the next day?
   a) he was half-dead; b) he was very active; c) he was strong and healthy.

Exercise 7. Retell the story.

Exercise 8. Give examples illustrating the following proverbs:
1) Nothing venture, nothing win.
2) Good words cost nothing, but are worth much.

GRAMMAR EXERCISES

Exercise 9. Answer the questions using Present Perfect:
Model: Are the students writing a dictation? – No, they have already written it.
1. Is your friend helping you to solve a difficult problem?
2. Is she learning a poem by heart?
3. Is Kate sweeping the floor?
4. Is the waiter putting a bottle of lemonade in front of him?
5. Is he bringing them some meat and vegetables?
6. Are they having tea?
7. Is she taking the dirty plates from the table?
8. Are you putting the dishes on the table?
9. Are you looking for more CDs with good music?
10. Are you recording your favourite film on his video recorder?

Exercise 10. Use the verbs in brackets in Present Continuous or Present Perfect:
1. Who (to write) this article already?
2. They (to learn) a lot of English words.
3. What she (to teach) them now?
4. What you (to look) for?
5. You (to find) the book already?
6. What you (to talk) about?
7. They (to ask) me several questions.
8. I (to answer) the telephone right now.
9. You just (to hear) tomorrow's weather forecast?
10. He (to fix) his car and now he (not to have) any trouble with the brakes anymore.

Exercise 11. Use the verbs in brackets in Past Indefinite or Present Perfect:
1. The rain (to stop) half an hour ago.
2. The rain (to stop) and the sun is shining in the sky again.
3. The wind (to blow) off the man's hat and he cannot catch it.
4. The weather (to change) and we can go for a walk.
5. The wind (to change) in the morning.
6. Yesterday they (to decide) to help him with his research.
7. The man already (to decide) what to do with the information.
8. I (not yet to eat) today.
9. You (to play) the piano yesterday?
10. When the lecture (to begin)?

Exercise 12. Use the verbs in brackets in Past Indefinite or Past Perfect:
1. He (to think) that he (to lose) the money.
2. When father (to return) from work, we already (to do) our homework.
3. When the teacher (to enter) the lecture room, the students (to finish) their work.
4. Kate (to give) me the dictionary which she (to buy) the day before.
5. Nick (to show) the teacher the picture which he (to draw).

6. The boy (to give) the goats the grass which he (to bring) from the field.
7. Mother (to see) that Nick (not to wash) his hands.
8. The supervisor (to understand) that the postgraduate (not yet to finish) his research.
9. I (to know) that our delegation (not yet to arrive).
10. By two o'clock the teacher (to examine) all the students.

LESSON 3   **COMPUTER PROGRAM**

A computer program is a list of instructions that tell a computer what to do. Everything done on a computer is done by using a computer program.

Some examples of computer programs:

A web browser like Mozilla Firefox and Apple Safari can be used to view web pages on the Internet.

An office suite can be used to write documents or spreadsheets.

Video games are computer programs, too.

A computer program is stored as a file on the computer's hard drive. When the user runs the program, the file is read by the computer, and the processor reads the data in the file as a list of commands or instructions. Then the computer does what the program tells it to do.

A computer program is written by a programmer. It is very difficult to write in ones and zeroes, which is what the computer can read, so computer programmers write in a programming language. Once it is written, the programmer uses a compiler to turn it into a language that the computer can understand.

There are also bad programs, written by people who want to do bad things to a computer. Sometimes these are computer viruses, or spyware, or malware. Some of these programs try to steal information. Other ones damage the data stored on the hard drive. Some others send users to web sites that offer to sell them things.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Переглянути веб-сторінку, офісний пакет, писати таблиці, запускати програму, перетворити в мову, вкрасти інформацію, пошкодити дані, пропонувати продати речі.

Exercise 2. Translate the following terms and terminological expressions:
To be stored as a file, to run the program, to write in a programming language, to use a compiler, spyware, malware, to damage the data.

Exercise 3. Ask your friends to answer the following questions:
1) What is a computer program?
2) What are the examples of computer programs?

3) How is a computer program stored?
4) Whom is a computer program written by?
5) What does a programmer use to turn program into a language that the computer can understand?
6) Are all programs good and useful?

Exercise 4. Match the definitions to the notions:

A web browser	a program that takes source code and translates it into a more basic language
A web site	a means to store information that belongs together
A web page	a set of webpages that are joined together
A file	part of a website
A compiler	a computer program application found on all modern computers

Exercise 5. Fill in the blanks using the words in brackets (programs, information, file, file format):
A computer file is a means to store _____ that belongs together. Computer files can be opened (read and written) by computer _____. Usually they are stored on some kind of _____ system.

There are different kinds of computer files that hold different kinds of data (information):
- Text files
- Audio files (e.g. for songs, voice recordings)
- Video files (e.g. for movies)
- Images (pictures)
- Other binary data
The way the information is organized in a file is called the _____ .

SPEAKING ENGLISH

Exercise 6. Read the story.
A Laconic Answer

There was a time when the people of Greece were not united, but instead, there were several states each of which had its own ruler.

Some of the people in the southern part of the country were called Spartans and they were famous for their simple habits and their bravery.

The name of their land was Laconia, so they were sometimes called Lacons.

One of the strange rules which the Spartans had was that they should speak briefly and never use more words than were needed.

A short answer is called laconic that is such an answer as a Lacon would give.

There was a land called Macedonia in the Northern part of Greece. This land was ruled by a king named Philip. Philip of Macedonia wanted to become the master of Greece. So he raised a great army and made war upon other states, until nearly all of them were forced to call him their king. Then he sent a letter to the Spartans in Laconia and said:"If I go down into your country, I will level your great city to the ground".

In a few days the answer was brought back to him. When he opened the letter he found only one word written there:"If".

Exercise 7. Answer the following questions:
1) What was the name of Macedonian king?
2) What did Philip want?
3) What did he raise?
4) What did Philip make upon other countries?
5) What happened to most of the states?
6) What did Philip send to Laconia?
7) What answer did he get?

Exercise 8. Retell the story.

Exercise 9. Give examples illustrating the following proverbs:
1) Health is better than wealth.
2) My home is my castle.

GRAMMAR EXERCISES

Exercise 10. Use the verbs in brackets in Past Indefinite, Past Continuous or Present Perfect:
Last night we (to go) to a football match. We (to take) a bus. The bus (to be) full of people as many fans (to want) to see the match. We (to get) off the bus and (to go) in the direction of the stadium. While we (to cross) the road, I (to see) Victor. He (to stand) at the corner. He said he (to wait) for his friend who (to come) to our city the day before and (to wish) to see the new stadium. A man (to come) up to me and asked if I (to have) a spare ticket for the match. Victor told us that two boys just (to ask) him whether he (to have) a spare ticket. We (to enter) the stadium just as the football players (to come) out on to the field. At the entrance to the stadium we (to meet) Sergiy. He (to show) us to our seats and we (to agree) to meet in the snack bar during the interval. He (to ask) me if I (to play) football in my childhood.

Exercise 11. Use the verbs in brackets in Future Indefinite, Future Continuous or Future Perfect:
1. I (to do) my homework at six tomorrow.
2. I (to do) all my work by the time he (to come) and we (to go) for a walk together.
3. When I (to come) home tomorrow, my family (to have) supper.

4. Don't come to my place tomorrow. I (to write) a composition the whole evening.
5. What you (to do) on Sunday?
6. What you (to do) at six on Sunday?
7. You (to do) this work by next Sunday?
8. When you (to go) to see your friends next time?
9. How many pages you (to read) by the end of the week?
10. I (not to go) to the University library next week.

Exercise 12. Translate the sentences into English:
1. Він був щасливий: він написав чудовий твір.
2. Я шукаю тебе весь вечір. Де ти був?
3. На щастя, дощ уже перестав, коли ми вийшли.
4. Я вже тричі сказав тобі, що треба переписати вправу.
5. Я не прийду. Я писатиму доповідь увесь вечір.
6. Коли вона була у поїзді, вона згадала, що забула документи вдома.
7. Ви отримали від нього якісь листи?
8. Коли ти почав працювати над цим дослідженням?
9. Ви багато працювали сьогодні?
10. Невже вони грають у шахи зараз?
11. Вони виконають ці вправи до понеділка?
12. Він ще не спакував пристрій у коробку.

LESSON 4 **DECIMAL NUMERALS**

In our numeration system we use ten numerals called digits. These digits are used over and over again in various combinations. Suppose, you have been given numerals 1, 2, 3 and have been asked to write all possible combinations of these digits.

You may write 123, 132, 213 and so on. The position in which each digit is written affects its value. How many digits are in the numeral 7086? How many place value positions does it have? The diagram below may prove helpful. A comma separates each group of period. To read 529,248,650,396, you must say: five hundred twenty-nine billion, two hundred forty-eight million, six hundred fifty thousand, three hundred ninety-six.

Billions period			Millions period			Thousands period			Ones period		
Hundred billions	Ten billions	One billion	Hundred millions	Ten millions	One million	Hundred thousand	Ten thousand	One thousand	Hundreds	Tens	Ones
5	2	9,	2	4	8,	6	5	0,	3	9	6

But suppose you have been given a numeral 587,9 where 9 has been separated from 587 by a point, but not by a comma. The numeral 587 names a whole number. The sign (.) is called a decimal point. All digits to the left of the decimal point represent whole numbers. All digits to the right of the decimal point represent fractional parts of 1.

The place-value position at the right of the ones place is called tenths. You obtain a tenth by dividing 1 by 10. Such numerals like 687,9 are called decimals. You read .2 as two tenths. To read .0054 you skip two zeroes and say fifty-four ten thousandths.

Decimals like .666…, or .242424…, are called repeating decimals. In a repeating decimal the same numeral or the same set of numerals is repeated over and over indefinitely.

We can express rational numbers as decimal numerals. See how it may be done. 31 / 100 = 0.31. 4 / 25 = 4 x 4 / 4 x 25 = 16 / 100 = 0.16. The digits to the right of the decimal point name the numerator of the fraction, and the number of such digits indicates the power of 10 which is the denominator.

For example, 217 denotes a numerator 217 and a denominator of ten cubed or 1000. In our development of rational numbers we have named them by fractional numerals.

We know that rational numerals can just as well be named by decimal numerals. As you might expect, calculations with decimal numerals give the same results as calculations with the corresponding fractional numerals.

Before performing addition with fractional numerals, the fractions must have a common denominator. This is also true of decimal numerals. When multiplying with fractions, we find the product of the numerators and the product of denominators. The same procedure is used in multiplication with decimals.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Кома, повний, лівий, турбота, пропускати, важкий, ретельний, уважний, схема, зразок, година, далеко.

Exercise 2. Translate the following terms and terminological combinations:
Just, a point, knowledge, a step, to repeat, to keep (kept, kept), to learn, to observe, to affect, appropriate.

Exercise 3. Answer the following questions:
1. How many digits do we use in our numeration system?
2. How many combinations can be written with the digits 1, 2, 3?
3. Does the position of each digit affect its value?
4. How many place-value positions does the numeral 78641 have?
5. What is a comma used for?
6. What does a point in a numeral like 1.3 mean?
7. What do all digits to the right of the decimal point represent?

8. What do all digits to the left of the decimal point represent?
9. In what way do you obtain a tenth?
10. Do you read zeros in .0081, or do you skip them?

Exercise 4. Match the definitions to the notions:

Numerals	a property such as number assigned to or calculated for a variable, constant or expression
Digits	a group of zero and positive integers
Value	a decimal separator, equivalent to the use in English of the decimal_point
Whole numbers	a symbol used to separate the integer part from the fractional part of a number written in decimal form
Comma	a type of symbol (a numeral symbol, such as "2" or "5") used in combinations (such as "25") to represent numbers (such as the number 25) in positional numeral_systems
Decimal point	a symbol or group of symbols, or a word in a natural language that represents a number

SPEAKING ENGLISH

Exercise 5. Read the story and put 5 questions on it.
A Foreign Tourist
An American tourist came to Paris. It was his first visit there. On the same day he sent a telegram to his wife who was in London. In the telegram he told her the address of the hotel where he was going to stay. He also told her that he was well.

As he was in Paris for the first time, he was very eager to see the places of interest. After dinner he went for a walk and then decided to go to the theatre to see a new play. It was very late when the play was over. It was time to go home.

But at that moment he realized that he couldn't get to the hotel: he didn't remember either the name of the hotel or the address. The Englishman was at a loss because he didn't know what to do. Suddenly he remembered sending that morning a telegram to his wife. So, late at night his wife got a very strange telegram:"Please, send me my address at once."

Exercise 6. Retell the story.

Exercise 7. Give examples illustrating the following proverbs:
1) One man's meat is another man's poison.
2) Necessity is the mother of invention.

GRAMMAR EXERCISES

Exercise 8. Express the same idea in one sentence instead of two by using the Present Perfect Continuous Tense:

Model: I began to do this exercise a quarter of an hour ago. I am still doing it. – I have been doing this exercise for a quarter of an hour.

- My sister began to learn French two years ago. She is still learning it.
- Our teacher began to teach English fifteen years ago. She is still teaching it.
- I began to look for this magazine half an hour ago. I am still looking for it.
- His father began to work at the railway station in 1985. He is still working there.
- The boy fell asleep at ten o'clock. He is still sleeping.

Exercise 9. Put questions to the italicized words:
1. He has been playing chess since childhood.
2. His younger brother has been skating for an hour.
3. Mary has been looking after the baby since her mother went to the market.
4. We have been looking for you for half an hour.
5. Ann has been speaking over the telephone for the last ten minutes.

Exercise 10. Replace the infinitives in brackets by the Present Indefinite, Present Continuous, Present Perfect or Present Perfect Continuous Tense:
1. Where are the pupils? – They (to plant) trees. They (to plant) them since the morning. They always (to plant) trees in October. They already (to plant) several hundred trees this year.
2. Ann (to have) her music lesson now. She (to have) her music lessons twice a week.
3. I am going to take a walk. I (to do) all my home exercises already. I (to do) them for three hours.
4. Since when they (to build) this house?
5. At last I (to find) the book I need. I (to look) for it for a quarter of an hour.
6. Don't shout. Helen (to read) an English book. She (to work) at her English every day. She (to learn) this language for three years. She (to read) many English stories this year.
7. What you (to do) in the morning? What you (to do) since the morning?

UNIT IV   COMPUTER SOFTWARE AND THE MEANING OF GEOMETRY

LESSON 1   THE MEANING OF GEOMETRY

1. Geometry is a very old subject. 2. It probably began in Babilonia and Egypt. 3. Men needed practical ways for measuring their land, for building pyramids, and for defining volumes. 4. The Egyptians were mostly concerned with applying geometry in their everyday problems. 5. Yet, as the knowledge of the Egyptians spread to Greece the Greeks found the ideas about geometry very intriguing and misterious. 6. The Greeks began to ask "Why? Why is that true?" 7. In 300 B. C. all the known facts about Greek geometry were put into a logical sequence by Euclid. 8. His book, called Elements, is one of the most famous books of mathematics. 9. In recent years men have improved on Euclid's work. 10. Today geometry includes not only the study of the shape and size of the earth and all things on it, but also the study of relations between geometric objects. 11. The most fundamental idea in the study of geometry is the idea of a point. 12. We will not try to define what a point is, but instead discuss some of its properties. 13. Think of a point as an exact location in space. 14. You cannot see a point, feel a point, or move a point, because it has no dimensions. 15. There are points (locations) on the earth, in the earth, in the sky, on the sun, and everywhere in space. 16. When writing about points, you represent the points by dots. 17. Remember the dot is only a picture of a point and not the point itself. 18. Points are commonly referred to by using capital letters. 19. The dots below mark points and are referred to as point A, point B, and point C.

.C

.A

. B

20. If you mark two points on your paper and, by using a ruler, draw a straight line between them, you will get a figure. 21. The figure below is a picture of a line segment.

D

E

D → E
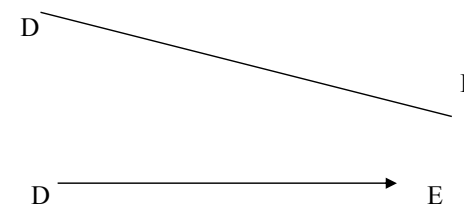
22. Points D and E are referred to as endpoints of the line segment. 23. The line segment includes point D, point E, and all the points between them. 24. Imagine extending the segment indefinitely. 25. It is impossible to draw the complete picture of such an extension but it can be represented as follows. 26. Let us agree on using the word line to mean a straight line. 27. The figure above is a picture of line DE or line ED.

VOCABULARY EXERCISES

Exercise 1. Translate the following terms and terminological expressions:
To measure, a measure, shape, land, to feel (felt), volume, to move, to spread (spread), sky, to improve.

Exercise 2. Go back to the text. Insert the missing words and finish these sentences:
1) Geometry probably began in Egypt as a means for _____.
2) Men needed practical ways for measuring their land and for defining _____.
3) The Egyptians were concerned with _____ geometry to their everyday problems
4) Euclid put all the known facts about geometry into a _____.
5) In recent years men have _____ on Euclid's work.

Exercise 3. Say true or false:
1) Geometry is quite a new subject.
2) Geometry began in Greece.
3) Egyptians applied Geometry for measuring land and for defining volumes.
4) It was Euclid who put all the known facts about geometry into a logical sequence.

Exercise 4. Answer the following questions:
1) Where did geometry begin?
2) Why did early Egyptians need geometry?
3) What were they mostly concerned with?
4) Where did the knowledge of Egyptians spread to?
5) What did the Greeks think of geometry?
6) What is the name of the man who put all the known facts about geometry into a logical sequence?
7) Which one of his books is one of the most famous books of mathematics?

Exercise 5. Translate sentences 3, 4, 13, 16, 18, 20, 22, 24, 26 from the text (1).

Exercise 6. Explain and describe the meaning of geometry for a non-specialist.

Exercise 7. Guess the meaning of these words:
Local, localize, foundation, pyramidal, application, applied, improvement, shapeless, sunless, movable, a feeling, a drawing.

Before you begin working with the text (2) "Points and Lines" read these words and guess their meaning

Mathematician *n*, model *n*, alphabet *n*, definite *adj*, location.

You can guess the meaning of the words: "arrow" [ˈærəʊ] n, "subset" n, "ray" n, and "vertex" n from the context.

Read these notes:
Serve as models – слугують у якості моделей
*Have in common* – мають спільне

Read the text to get its general idea:
Points and Lines
The world around us contains many physical objects from which mathematicians have developed geometric ideas. These objects can serve as models of the geometric figures. The edge of a ruler or an angle of this page is a model of a line. We have agreed to use the word line to mean a straight line. A geometric line is the property these models of lines have in common; it has length but no thickness and no width; it is an idea. A particle of dust in the air, or a dot on a piece of paper is a model of a point. A point is an idea about an exact location; it has no dimensions. We usually use letters of the alphabet to name geometric ideas. For example, we speak of the following models of points as point A, point B, and point C.

. B

. A

. C
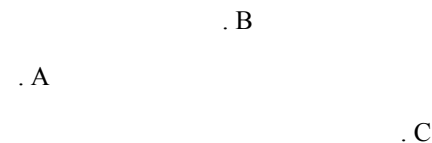
We speak of the following as line AB or line BA.

A ———————————————→ B
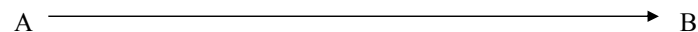
The arrows on the model above indicate that a line extends indefinitely in both directions. Let us agree to use the symbol "arrow" to mean a line. Line AB means line AB. Can you locate a point C between A and B on the drawing of the line AB above? Could you locate another point between B and C? Could you continue this process indefinitely? Why? Because between two points on a line there is another point. A line consists of a set of points. Therefore, a piece of a line is a subset of the line. There are many kinds of subsets of a line. The subset (piece) of the arrow AB shown below is called a line segment. The symbol for the line segment AB is line AB. Points A and B are the endpoints, as you may remember. A line segment is a set of points consisting of the two endpoints and all of the points on the line between them. How does a line segment differ from a line?

Could you measure the length of a line? Of a line segment? A line segment has definite length but a line extends indefinitely in each of its directions. Another important subset of a line is called a ray. That part of the line MN shown below is called ray NM. The symbol for ray MN is ray MN.

N

M
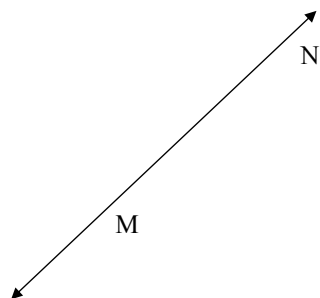
A ray has indefinite length and only one endpoint. The endpoint of a ray is called its vertex. The vertex of the ray MN is M. In the drawings above you see pictures of a line, a line segment, and a ray – not the geometric ideas they represent. Let us agree that to draw a geometric figure means to draw its picture

Exercise 8. Now that you have read the text look throught it again and say what its main points are.

SPEAKING ENGLISH

Exercise 9. Read the story; put 5 questions to it.

