



**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ**  
**УКРАЇНСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ**  
**ЗАЛІЗНИЧНОГО ТРАНСПОРТУ**

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**TECHNICAL ENGLISH**  
**FOR RAILWAY STUDENTS**

***Навчальний посібник***

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Навчальний посібник складений відповідно до програми з іноземних мов для немовних закладів вищої освіти. Мета навчального посібника - підготувати майбутніх спеціалістів залізничного транспорту до професійно орієнтованого усного та письмового спілкування. Ефективне оволодіння мовою забезпечено системою комунікативних вправ, що стимулюють інтерес здобувачів вищої освіти і їхню творчу активність. Текстовий матеріал навчального посібника дає різну інформацію про історію, найважливіші аспекти роботи і тенденції розвитку залізниць як України, так і інших країн світу. Тексти складені за сучасними матеріалами спеціалізованих британських і американських періодичних видань: *International Railway Journal*, *European Rail Outlook*, *Railway Gazette* і *Railvolution*. Велику увагу приділено вивченню граматики як основи розуміння та мовлення англійською мовою.

Рекомендовано як базовий курс для здобувачів закладів вищої та середньої освіти залізничного транспорту першого року навчання, а також тих, хто має технічну освіту і бажає самостійно вдосконалювати свої навички оволодіння англійською мовою.

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## ВСТУП

Навчальний посібник може бути використаний як базовий курс для здобувачів закладів вищої та середньої освіти залізничного транспорту першого року навчання. Мета навчального посібника, за Програмою вивчення іноземних мов, - підготовка здобувачів до використання іноземної мови в майбутній діяльності, тобто формування необхідних навичок професійно-орієнтованого усного та письмового спілкування.

Навчальний посібник спрямований на розвиток навичок і вмінь різних видів читання (вивчення, ознайомлення, пошук та огляд), що в подальшому дасть змогу професійно і швидко знаходити інформацію в оригінальній літературі: загальнонаукових статтях, монографіях, краєзнавчій літературі, технічній документації, матеріалах політехнічного та науково-популярного характеру.

Під час вибору текстового матеріалу основним критерієм була інформаційна цінність текстів і їх відповідність інтересам здобувачів закладів вищої освіти і технікумів залізничного транспорту. Усі тексти першої частини навчального посібника складені за сучасними матеріалами спеціалізованих британських і американських періодичних видань: *International Railway Journal*, *European Rail Outlook*, *Railway Gazette* і *Railvolution*, через що підручник актуальний і має інформаційну новизну. У деяких випадках тексти були адаптовані, а найбільш складні для сприйняття мовні явища й реалії подані у виносках і коментарях до тексту. Усі основні тексти мають QR-коди, застосовуючи які, здобувач може прослухати текст.

Велику увагу приділено навчанню усному мовленню та підготовці здобувачів до монологічного висловлювання у вигляді доповідей, що є типовим для сфери професійного спілкування; підготовці до участі в елементарному діалозі або полілозі (бесіда або дискусія), що передбачає

розвиток умінь висловлювати особисту точку зору, згоду або незгоду з чужими висловлюваннями, здійснювати запит інформації тощо.

Навчальний посібник складається з чотирьох структурних розділів і додатка. Кожний розділ умовно поділений на *Discussion*, *Reading*, *Grammar*, *Speaking* і *Word Building*. Частина *Grammar* подає граматичний матеріал у стислому вигляді з використанням таблиць і відповідних коментарів, а також великої кількості наочних прикладів. Граматичний матеріал подано послідовно і системно, так що повторення шкільного курсу англійської мови на рівні узагальнення має міцну основу для подальшого розширення та ускладнення матеріалу. Сформовані навички закріплюють серією комунікативно спрямованих вправ підстановчого, перекладного і творчого характеру. Лексика вправ не обмежена лише технічним напрямком, а відображує і соціально-побутову сферу. Граматичні вправи диференційовані за ступенем складності з урахуванням різних рівнів підготовки здобувачів і розраховані на письмову та усну практику в режимах аудиторної й самостійної робіт. Частина *Reading* починається з детального словника з різними лексичними вправами. Тематика текстів охоплює найважливіші аспекти роботи залізниці: керування рухом, метрополітен, залізничне будівництво та будова колії. Тексти, безперечно, мають професійний інтерес для майбутніх інженерів залізничного транспорту, оскільки містять найсучасніші відомості про досягнення світових залізниць і стосуються тенденції розвитку європейських залізниць на найближчі десятиліття. Система передтекстових і післятекстових вправ спрямована на формування навичок і вмінь роботи з текстом, включаючи пошук, осмислення та узагальнення інформації, її класифікацію й порівняльний аналіз, провадження професійної дискусії з обґрунтуванням своєї позиції, анотування та реферування, підготовку й презентацію особистого проєкту (*Project*) із використанням додаткової спеціальної інформації. Комунікативні і творчі завдання в межах певної теми

посилюють мотивацію здобувачів і їхню професійну орієнтацію, а також готує їх до самостійної роботи з науковим текстом. Додаткові тексти (*Supplementary texts*) змістовно пов'язані з основним і розширюють професійну свідомість і компетенцію здобувачів. Такі тексти призначені для розвитку навичок «швидкого читання» і вміння знаходити в тексті певну інформацію, що і є метою професійно орієнтованого читання.