A Broken Vase

The young man was going to marry a beautiful girl. One day the girl said that the next day she would celebrate her birthday and invited him to her birthday party. The young man was eager (дуже хотів) to make her a present, so he went to a gift (подарунок) shop. There he saw many beautiful things. Of all the things he particularly (особливо) liked the vases. But they were very expensive (коштовні), and as he had very little money he had to leave the shop without buying anything (нічого не придбав).

Making for the door (ідучи до виходу) he suddenly heard a noise: one of the vases fell on the floor and broke to pieces (на шматочки). A brilliant idea came to his mind. He came up to the counter and asked the salesman to wrap up (запакувати) the broken vase. The salesman got a little surprised but did what the young man had asked him to.

The young man, feeling very happy, took the parcel and went straight to the girl's place. By the time he entered the room the guests had already gathered. Everybody was enjoying the party. Some of the people were dancing, others were talking, joking and laughing. Saying "Many happy returns of the day" (Вітаю з Днем народження), the young man told the girl that he had bought a small present

for her. With these words he began to unwrap the parcel. Suddenly he got pale and said:"I am afraid, I have broken it. There were so many people in the bus…" But when he unwrapped (розгорнув) the parcel, he saw that the salesman had wrapped up each piece of the vase separately (окремо).

Exercise 10. Retell the story.

GRAMMAR EXERCISES

Exercise 11. Use the correct form of the verb in Present Simple, Present Continuous or Present Perfect:
1. In the evening George often (to go) to see his friends.
2. He just (to meet) them at the stadium.
3. They (to play) a friendly match with the team "Navigator" now.
4. Michael (to like) to read a colourful exciting magazine "Ring".
5. He (to buy) a new issue already.
6. My friend (to read) an interesting article about brothers Klychko now.

Exercise 12. Use the correct form of the verb in Past Simple, Past Continuous or Past Perfect:
1. When I (to come) to the hostel, my friends (to watch) a Wimbledon tournament.
2. They (to translate) two articles before the tournament started.
3. My brother (to play) computer games the whole evening yesterday.
4. I (to take part) in the Faculty competitions last month.
5. Peter (to set) a record before his team arrived.
6. When Henry (to train) in the swimming-pool he met a world champion.
7. While Oliver (to run), his friend (to jump) at the stadium.

Exercise 13. Use the correct form of the verb in Future Simple, Future Continuous or Future Perfect:
1. Jennifer (to participate) in the chess tournament next season.
2. She (to arrive) to Sydney a week before the competitions (to start).
3. Brian (to skate) in the skating-rink from 6 till 8 tomorrow.
4. You (to do) these exercises at the next lesson.
5. They (to translate) some articles before the English guest (to arrive) to the University.

Exercise 14. Translate the following sentences into English:
1. Олена вивчає англійську мову. Вона вивчає її вже чотири роки. В школі вона вивчала також німецьку.
2. Я зустрів Петра в читальному залі. Він читав статтю, коли я його побачив. Він читав уже сорок хвилин. Петро завжди проглядає останні спортивні новини.
3. Іван тренується на веслувальній станції зараз. Він братиме участь у чемпіонаті світу. Він завтра тренуватиметься з 11 до 15 години. Іван вже потренується, коли команда прийде на станцію.

LESSON 2   **SYSTEM SOFTWARE**

System software (or systems software) is an operating system designed to operate and control the computer hardware and to provide a platform for running application software.

Device drivers such as computer BIOS (Basic Input/Output System) and device firmware provide basic functionality to operate and control the hardware connected to or built into the computer. The operating system (prominent examples being z/OS, Microsoft_Windows, Mac OS X and Linux), allows the parts of a computer to work together by performing tasks like transferring data between memory and disks or rendering output onto a display_device. It also provides a platform to run high-level system software and application_software. Window systems are components of a graphical user interface (GUI), and more specifically of a desktop_environment, which supports the implementation of window managers, and provides basic support for graphics hardware, pointing devices such as mouse, and keyboards. The mouse cursor is also generally drawn by the windowing_system. Utility software helps to analyze, configure, optimize and maintain the computer.

Servers are computer programs running to serve the requests of other programs. The server performs some computational task on behalf of the software which may run on either the same computer or on other computers connected through a network.

In some publications, the term system software also includes software development tools (like a compiler, linker or debugger). In contrast to system software, software that allows users to do things like create text documents, play games, listen to music, or surf the web is called application_software.

VOCABULARY EXERCISES

Exercise 1. Find the English equivalents in the text:
Запуск додатків програмного забезпечення, базова система введення / виведення, вбудоване програмне забезпечення (мікропрограма), яскравий приклад, передача даних, надання вихідних даних, оточення робочого столу, підтримувати реалізацію, вказівні пристрої, інструменти розробки програмного забезпечення.

Exercise 2. Translate the following terms and terminological expressions:
To design, device drivers, BIOS, to provide basic functionality, GUI, graphics hardware, mouse cursor, utility software, to optimize and maintain the computer, to serve the requests of other programs, software development tools, compiler, linker, debugger.

Exercise 3. Match the definitions to the notions.

Device driver	an operating system designed to operate and control the computer hardware and to provide a platform for running application_software
Device firmware	all the computer software that causes a computer to perform useful tasks beyond the running of the computer itself
BIOS	a computer program that operates or controls a particular type of device that is attached to a computer
GUI	the combination of persistent memory and program code and data stored in it
Server	the first software run by a PC when powered on
System software	a type of user interface that allows users to interact with electronic devices using images rather than text commands
Application software	a system (software and suitable computer_hardware) that responds to requests across a computer network to provide, or help to provide, a network_service

Exercise 4. Ask your friends to answer these questions.
1) What is system software?
2) What provides basic functionality to operate and control the hardware?
3) What allows the parts of a computer to work together?
4) What is GUI?
5) What is the function of utility software?
6) What are servers?
7) What does the server perform?
8) What does system software include?
9) What is application software?

SPEAKING ENGLISH

Exercise 5. Read and discuss with your friends.

About Books (*after O. Wilde*)
Books, I believe, may be divided into three classes:
1) books to read;
2) books to re-read;
3) books not to read at all.
The third class is the most important. To tell people what to read is, as a rule, either useless or harmful. But to tell people what not to read is a very different matter.
It is indeed necessary in this age of ours, an age that reads so much, that it has no time to admire, and writes so much that it has no time to think. Whoever will select "The Worst Hundred Books" and publish a list of them will give the rising generation a real and lasting service.

Exercise 6. Answer the following questions:
1. Do you agree that there are three classes of books: books you must read, books you must re-read and books you must not read at all?
2. Which is the largest and the smallest class? Why?
3. How do you choose a book to read?
4. What books do you re-read?
5. How do you know what books not to read at all?
6. How can our age be characterized?
7. Do you agree that the list of the "Worst Hundred Books" may be useful?
8. What is the worst book in your opinion you have ever read?

GRAMMAR EXERCISES

Exercise 7. Express the same idea in one sentence instead of two by using the Present Perfect Continuous Tense:
Model: I began to do this exercise a quarter of an hour ago. I am still doing it. – I have been doing this exercise for a quarter of an hour.
1. My sister began to learn French two years ago. She is still learning it.
2. Our teacher began to teach English fifteen years ago. She is still teaching it.
3. I began to look for this magazine half an hour ago. I am still looking for it.
4. His father began to work at the railway station in 1985. He is still working there.
5. The boy fell asleep at ten o'clock. He is still sleeping.

Exercise 8. Put questions to the italicized words:
1. He has been playing chess since childhood.
2. His younger brother has been skating for an hour.
3. Mary has been looking after the baby since her mother went to the market.
4. We have been looking for you for half an hour.
5. Ann has been speaking over the telephone for the last ten minutes.

Exercise 9. Replace the infinitives in brackets by the Present Indefinite, Present Continuous, Present Perfect or Present Perfect Continuous Tense:
1. Where are the pupils? – They (to plant) trees. They (to plant) them since the morning. They always (to plant) trees in October. They already (to plant) several hundred trees this year.
2. Ann (to have) her music lesson now. She (to have) her music lessons twice a week.
3. I am going to take a walk. I (to do) all my home exercises already. I (to do) them for three hours.
4. Since when they (to build) this house?
5. At last I (to find) the book I need. I (to look) for it for a quarter of an hour.
6. Don't shout. Helen (to read) an English book. She (to work) at her English every day. She (to learn) this language for three years. She (to read) many English stories this year.
7. What you (to do) in the morning? What you (to do) since the morning?

LESSON 3   RAYS, ANGLES, TRIANGLES AND
                           QUADRILATERALS

1.   You certainly remember that by extending a line segment in only one direction we form a ray. 2. From what you already know you may deduce that drawing two rays originating from the same endpoint forms an angle. 3. Their common endpoint is the vertex of the angle. 4. Angles, though open figures, separate the plane into 3 distinct sets of points: the interior, the exterior, the angle.
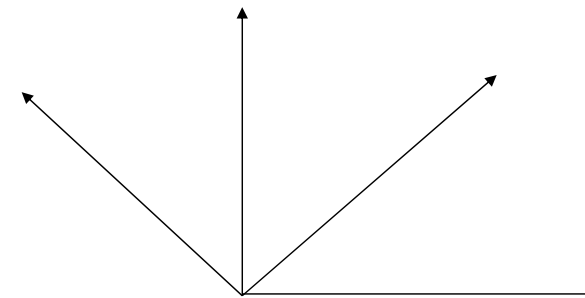
5. In the drawing above ray PA and ray PB form a right angle. 6. Since ray PC (except for point P) lies in the interior of angle APB, we speak of angle CPA being less than a right angle and call it an acute angle. 7. Since ray PD (except for point P) lies in the exterior of angle APB, we say that angle APD is greater than a right angle and call it an obtuse angle. 8. As far as triangles are concerned, they may be classified according to the measures of the angles and the measures of the sides.
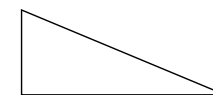
9.Triangle ABC is referred to as an equilateral triangle. 10. The sides of such a triagle all have the same linear measure. 11. Triangle DEF is called an isosceles triangle which means that its two sides have the same measure. 12. You can see it in the drawing above. 13. Triagle MKC being referred to as a right triangle means that it contains 1 right angle. 14. In triangle MKL, angle M is the right angle, sides MK and ML are called the legs, and side KL is called the hypotenuse. 15. The hypotenuse refers only to the side opposite to the right angle of a right triangle. 16. Quadrilaterals are geometric figures having four sides. 17. A parallelogram is a quadrilateral whose opposite sides are parallel. 18. Then the set of all parallelograms is a subset of all quadrilaterals. Why? 19. A rectangle is a

parallelogram in which all angles are right angles. 20. Therefore we can speak of the set of rectangles being a subset of the set of paralellograms. 21. A square is a rectangle having four congruent sides as well as four right angles. 22. A rhombus is a parallelogram in which the four sides are congruent. 23. Thus it is evident that opposite sides of a rhombus are parallel and congruent.

VOCABULARY EXERCISES

Exercise 1. Translate the following terms and terminological expressions:
To originate, an angle, though, right, to lie (lay, lain), acute, obtuse, a triangle, equilateral, isosceles, a leg, quadrilateral, a rectangle, evident, as well as.

Exercise 2. Find the English equivalents:
Кут, прямий, правий, правильний, гострий, трикутник, рівнобедрений, чотирьохсторонній, очевидний.

Exercise 3. Answer the following questions:
1) How many rays form an angle?
2) Into how many distinct sets of points do angles separate a plane?
3) According to what principle do we classify triangles?
4) What is an isosceles triangle?
5) What does the hypotenuse refer to?
6) What is a paralellogram?
7) How many sides of a square are congruent?

Exercise 4. Analyse and translate sentences 1, 9, 10, 14, 22 from the text (1).

Exercise 5. Describe the classification of triangles according to the measures of the angles and the measures of the sides.

Exercise 6. Read the words below. Use them in short phrases of your own.
Uncertain, to direct, formalization, deductive, separately, immeasurable, greatness, to lessen, rightness, classification, undefined.

Before you begin working with the text (2) "Euclidean and Non-Euclidean Geometries" read these words and guess their meaning

Postulate [ˈpɒsːjʊleɪt] *n*, variation, intuitively, diagonal [daɪˈægənl] *n*, ellipsoidal *n*, essentially [ɪˈsenʃ(ə)lɪ], paradoxical situation, reason [ˈriːz(ə)n] *n*, pseudospherical, deductive.

Read these notes:
at least – щонайменше
so-called – так званий
conclusions which may be drawn - висновки, які можна зробити

Read the text to get its general idea:

EUCLIDEAN AND NON-EUCLIDEAN GEOMETRIES

Without assumig that there exists at least one parallel to a given line through a point not on the given line we could not state the definition of the special quadrilaterals which have given pairs of parallel sides. Without the assumption that there exists no more than one parallel to a given line through a point not on the given line we could not deduce the conclusion we have stated for the special quadrilaterals. An important aspect of geometry (or any other area of mathematics) as a deductive system is that the conclusions which may be drawn are consequences of the assumptions which have been made. The assumptions made for the geometry we have been considering so far are essentially those made by Euclid in Elements. We know of Lobachevski and Bolyai having assumed independently of one another that through a given point not on a given line there is more than one line parallel to the given line. Riemann assumed that through a given point not on a given line there is no line parallel to the given line.

These variations of the parallel postulate have led to the creation of non-Euclidean geometries which are as internally consistent as Euclidean geometry. However, the conclusions drawn in non-Euclidean geometries are often completely inconsistent with Euclidean conclusions. For example, according to Euclidean geometry parallelograms and rectangles (in the sense of a parallelogram with four 90-degree angles) exist; according to the geometries of Lobachevski and Bolyai parallelograms exist but rectangles do not; according to the geometry of Riemann neither parallelograms nor rectangles exist. It should be borne in mind that the conclusions of non-Euclidean geometry are just as valid as those of Euclidean geometry, even though the conclusions of non-Euclidean geometry contradict those of Euclidean geometry. This paradoxical situation becomes intuitively clear when one realizes that any deductive system begins with undefined terms. Although the mathematician forms intuitive images of the concepts to which the undefined terms refer, these images are not logical necessities. That is, the reason for forming these intuitive images is only to help our reasoning within a certain deductive system.

Exercise 8. Now that you have read the text above, look throught it again and say what its main point is. Into how many logical parts (paragraphs) could you divide the text?

SPEAKING ENGLISH

Exercise 9. Answer the following questions about your vacations:
1) When do you usually have your vacation?
2) When does your vacation begin?
3) How long does your vacation last?
4) What sports do you go in for?

5) What games do you prefer?
6) What places do you visit?
7) What excursions do you take part in?
8) Have you ever been abroad?
9) What foreign countries do you want to visit?
10) What climate do you prefer?

Exercise 10. Speak about your last vacation.

Exercise 11. Read the story.

Oysters for the Horse

On a very cold day, a man travelling on horseback came to a country inn, and, after leaving his horse in the stable, went in. He was longing to warm himself, but the room being full of people, he could not get near t he fire. On seeing this he said to the innkeeper: "Please, give some oysters to my horse!"

"Why, your horse will never eat oysters!" said the innkeeper surprised.
"Do as I ask you, please!" replied the traveller.

The people hearing this ran out immediately to the stable to see the horse eat oysters.

The traveller having now the whole room to himself, took the best seat near the fire. After a few minutes the innkeeper returned, crying out, "I was sure that your horse would not touch the oysters, and he didn't!"

"Never mind," replied the traveller. "In this case I suppose I must eat them myself. Give them to me!"

Exercise 12. Form 6 questions on the story and ask your friend to answer them.

GRAMMAR EXERCISES

Exercise 13. Turn the following into the Past Perfect Continuous, adding other words indicating a past moment as in the model:

Model: I have been waiting for you for half an hour. – I had been waiting for you for half an hour when you came.

1. I have been packing my things for an hour and a half.
2. He has been working in the laboratory for two years.
3. They have been quarrelling for a long time.
4. The children have been skating for an hour.
5. He has been wearing this suit for a year.
6. My brother has been serving in the army for two years.

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Exercise 14. Translate into English:

1. Коли я увійшов в аудиторію, студенти обговорювали план екскурсії. Вони обговорювали його вже 20 хвилин.
2. Коли Ольга закінчила інститут, її сестра вже 5 років викладала англійську мову.
3. Його батьки залишили квартиру, в якій вони прожили двадцять років.
4. Я шукав свій зошит півгодини, перш ніж знайшов його під газетою.
5. Вчора листоноша приніс мені лист. Я чекав на нього три тижні.
6. Коли ми вийшли з дому, йшов дощ. Він ішов уже дві години.

Exercise 15. Use the verb in brackets in correct tense form and read the dialogue:

- What you (to do) now?
- I (to write) a letter.
- How long you (to write) it?
- I (to write) it for half an hour.
- You (to write) it when I rang you up?
- Yes, I (to be).
- How long you (to write) the letter when I rang you up?
- I (to write) it for ten minutes by that time.
- By what time you (to write) it?
- I hope I (to write) it by six o'clock.

LESSON 4   **EMBEDDED SOFTWARE**

Embedded software is computer software, written to control machines or devices that are not typically thought of as computers. It is typically specialized for the particular hardware that it runs on and has time and memory constraints. This term is sometimes used interchangeably with firmware, although firmware can also be applied to ROM-based code on a computer, on top of which the OS runs, whereas embedded software is typically the only software on the device in question.

Manufacturers 'build in' embedded software in the electronics in cars, telephones, modems, robots, appliances, toys, security systems, pacemakers, televisions and set-top boxes, and digital watches, for example. This software can be very simple, such as lighting controls running on an 8-bit microprocessor and a few kilobytes of memory, or can become very sophisticated in applications such as airplanes, missiles, and process control systems.

Unlike standard computers that use only a few operating systems (MacOS, Windows and to some extent, Linux), embedded software comes in a wide variety of operating systems, typically a real-time operating system.

Most consumers are familiar with Application software that provide functionality on a computer. Embedded software however is often less visible, but no less complicated. Unlike application software, embedded software has fixed

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hardware requirements and capabilities, addition of 3rd-party hardware or software is strictly controlled.

Embedded software needs to include all needed device drivers at manufacturing time, and the device drivers are written for the specific hardware. The software is highly dependent on the CPU and specific chips chosen. Most embedded software engineers have at least a passing knowledge of reading schematics, and reading data sheets for components to determine usage of registers and communication system.

VOCABULARY EXERCISES

Exercise 1. **Find the English equivalents in the text**:
Конкретне устаткування (апаратне забезпечення), обмеження у пам'яті, використовуватися як синонім (взаємозамінно), постійний запам'ято-вувальний пристрій, прилад, кардіостимулятор, приставка, уравління освітленням, ракети, на відміну від, певною мірою, фіксовані вимоги до апаратного забезпечення, час виробництва (виготовлення), бути у значній мірі залежним від.

Exercise 2. **Translate the following terms and terminological expressions**:
Firmware, ROM-based code, to build in, security system, digital watch, real-time operating system, a consumer, to be strictly controlled, device driver, reading data sheets, to determine usage of registers.

Exercise 3. **Match the definitions to the notions**.

Pacemaker	the combination of persistent memory and program code and data stored in it
Microprocessor	a medical device that uses electrical impulses, delivered by electrodes contacting the heart muscles, to regulate the beating of the heart
ROM	multipurpose, programmable device that accepts digital data as input, processes it according to instructions stored in its memory, and provides results as output
Embedded software	a class of storage medium used in computers and other electronic devices
Firmware	computer software, written to control machines or devices that are not typically thought of as computers

Exercise 4. **Answer the following questions**:
1) What is embedded software?
2) What is firmware?
3) Where do manufacturers build in embedded software?
4) Is this software simple or sophisticated?
5) What operating systems does embedded software come in?
6) What does embedded software have unlike application software?
7) What does embedded software need to include?
8) What is embedded software highly dependent on?

Exercise 5. **Read the information and put 4 questions to your friends**.
Web applications are rarely used, although XML files and other output may be passed to *a* computer for display. File systems with folders are typically absent as are SQL databases.

Software development requires use of a cross_compiler, which runs on a computer but produces executable code for the target device. Debugging requires use of an in-circuit emulator, JTAG or SWD. Software developers often have access to the complete kernel (OS) source code.

Size of the storage memory and RAM can vary significantly. Some systems run in 16 KB of Flash and 4 KB of RAM with a CPU operating at 8MHz, other systems can rival contemporary computers. These space requirements lead to more work being done in C or embedded C++, instead of C++. Interpreted languages like BASIC and Java are not used.

SPEAKING ENGLISH

Exercise 6. **Practise the dialogue with your friend**.
Supper
- At what time do you usually have your supper?
- Well, I usually have my supper at seven o'clock.
- What do you have for supper?
- I eat either a slice of meat with some vegetables, or some meat salad, or a sausage sandwich, or some pudding and then I have a glass of tea with a piece of pie.
- Do you like your tea strong or weak?
- I don't have strong tea in the evening. And what about you?
- As for me, I eat almost nothing in the evening as I dine rather late.
- What does your supper consist of then?
- Oh, nothing substantial. It consists only of two cups of tea with milk and some toast or bread and butter. Sometimes I take either a cheese or a ham sandwich with my tea.

Exercise 7. **Make up a dialogue about your dinner or breakfast**.

Exercise 8. **Read the story**.
"**No**, **thank you**"
When supper was served Helen refused a second helping of ice-cream with a polite but rather wistful, "No, thank you." "Do have some more, dear!" her hostess insisted. "Mother told me to say "No, thank you," when I am offered a second helping," Helen explained. "But I don't think she could have known how small the first helping was going to be."

Exercise 9. Answer the following questions:

1) Was ice-cream served at supper?
2) Did Helen refuse to have a second helping?
3) Did the hostess insist on Helen's having some more ice-cream?
4) Why did Helen refuse a second helping?
5) Could her mother have known how small the first helping was going to be?
6) Was Helen's mother pleased with her daughter's behaviour?

Exercise 10. Retell the story.

GRAMMAR EXERCISES

Exercise 11. Transform the Active Voice into Passive:

1. They sent for a doctor.
2. They looked for the book everywhere.
3. They listened to the lecture with great interest.
4. They always look at this picture.
5. They will look through these letters tomorrow.
6. They often laughed at him.

Exercise 12. Change the following into the Passive Voice. Leave out the subject of the action.

1. The girls water the flowers every day.
2. They publish this magazine in Paris.
3. We do not discuss such questions at our meeting.
4. Somebody built this castle in the 16th century.
5. They did not show this film last week.
6. They will not finish this work tomorrow.
7. We shall invite him to take part in the concert.
8. The workers repaired this road last year.
9. They write compositions regularly.
10. The travellers made camp not far from the village.

Exercise 13. Change the following into the Passive Voice, without leaving out the subject of the action.

1. My sister teaches me English.
2. Peter drives the car.
3. The fascists killed her father.
4. His assistant will meet the delegation.
5. Alan opened the door.
6. He put the letter in the envelope.
7. The hunter killed the bear.
8. The guide showed us the monuments of Lviv.
9. The waitress offered me a cup of tea.
10. He showed me the way to the railway station.

LESSON 1   ANNOTATION

Exercise 1. Read, translate and remember the following sentences for the annotation of the article.

1. I have read the article in … ("Digest", "Art News").
2. It is … (Ukrainian, British, American) … (newspaper, magazine, journal).
3. The title of the article is …
4. The author of the article is …
5. The article considers the problem of …
6. It gives … (facts, photos, diagrams, schemes).
7. The author points out that …
8. The article draws the readers' attention to the fact that …
9. The author stresses that …
10. The key problem of the article is …
11. To my mind, … .
12. The article is worth reading because the problem discussed in the article is of great interest (informative, of good use).

Exercise 2. Read and translate the text.

Linux or GNU/Linux is a free and open source software operating system for computers. The operating system is a collection of the basic instructions that tell the electronic parts of the computer what to do and how to work. Free and open source software (FOSS) means that everyone has the freedom to use it, see how it works, and change it.

There is a lot of software for Linux, and since Linux is free software it means that none of the software will put any license restrictions users. This is one of the reasons why many people like to use Linux.

In the 1980s, many people liked to use an operating system called Unix. But because it restricted the user from sharing and improving the system, some people made a new operating system that would work like Unix but which anybody could share or improve. MINIX, similar to Unix, was used as a teaching tool for university students to learn how operating systems worked. MINIX also restricted its sharing and improvement by its users.

A group of people called the GNU project wrote different parts of a new operating system called GNU, but it did not have all the parts an operating system needs to work. In 1991 Linus Torvalds began to work on a replacement for MINIX that would be free to use, and which would not cost anything. Linus started the project when he was attending the University of Helsinki. This eventually became the Linux kernel.

Linus Torvalds shared the Linux kernel on some internet groups for MINIX users. Linus first called the operating system "Freax". The name Freax came from

joining up the English words "free" and "freak", and adding an X to the name because Unix has an X in its name. Ari Lemmke, who worked with Linus at the University, was responsible for the servers that Freax was stored on. Ari did not think Freax was a good name, so he called the project "Linux" without asking Linus. Later, Linus agreed that Linux was a better name for his project.

Linux relied on software code from MINIX at first. But, with code from the GNU system available for free, it would be good for Linux if it could use that code, instead of code from MINIX. The GNU General Public License is a software license that lets people change any part of the code they want to, as long as they share any changes they make with the people they give their software to. The software from GNU was all licensed under the GNU General Public License, so Linus and the other people who worked on Linux could use it too.

To make the Linux kernel suitable for use with the code from the GNU Project, Linus Torvalds started a switch from his original license (which did not allow people to sell it) to the GNU GPL. Linux and GNU developers worked together to integrate GNU code with Linux to make a free operating system.

Since 1991, thousands of programmers and companies have worked to make Linux better.

Exercise 3. Form 8 questions on the text.

Exercise 4. Make an annotation of the article.

PTOLEMY I SOTER

From Wikipedia, the free encyclopedia

Ptolemy I Soter I (Ancient Greek: Πτολεμαῖος Σωτήρ, Ptolemaîos Sōtḗr, i.e. Ptolemy (pronounced /ˈtɒləmi/) the Savior), also known as Ptolemy Lagides, c. 367 BC – c. 283 BC, was a Macedonian general under Alexander the Great, who became ruler of Egypt (323–283 BC) and founder of both the Ptolemaic Kingdom and the Ptolemaic Dynasty. In 305/4 BC he took the title of pharaoh.

His mother was Arsinoe of Macedon, and, while his father is unknown, ancient sources variously describe him either as the son of Lagus, a Macedonian nobleman, or as an illegitimate son of Philip II of Macedon (which, if true, would have made Ptolemy the half-brother of Alexander). Ptolemy was one of Alexander's most trusted generals, and was among the seven somatophylakes (bodyguards) attached to his person. He was a few years older than Alexander, and had been his intimate friend since childhood.

He was succeeded by his son Ptolemy II Philadelphus.

Ptolemy served with Alexander from his first campaigns, and played a principal part in the later campaigns in Afghanistan and India. He participated in the Battle of Issus and accompanied Alexander during his journey to the Oracle in the Siwa Oasis where he was proclaimed a son of Zeus. Ptolemy had his first independent command during the campaign against the rebel Bessus whom Ptolemy captured and handed over to Alexander for execution. During Alexander's campaign in the Indian subcontinent Ptolemy was in command of the advance guard at the siege of Aornos and fought at the Battle of the Hydaspes River.
Successor of Alexander

When Alexander died in 323 BC, Ptolemy is said to have instigated the resettlement of the empire made at Babylon. Through the Partition of Babylon, he was appointed satrap of Egypt, under the nominal kings Philip III Arrhidaeus and the infant Alexander IV; the former satrap, the Greek Cleomenes, stayed on as his deputy. Ptolemy quickly moved, without authorization, to subjugate Cyrenaica.

By custom, kings in Macedonia asserted their right to the throne by burying their predecessor. Probably because he wanted to pre-empt Perdiccas, the imperial regent, from staking his claim in this way, Ptolemy took great pains in acquiring the body of Alexander the Great, placing it temporarily in Memphis, Egypt. Ptolemy then openly joined the coalition against Perdiccas.

Perdiccas appears to have suspected Ptolemy of aiming for the throne himself, and may have decided that Ptolemy was his most dangerous rival. Ptolemy executed Cleomenes for spying on behalf of Perdiccas — this removed the chief check on his authority, and allowed Ptolemy to obtain the huge sum that Cleomenes had accumulated.

In 321 BC, Perdiccas attempted to invade Egypt only to fall at the hands of his own men. Ptolemy's decision to defend the Nile against Perdiccas's attempt to force it ended in fiasco for Perdiccas, with the loss of 2000 men. This failure was a fatal blow to Perdiccas' reputation, and he was murdered in his tent by two of his subordinates. Ptolemy immediately crossed the Nile, to provide supplies to what had the day before been an enemy army. Ptolemy was offered the regency in place of Perdiccas; but he declined. Ptolemy was consistent in his policy of securing a power base, while never succumbing to the temptation of risking all to succeed Alexander.

In the long wars that followed between the different Diadochi, Ptolemy's first goal was to hold Egypt securely, and his second was to secure control in the outlying areas: Cyrenaica and Cyprus, as well as Syria, including the province of Judea. His first occupation of Syria was in 318, and he established at the same time a protectorate over the petty kings of Cyprus. When Antigonus One-Eye, master of Asia in 315, showed dangerous ambitions, Ptolemy joined the coalition against him, and on the outbreak of war, evacuated Syria. In Cyprus, he fought the partisans of Antigonus, and re-conquered the island (313). A revolt in Cyrene was crushed the same year.

LESSON 2 · **ANDROID**

Exercise 1. Read and translate the text.

Android is a Linux-based operating system designed primarily for touchscreen mobile devices such as smartphones and tablet computers. Initially developed by Android, Inc., which Google backed financially and later bought in 2005, Android was unveiled in 2007 along with the founding of the Open_Handset_Alliance: a consortium of hardware, software, and telecommunication companies devoted to advancing open standards for mobile devices. The first Android-powered phone was sold in October 2008.

Android is open source and Google releases the code under the Apache License. This open source code and permissive licensing allows the software to be freely modified and distributed by device manufacturers, wireless carriers and enthusiast developers. Additionally, Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in a customized version of the Javaprogramming language. In October 2012, there were approximately 700,000 apps available for Android, and the estimated number of applications downloaded from Google_Play, Android's primary app store, was 25 billion.

These factors have contributed towards making Android the world's most widely used smartphone platform, overtaking Symbian in the fourth quarter of 2010, and the software of choice for technology companies who require a low-cost, customizable, lightweight operating system for high tech devices without developing one from scratch. As a result, despite being primarily designed for phones and tablets, it has seen additional applications on televisions, games consoles, digital cameras and other electronics. Android's open nature has further encouraged a large community of developers and enthusiasts to use the open source code as a foundation for community-driven projects, which add new features for advanced users or bring Android to devices which were officially released running other operating systems.

Android had a worldwide smartphone market share of 75% during the third quarter of 2012, with 750 million devices activated in total and 1.5 million activations per day. The operating system's success has made it a target for patent litigation as part of the so-called "smartphone_wars" between technology companies. As of May 2013, a total of 900 million Android devices have been activated and 48 billion apps have been installed from the Google Play store.

Exercise 2. Form 7 questions on the text.

Exercise 3. Make an annotation of the article.

PYTHAGORAS
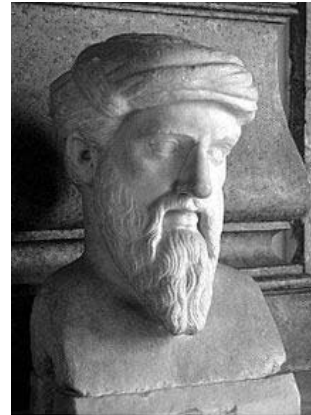
Pythagoras of Samos (Ancient Greek: Πυθαγόρας ὁ Σάμιος [Πυθαγόρης in Ionian Greek] Pythagóras ho Sámios "Pythagoras the Samian", or simply Πυθαγόρας; b. about 570 – d. about 495 BC) was an Ionian Greek philosopher, mathematician, and founder of the religious movement called Pythagoreanism. Most of the information about Pythagoras was written down centuries after he lived, so very little reliable information is known about him. He was born on the island of Samos, and might have travelled widely in his youth, visiting Egypt and other places seeking knowledge. Around 530 BC, he moved to Croton, a Greek colony in southern_Italy, and there set up a religious sect. His followers pursued the religious rites and practices developed by Pythagoras, and studied his philosophical theories. The society took an active role in the politics of Croton, but this eventually led to their downfall. The Pythagorean meeting-places were burned, and Pythagoras was forced to flee the city. He is said to have died in Metapontum.

Pythagoras made influential contributions to philosophy and religious teaching in the late 6th century BC. He is often revered as a great mathematician, mystic and scientist, but he is best known for the Pythagorean theorem which bears his name. However, because legend and obfuscation cloud his work even more than that of the other pre-Socratic_philosophers, one can give only a tentative account of his teachings, and some have questioned whether he contributed much to mathematics and natural_philosophy. Many of the accomplishments credited to Pythagoras may actually have been accomplishments of his colleagues and successors. Whether or not his disciples believed that everything was related to mathematics and that numbers were the ultimate reality is unknown. It was said that he was the first man to call himself a philosopher, or lover of wisdom, and Pythagorean ideas exercised a marked influence on Plato, and through him, all of Western_philosophy

LESSON 3 **MICROSOFT WINDOWS**

Exercise 1. Read and translate the text.
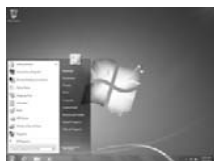
Microsoft Windows is a popular operating system software for computers. Windows is made by the Microsoft company. Almost 90% of desktop and laptop computers have Windows installed (included). The newest version of Windows is Windows_8. Most newly bought personal computers have Windows 8 installed. Some cheaper computers have older versions of Windows included.

In November 20, 1985 "Microsoft Windows version 1.0" went on sale. Windows 7 went on sale in October, 2009.

Windows makes it easier to run programs (applications) than DOS did. It also helps people keep their files safe and in order.

Some programs are included with Windows. Some examples:

Wordpad - to write simple documents

Photo viewer - to look at pictures

Paint - to make simple drawings

Internet Explorer Web browser - to use the Internet to look at web pages and read e-mail and get applications from the World Wide Web.

Windows Media Player - to listen to music and watch videos.

Many new applications are available that are not included with Windows. Some popular applications are games, word processors (to write letters) or add-on programs like Adobe Flash Player (to watch video clips on websites). Adding new applications to Windows is called "installing". Applications can be bought on a CD or DVD. Applications can also be downloaded from the Internet, sometimes for free.

Exercise 2. Form 6 questions on the text.

Exercise 3. Make an annotation of the article.

LEOPOLD KRONECKER

From Wikipedia, the free encyclopedia
Grave of Kronecker (St Matthäus, Berlin)

Leopold Kronecker (December 7, 1823 – December 29, 1891) was a German mathematician who worked on number theory and algebra. He criticized Cantor's work on set theory, and was quoted by Weber (1893) as having said, "God made natural numbers; all else is the work of man". Kronecker was a student and lifelong friend of Ernst Kummer.

Leopold Kronecker was born on 7 December 1823 in Liegnitz, Prussia (now Legnica, Poland) in a wealthy Jewish family. His parents, Isidor and Johanna (née Prausnitzer), took care of their children's education and provided them private tutoring at home - Leopold's younger brother Hugo Kronecker would also follow a scientific path later becoming a notable physiologist.

Kronecker then went to the Liegnitz Gymnasium where he was interested in a wide range of topics including science, history and philosophy, while also practicing gymnastics and swimming. At the gymnasium he was taught by Ernst Kummer, who noticed and encouraged the boy's interest in mathematics.

In 1841 Kronecker became a student at the University of Berlin where his interest did not immediately focus on mathematics, but rather spread over several subjects including astronomy and philosophy. He spent the summer of 1843 at the University of Bonn studying astronomy and 1843–44 at the University of Breslau following his former teacher Kummer. Back in Berlin, Kronecker studied mathematics with Peter Gustav Lejeune Dirichlet and in 1845 defended his dissertation in algebraic number theory written under Dirichlet's supervision.

After obtaining his degree, Kronecker did not follow his interest in research on an academic career path. He went back to his hometown to manage a large farming estate built up by his mother's uncle, a former banker. In 1848 he married his cousin Fanny Prausnitzer, and the couple had six children. For several years Kronecker focused on business, and although he continued to study mathematics as a hobby and corresponded with Kummer, he published no mathematical results. In 1853 he wrote a memoir on the algebraic solvability of equations extending the work of Évariste Galois on the theory_of equations.

Due to his business activity, Kronecker was financially comfortable, and thus he could return to Berlin in 1855 to pursue mathematics as a private scholar. Dirichlet, whose wife Rebecka came from the wealthy Mendelssohn_family, had introduced Kronecker to the Berlin elite. He became a close friend of Karl Weierstrass, who had recently joined the university, and his former teacher Kummer who had just taken over Dirichlet's mathematics chair. Over the following years Kronecker published numerous papers resulting from his previous years' independent research. As a result of this published research, he was elected a member of the Berlin Academy in 1861.

Although he held no official university position, Kronecker had the right as a member of the Academy to hold classes at the University of Berlin and he decided to do so, starting in 1862. In 1866, when Riemann died, Kronecker was offered the mathematics chair at the University of Göttingen (previously held by Carl Gauss and Dirichlet), but he refused, preferring to keep his position at the Academy. Only in 1883, when Kummer retired from the University, was Kronecker invited to succeed him and became an ordinary professor. Kronecker was the supervisor of Kurt_Hensel, Adolf_Kneser, Mathias_Lerch, and Franz Mertens, amongst others.

His philosophical view of mathematics put him in conflict with several mathematicians over the years, notably straining his relationship with Weierstrass, who almost decided to leave the University in 1888. Kronecker died on 29 December 1891 in Berlin, several months after the death of his wife. In the last year of his life, he converted to Christianity. He is buried in the Alter St Matthäus Kirchhof cemetery in Berlin-Schöneberg, close to Gustav_Kirchhoff

LESSON 4 **INTERNET EXPLORER**

Exercise 1. Read and translate the text.

Internet Explorer (formerly Microsoft Internet Explorer and Windows Internet Explorer, commonly abbreviated IE or MSIE) is a series of graphical web browsers developed by Microsoft and included as part of the Microsoft Windows line of operating_systems, starting in 1995. It was first released as part of the add-on package Plus! for Windows 95 that year. Later versions were available as free downloads, or in service_packs, and included in the OEM service releases of Windows 95 and later versions of Windows.

Internet Explorer is one of the most widely used web browsers, attaining a peak of about 95% usage share during 2002 and 2003. Its usage share has since declined with the launch of Safari (2003), Firefox (2004), and Google Chrome (2008), each of which now has significant market share. Estimates for Internet Explorer's overall market share range from 27.4% to 54.13%, as of October 2012 (browser market share is notoriously difficult to calculate). Microsoft spent over US$100 million per year on Internet Explorer in the late 1990s, with over 1000 people working on it by 1999.

Since its first release, Microsoft has added features and technologies such as basic table display (in version_1.5); XMLHttpRequest (inversion 5), which aids creation of dynamic_web_pages; and Internationalized Domain Names (in version 7), which allow Web sites to have native-language addresses with non-Latin characters. The browser has also received scrutiny throughout its development for use of third-party technology (such as the source code of Spyglass_Mosaic, used without royalty in early versions) and security and privacyvulnerabilities, and both the United States and the European Union have alleged that integration of Internet Explorer with Windows has been to the detriment of other browsers.

Exercise 2. Form 7 questions on the text.

Exercise 3. Make an annotation of the article.

HERMANN WEYL

Hermann Klaus Hugo Weyl, ForMemRS (German: [vaɪl]; 9 November 1885 – 8 December 1955) was a German mathematician, theoretical physicist and philosopher. Although much of his working life was spent in Zürich, Switzerland and then Princeton, he is associated with the University of Göttingen tradition of mathematics, represented by David Hilbert and Hermann_Minkowski. His research has had major significance for theoretical physics as well as purely mathematical disciplines including number_theory. He was one of the most influential mathematicians of the twentieth century, and an important member of the Institute for Advanced Study during its early years.

Weyl published technical and some general works on space, time, matter, philosophy, logic, symmetry and the history_of_mathematics. He was one of the first to conceive of combining general relativity with the laws of electromagnetism. While no mathematician of his generation aspired to the 'universalism' of Henri Poincaré or Hilbert, Weyl came as close as anyone. Michael_Atiyah, in particular, has commented that whenever he examined a mathematical topic, he found that Weyl had preceded him (The Mathematical Intelligencer (1984), vol.6 no.1).

Weyl was born in Elmshorn, a small town near Hamburg, in Germany, and attended the gymnasium Christianeum in Altona.

From 1904 to 1908 he studied mathematics and physics in both Göttingen and Munich. His doctorate was awarded at the University of Göttingen under the supervision of David Hilbert whom he greatly admired.

In September 1913 in Göttingen, Weyl married Friederike Bertha Helene Joseph (March 30, 1893 – September 5, 1948) who went by the name Helene (nickname "Hella"). Helene was a daughter of Dr. Bruno Joseph (December 13, 1861 – June 10, 1934), a physician who held the position of Sanitätsrat in Ribnitz-Damgarten, Germany. Helene was a philosopher (she was a disciple of phenomenologist Edmund_Husserl) and also a translator of Spanish literature into German and English (especially the works of Spanish philosopher José_Ortega_y Gasset). It was through Helene's close connection with Husserl that Hermann became familiar with (and greatly influenced by) Husserl's thought. Hermann and Helene had two sons, Fritz Joachim Weyl (February 19, 1915 – July 20, 1977) and Michael Weyl (September 15, 1917 – March 19, 2011), both of whom were born in Zürich, Switzerland. Helene died in Princeton, New Jersey on September 5, 1948. A memorial service in her honor was held in Princeton on September 9, 1948. Speakers at her memorial service included her son Fritz Joachim Weyl and mathematicians Oswald Veblen (1880-1960) and Richard Courant (1888-1972). In 1950 Hermann married sculptress Ellen Bär (née Lohnstein) (April 17, 1902 – July

14, 1988), who was the widow of professor Richard Josef Bär (September 11, 1892 – December 15, 1940) of Zürich.

After taking a teaching post for a few years, Weyl left Göttingen for Zürich to take the chair of mathematics at the ETH Zurich, where he was a colleague of Albert Einstein, who was working out the details of the theory of general relativity. Einstein had a lasting influence on Weyl, who became fascinated by mathematical physics. In 1921 Weyl met Erwin Schrödinger (1887-1961), a theoretical physicist who at the time was a professor at the University of Zürich. They were to become close friends over time. Weyl had some sort of childless love affair with Erwin's wife Annemarie (Anny) Schrödinger (née Bertel) (December 31, 1896 – October 3, 1965), while at the same time Anny was helping raise an illegitimate daughter of Erwin's named Ruth Georgie Erica March, who was born in 1934 in Oxford, England.
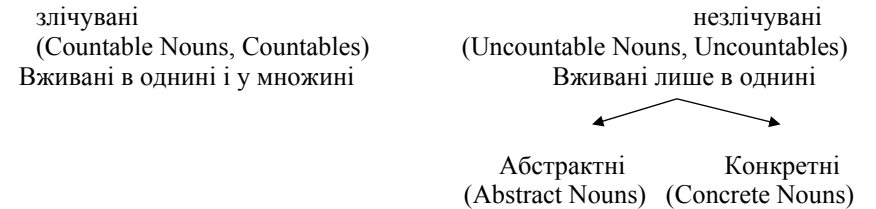
Weyl left Zürich in 1930 to become Hilbert's successor at Göttingen, leaving when the Nazis assumed power in 1933, particularly as his wife was Jewish. He had been offered one of the first faculty positions at the new Institute for Advanced Study in Princeton, New Jersey, but had declined because he did not desire to leave his homeland. As the political situation in Germany grew worse, he changed his mind and accepted when offered the position again. He remained there until his retirement in 1951. Together with his second wife Ellen, he spent his time in Princeton and Zürich, and died from a heart attack on December 8, 1955 while living in Zürich.

Hermann Weyl was cremated in Zurich on December 12, 1955. His cremains remained in private hands until 1999, at which time they were interred in an outdoor columbarium vault in the Princeton Cemetery (aka the Princeton Cemetery of Nassau Presbyterian Church), located at 29 Greenview Avenue, Princeton (Mercer County), New Jersey. The cremains of Hermann's son Michael Weyl (1917–2011) are interred right next to Hermann's ashes in the same columbarium vault in the Princeton Cemetery.

Weyl was a pantheist.

ГРАМАТИЧНИЙ ДОВІДНИК

ІМЕННИК
(Noun)

злічувані
(Countable Nouns, Countables)
Вживані в однині і у множині

незлічувані
(Uncountable Nouns, Uncountables)
Вживані лише в однині

Абстрактні
(Abstract Nouns)

Конкретні
(Concrete Nouns)

Утворення множини англійських іменників відбувається шляхом додавання закінчення **-(e)s** до їхньої основи.

Правила вимови –(e)s:

/ s /   / z /   / ɪz /

Після глухих приголосних крім / s /, / ʃ /, / tʃ /	Після голосних і дзвінких приголосних крім / z /, / ʒ /, / dʒ /	Після свистячих / s /, / z /, / ʃ /, / ʒ /, / tʃ /, / dʒ /
A dot – dots	a dog – dogs	a dress – dresses
a rose – roses
a fish – fishes
a garage – garages
a watch – watches
a change – changes

Правила правопису –(e)s:
1. Після **–s, -ss, -sh, -ch, -tch, -x**:
a bus – buses
a glass – glasses
a bush – bushes
a bench – benches
a patch – patches
a fox - foxes

2. Після **y**, якій передує голосний (**y** змінюється на **i**):
a sky – skies

a story – stories
But: *Mary – Marys*

До **y**, якій передує голосний, додається **–s**:
a day – days
a toy – toys

3. Після **o**, якому передує приголосний:
a tomato – tomatoes
a hero – heroes
But: *a photo – photos*
a solo – solos
a piano – pianos
But: *a moskito – moskitos – moskitoes*

До **o**, якій передує голосний, додається **–s**:
a leo – leos

Окремі випадки утворення множини іменників:

1. Лише у наступних словах **f** змінюється на **v** із додаванням **–(e)s**:
a wife – wives
a shelf – shelves
a wolf – wolves
a half – halves
a calf – calves
a leaf – leaves
a knife – knives
a life – lives
a sheaf – sheaves
a thief – thieves

У решті випадків до **f(e)** додається **–s**:
a safe – safes
a kerchief – kerchiefs
a roof – roofs
a handkerchief – handkerchiefs
But: *a scarf – scarfs – scarves*
a wharf – wharfs – wharves

2. Лише у наступних словах утворення форм множини відбувається зміною кореневої голосної:
a man – men
a woman – women
a goose – geese
a mouse – mice
a foot – feet
a tooth – teeth
a louse – lice

3. Форма множини іменнику **house** утворюється окремим чином:
a house – houses

4. Після дифтонгу або довгого голосного / θ /, який передається **th**, змінюється на / ð /, після якого закінчення s вимовляється / z /:
a path – paths
a mouth – mouths

5. Після короткого голосного або приголосного **th** вимовляється / θ /, додається закінчення **s**, яке вимовляється / s /:
a death – deaths
a tenth – tenths

6. Форми множини іменників *child*, *ox* утворюються окремим чином:
a child – children
an ox – oxen

7. Іменник *brother* крім форми множини *brothers* має іще форму множини *brethren*, яка позначає «братство».

8. Іменник *cow* крім форми множини *cows* міє іще форму множини *kine*, яка вживається у поезії.

9. Лише наступні іменники мають однакову форму однини і множини:
a deer – deer
a fish – fish
*a swine – **swine***
a sheep – sheep
a trout – trout
a fruit – fruit

Іменники *fish*, *fruit* набувають форми множини, коли йдеться про різні сорти риби (фруктів):
But: *a fish – fishes*
a fruit – fruits

10. Іменники грецького та латинського походження зберігають форми однини і множини мови-джерела:
a radius – radii
a phenomenon – phenomena
a crisis – crises

11. У складних словах закінчення множини додається до основи іменнику:
a brother-in-law – brothers-in-law
But: *a lady-bird – lady-birds*

12. У складних словах без іменнику закінчення множини додається до останнього слова:
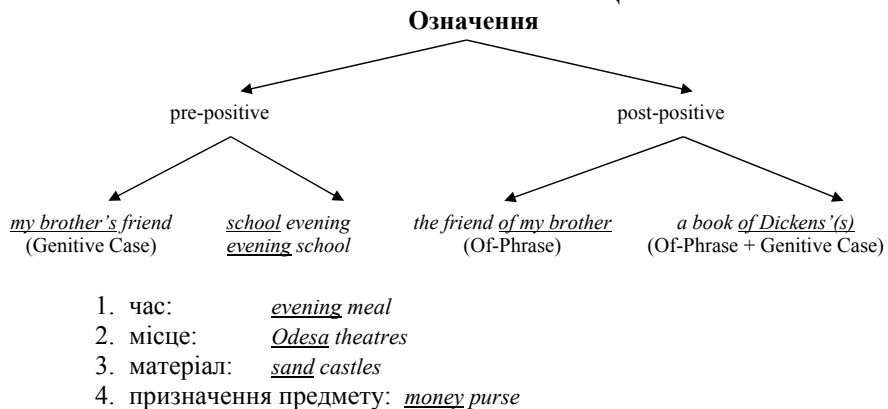*a forget-me-not – forget-me-nots*
a merry-go-round – merry-go-rounds

13. Існують іменники, які вживаються лише в однині в англійській та українській мовах; лише в однині в англійській та в однині і/або множині в українській мові; лише у множині в українській та англійській мовах та лише у множині в англійській та в однині і/або множині в українській мові:

Лише в однині в англійській та українській мовах	Лише в однині в англійській та в однині і/або множині в українській мові	Лише у множині в українській та англійській мовах	Лише у множині в англійській та в однині і/або множині в українській мові
Назви речовин		Назви речей, що складаються із 2 частин	
milk *water* *sugar* *sand* *earth*	*money* – гроші *knowledge* – знання *information* – інформація *advice* – порада, поради *progress* – успіх, успіхи *news* – новина, новини	*Tongs* *scissors* *spectacles* *trousers*	*goods* – товар, товари *wages* - зарплатня

ВЖИВАННЯ ІМЕННИКА У ФУНКЦІЇ ОЗНАЧЕННЯ

Означення

pre-positive — post-positive

my brother's friend (Genitive Case)
school evening / evening school
the friend of my brother (Of-Phrase)
a book of Dickens'(s) (Of-Phrase + Genitive Case)

1. час: *evening* meal
2. місце: *Odesa* theatres
3. матеріал: *sand* castles
4. призначення предмету: *money* purse

Означення

Subject	object
feminists movement	*paper production*

Більше одного означення:
self service canteen
post office paper boy

Іменник (Noun)

Загальний відмінок (Common Case) ← → Присвійний відмінок (Genitive Case)

Українська мова — **Англійська мова**

1. Називний відмінок — загальний відмінок

2. Родовий — загальний + *of*
the back of the chair

3. Давальний — загальний + *to/for*
I gave the ticket to my daughter.
Father bought a TV set for his son.

4. Знахідний — загальний
I draw a pencil.

5. Орудний — загальний + *with/by*
I draw with a pencil.
This story is written by a famous writer.

6. Місцевий — загальний + *on/at*
Flowers are on the table.
Students are at their desks.

Присвійний відмінок іменника

Присвійний відмінок англійських іменників утворюється додаванням "'s" до їх основи:
a brother – brother's.

Якщо іменник закінчується на –s, -ss, -x додається лише "'", вимовляється / iz /. Може також додаватися "'s":
Alex – Alex'(s)
James – James'(s)
a boss – boss'(s)

Якщо іменник у множині закінчується на –(e)s, додається лише "'", змін у вимові не відбувається:
students – students'
heroes – heroes'

В інших випадках додається "'s":
children – children's
a man – man's

У присвійному відмінку вживаються:

1. Іменники-назви істот:
my Father's study
my cat's fur

2. Іменники-назви неістот:

the <u>bus's</u> steps
the <u>vehicle's</u> tires

3. Іменники на позначення часу, ваги та відстані:

in a <u>two-week's</u> time
with a <u>two-kilo's</u> weight
at a <u>two-mile's</u> distance

4. Іменники-назви країн, міст, а також іменники: *country, city, town, world, ocean, river:*

<u>England's</u> best traditions
<u>Kyiv's</u> green parks
our <u>country's</u> financial policy
our <u>city's</u> squares & streets
our <u>town's</u> lanes
the <u>world's</u> classics
the <u>ocean's</u> inhabitants
the <u>river's</u> banks

5. Іменники-назви планет:

the <u>Sun's</u> rays
the <u>Earth's/Moon's</u> surface

6. Збірні іменники: *government, party, army, crew, family, society:*

the <u>government's</u> members
the <u>party's</u> program(me)
the <u>army's</u> forces
the <u>crew's</u> fighters
the <u>family's</u> customs
the <u>society's</u> life

7. Іменники та займенники у сталих виразах:

for <u>heaven's</u> sake
for <u>God's</u> sake
at <u>one's wit's</u> end
to a <u>hair's</u> breadth
in a <u>stone's</u> throw
to <u>one's heart's</u> content / delight

8. Займенники: *anybody, anyone, somebody, someone, nobody, no one, other, another, each other, one another* та неозначено-особовий *one:*

<u>anybody's</u> success
<u>anyone's</u> mistake
<u>somebody's</u> hat
<u>someone's</u> fault
<u>nobody's</u> address
<u>no one's</u> place
<u>other's</u> clothes
<u>another's</u> visit
<u>each other's</u> work

<u>one another's</u> business
<u>one's</u> hair/teeth

9. Прислівники-назви днів: *today, yesterday, tomorrow:*

<u>today's</u> weather
<u>yesterday's</u> rainfall
<u>tomorrow's</u> events

10. Цілі речення:

<u>Tom & Jerry's</u> adventures
<u>commander-in-chief of Ukraine's</u> deeds

11. Іменникові фрази із локативним значенням:

at <u>the baker's</u>
at <u>the barber's</u>
at <u>the undertaker's</u>
at <u>the Snicker's</u>
at <u>my uncle's</u>

РЕЧЕННЯ. ОСОБОВІ, ПРИСВІЙНІ ТА ВКАЗІВНІ ЗАЙМЕННИКИ

My younger brother works at a plant.
My best friend is a lawyer.
This handsome man is a director of a private firm.

ОСОБОВІ ТА ПРИСВІЙНІ ЗАЙМЕННИКИ

Personal Pronouns		Possessive Pronouns	
Nominative Case	Objective Case	Conjoint Form	Absolute Form
I	*me*	*my*	*mine*
you		*your*	*yours*
he	*him*	*His*	
she	*her*	*her*	*hers*
it		*Its*	
we	*us*	*our*	*ours*
you (all)		*yours (all)*	
they	*them*	*Theirs*	

ВКАЗІВНІ ЗАЙМЕННИКИ

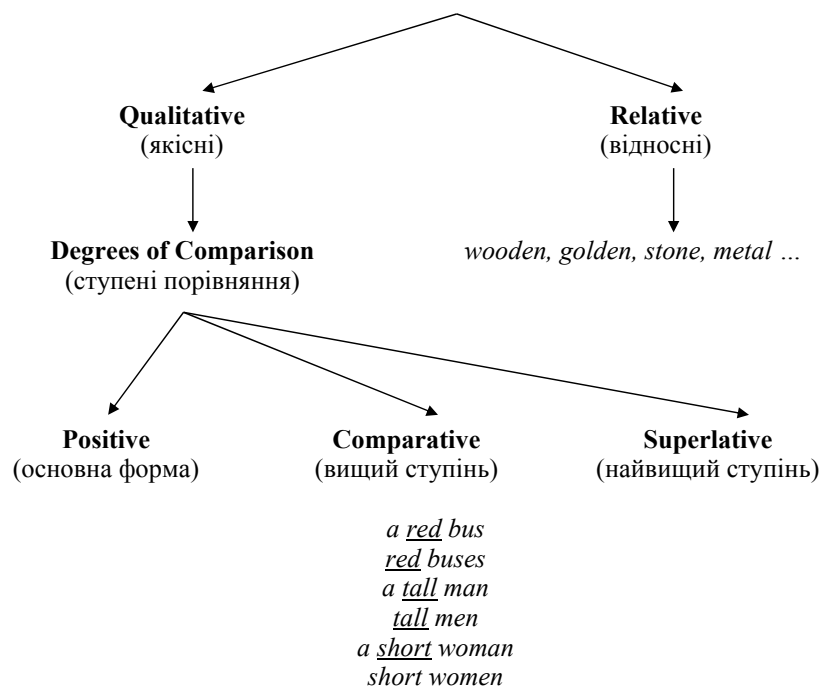|	
this	*That*
these	*Those*

This is my book.
This book is mine.
This is your pencil.
This pencil is yours.
That is his map.
That map is his.

This is our class-room.
This class-room is ours.
This is your holiday.
This holiday is yours.
That is their plant.
That plant is theirs.

This is her skirt.
This skirt is hers.
This is its collar.
This collar is its.
These are my books.
These books are mine.
Those are your pens.
Those pens are yours.
These are his keys.
These keys are his.
Those are her mittens.
Those mittens are hers.
These are its toys.
These toys are its.

These are our plans.
These plans are ours.
Those are your magazines.
Those magazines are yours.
These are their shoes.
These shoes are theirs.

ПРИКМЕТНИК

Qualitative
(якісні)

Relative
(відносні)

Degrees of Comparison
(ступені порівняння)

wooden, golden, stone, metal …

Positive
(основна форма)

Comparative
(вищий ступінь)

Superlative
(найвищий ступінь)

a red bus
red buses
a tall man
tall men
a short woman
short women

Вищий і найвищий ступені порівняння якісних прикметників утворюється додаванням суфіксів *–er, -est* до їх основи:
quick – quicker – the quickest

Перед прикметником у найвищому ступені, після якого стоїть іменник, вживається означений артикль *the*:
the smartest answer

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Артикль вживається і тоді, коли іменник лише домислюється:
There are 20 tall boys in our class. Jimmy is the tallest.

ПРАВИЛА ПРАВОПИСУ СТУПЕНІВ ПОРІВНЯННЯ ПРИКМЕТНИКІВ

1. «Німа» літера *–e* перед додаванням суфіксів *–er, -est* опускається:
polite – politer – the politest

2. Приголосна літера, якій передує короткий голосний звук, подвоюється:
hot – hotter – the hottest

3. Кінцева літера *y*, якій передує приголосний звук, змінюється на *i* перед додаванням суфіксів:
pretty – prettier – the prettiest

Синтетичні форми ступенів порівняння мають односкладові прикметники, а також двоскладові прикметники із наголосом на першому складі та закінченнями *-y, -er, -ly, -ow*, а також двоскладові прикметники із наголосом на другому складі. Решта двоскладових прикметників із наголосом на першому складі мають аналітичні форми ступенів порівняння*:*
crazy – crazier – the craziest
clever – cleverer – the cleverest
friendly – friendlier – the friendliest
narrow – narrower – the narrowest
polite – politer – the politest
brilliant – more brilliant – the most brilliant

Аналітичні форми ступенів порівняння мають також багатоскладові прикметники:
comfortable – more comfortable – the most comfortable

Аналітичні форми вживаються замість синтетичних із стилістичною метою:
clever – more clever – the most clever

Для вираження однакової міри якості вживається сполучник *as … as*. Прикметник у такому випадку вживається в основній формі:
Tom is as tall as Ted.

Для вираження неоднакової міри якості вживається сполучник *not so … as, not as … as*:
Tom is not as tall as Ted.
Tom is not so tall as Ted.

Деякі прикметники мають суплетивні форми ступенів порівняння:
good – better – the best
bad – worse – the worst
many – more – the most
much – more – the most
little – less – the least
few – less – the least

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Прикметник *old* має 2 види форм ступенів порівняння:
old – older – the oldest
elder – the eldest

Форми *elder (eldest)* вживаються на позначення віку членів однієї родини:
My elder brother

Якщо наявне порівнювальне слово *than*, вживається форма *older*:
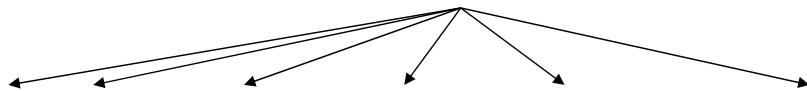*My brother is 3 years older than me.*

Прикметник *far* також має 2 види форм ступенів порівняння:
far – farther – the farthest
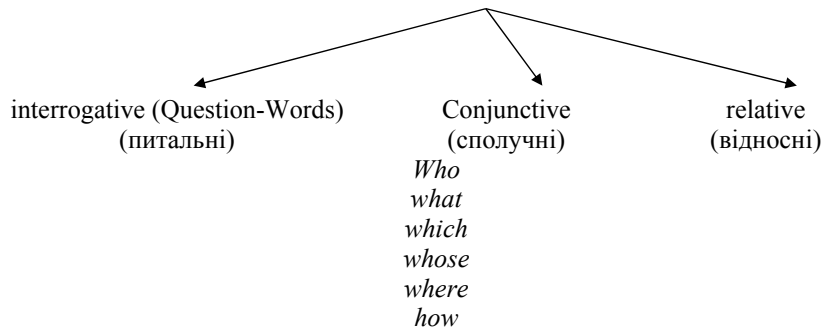*further – the furthest*

Обидві форми *farther (the farthest)* та *further (the furthest)* позначають «далекий, дальший». Форма *further (the furthest)* крім цього позначає «подальший, наступний».

ПРИСЛІВНИК

of time (часу)	of place (місця)	of repetition and frequency (повторюваності та частотності)	of manner (способу дії)	of cause and consequence (причини та наслідку)	of degree, manner and consequence (ступеню, способу дії та наслідку)
Tomorrow	here	ever	quickly	therefore	exceedingly
Yesterday	there	never	Fast	accordingly	near
Today	inside	often	Hard	hence	half
After	outside	sometimes	Quietly	So	too
Before	near	occasionally		As	first
Yet	forward	seldom		consequently	little
Already		regularly			much

ПРИСЛІВНИК

interrogative (Question-Words) (питальні)	Conjunctive (сполучні)	relative (відносні)
	Who	
	what	
	which	
	whose	
	where	
	how	

how much
how old
how long

Англійські прислівники утворюються додаванням суфіксу *–ly* не лише до прикметників, але і інших частин мови:
quiet – quietly
a day – daily

Крім *–ly*, в утворенні прислівників також беруть участь суфікси *–ward, -wards, -long, -wise*:
toward
backwards
headlong
otherwise

Деякі прислівники по формі збігаються із прикметниками:
far
hard
fast

Англійські прислівники мають ступені порівняння. Односкладові прислівники мають синтетичні форми ступенів порівняння:
fast – faster – the fastest

Дво- і більше складові прислівники мають аналітичні форми ступенів прівняння:
coldly – more coldly – the most coldly
But*: easily – easier – the easiest*

Деякі прислівники мають суплетивні форми ступенів порівняння:
well – better – the best
badly – worse – the worst
little – less – the least
much – more – the most

АРТИКЛЬ

Неозначений артикль | **Означений артикль**
(the Indefinite Article) | (the Definite Article)
a (an) | *the*

В англійській мові існує службова частина мови – формальне слово – артикль. Артикль є означеним і неозначеним. Неозначений артикль вживається перед злічуваними іменниками в однині. У множині він не вживається.

Означений артикль вживається в однині та множині.

Неозначений артикль

Неозначений артикль походить від давньоанглійського числівнику *an* (один). Він має 2 форми. Форма *a* вживається перед іменниками, що починаються на приголосний:

a boy

Форма *an* вживається перед іменниками, що починаються на голосний:

an aunt

Неозначений артикль, як і будь-яка службова частина мови, є ненаголошеним у реченні. Проте він наголошується, коли виступає у ролі підмету у реченні:

A is an indefinite article.
An is used before vowels.

Вживання неозначеного артикля

1. Перед злічуваним іменником, що згадується вперше:

Tom has a cat. The cat is big.

2. Перед злічуваним іменником, що є одним із представників цілого класу:

It's a table. The book is on the table.

3. Перед предикативом, що позначає особу як одного із представників цілого класу:

My Father is an agronomist.

4. Перед прикладкою:

Petrenko, an architect of our Institute, is a good worker.

Petrenko, the architect of our Institute, who won the last year worldwide competition, is a good worker.

Перед прикладкою, що позначає відому людину, вживається означений артикль:

M.V. Hohol, the famous Russian writer, was born in Ukraine.

5. У конструкції *there is / there are*, що вперше називає предмет:

There are very many   beautiful flowers in front of our hostel.

The flowers in front of our hostel are red, blue & orange.

6. У значенні «деякий»:

There is an Ann in our group.

7. У значенні «один»:

There is a book and 2 pencils on the desk.

8. Перед іменником із прикметником:

A green book.

З іменником *weather* неозначений артикль не вживається. А тому і перед іменником *weather* з прикметником також:

Such fine weather.

9. Після слів *such, quite, rather, what*:

Such a fool!

She is rather a beautiful woman.

Theirs is quite a comfortable flat.

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What a marvelous evening!

10. Перед іменниками *period, distance, height, weight, time, age,* після яких є прийменник *of* та іменник із числівником:

a period / time of 2 weeks
a distance of 2 miles
a height of 2,05 meters
a weight of 3 kilos
an age of 3 (years)

Означений артикль

Означений артикль у англійській мові має 2 варіанти вимови. Під логічним наголосом він вимовляється по-особливому:

The is the definite article.

Означений артикль походить від давньоанглійського вказівного займенника *se* і означає вже відомі слухачеві речі:

I have a cat and a dog. The cat's name is Tom.

Він також означає речі, єдині у своєму роді:

the Sun
the Moon
the Earth

Вживання означеного артикля

1. Означений артикль вживається перед іменниками, що позначають цілий клас предметів:

The wolf is an animal.
The pine is a tree.

Іменник *man* у такому випадку вживається без артиклю:

Man creates the nature.

Іменник *woman* у такому випадку вживається із означеним артиклем або без нього:

(The) woman is man's helpmate.

2. Означений артикль також вживається перед іменниками з обмежувальним означенням (означенням, що вказує на предмет не як представника цілого класу, а якийсь конкретний предмет):

My Father is the top designer of his firm.

3. Крім цього, він вживається перед іменниками, означуваними прикметниками у найвищому ступені порівняння:

the tallest fellow

4. Означений артикль також вживається перед займенником *same*, прикметниками *wrong* та *right*:

the same answer
the wrong number

5. А також він іще вживається перед субстантивовуваними прикметниками та дієприкметниками:

92

the poor
the rich
the unemployed

6. Означений артикль вживається із незлічуваними іменниками – назвами абстрактних понять, притаманних якійсь певній особі:
Soames was the courage of his father, the conscience of his grandfather and the dignity of his greatgrandfather.

7. Із означеним артиклем також вживаються назви абстрактних понять, що стають зрозумілими із контексту:
I've been to the opera this week. I enjoyed the music played there very much.

8. Означений артикль вживається із власними назвами на позначення усієї родини:
The Smiths and the Browns are our best friends.

9. А також із власними назвами із обмежувальним означенням:
You're not the Philip I knew before.
The France of the 19th century was not the same as that of the 16th one.
The culture of the Renaissance differs greatly from that of the Middle ages.

10. Географічні назви, як і усі інші власні назви, вживаються без артиклю, навіть якщо перед ними є означення:
England
Central Asia
Винятки становлять:
The USA, the Soviet Union

11. Із означеним артиклем вживаються географічні назви із обмежувальним означенням:
The Russia of the 19th century

12. Із назвами океанів, морів та річок вживається означений артикль:
The Atlantic Ocean
The Dnipro
The Black Sea

13. Із назвами озер означений артикль не вживається, якщо є наявним слово *lake*:
Lake Baikal
The Baikal

14. Із назвами гірських перевалів вживається означений артикль:
The Urals, the Alps
Із назвами гірських вершин він відсутній:
Everest

15. Проте він з'являється перед назвами груп островів:
The Hebrides, the Orkneys
Із назвами окремих островів артикль не вживається:
Isle of Man, Isle of Wight

16. Із означеним артиклем вживаються назви наступних міст, країн та провінцій:

The Hague, the Netherlands, the West Indies, the Ruhr, the Reviera, the Crimea, the Ukraine, the Caucasus, the Congo
Із географічною назвою *the Lebanon* означений артикль іноді не вживається.

17. Назви вулиць та площ зазвичай вживаються без артиклю, проте також існують винятки:
The High Street, the Strand

18. Із означеним артиклем вживаються також назви готелів, кораблів, газет та журналів:
Mr. Brown reads the Times each morning.
The Strand is a popular magazine.
The Dnipro is one of the best hotels of the town of Cherkasy.
The Hope sailed away to Bulgaria yesterday.

19. Із означеним артиклем також вживаються назви головних частин світу:
The North, the East, the South, the West

20. Означений артикль вживається із назвами місяців, які мають обмежувальне означення:
The May of 1945 will always remain in the memory of Soviet people.

21. Він також вживається перед іменниками у функції означення:
Let us visit the Tretyakov Picture Gallery next week.

Семантична відсутність артиклю
Артикль не вживається в англійській мові:
1. перед злічуваними іменниками у множині, що згадуються вперше:
a pan – pans
2. перед власними назвами (людей, міст, країн, вулиць, площ) доти, доки вони не означуються обмежувальним означенням:
Tom – the Tom I knew before
Cherkasy – the Cherkasy of the 19th century
England – the England of the Renaissance
We live in Gagarinstreet.
The meeting was held in Bohdan Khmelnytsky Square.
3. перед звертаннями:
the girls – Girls, don't be shy!
4. перед іменником, уже означеним присвійним або вказівним займенником:
my elder brother
this handsome man
5. перед назвами днів тижня, місяців, пір року доти, доки вони не є означеними обмежувальним означенням:
on Monday – the Monday I met you first
in September – the September of 1948
next Winter – the winter of 1933

6. перед іменниками на позначення членів однієї родини:

Father comes home late from work.

Перед іменником із постпозитивним означенням, навіть якщо він є позначенням одного представника цілого класу, вживається означений артикль:

Suori, the daughter of Tom Cruise, is a quick-witted lady.

7. перед іменниками *school, college, prison, jail, bed*:

I finished school in 2005 and entered college.
The criminal was sent to prison (jail) for 10 years.
Alice had been keeping bed for 10 days, before she recovered.

Іменник *University* завжди вживається з означеним артиклем:

We shall graduate from the University in 2018.

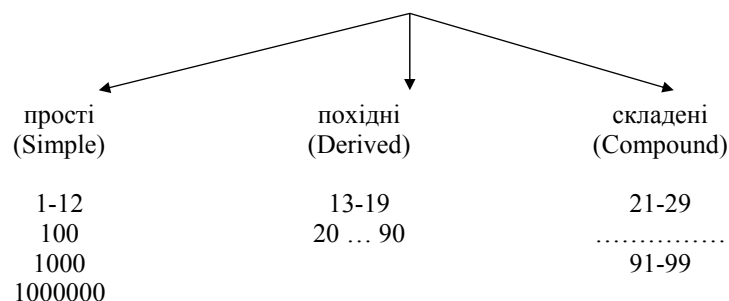Якщо йдеться не про назву установи, а про її фізичну форму, вживається означений артикль:

The school was rebuilt in 1995.
The bed is in the corner of my room.

8. у назвах журнальних та газетних заголовків:

"New Medicine Helps Fight Cancer Diseases".

Числівник

```
                        Числівник
         ┌──────────────────┼──────────────────┐
         ▼                  ▼                  ▼
      прості            похідні            складені
      (Simple)          (Derived)          (Compound)

       1-12              13-19               21-29
       100             20 … 90            ……………
       1000                                 91-99
      1000000
```

Прості числівники 100, 1000, 1000000 вживаються із неозначеним артиклем або числівником *one*:

a (one) hundred
a (one) thousand
a (one) million

Похідні числівники від 13 до 19 мають 2 наголоси: на корені та суфіксі. Один із них втрачається коли поряд опиняється наголошений склад:

room fifteen
fifteen books

Похідні числівники 13, 15, 18 мають особливі форми, відмінні від відповідних їм форм простих числівників:

three – thirteen
five – fifteen
eight – eighteen

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Назви десятків утворюються додаванням суфіксу *–ty* до основи простого числівнику. Вони мають наголос на першому складі:

two – twenty
three – thirty

Деякі похідні числівники – назви десятків – мають відмінні від простих числівників форми:

four – forty
five – fifty
eight – eighty

Складені числівники мають 2 наголоси. Вони складаються із 2 частин і пишуться через дефіс:

ninety-nine

Перед розрядом десятків (а якщо такого немає, то перед розрядом одиниць) у кількісних числівниках завжди ставиться сполучник *and*:

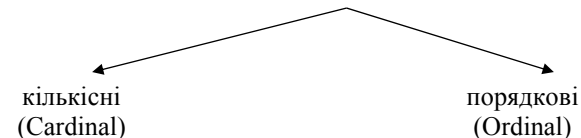422 *four hundred and twenty-two*
402 *four hundred and two*

Іменники *hundred, thousand, million* у такому випадку вживаються в однині. Вони вживаються у множині перед іменниками із прийменником *of*:

Millions of unemployed

Іменник *million* може вживатися у множині, якщо після нього немає інших розрядів:

2 millions

Числівник

```
                  Числівник
         ┌────────────────────┐
         ▼                    ▼
     кількісні            порядкові
     (Cardinal)           (Ordinal)
```

Порядкові числівники вживаються з означеним артиклем якщо після них знаходиться іменник. Порядкові числівники від 1 до 3 мають відмінні від кількісних форми:

one – the first book
two – the second lesson
three – the third time

Решта порядкових числівників утворюються додаванням закінчення *–th* до основи кількісних. Винятки становлять наступні числівники:

four – the fourth floor
five – the fifth house
eight – the eighth volume
nine – the ninth man

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Якщо порядковий числівник стоїть після означуваного іменнику, він вживається без артиклю:

Page 5
Paragraph 3
Chapter 6
Act 4
Part 7
Room 240
Flat 66
House 38
Bus 16

При утворенні порядкових числівників від основ десятків, *у* змінюється на *–ie* перед додаванням закінчення *–th*:

twenty – the twent<u>ie</u>th chance

У простих дробах чисельник має форму кількісного числівнику, а знаменник – порядкового:

1/3 – *one third*

Якщо чисельник більший за 1, порядковий числівник у знаменнику вживається у множині:

2/3 – *two third<u>s</u>*

Між цілою та дробовою частинами ставиться сполучник *and* і кількісний числівник на позначення цілої частини вживається лише в однині.

1 1/3 – *one <u>and</u> one third*

Якщо числівник не має цілої частини, означуваний іменник вживається в однині:

1/3 of a cake

Якщо числівник має цілу частину, означуваний іменник вживається у множині:

1,5 hours

У десяткових дробах між цілою та дробовою частинами ставиться крапка, яка читається *point*; усі цифри читаються окремо:

1.56 *one point five six*

«0» читається *naught* (в американській мові – *zero*):

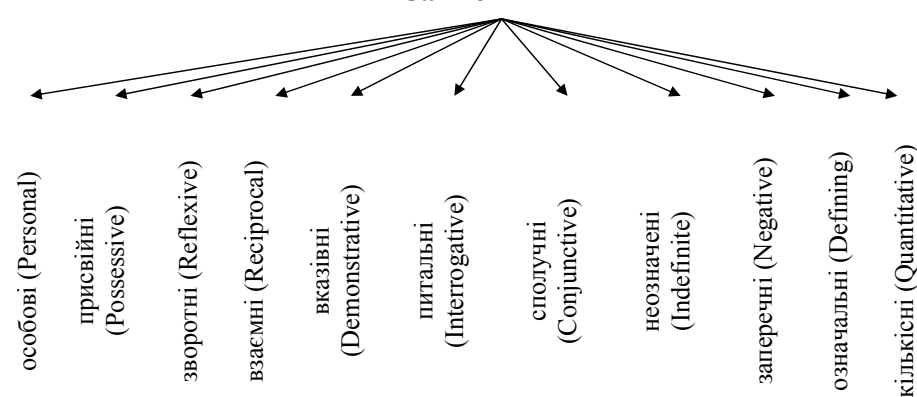0.536 – *naught point five three six*

Слово *naught* може опускатися:
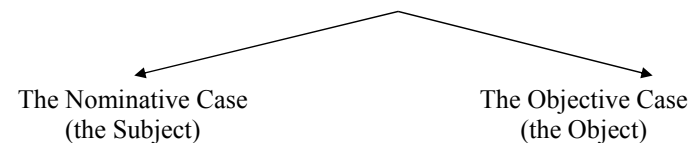
0.536 – *point five three six*

Цифри у номерах телефонів читаються окремо. Замість *naught* читається *oh*. Якщо поряд стоять однакові цифри, вживається слово *double*:

0975372699 *oh nine seven five three seven two six double nine*

Займенник

- особові (Personal)
- присвійні (Possessive)
- зворотні (Reflexive)
- взаємні (Reciprocal)
- вказівні (Demonstrative)
- питальні (Interrogative)
- сполучні (Conjunctive)
- неозначені (Indefinite)
- заперечні (Negative)
- означальні (Defining)
- кількісні (Quantitative)

Особові займенники

The Nominative Case (the Subject)　　　The Objective Case (the Object)

<u>I</u> can see you well.
You can see <u>me</u> well, too.

Присвійні займенники

Conjoint Form　　　Absolute Form
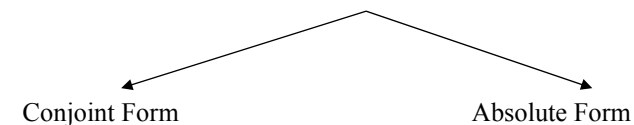
Зворотні займенники

Oneself
I wash <u>myself</u>.

I	*myself*	*we*	*ourselves*
you	*yourself*		
he	*himself*	*you (all)*	*yourselves*
she	*herself*		
it	*itself*	*they*	*themselves*

Взаємні займенник

the Common Case (object)   the Genitive Case (attribute)

each other   one another

We talk <u>to each other</u>.
We keep <u>each other's</u> business.

Вказівні займенники

this   that   these   those   such   the same

The students made <u>the same</u> mistakes.
Little children were making <u>such a great</u> noise.

Питальні займенники

who   what   which   whose

The nominative case (the subject)
The objective case (the object)

who   whom

<u>Who</u> helps you with your English lessons?
<u>Whom</u> do you help with his English lessons?

Сполучні займенники

who   whom   whose   what   which   that

Неозначені займенники

one

the Common Case (the subject, the object)   the Genitive Case (the attribute)

<u>One</u> should master <u>one's</u> English every day.

some
someone
somebody
something

any
anyone
anybody
anything

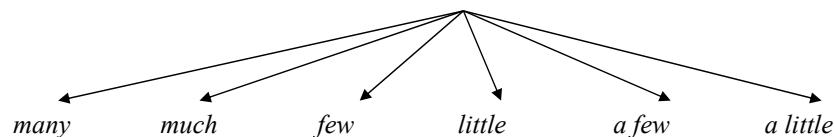**Заперечні займенники**

no   nobody   no one   nothing   none   neither

Означальні займенники

all   both   each   every   everybody   everyone   everything   either   another   other

Кількісні займенники

```
                    Кількісні займенники

many      much      few      little      a few      a little
```

Кількісні займенники в англійській мові мають ступені порівняння.

ДІЄСЛОВО

Дієслово – це частина мови, що позначає дію і відповідає на запитання «що робити?», «що зробити?». Вона (частина мови) має шість граматичних категорій:

1. *особа* (особові, неособові);
2. *число* (однина, множина);
3. *час* (теперішній, минулий, майбутній, майбутній з точки зору минулого);
4. *аспект* (тривалі, завершені, завершено-тривалі часи);
5. *стан* (активний, пасивний, зворотній);
6. *спосіб* (дійсний, наказовий, умовний).

Усі дієслова в англійській мові мають особові і неособові форми. *Особові форми* виступають у реченні в ролі присудку, а *неособові* – у будь-якій синтаксичній функції за винятком присудку.

Вони поділяються на *правильні*, які у Past Indefinite мають закінчення –*ed*, *неправильні* і *мішані* (у Past Indefinite мають закінчення –*ed*, а у Past Perfect – *Participle II*):

To show – showed – shown

Дієслова усіх груп за винятком Indefinite мають граматичну категорію аспекту і відповідають в українській мові дієсловам доконаного і недоконаного видів:

I was reading a book yesterday from 5 till 7 o'clock.
I have read the book already.

За своїм значенням усі дієслова поділяються на *смислові*, *допоміжні* і *дієслова-зв'язки*. Останні є частиною *складеного дієслівного присудку*:

My father is an agronomist.

ТЕПЕРІШНІЙ НЕОЗНАЧЕНИЙ ЧАС

утворюється вживанням початкової форми дієслова без частки 'to' у ролі присудка в реченні.

I run to the river.

У третій особі однини до основи дієслова додається закінчення 's', яке вимовляється так само, як закінчення множини іменників і в присвійному відмінку іменників. Це так зване «правило третьої особи однини».

He / she / it runs to the river.

I	run	We	run
you	run	you (all)	run
he, she, it	runs	They	run

+ *An early bird catches the worm.*

　　　　catches=does
　　　　(do+s)

У питальній формі на початку речення ставиться допоміжне дієслово "do/ does", потім підмет, потім інфінітив дієслова без частки "to", а лише потім решта членів речення.

Загальне запитання

? *Does an early bird catch the worm?*
Yes, it does.
No, it doesn't.

У заперечній формі використовується заперечна частка "not". Вона ставиться між допоміжним і смисловим дієсловами.

Заперечна форма

- *An early bird does not catch the worm.*
　　　(doesn't)

У питально-заперечній формі на початку речення ставиться скорочена форма *don't / doesn't*, потім підмет, потім інфінітив дієслова без частки *to*, а лише потім решта членів речення.

Питально-заперечна форма

?/- *Doesn't an early bird catch the worm?*
　　　　Yes, it does. – Ні, ловить.
　　　　No, it doesn't. – Так, не ловить.

Українською мовою такі речення перекладаються «Хіба ти не…» і потребують відповіді «Так, не…» або «Ні, …». При перекладі англійською увагу потрібно звертати не на слова так / ні, а на факт, чи відбувається дія.

Спеціальне запитання

? *What does an early bird catch?*
Who catches the worm?
What does an early bird do?
What bird catches the worm?
Which bird catches the worm: an early or late?

Розділове запитання

? *An early bird catches the worm, doesn't it?*
An early bird doesn't catch the worm, does it?

Альтернативне запитання

? *Does an early bird catch the worm, or the fly?*

Допоміжне дієслово "do" у множині

+ *Early birds catch the worms.*

- *Early birds <u>do not</u> catch the worms.*
       (don't)

Загальне запитання

? *<u>Do</u> early birds <u>catch</u> the worms?*
       Yes, they do.
       No, they don't.

Спеціальне запитання

? *<u>What</u> <u>do</u> early birds catch?*
   Who <u>catch</u> the worms?
   <u>What</u> <u>do</u> early birds <u>do</u>?
   <u>What birds</u> catch the worms?
   <u>Which birds</u> catch the worms: early or late?

Розділове запитання

? *Early birds catch the worms, <u>don't</u> they?*
   Early birds do<u>n't</u> catch the worms, <u>do</u> they?

Альтернативне запитання

? *<u>Do</u> early birds catch the worms, or the flies?*

Питально-заперечна форма

?/- *Do<u>n't</u> early birds catch the worms?*
       Yes, they do. – Ні, ловлять.
       No, they don't. – Так, не ловлять.

Дієслово "*to be*"
Заперечна форма

- *Life <u>is</u> <u>not</u> a bed of roses.*
+ *Life<u>'s</u> a bed of roses.*

Загальне запитання

? *<u>Is</u> life <u>not</u> a bed of roses?*
   Yes, it is.
   No, it isn't.

Спеціальне запитання

? *<u>What</u> is life?*
   <u>What</u> is life not a bed of?
   <u>What</u> isn't life of roses?

Розділове запитання

? *Life is not a bed of roses, is it?*
   Life's a bed of roses, isn't it?

Альтернативне запитання

? *<u>Is</u> life <u>not</u> a bed of roses, or lilies?*

Negative-Interrogative Form

?/- *<u>Isn't</u> life a bed of roses?*
       Yes, it is. – Ні, є.
       No, it isn't. – Так, не є.

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Дні тижня

- What is the day today?
- Today is Monday
- (It is Monday today).

- Who are you?
- I'm Olga.

- What are you?
- I'm a student.

- How old are you?
- I'm 18.

- How are you?

- Thanks, I'm fine.
- Thanks, I'm OK.
- Thanks, I'm well.
- I'm unwell, I'm afraid.
- Not so bad, I'm glad to say.
- I feel terribly blue today.
- I'm in low spirits/moods.
- I'm in high spirits/moods.
- I'm in happy spirits.

Excuse me, …	*I wonder, …*
I'm sorry, …	*I'd like to know, …*
May I ask you, …	*I'm eager to know, …*

- *What is your native place?*
- *My native place is … .*

- *So, your native place is the town/city/village of … , isn't it?*
- *Yes, it is.*

- *I have never been to … yet.*
- *Have you ever been to … yet?*

I'm Yulia.	We're Natalias.
You're Svitlana.	You're Yana and Alla.
He's Dima.	
She's Ann.	They're Vica and Ksenia.
It's me.	

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I'm a student. You're a teacher. He's a driver. She's a housewife. It's a farmer.	We're shop assistants. You're chemists. They're dancers.
I'm 17. You're 20. He's 22. She's 25. It's 2.	We're 18. You're 19. They're 24.
I'm fine. You're OK. He's well. She's unwell. It's not so bad.	We're in high spirits. You're in low moods. They're in happy spirits.

Допоміжне дієслово "*to have*"

I	*have*	we	*have*
you	*have*	you (all)	*have*
he, she, it	*ha*s	they	*Have*

+ *I have breakfast at 7 a.m. each morning.*

Заперечна форма
- *I do not have breakfast at 7 a.m. each morning.*
  (don't)

Загальне запитання
? *Do I have breakfast at 7 a.m. each morning?*
> *Yes, I do.*
> *No, I don't.*

Спеціальне запитання
? *Who have breakfast at 7 a.m. each morning?*
What do I have at 7 a.m. each morning?
When do I have breakfast each morning?
How often do I have breakfast at 7 a.m.?

Розділове запитання
? *I don't have breakfast at 7 a.m. each morning, do I?*
I do have breakfast at 7 a.m. each morning, don't I?

Альтернативне запитання
? *Do I have breakfast at 7, or 8 a.m. each morning?*

Питально-заперечна форма
?/- *Don't I have breakfast at 7 a.m. each morning?*
> *Yes, I do.* – Ні, маю.
> *No, I don't.* – Так, не маю.

Заперечна форма
- *She has never been to London yet.*
+ *She has ever been to London already*

Загальне запитання
? *Has she ever been to London yet?*
> *Yes, she has. – Ні, була.*
> *No, she hasn't. – Так, не була.*

Спеціальне запитання
? *Who has never been to London yet?*
Where has she never been to yet?

Розділове запитання
? *She has never been to London yet, has she?*
She's ever been to London already, hasn't she?

Альтернативне запитання
? *Has she been to London, or Hamburg yet?*

Питально-заперечна форма
?/- *Hasn't she been to London yet?*
> *Yes, she has. – Ні, була.*
> *No, she hasn't. – Так, не була.*

Модальні дієслова
Загальне запитання
? *Can the leopard change his spots?*
> *Yes, he can.*
> *No, he can't.*
+ *The leopard can (never) change his spots.*

Заперечна форма
- *The leopard can't change his spots.*
  (cannot)

Спеціальне запитання
? *Who can't change his spots?*
What can't the leopard do to his spots?
Whose spots can't the leopard change?
What can't the leopard change?

Розділове запитання
? *The leopard can't change his spots, can he?*
The leopard can change his spots, can't he?

Альтернативне запитання
? *Can't the leopard change his spots, or habits ?*

Питально-заперечна форма
?/- *Can't the leopard change his spots?*
Yes, he can. – Ні, може.
No, he can't. – Так не може.

Прислів'я:

(1) You can't eat your cake and have it.
(2) A beggar can never be bankrupt.
(3) A man can do not more than he can.
(4) Man cannot live by bread only.
(5) Never put off till tomorrow   what you can do today.

Вживання теперішнього неозначеного часу

Теперішній неозначений час вживається для:

1. вираження постійної або повторюваної дії:

I go to the University every day.

2. вираження стану або дії, що описує людину:

He draws very well.

3. вираження універсальних істин:

The Earth rotates round the Sun.

4. вираження дії, що відбувається у момент мовлення:

- з дієсловами чуттєвого сприйняття *to see, to hear, to smell, to taste, to touch, to observe*; розумової діяльності *to think, to know, to learn, to find, to believe, to consider, to suppose, to expect, to understand, to trust* та дієсловами, що позначають почуття та емоції *to (dis)like, love, to hate, cannot bear*:

I hear pretty well, what you're saying to me.
I think you understand me.
I like this idea very much.

- з метою повідомити про дію як факт, а не процес:

My brother comes in.

5. вираження майбутньої дії у підрядних реченнях часу та умови із сполучниками *when, after, before, till, until, as soon as, if, unless*:

I shall be at home, when you return.
I shall answer you, after you write me first.
I shall finish this work, before you come back from Spain.
I shall learn Chinese, till the New Year comes.
I shan't listen to you, until you behave well.
We shall start, as soon as the clock strikes 12.
I shall help you, if you ask me to.
I shan't answer the telephone, unless my friend phones.

6. вираження майбутньої дії із дієсловами руху *to come, to arrive, to leave (for), to go, to start*, etc.:

Tomorrow, my best friend comes from abroad.
The train from Kyiv arrives tomorrow at 9 a.m.
Next week, our colleague leaves for Africa.
I go to India in a month.

The expedition to the North Pole starts next year.

7. переліку минулих подій з метою пожвавлення розмови:

Felix comes into the room and brings in spring flowers.

Минулий неозначений час
(The Past Indefinite Tense)

позначає дію, яка відбулася або відбувалася у минулому. Він утворюється додаванням закінчення *–(e)d* до основи дієслова (*conquered*), заміною кореневої голосної (*came, saw*) або іншим шляхом (*bent*).

+ *I came, I saw, I conquered.*

came = to come + ed
saw = to see + ed
conquered = to conquer + ed

I	came	we	came
you	came	you (all)	came
he, she, it	came	they	came

Заперечна форма

- *I did not come.*

(didn't)

Загальне запитання

? *Did I come?*

Yes, I did.
No, I didn't.

Спеціальне запитання

? *Who came, saw and conquered?*
Where did I come?
What did I see?
Whom did I conquer?

Розділове запитання

? *I came, I saw and I conquered, didn't I?*
I didn't come, see & conquer, did I?

The Alternative Question

? *Did I or she come, see & conquer?*

The Negative-Interrogative Form

?/- *Didn't I come, see & conquer?*

Yes, I did. – Ні; прийшов, побачив, переміг.
No, I didn't. – Так; не прийшов, не побачив, не переміг.

Вживання минулого неозначеного часу

1. Минулий неозначений час вживається на позначення дії, що відбулася або відбувалася у період часу, який вже закінчився, проте не є занадто віддаленим від теперішнього часу. У такому випадку вживаються обставини *yesterday, the other day, last week / month / year, a week / month / year ago*:

I did my hometask yesterday.

Такі речення перекладаються українською мовою дієсловами доконаного і недоконаного виду.

2. Для позначення послідовних дій у минулому:

I came, I saw, I conquered.

Такі речення перекладаються рідною мовою дієсловами недоконаного виду.

3. Для позначення минулої дії, яка була повторюваною протягом певного проміжку часу. При цьому використовуються обороти *would + Infinitive* та *used to + Infinitive*:

He would sing and at once everything about him and his song would become absolutely clear.

Перший є характерним для розмовного стилю, а другий – для офіційного.

Речення із *would + Infinitive* та *used to + Infinitive* не завжди позначають минулу дію, яка була тривалою протягом певного проміжку часу, але також дію, яка характеризує особу, дію або стан:

He used to be a nice man.

George used to smoke a cigarette before going to bed.

The Future Indefinite Tense
(Майбутній неозначений час)

утворюється за допомоги допоміжних дієслів *shall* (для I особи однини і множини) та *will* (для II і III осіб однини і множини).

I	*shall follow*	We	*shall follow*
you	*will follow*	you (all)	*will follow*
he, she, it	*will follow*	They	*will follow*

shall = 'll
will = 'll

I *'ll follow*	we *'ll follow*
you *'ll follow*	you (all) *'ll follow*
he *'ll follow*, she *'ll follow*, it *'ll follow*	they *'ll follow*

Стверджувальна форма

+   *I'll follow the Sun.*
  shall not = shan't
  will not = won't

Заперечна форма

-   *I shan't follow the Sun.*
  I'll not follow the Sun.

Загальне запитання

?   *Shall I follow the Sun?*

Yes, I shall.
No, I shan't.

Питально-заперечна форма

?/-   *Shan't I follow the Sun?*

Yes, I shall. – Ні; йтиму.
No, I shan't. – Так; не йтиму.

Спеціальне запитання

?   *Who'll follow the Sun?*
What shall I do to the Sun?
What shall I follow?

Альтернативне запитання

?   *Shall I follow the Sun or the Moon?*

Розділове запитання

?   *I 'll follow the Sun, shan't I?*
I shan't follow the Sun, shall I?

Вживання майбутнього неозначеного часу

1. Майбутній неозначений час вживається для позначення майбутньої дії:

I'll follow the Sun.

Майбутня дія також передається зворотами: *to be going to + Infinitive, to be about + Infinitive, to be on the point of + Gerund*, які вказують на те, що дія, виражена ними є запланованою і відбудеться у найближчому майбутньому:

I'm going to follow the Sun (розмовний стиль).
I'm about to follow the Sun.
I'm on the point of following the Sun (літературний стиль).

Майбутній неозначений час дієслова "*to be*"

I *shall be*	we *shall be*
you *will be*	you (all) *will be*
he, she, it *will be*	they *will be*

I *'ll be*	we *'ll be*
you *'ll be*	you *'ll be*
he *'ll be*, she *'ll be*, it *'ll be*	they *'ll be*

-   *What will you be in the future?*
-   *I'll be a translator in the future.*
(- *I'll become a teacher in three years.*
-   *I'll make a doctor soon).*

-   *How old will you be next year?*
-   *I'll be 19 next year.*

-   *How will she be tomorrow?*
-   *She'll be pretty well tomorrow.*

I'll be a writer soon.
You'll be the President in 3 years.
He'll be a judge soon.

She'll be a dentist in the future.
It'll be a king in the future.

I'll be 40 in 20 years.
You'll be 20 soon.
He'll be 17 next year.
She'll be 23 in a week.
It'll be 1 tomorrow.

I'll be well tomorrow.
You'll be fine by Friday.
He'll be OK soon.
She'll be still unwell.
It'll be pretty well now.

We'll be linguists soon.

You all will be students of the 3ʳᵈ year of study next autumn.

They'll be graduates next year.

We'll be 19 next summer.

You all will be 24 in 5 years.

They'll be 21 in 3 months.

We'll be in high moods tomorrow.

You all will feel happy tonight.

They'll feel funny in a moment.

Майбутній неозначений час із точки зору минулого
(The Future Indefinite-in-the-Past Tense)

утворюється за допомоги допоміжних дієслів *should* (для I особи однини і множини) та *would* (для II і III осіб однини і множини).

I	*should follow*	we	*should follow*
You	*would follow*	you (all)	*would follow*
he, she, it	*would follow*	they	*would follow*

should = 'd
would = 'd

I 'd *follow*	we 'd *follow*
you 'd *follow*	you (all) 'd *follow*
he 'd *follow*, she 'd *follow*, it 'd *follow*	they 'd *follow*

Стверджувальна форма

+   *I'd follow the Sun.*
  should not = *should*n't
  would not = *would*n't

Заперечна форма

-   *I shouldn't follow the Sun.*
  I 'd *not follow the Sun.*

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Загальне запитання

?   *Should I follow the Sun?*

  Yes, I should.
  No, I shouldn't.

Питально-заперечна форма

?/-   *Shouldn't I follow the Sun?*

  Yes, I should. – Ні; йтиму.
  No, I shouldn't. – Так; не йтиму.

Спеціальне запитання

?   *Who'd follow the Sun?*
  What should I do to the Sun?
  What should I follow?

Альтернативне запитання

?   *Should I follow the Sun or the Moon?*

Розділове запитання

?   *I'd follow the Sun, shouldn't I?*
  I shouldn't follow the Sun, should I?

Вживання майбутнього неозначеного часу із точки зору минулого

1. Майбутній неозначений час із точки зору минулого вживається для позначення дії, яка була майбутньою з точки зору минулого:
  Brother said, he'd follow the Sun.

ПЕРФЕКТНІ ЧАСИ
(Perfect Tenses)

використовуються на позначення дії, що вже закінчилася до моменту мовлення, але має із ним тісний зв'язок або дії, яка закінчилася до певного моменту у майбутньому або минулому.

Перфектні форми утворюються додаванням минулого дієприкметника (третьої форми смислового дієслова) до допоміжного дієслова *to have* у відповідному із неозначених часів.

Теперішній перфектний час
(The Present Perfect Tense)

утворюється за допомоги дієслова *to have* у Present Indefinite та минулого дієприкметника.

I	*have found*	we	*have found*
You	*have found*	you (all)	*have found*
he, she, it	*has found*	they	*have found*

I have = I've
you have = you've
he has = he's, *she has* = she's

it has = it's
we have = we've
they have = they've

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I 've *found*   we 've *found*
you 've *found*   you (all) 've *found*
he 's *found*, she 's *found*, it 's *found*   they 've *found*

Стверджувальна форма
+   *I've just found your key.*
   have not = *have*n't
   has not = *has*n't

Заперечна форма
-    *I haven't found your key yet.*

Загальне запитання
?   *Have you found my key yet?*

   Yes, I have.
   No, I haven't.

Питально-заперечна форма
?/-   *Haven't I found your key yet?*

   Yes, I have. – Ні; знайшов.
   No, I haven't. – Так; не знайшов.

Спеціальне запитання
?   *Who's found my key?*
   What have you found?
   What have you done to my key?
   When have you found my key?

Альтернативне запитання
?   *Have you found my key or umbrella?*

Розділове запитання
?   *I've found your key, haven't I?*
   I haven't found your key, have I?

Вживання теперішнього перфектного часу
   Теперішній перфектний час вживається:
1.   на позначення дії, що вже відбулася у минулому, але має наслідки у теперішньому часі:
   I have broken my favourite cup, that's why I'm in low spirits.
   Якщо дія не має наслідку у теперішньому часі, вживається Past Indefinite:

   I broke my favourite cup.
   Теперішній перфектний час вживається здебільшого із обставинними словами *just, already, yet, of late*:
   I've just had a cup of coffee.

   Із обставинним виразом *just now* вживається лише Past Indefinite:
   I saw my neighbour just now.

Із обставинними словами *today, this week*, etc. вживається як Past Indefinite, так і Present Perfect:
   I have already had a cup of coffee in the morning.
   In the morning, I had a sandwich.
2.   у підрядних часу із сполучниками *when, after, before, till, until, as soon as*, etc:
   I'll retell the story to you, as soon as I have finished reading the book.
   Із дієсловами чуттєвого сприйняття та руху: *to come, to arrive, to go* замість Present Perfect вживається Present Indefinite:
   I'll tell you my opinion of the person after I first see him.
   I'll congratulate the champion after he arrives.
3.   на позначення періоду часу, що розпочався у минулому, тривав до моменту мовлення і навіть може тривати і надалі. Початок періоду задається обставинним словом *since*, а тривалість – *for*. Якщо початок періоду задається підрядним реченням, вживається Past Indefinite:
   I have known Peter for 7 years already. I've known him since he first joined our party. So, I've known him since 1945.

Минулий перфектний час
(The Past Perfect Tense)
утворюється додаванням минулого дієприкметника смислового дієслова до допоміжного дієслова *to have* у Past Indefinite:
   I had just found your key.

I	*Had found*	We	*had found*
you	*Had found*	you (all)	*had found*
he, she, it	*Had found*	They	*had found*

had = 'd

I 'd *found*   we 'd *found*
you 'd *found*   you (all) 'd *found*
he 'd *found*, she 'd *found*, it 'd *found*   they 'd *found*

Стверджувальна форма
+   *I had just found your key.*
   had not = hadn't

Заперечна форма
-    *I hadn't found your key yet.*

Загальне запитання
?   *Had I found your key yet?*

   Yes, I had.
   No, I hadn't.

?/- *Hadn't* I *found your key?*

Yes, I had. – Ні; знайшов.

No, I hadn't. – Так; не знайшов.

Спеціальне запитання

? *Who'd found your key?*

When had you found my key?

What had I just done to your key?

What had I just found?

Whose key had you just found?

Альтернативне запитання

? *Had I just found your key or locket?*

Розділове запитання

? *I'd found your key, hadn't I?*

I hadn't found your key, had I?

Вживання минулого перфектного часу

1. Минулий перфектний час вживається для позначення дії, що вже відбулася протягом періоду часу, який закінчився до певного моменту у минулому або іншої минулої дії, вираженої Past Indefinite або обставинним словом:

By this time, Sir Arthur Conan Doyle had accomplished 26 of his 56 short stories.

Sir Conan Doyle had accomplished 26 of his 56 short stories before he proceeded to the creation of the rest of them.

2. Певний момент може ставати зрозумілим із ситуації:

Alex had done his homework and was watching television then.

3. Певний момент може не згадуватися взагалі:

Thomas looked very sleepy, for he had slept 2 hours only the previous night.

4. Із виразами *scarcely ... when, hardly ... when, no sooner ...than*:

They had no sooner entered their flat, when the telephone rang.

5. Порядок слів у реченні може змінюватися з емфатичною метою:

Hardly had they entered their flat, when the telephone rang.

6. Дуже часто Past Perfect вживається з обставинними словами *just, already* та *yet*:

Uncle Tom had just had a cup of coffee and was looking through the morning newspaper.

7. Past Perfect може не обов'язково позначати дію, яка передує іншій, а лише дію, яка вже скінчилася:

Mary had done the room and was having a rest then.

8. На позначення дії, яка завершилася у проміжку часу, який почався у минулому, продовжувався до моменту мовлення і навіть може тривати після нього. Початок цього проміжку вводиться прийменником *since*, а його тривалість – *for*:

The victims of the street accident had been dead for 3 hours already when the help arrived.

9. У підрядних реченнях часу із сполучниками *when, after, before*, etc. вживається Past Indefinite:

The student knew the contents of the article after he read it only once.

З метою підкреслити завершеність дії, вживається Past Perfect:

Jack knew the poem by heart, after he had read it 3 times.

Майбутній перфектний час

(The Future Perfect Tense)

утворюється додаванням минулого дієприкметника смислового дієслова до допоміжного дієслова *to have* у Future Indefinite.

Стверджувальна форма

+ *I'll have found your key by 3 o'clock.*

Заперечна форма

- *I'll not have found your key by 3 o'clock.*

I won't have found your key by 3 o'clock.

Загальне запитання

? *Will you have found my key by 3 o'clock?*

Yes, I will.

No, I won't.

Спеціальне запитання

? *Who will have found my key by 3 o'clock?*

What will I have found by 3 o'clock?

What will I have done to your key by 3 o'clock?

Whose key will you have found by 3 o'clock?

What time will I have found my key by?

Розділове запитання

? *I will have found your key by 3 o'cock, won't I?*

I won't have found your key by 3 o'clock, will I?

Альтернативне запитання

? *Will I or she have found my key by 3 o'clock?*

Питально-заперечна форма

?/- *Won't you have found my key by 3 o'clock?*

Yes, I will. – Ні; знайду.

No, I won't. – Так; не знайду.

Вживання майбутнього перфектного часу

1. Майбутній перфектний час вживається на позначення дії, яка завершиться до певного моменту часу у майбутньому:

I'll be at home by 3. I'll have bought some butter by that time.

2. На позначення дії, яка відбудеться у проміжку часу, який розпочався до моменту мовлення, тривав до нього і навіть може тривати після нього:

I'll have known you for a year by September.

Теперішній тривалий час
(The Present Continuous Tense)

утворюється за допомоги дієслова *to be* у Present Indefinite та теперішнього дієприкметника.

Теперішній дієприкметник утворюється за допомогою додавання закінчення –*ing* до основи дієслова.

1. Якщо дієслово закінчується на німу –*e*, вона випадає перед додаванням закінчення:

to give –giving

2. Якщо основа дієслова закінчується на приголосний, якому передує короткий голосний, що утворює наголошений склад, цей приголосний подвоюється:

to refer - referring

3. Якщо основа дієслова закінчується на приголосний, якому передує короткий голосний, що утворює ненаголошений склад, цей приголосний не подвоюється:

to render - rendering

4. Якщо дієслово закінчується на приголосний *l*, якому передує короткий голосний, що утворює наголошений або ненаголошений склад, цей приголосний у будь-якому випадку подвоюється:

to travel – travelling
to compel - compelling

5. Теперішні дієприкметники дієслів *to lie, to die, to tie* утворюються наступним чином:

lying, dying, tying

6. Якщо основа дієслова закінчується на –*y*, остання не змінюється перед додаванням закінчення –*ing*:

to deny - denying

I	*am leaving*	we	*are leaving*
You	*are leaving*	you (all)	*are leaving*
he, she, it	*is leaving*	they	*are leaving*

I am = I'm   *We are* = we're
You are = you're   *They are* = they're
He is = he's
She is = she's
It is = it's

I'm *leaving*	we're *leaving*
you're *leaving*	you (all)'re *leaving*
he's *leaving*, she's *leaving*, it's *leaving*	they're *leaving*

Стверджувальна форма

+   *I'm leaving for Peking.*
   am not = *are*n't
   are not = *are*n't
   is not = *is*n't

Заперечна форма

-   *I aren't leaving for Peking.*
  I'm not leaving for Peking.

Загальне запитання

?   *Am I leaving for Peking?*

Yes, I am.
No, I aren't.

Питально-заперечна форма

?/-   *Aren't I leaving for Peking?*

Yes, I am. – Ні; їду.
No, I aren't. – Так; не їду.

Спеціальне запитання

?   *Who's leaving for Peking?*
What am I leaving for?
What am I doing to Peking?

Альтернативне запитання

?   *Am I leaving for Peking or Moscow?*

Розділове запитання

?   *I'm leaving for Peking, aren't I?*
  I aren't leaving for Peking, am I?

Вживання теперішнього тривалого часу

Теперішній тривалий час вживається на позначення:
1. дії, що відбувається у момент мовлення:

Why are you looking at me so sad?

2. дії, що відбувається у період часу, що також включає момент мовлення, але є значно ширшим за нього:

What are you doing here, in Kyiv?

3. стану або якості, що характеризують особу:

You're being a bore!

4. запланованої дії, що має відбутися у майбутньому. У даному випадку вживаються здебільшого дієслова руху: *to go, to come, to arrive, to leave,* etc.:

I'm leaving for Peking.

5. У сучасній англійській для передачі запланованої дії вживаються не лише дієслова руху:

Are we playing poker tomorrow?

6. однієї із двох дій, інша із яких позначена Present Indefinite:

I quickly get tired, when I'm running.

7. тривалого процесу із застосуванням прислівників часу *always, constantly, ever*:

The Earth is constantly moving round the Sun.

8. тривалого процесу із застосуванням прислівників часу *always, ever, constantly*, при чому акцент робиться на безперервності цього процесу:

You're constantly grumbling.

Акцентування безперервності у даному випадку відбувається з іронічною метою і спричиняється емоціями мовця.

Минулий тривалий час
(The Past Continuous Tense)

утворюється за допомоги дієслова *to be* у Past Indefinite та теперішнього дієприкметника.

I	was leaving	We	were leaving
You	were leaving	you (all)	were leaving
he, she, it	was leaving	They	were leaving

Стверджувальна форма

+   *I was leaving for Peking.*

was not = *was*n't
were not = *were*n't

Заперечна форма

-   *I wasn't leaving for Peking.*

Загальне запитання

?   *Was I leaving for Peking?*

Yes, I was.
No, I wasn't.

Питально-заперечна форма

?/-   *Wasn't I leaving for Peking?*

Yes, I was. – Ні; їхав.
No, I wasn't. – Так; не їхав.

Спеціальне запитання

?   *Who was leaving for Peking?*
What was I leaving for?
What was I doing to Peking?

Альтернативне запитання

?   *Was I leaving for Peking or Singapore?*

Розділове запитання

?   *I was leaving for Peking, wasn't I?*
I wasn't leaving for Peking, was I?

Вживання минулого тривалого часу

Минулий тривалий час вживається на позначення:

1. Дії, що відбувалася протягом певного проміжку часу у минулому:

Ted was pulling at his cigar.

2. Межі певного проміжку часу можуть задаватися обставиною часу або іншою дією, вираженою у Past Indefinite Tense:

At midday, Mrs. Brown was cooking dinner for her children.

3. Проміжок часу може не вводитися взагалі:

George was doing his dirty business and not paying the least attention to what was going on all around him.

4. З обставинами часу *the whole day, all day long* Past Continuous вживається паралельно із Past Indefinite:

My friends were working in the garden all day long.
My friends were working in the garden the whole day.
My friends worked in the garden all day long.
My friends worked in the garden the whole day.

5. тривалого процесу із прислівниками частотності і повторюваності *ever, always, constantly*:

Betty was always smiling to the people surrounding her.

6. стану або якості особи:

They said she was being clever.

Майбутній тривалий час
(The Future Continuous Tense)

утворюється за допомоги допоміжного дієслова *to be* у Future Indefinite та теперішнього дієприкметника смислового дієслова.

I	shall be leaving	we	shall be leaving
you	will be leaving	you (all)	will be leaving
he, she, it	will be leaving	they	will be leaving

I shall = I'll you will = you'll he will = he'll she will = she'll it will = it'll	we shall = we'll you (all) will = you (all)'ll they will = they'll

Стверджувальна форма

+   *I'll be leaving for Peking.*
shall not = *sha*n't
will not = *wo*n't

Заперечна форма

-   *I won't be leaving for Peking.*

Загальне запитання

?   *Will* I *be leaving for Peking?*

Yes, I will.
No, I won't.

Питально-заперечна форма

?/-   *Won't* I *be leaving for Peking?*

Yes, I will. – Ні; їхатиму.
No, I won't. – Так; не їхатиму.

Спеціальне запитання

?   *Who* will be leaving for Peking?
What will I be leaving for?
What will I be doing to Peking?

Альтернативне запитання

?   *Will I be leaving for Peking or Singapore?*

Розділове запитання

?   *I will be leaving for Peking, won't I?*
I won't be leaving for Peking, will I?

Вживання майбутнього тривалого часу

Мабутній тривалий час вживається на позначення:

1. дії, що відбуватиметься протягом певного проміжку часу у майбутньому:

I'll be having my English lesson for an hour and a half.

2. Проміжок часу може задаватися іншою дією, вираженою у Present Indefinite Tense або обставиною часу:

I'll be making a report when you come.
At midday, I'll be making a report.

3. Проміжок часу може не вводитися взагалі, коли він є зрозумілим із контексту:

The teacher won't answer your telephone call – he'll be making a new lesson for you.

4. Як і Future Indefinite, Future Continuous може позначати майбутню дію:

I'll be travelling to New York next year.

Майбутній тривалий час із точки зору минулого
(The Future Continuous-in-the-Past Tense)

утворюється за допомоги допоміжного дієслова *to be* у Future Indefinite-in-the-Past Tense та теперішнього дієприкметника смислового дієслова.

Стверджувальна форма

+   *I'd be leaving for Peking.*

Заперечна форма

-   *I shouldn't be leaving for Peking.*
I'd not be leaving for Peking.

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Загальне запитання

?   *Should I be leaving for Peking?*

Yes, I should.
No, I shouldn't.

Питально-заперечна форма

?/-   *Shouldn't I be leaving for Peking?*

Yes, I should. – Ні; їхатиму.
No, I shouldn't. – Так; не їхатиму.

Спеціальне запитання

?   *Who'd be leaving for Peking?*
What should I be doing to Peking?
What should I be leaving for?

Альтернативне запитання

?   *Should I be leaving for Peking or Singapore?*

Розділове запитання

?   *I'd be leaving for Peking, shouldn't I?*
I shouldn't be leaving for Peking, should I?

Вживання майбутнього тривалого часу із точки зору майбутнього

Майбутній тривалий час із точки зору минулого вживається для позначення дії, яка була майбутньою з точки зору минулого:

Brother said, he'd be leaving for Peking.

Перфектні тривалі часи
(Perfect Continuous Tenses)

позначають дію, яка відбувалася до певного моменту часу у минулому, теперішньому або майбутньому часі як процес. Вони утворюються з допоміжного дієслова *to be* в одному із перфектних часів та теперішнього дієприкметника смислового дієслова.

Теперішній перфектний тривалий час
(The Present Perfect Continuous Tense)

утворюється додаванням теперішнього дієприкметника основного дієслова до допоміжного дієслова *to be* у Present Perfect.

I	*have been reading*	We	*have been reading*
you	*have been reading*	you (all)	*have been reading*
he, she, it	*has been reading*	They	*have been reading*

I have = I've
you have = you've
he has = he's
she has = she's
it has = it's

we have = we've
they have = they've

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I 've *been reading*   we 've *been reading*
you 've *been reading*   you (all) 've *been reading*
he 's *been reading*, she 's *been reading*,   they 've *been reading*
it 's *been reading*

Стверджувальна форма

\+   I <u>have been reading</u> that book these 5 days.
have not = *have*n't
has not = *has*n't

Заперечна форма

\-   I <u>haven't been reading</u> that book these 5 days.

Загальне запитання

?   <u>Have I been reading</u> that book these 5 days?
Yes, I have.
No, I haven't.

Питально-заперечна форма

?/-   <u>Haven't I been reading</u> that book these 5 days?
Yes, I have. – Ні; читав.
No, I haven't. – Так; не читав.

Спеціальне запитання

?   <u>Who's been reading</u> that book these 5 days?
<u>What</u> have I been doing to that book these 5 days?
<u>Which book</u> have I been reading these 5 days?
<u>What</u> have I been reading these 5 days?
<u>When</u> have I been reading that book?

Альтернативне запитання

?   <u>Have I been reading</u> that book these 5 or 6 days?

Розділове запитання

?   I <u>have been reading</u> that book these 5 days, <u>haven't</u> I?
I <u>haven't been reading</u> that book these 5 days, <u>have</u> I?

Вживання теперішнього перфектного тривалого часу

Теперішній перфектний тривалий час вживається:

1. на позначення тривалої дії як процесу, що розпочалася у минулому, тривала до певного проміжку часу і навіть після нього. Початок проміжку часу задається обставинним словом *since*, тривалість – *for, these 2 days*, etc. Якщо *since* вводить підрядне речення, у ньому використовується Past Indefinite:
I <u>have been reading</u> that book these 5 days.
I <u>have been teaching</u> English to you, since you came here first.

2. на позначення тривалої дії як процесу, яка завершилася незадовго до моменту мовлення:
You don't look well now. You probably <u>have been weeping</u> all the night through.

3. на позначення повторюваних дій у минулому:
I <u>have been collecting</u> postage stamps in the past.

4. з метою емоційного забарвлення мовлення:
You <u>have been lying</u> to me!

Минулий перфектний тривалий час

(The Past Perfect Continuous Tense)
утворюється додаванням теперішнього дієприкметника смислового дієслова до допоміжного дієслова *to be* у Past Perfect:
I <u>had been working</u>.

I	*had been working*	We	*had been working*
you	*had been working*	you (all)	*had been working*
he, she, it	*had been working*	They	*had been working*

had = 'd

I 'd *been working*   we 'd *been working*
you 'd *been working*   you (all) 'd *been working*
he 'd *been working*, she 'd *been working*,   they 'd *been working*
it 'd *been working*

Стверджувальна форма

\+   It <u>had been raining</u> since the morning.
had not = hadn't

Заперечна форма

\-   It had<u>n't</u> been raining since the morning.

Загальне запитання

?   <u>Had it been raining</u> since the morning?
Yes, it had.
No, it hadn't.

Питально-заперечна форма

?/-   <u>Hadn't it been raining</u> since the morning?
Yes, it had. – Ні; ішов.
No, it hadn't. – Так; не ішов.

Спеціальне запитання

?   <u>What</u> had been raining since the morning?
<u>What</u> had it been doing since the morning?
<u>What</u> time had it been raining since?
<u>When</u> had it been raining?

Альтернативне запитання

?   Had it been raining since <u>the morning</u> or <u>the evening</u>?

Розділове запитання

?   It <u>had</u> been raining since the morning, <u>hadn't</u> it?
It had<u>n't</u> been raining since the morning, <u>had</u> it?

Вживання минулого перфектного тривалого часу

Минулий перфектний тривалий час вживається:

1. на позначення дії, яка розпочалася до певного періоду часу у минулому, тривала до нього і, навіть, у момент нього. Початок періоду задається обставинним словом *since*, а його тривалість – *for*:

   We stayed indoors because it had been raining <u>since the morning</u>.
   We stayed indoors because it had been raining <u>for 2 hours</u>.

2. на позначення дії як процесу, яка завершилася незадовго до певного моменту у минулому:

   Jane sobbed, because she<u>'d been weeping</u>.

Майбутній перфектний тривалий час
(The Future Perfect Continuous Tense)

утворюється додаванням теперішнього дієприкметника смислового дієслова до допоміжного дієслова *to be* у Future Perfect.

Стверджувальна форма

+   *I<u>'ll have been working</u> for 3 hours when brother arrives.*

Заперечна форма

-     *I <u>won't have been working</u> for 3 hours when brother arrives.*

Загальне запитання

?   *Will I <u>have been working</u> for 3 hours when brother arrives?*
       Yes, I will.
       No, I won't.

Питально-заперечна форма

?/-   *Won't I <u>have been working</u> for 3 hours when brother arrives?*
       Yes, I will. – Ні; працюватиму.
       No, I won't. – Так; не працюватиму.

Спеціальне запитання

?   *<u>Who</u> will <u>have been working</u> for 3 hours when brother arrives?*
    <u>What</u> will I <u>have been doing</u> for 3 hours when brother arrives?
    <u>How long</u> will I <u>have been working</u> when brother arrives?
    <u>How many hours</u> will I <u>have been working</u> for when brother arrives?

Розділове запитання

?   *I<u>'ll have been working</u> for 3 hours when brother arrives, won't I?*
    I <u>won't have been working</u> for 3 hours when brother arrives, <u>will I</u>?

Альтернативне запитання

?   *Will I <u>have been working</u> for 3 or 4 hours when brother arrives?*

Вживання майбутнього перфектного тривалого часу

1. Майбутній перфектний тривалий час вживається на позначення дії, яка розпочнеться до певного періоду часу у майбутньому, триватиме до нього і, навіть, під час нього:

   I<u>'ll have been working</u> for 3 hours when brother arrives.

Пасивний стан дієслова
(The Passive Voice)

утворюється додаванням його третьої форми до дієслова *to be* у будь-якому із 16 граматичних часів:

I read a book.
The book <u>is read</u> (by me).

В активному стані іменник *a book* є об'єктом, на який спрямовується дія суб'єкту *I*.

У пасивному стані цей об'єкт стає суб'єктом (підметом у реченні):

I read a book yesterday.
The book <u>was read</u> yesterday.

Вживання пасивного стану

1. Дієслово вживається у пасивному стані, якщо об'єкт у реченні відсутній або лише домислюється:

   The house <u>was rebuilt</u>.

2. Якщо об'єкт присутній, то він вводиться прийменником *by*:

   *The house was rebuilt <u>by the builders</u>.*

НЕОСОБОВІ ФОРМИ ДІЄСЛОВА
(VERBALS)

Загальні поняття:

the verb	tense and voice distinctions	verbal	Simultaneous	predicative relation	accompanying words
verbals	characteristic traits	absolute	Prior	a syntactic unit	a phrase
mood	Nominal	relative	a predicative construction	the doer of the action	

Дієслово має *особові* і *неособові* форми. Останні називаються неособовими через те, що вони не мають граматичних[категорій особи, числа, часу, а лише показують, чи виражена ними дія є одночасною або неодночасною із дією, вираженою особовою формою дієслова. Іншими словами, їм властива *відносність вираження часових характеристик*.

В англійській мові існують три неособові форми дієслова: інфінітив, герундій та дієприкметник. Кожна із них має *подвійну природу*: інфінітив і герундій мають якості, властиві дієслову і іменникові, а дієприкметник – дієслову і прикметникові.
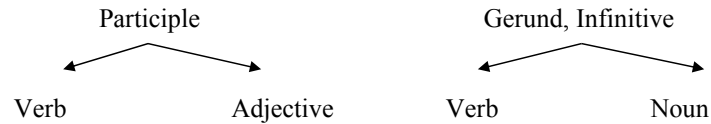
Дієслово

the finite   forms
the non-finite forms (verbals)
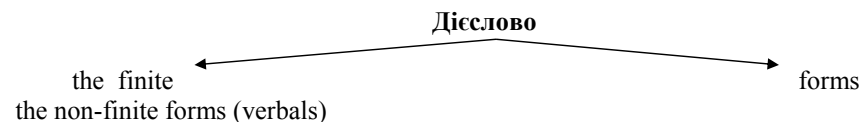
Verbals:

- the Participle;
- the Gerund;
- the Infinitive.

The Characteristic Traits of the Verbals:

1. Double Nature

Participle   Gerund, Infinitive

Verb   Adjective   Verb   Noun

2. The Tense Distinctions
   e.g. Through the window of our class-room we could well see **the children playing in the yard**.
   Through the window of our class-room we can well see **the children playing in the yard**.
   Through the window of our class-room we shall see **the children playing in the yard**.
3. Predicative Constructions

A predicative construction

a nominal element (noun or pronoun)   a verbal element (one of the verbals)
   e.g. *They sat down to supper*, *Manston still talking cheerfully*.

In a sentence verbals may occur**:**
Singly (i.e. without any accompanying words):
   e.g. *She went away, smiling*.

In phrases (i.e. with several accompanying words, usu. an object or an adverbial modifier to a verbal):
   e.g. *They painted the fence overlooking the garden green*.

In predicative constructions:
   e.g. *Tom observed a man crossing the street*.

THE INFINITIVE
developed from the verbal noun which in course of time became verbalized, retaining at the same time some of ist nominal characteristics.

General Notions:

to develop	syntactic functions	a direct object	an aspect form	to be conveyed
a verbal noun	a predicative	to be modified	time relations	to last
to become verbalized	a nominal character	aspect distinctions	a manner	
to retain	verbal characteristics	to refer	to be presented	
to be manifested	transitive verbs	a tense form	to be carried out	

The Double Nature of the Infinitive

nominal   verbal
(reflected in its syntactic functions):

nominal	verbal
1. Subject e.g. *To be afraid of wolves means to never go to the forest.*	1. The Infinitive of transitive verbs can take a direct object. e.g. *In some time Gulliver learnt to understand their language*.
2. Object e.g. *We like to study English.*	2. The Infinitive can be modified by an adverb. e.g. *The girl began to cry bitterly*.
3. Predicative e.g. *Our duty of students is to know English well.*	3. The Infinitive has tense and aspect distinctions. The infinitive of transitive verbs has also voice distinctions.

THE FORMS OF THE INFINITIVE

	Active	Passive
1. Indefinite	*to write*	*to be written*
2. Continuous	*to be writing*	-
3. Perfect	*To have written*	*to have been written*
4. Perfect Continuous	*to have been writing*	-

- **The Indefinite Infinitive Active**:   *to write*
- **The Indefinite Infinitive Passive**:   *to be written*
- **The Continuous Infinitive (Active)**:   *to be writing*
- **The Perfect Infinitive Active**:   *to have written*
- **The Perfect Infinitive Passive**:   *to have been written*
- **The Perfect Continuous Infinitive (Active)**:   *to have been writing*

1. **The Indefinite Infinitive (Active and Passive)** shows the action it denotes is simultaneous with that expressed by the finite verb.
   e.g. *We saw the man cross the river*.
   The man appeared to be seen to cross the river.

2. **The Continuous Infinitive** also shows the action it denotes is simultaneous with that expressed by the finite verb, but it is an action in progress.
   e.g. *We found the man to be standing at the entrance*.

3. **The Perfect Infinitive (Active and Passive)** shows the action it denotes is prior to that expressed by the finite verb.
   e.g. *She turned out to have known that person for years*.

NB: With the verbs *to mean*, *to intend*, *to hope*, *to expect* used in the Past Indefinite Tense the Perfect Infinitive shows the intention was not carried out.

e.g. *I meant to have approached you on that matter*.

The same idea is rendered by these verbs used in the Past Perfect Tense with an Indefinite Infinitive.

e.g. *I had meant to approach you on that matter*.

The idea can, however, be expressed in the following way:

e.g. *I meant to approach you on that matter but never did*.

4. ***The Perfect Continuous Infinitive*** also shows the action it denotes is prior to that expressed by the finite verb. It is also an action in progress.

e.g. *They turned out to have been living on nothing more than bread and water for a week*.

The Voice Distinctions of the Infinitive

The Infinitive has special forms for the active and the passive voice.

e.g. *It's so glorious to love and to be loved*.

In *there is / there are* constructions the Infinitive can be active and passive without any change of meaning.

e.g. *There's no time to lose / to be lost*.
There're no obstacles to fear / to be feared.

THE BARE INFINITIVE

General Notions:

the use	a modal verb	to precede	the end of an action	to imply
the particle	sense perception	to follow	a compound verbal aspect predicate	an adverbial modifier of purpose
Modern English	Obsolete	an introductory subject	the introductory object	an adverbial modifier of result
Old English	colloquial speech	a compound verbal predicate	an attribute	an adverbial modifier of comparison (manner)
a preposition	an expression	a modal expression	an abstract noun	an adverbial modifier of attendant circumstances
the dative case	an Infinitive sentence	a verb expressing modality	a class noun	a parenthesis
to indicate	to be separated from	a compound verbal modal predicate	an indefinite pronoun	
the bare Infinitive	a split Infinitive	the beginning of an action	an ordinal numeral	
an auxiliary verb	an Infinitive phrase	the duration of an action	a modal significance	

In Modern English the Infinitive is chiefly used with the preposition *to* which in Old English was a preposition rendering the dative case with additional meaning of purpose: *to writtene*. Later on it became a formal sign used together with the Infinitive to render not only the meaning of purpose but other meanings, too.

Still, there are cases when the Infinitive can be used without particle *to* (the so-called bare Infinitive):

1. After auxiliary verbs:
I shall phone you tomorrow.
Don't you understand my English?

2. After modal verbs, except *ought*:
I can understand English well.
He ought to call her the previous day.

3. After the verbs denoting sense perception: *to see, to hear, to feel*, etc.:
We saw him enter the building.
NB: After the verb *to feel* the verb *to be* is used with the particle *to*:
I felt this story to be true.

4. After the verb *to let:*
Let me introduce myself.

5. After the verbs *to make, to have* in the meaning of «примушувати»:
I made him understand that Grammar rule.
NB: The verb *to have* used with auxiliaries *will/would* has the negative meaning:
I won't have you speak to me this way.

6. After the verb *to know* in the meaning of *to see, to observe*:
I have never known the medicine work wonders.

In this case the Infinitive can also be used with the particle *to*:
I have never known that lecturer to speak in a loud voice to his audience.

NB: After the verbs *to see, to hear, to make, to know* used in the Passive Voice the Infinitive is used with the particle *to*:
He was seen to strike the woman's face.
He was heard to pronounce the girl's name several times.
All the pupils were made to obey their teacher.
Sir Arthur Conan Doyle is known to be the father of the detective story.

7. After the verb *to bid*:
I bade him help the old woman.

8. After the verbs and verbal expressions: *had better, would sooner, would rather, cannot but, nothing but, cannot choose but*:
You'd better go and buy newspapers.

9. In sentences of a special type (infinitive sentences):

Why not go there immediately?

Sometimes particle *to* can be used without the Infinitive when its meaning is implied in the context:
- *Would you like a cup of coffee?*
- *I'd love to.*

The Infinitive can be separated from the particle *to* by an adverb (the so-called split Infinitive):
He used to carefully look after her.

THE FUNCTIONS OF THE INFINITIVE
In a sentence the Infinitive can perform different syntactic functions. A single Infinitive occurs but seldom - in most cases we find a phrase.
1. Subject:
To act like that was dangerous.

The Infinitive can be introduced by the pronoun *it* (the so-called Introductory (Anticipatory) Subject):
It was dangerous to act like that.

2. Predicative:
The only way out was to decide.

The Infinitive can also be a part of a predicative:
The problem was not easy to find out.

3. Part of a Compound Verbal Predicate:
a) with modal verbs, modal expressions and verbs denoting modality the Infinitive forms Part of a Compound Verbal Modal Predicate:
I could go there any time.
They were likely to cope with the problem.
We intended to finish that work before dead-line.

b) with verbs denoting the beginning, the duration or the end of an action the Infinitive forms Part of a Compound Verbal Aspect Predicate:
She began to cry bitterly.
They continued to speak quietly.
I already finished to read that book.

4. Object:
I want to write a book about my summer adventures.

After the verbs *to teach, to instruct, to order, to allow, to implore, to beg*, etc. there are 2 objects – one of them is expressed by an Infinitive:

He ordered the secretary to change the time-table.

The object can also be introduced by the anticipatory *it:*
He found it difficult to answer that question.

5. Part of a Complex Object:
He was heard to open the door.

6. Attribute:
The attribute expressed by the Infinitive can modify both class and abstract nouns, ordinal numerals, indefinite pronouns and the adjective *last*.
We have no time to waste.
He's a man to trust.
He was the first to answer.
Have you got anything to eat?
That girl was the last to leave the plane.

7. Adverbial Modifier of:
a) purpose:
I opened the window to let the fresh air in.

Adverbial modifiers of purpose may also be introduced by *so as, in order*:
I opened the window so as the fresh air might come in.

b) Adverbial modifiers of result are modified by adverbs *too* and *enough*:
He's clever enough to be cheated by you.

They are also to be found in sentences of the following type:
Would you be so kind as to open the window?

c) Adverbial modifiers of Comparison (Manner) are introduced by the conjunctions *as if, as thought*:
That fellow opened his mouth as if to pronounce something.

d) Adverbial Modifier of Attendant Circumstances:
He left his native town to never come back to it again.

8. Parenthesis:
To cut the long story short, they lived a happy life.
To put it mild, you're a scoundrel.
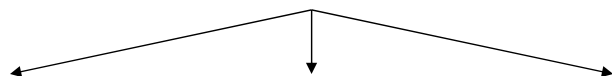*To say the least of, the matter was really dangerous.*

PREDICATIVE CONSTRUCTIONS WITH THE INFINITIVE.
The Objective-with-the-Infinitive Construction

General notions:

the Objective-with-the-Infinitive Construction	the objective case	a simple sentence	a literary style	verbs and expressions denoting feeling and emotion	a negative sentence
the Subjective Infinitive Construction	a subordinate clause	mental activity	a colloquial style	verbs denoting order and permission	verbs denoting compulsion
the for-to-Infinitive Construction	to contain	a restriction	verbs of declaring	a lifeless thing	to require
the common case	to be rendered	to ap ply	verbs denoting wish and intention	an affirmative sentence	a preposition

Predicative Constructions with the Infinitive

The Objective-with-the-Infinitive Construction   The Subjective Infinitive Construction   The for-to-Infinitive Construction

The Objective-with-the-Infinitive Construction is a predicative construction consisting of 2 elements: a verbal (expressed by the Infinitive) and nominal (expressed by a noun in the common case or a pronoun in the Objective case):

We saw <u>him enter the building</u>.
They observed <u>Jim pick flowers</u>.

The verbal element *enter* stands in predicate relation to the nominal element *he* in the objective case which denotes the doer of the action expressed by the Infinitive.

The verbal element *pick* also stands in predicate relation to the nominal element expressed by the proper noun *Jim* in the common case, which also denotes the doer of the action expressed by the Infinitive.

If the meaning is passive, Participle II is used:
We saw <u>the fire slowly conquered</u>.

If the process is meant, Participle I is used:
I saw <u>you dancing</u>.

The Objective-with-the-Infinitive Construction is used:
1. After the verbs of sense perception: *to hear, to see, to watch, to feel, to observe, to notice*:
The man watched <u>his dog lick the bones</u>.
NB: When the verb *to hear* is used in its meaning *to get to know*, a predicative clause is used:
I heard <u>he had left our town</u> (<u>of his having left our town</u>).
NB: After the verbs *to hear, to notice* the verb *to be* is never used in the Objective-with-the-Infinitive Construction:
I observed <u>that he became pale</u>.
2. After the verbs of mental activity: *to think, to know, to consider, to expect, to believe, to suppose, to imagine, to find, to feel, to trust:*
We expected <u>him to come in time</u>.
NB: After the verbs *to think, to consider, to find* the Objective-with-the-Infinitive Construction is used without Infinitive:
I find <u>her smart</u>.
Sometimes the Perfect Infinitive is used:
The doctor pronounced <u>his heart to have stopped 2 hours before</u>.
3. After the verbs of declaring: *to pronounce, to declare, to report:*
The surgeon reported <u>the wound to be a slight one</u>.
4. After the verbs denoting wish and intention: *to wish, to want, to desire, to mean, to intend, to choose (want):*
I want <u>you to learn this Grammar rule</u>.
5. After the verbs denoting feeling and emotion: *to (dis)like, to love, to hate, to suffer:*
I'd like <u>you to open the window</u>. It's a bit too stuffy here.
6. After the verbs denoting order and permission: *to order, to allow, to have, to suffer:*
The verbs *to order, to allow* are used with the names of lifeless things only:
The gentleman ordered <u>his carriage to be brought around at 6 sharp</u>.
If they're used with the names of living beings, the meaning is passive:
Father allowed <u>his son to be awaked at 10 in the morning</u>.
The verbs *to order, to allow* demand 2 objects after them: one expressed by a noun or a pronoun and another expressed by the Infinitive:
The Dean allowed <u>his secretary</u> <u>to change the time-table</u>.
But: The Dean allowed <u>the time-table to be changed</u>.
The young man suffered <u>his fiancée take a leave</u>.
I won't have <u>you speak to me in such a tone</u>.
7. After the verbs denoting compulsion: *to make* (змушувати), *to have* (змушувати, сказати), *to get* (добиватися), *to cause (*змушувати, примушувати):
The teacher caused <u>her pupils to correct their mistakes</u>.
8. The Objective-with-the-Infinitive Construction is never used after the verbs demanding prepositions. Still, it's widely used after the verb *to rely* taking preposition *on*:
I rely on <u>you doing this business</u>.
The gerund can also be used in this case:
I rely on <u>your doing this business</u>.

THE SUBJECTIVE INFINITIVE CONSTRUCTION
(The Nominative-with-the-Infinitive Construction)

General notions:

the Nominative-with-the-Infinitive Construction	a principal clause
the peculiarity	an indefinite personal clause
the nominative case	Fiction
to serve	a word-group
a component part	a pair of synonyms

The Subjective Infinitive Construction is a predicative construction consisting of 2 elements: a verbal (expressed by the Infinitive) and a nominal (expressed by a noun in the common case or a pronoun in the Nominative case, also called the Nominative-with-the-Infinitive Construction):

He was seen to enter the building.
Jim was observed to pick flowers.

The peculiarity of this construction is that it doesn't form a separate syntactic unit: one of its components is the subject (which does not denote the doer of the action) and the other – part of a compound verbal predicate.

The verbal element *to enter* stands in predicate relation to the nominal element *he* in the nominative case which does not denote the doer of the action expressed by the Infinitive.

The verbal element *to pick* also stands in predicate relation to the nominal element expressed by the proper noun *Jim* in the common case, which doesn't denote the doer of the action expressed by the Infinitive either.

The Subjective-with-the-Infinitive Construction is used:

1. After the verbs of sense perception: *to hear, to see*, etc:
The dog was seen to lick the bones.
If the process is meant, Participle I is used:
The little girl was seen dancing.
2. After the verbs of mental activity: *to think, to consider, to expect, to believe, to suppose, to know:*
Sir Arthur Conan Doyle is considered to be the father of the detective story.
3. After the verb *to make*:
The little boy was made to go to bed at 9 p.m.
NB: The use of the Subjective Infinitive Construction with the verbs denoting mental activity is characteristic of literary style. The verbs *to expect, to suppose, to make* allow of being used in colloquial style, as well.
4. After the verbs *to say, to report*:
Our neighbor is said to be rich.

5. After verbal expressions: *to be sure, to be likely, to be certain:*
He is likely to come at 6 in the evening.
6. After the following pairs of synonyms: *to seem - to appear, to happen – to chance* (literary)*, to prove - to turn out:*

Our colleague happened to be visiting London 2 weeks ago.
NB: With the verbs *to expect, to be sure (likely), to be certain* the Subjective Infinitive Construction has the meaning of futurity.

The for-to-Infinitive Construction
is a predicative construction in which the verbal element (expressed by the Infinitive) stands in predicate relation to the nominal one (expressed by a noun or a pronoun proceeded by the preposition "for"):
This book is for you to read.
The verbal element expressed by the Infinitive *to read* stands in predicate relation to the nominal one expressed by the personal pronoun *you* proceeded by the preposition *for*.

In a sentence the for-to-Infinitive construction may perform the following syntactic functions:

1. Subject:
For me to tell you a lie will be unjust.
Here the introductory (anticipatory) subject *it* can also be found:
It will be unjust for me to tell you a lie.
2. Predicative:
The only way out is for you to tell the truth.
3. Complex object:
The judge waited for the accused to speak up.
4. Attribute:
Here's a nice book for you to read before going to sleep.
5. Adverbial modifier of:
a) purpose:
They left the door open for the doctor to come in.
b) result:
The text was too difficult for the pupils to translate it.
After the expressions: *to be glad, to be pleased, to be sorry* the Infinitive is used when the subject of the sentence denotes the doer of the action expressed by it. Otherwise, a subordinate clause is used:
I'm glad to have already seen that movie.
I'm pleased to have met you.
I'm really sorry you haven't seen that movie yet.

THE GERUND
developed from the verbal noun, which in course of time became verbalized, preserving at the same time its nominal characteristics.
The Gerund is formed by adding the *–ing* ending to the verb-stem:
to write – writing
As a result of its natural origin and development the Gerund has a double nature – nominal and verbal.
Its **nominal characteristics** are as follows:

1. In a sentence the Gerund can perform syntactic functions of the subject, the object and the predicative:

Walking in such slippery weather is extremely dangerous.

Step by step, I made certain progress in understanding their language.

The only way out was fighting the enemy.

2. The Gerund can be proceeded by a preposition:

I can never get tired of talking to people.

3. The Gerund can be modified by a noun in the possessive case or a possessive pronoun:

Is there any objection to my opening the window?

Jolyon's having entered the room surprised everybody greatly.

The Gerund's **verbal character** is the same as that of Participle I:

4. The Gerund of transitive verbs can take a direct object:

I adore reading books.

5. The gerund can be modified by an adverb:

Peggy burst out crying bitterly.

6. The Gerund has tense distinctions. The Gerund of transitive verbs may also have voice distinctions.

The forms of the gerund are as follows:

The Indefinite Gerund Active *writing*

The Indefinite Gerund Passive *being written*

The Perfect Gerund Active *having written*

The Perfect Gerund Passive *having been written*

The Indefinite Gerund Active and Passive shows the action expressed by it is simultaneous with that expressed by the finite verb:

I can swim many hours without tiring.

The Perfect Gerund Active and Passive shows the action prior to the one expressed by the finite verbs:

I really regret now having behaved in such a cynic way then.

NB: With the verbs *to remember, to excuse, to forgive, to thank* the Indefinite Gerund shows the action it expresses is prior to the one expressed by the finite verb:

I always remember going to the cinema together with you.

However, Perfect Gerund is also possible here:

I'd like to thank you for having cooperated with us.

The Gerund has special forms for the Active and the Passive voice:

I like neither talking aloud nor being talked aloud to.

Used with the verbs *to want, to need, to deserve, to require* and the adjective *worth*, the Gerund is active in form though passive in meaning:

The house wants painting.

The film is worth seeing.

PREDICATIVE CONSTRUCTIONS WITH THE GERUND

A Gerundial Construction is a predicative construction in which gerund is in predicative relation to a noun or a pronoun. The nominal element points out the doer of the action expressed by the gerund.

The nominal element can be expressed in different ways:

a) By a noun in the possessive case or a possessive pronoun:

My having translated the text surprised the teacher greatly.

There was no objection to Sam's starting reading the text.

NB Sometimes the noun can be used in the common case and the pronoun – in the objective one:

There was no objection to me starting reading the text.

Sam having translated the text surprised the teacher greatly.

There exists a difference between the parallel constructions *Sam's having translated* and *Sam having translated*. In the first case the person is made prominent and in the second – his / her action.

Sometimes, it's impossible to use the nominal element in the possessive case and namely when there're more than one noun or it is modified by an attribute in the post-position:

I enjoyed Tom and Kate having visited me when I was in trouble.

There could be no doubt about the man of letters having written it himself.

b) When the nominal element denotes a lifeless being, it's expressed by a noun in the common case or a possessive pronoun:

I told John about his watch losing time.

The picture was really great. We insisted on its rerunning.

c) The nominal element can also be expressed by a pronoun having no case distinctions: *all*, *both*, *each*, *something*, etc.:

We expected all coming back in time.

Some grammarians differentiate between the existence of two constructions: one with gerund and another with half-gerund (a noun in the common case, a pronoun in the objective one or a pronoun having no case distinctions).

THE PARTICIPLE

Is one of the 3 verbals, possessing a double nature - adjectival or adverbial and verbal. It combines the characteristics of a verb with those of an adjective or an adverb.

The Participle's nominal character is manifested in its syntactic functions: those of an attribute and adverbial modifier.

There're 2 participles in the English language: Participle I and Participle II, called the Present and the Past Participle respectively. However, these terms are open for discussion – Participle I does not necessarily express a present action, whereas Participle II does not obligatory express a past one.

The Spelling Rules

Participle I is formed by adding *–ing* ending to the verb stem.

1. mute *e* is dropped before adding the ending:

to give - giving

2. a consonant preceded by a stressed syllable rendering a short vowel is doubled:

*to regret – regre**tt**ing*

3. consonant *l* is always doubled in a stressed position, irrespective whether the vowel is short or long:

*to compel – compe**ll**ing*
to travel – traveling

4. the verbs *to lie*, *to tie*, *to die* form their Participles I in a special way:

dying, tying, lying

5. final *y* is not changed into *i* when preceded by a consonant:

*to deny – den**y**ing*

the verbal character of the Participle is reflected in its ability to:

1. take a direct object:

having garaged <u>his car</u>, Robert had dinner.

2. be modified by an adverb:

laughing <u>heartily</u>, he opened the door & entered.
<u>Deeply</u> wounded, he left the room.

3. participle I of intransitive verbs has tense distinctions. Participle I of transitive verbs has also voice distinctions.

The Forms of Participle I

	Active	Passive
Indefinite	*reading*	*being read*
Perfect	*having read*	*having been read*

Participle II has only 1 form.

PREDICATIVE CONSTRUCTIONS WITH THE PARTICIPLE
The Objective Participial Construction

There're 4 predicative constructions with the Participle in Modern English:
1. The Objective Participial Construction.
2. The Subjective Participial Construction.
3. The Nominative Absolute Participial Construction.
4. The Prepositional Absolute Participial Construction.

The Objective Participial Construction is a predicative construction in which Participle I Indefinite Active or Participle II is in predicate relation to a noun in the common case or a pronoun in the Nominative one.

In the sentence it performs the function of a complex object. The person denoted by the subject of the sentence is not the doer of the action expressed by the Participle.

The Use of the Objective Participial Construction
The Objective Participial Construction can be used:

1. after the verbs of sense perception: *to see, to hear, to feel, to find*:
I found <u>the place unaltered</u>.
They heard <u>the voices of their guests approaching</u>.
2. after the verbs of mental activity: *to consider, to understand*, etc:
I consider <u>myself engaged to that pleasant-looking young lady</u>.
3. after the verbs denoting wish: *to wish, to want, to desire*. In this case only Participle II is used:
The governor wants <u>it done quickly</u>.
4. after the verbs *to get* and *to have*:
A few days ago I had <u>my car repaired</u>.

In this case the subject of the sentence denotes the person at whose request the action expressed by the Participle is being carried out.

Sometimes, there may occur a difference in the meaning of the construction and the person denoted by the subject of the sentence become the recipient of the action expressed by the Participle:

The young lady had <u>her bad tooth pulled out</u>.

The *Nominative Absolute Participial Construction* is a predicative construction in which the participle stands in predicate relation to a noun in the common case or a pronoun in the nominative case. The nominal element is not the doer of the action. All the forms of the Participle I and II can be used in this construction.

In a sentence it performs the function of an adverbial modifier of:
1. time:
<u>The table having been served</u>, the family had supper.
<u>The task completed</u>, they had a rest.
2. attendant circumstances:
they were following the Sun, <u>Sam moving behind</u>.

In this case adverbial modifier is placed at the end of the sentence, separated by a comma.
3. condition:
in this function participles I "permitting" and "failing" are chiefly used.
<u>Weather permitting</u>, we'll go to the woods.
<u>The hope failing</u>, we'll be unable to do the task.

Sometimes, the Absolute participial construction may be introduced by the conjunction "with". It is called *the Prepositional Absolute Participial Construction* then. It performs the function of an adverbial modifier of attendant circumstances.
They were following the Sun, <u>with</u> Sam moving behind.

Absolute Participial Constructions can also be used without the Participle. We find an adjective, a prepositional phrase or an adverb instead of the verbal element then.

The Nominative Absolute Construction can be used in the function of an adverbial modifier of:

a) time:

The lesson over, the children hurried home.

b) attendant circumstances:

the teacher was sitting at his desk, <u>a pen in his hand</u>.

NB: "The lesson *being* over" has a causative meaning.

The Prepositional Absolute Construction is chiefly used in the function of an adverbial modifier of attendant circumstances:

The teacher was sitting at his desk, <u>with a pen in his hand</u>.

In writing, the Nominative Absolute Participial Construction and the Nominative Absolute Construction are detached from the main sentence by a semi-column and the Prepositional Absolute Participial Construction and the Prepositional Absolute Construction – by a comma.

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