Частина *Speaking* спрямована на розвиток навичок діалогічної мовленнєвої діяльності за допомогою тематичних моделей, зразків, найбільш типових ситуативних діалогів і мовних кліше. Частина словотворення *Word Building* охоплює поширені випадки активного словотворення в сучасній англійській мові і містить багато вправ.

**Для складання навчального посібника були використані аудіоматеріали Л. І. Золотаревської.**

# I. FROM THE HISTORY OF RAILWAYS

*Discussion:* Travelling by Rail: Pros and Cons

*Main Text:* From the History of Railways: 200 Years of Progress

*Supplementary Text:* Unusual Railways

*Grammar:* Sentences with the Verbs *to be*, *to have*

Construction *there + to be*

Degrees of Comparison of Adjectives and Adverbs

Nouns: Countable and Uncountable; Plural and Singular

Indefinite (Simple) Tense

*Speaking:* At the Railway Ticket Office

*Word Building:* -er (-or), -ion (-sion, -tion, -ation), -ist, -ant (-ent), -able (-ible)

## DISCUSSION

**Exercise 1.1. a) What do we all have in common? Among other things, the fact that we all travel by rail. Let us discuss the pros and cons of a railway journey. What for you is most important from the railway? Add your own reasons to the list below.**

- safety
- comfort
- punctual departures and arrivals
- attentive staff
- cheapness

**b) In this text you'll know Maria's opinion about the advantages and disadvantages of travelling by train. Put the linking words on the right in the correct place in each paragraph. The linking words are in the right order.**

*First of all*

1. Travelling by train has many advantages. There are no stressful traffic jams, and trains are fast and comfortable.

*Also*

*For example*

You can use the time in different ways. You can just sit

*Besides*

and read, or relax and watch the world go by. You can work, or you can have a meal or a snack in the buffet car. And, what is most important, you don't depend on the weather.

2. Travelling by train also has some disadvantages. It is expensive and the trains are sometimes crowded and delayed. You have to travel at certain times and trains cannot take you from door to door. You need a bus or a taxi to take you to the railway station.

*However*  
*For one thing*  
*What is more*  
*For example*

3. I prefer travelling by train to either flying or driving. I feel more relaxed when I reach my destination.

*Despite the*  
*disadvantages*  
*Because*

### Exercise 1.2. In groups discuss the following questions.

- Do you know which country was the birthplace of railways? Do you remember any names or dates associated with rail history?
- What do you know about the early days of railways? What did the first trains and carriages look like?
- When was 'the golden age' of railway? Are you optimistic about the future for railways? What makes you think so?
- Give some facts to prove that the railway is the backbone of any country's economy.

## READING



**railway** – *n* залізниця (*AmE railroad*); *rail* – *n* рейка, залізниця

**travel** – *n* поїздка, подорож; *v* рухатися, їхати, подорожувати;

*traveller* – *n* пасажир

**choose** (*chose, chosen*) – *v* вибирати



**prefer** – *v* надавати перевагу

**means** – *n* засіб; *by means of* – за допомогою

**combine** – *v* поєднувати, єднати; *syn unite*

**safety** – *n* безпека, надійність; *safe* – *adj* безпечний, надійний

**superior** – *adj* найкращий, переважаючий; *have no superior* – не мати рівних

**important** – *adj* важливий, значний

**carry** – *v* везти, нести; *carry freight (goods)* – перевозити вантажі

**account (for)** – *v* відповідати за, звітувати; *account* – *n* звіт, рахунок

**different** – *adj* різний; *differ from* – *v* відрізнятися від

**place** – *n* місце, місцезнаходження; *v* розміщувати; *take place* – відбуватися, мати місце

**develop** – *v* розвивати(ся), розробляти, створювати; *development* – *n* розвиток, досягнення, розроблення

**realize** – *v* розуміти, усвідомлювати, виконувати

**challenge** – *n* виклик, проблема; *meet the challenge* – стикатися з проблемою, відповісти на виклик

**engine** – *n* локомотив, двигун; *steam engine* – паровий двигун

**invention** – *n* винахід; *invent* – *v* винаходити; *inventor* – *n* винахідник

**attempt** – *n* спроба; *v* пробувати

**carriage** – *n* вагон; *syn car, coach*

**construct** – *v* будувати, конструювати; *syn build*

**call** – *v* звати, називати

**load** – *v* завантажувати; *n* навантаження

**power** – *n* сила, потужність, енергія; *v* постачати енергію; *powerful* – *adj* потужний; *tractive power = traction* – тягова сила, тяга

**successful** – *adj* успішний, вдалий; *success* – *n* успіх; *be a success* – мати успіх

**offer** – *v* пропонувати; *n* пропозиція

**be in wide use** – мати широке використання

**connect** – *n* з'єднувати *syn link*

**skill** – *n* вміння, майстерність

**doubt** – *n* сумнів; *v* мати сумнів

**possibility** – *n* можливість; *possible* – *adj* можливий

**in terms of** – з точки зору, стосовно; *term* – *n* термін, період, семестр; *terms* – *n* умови

**volume** – *n* об'єм, маса

**complete** – *v* закінчувати

**get an access to** – одержати доступ до

**change** – *v* змінювати; *n* зміна

**rank** – *v* займати місце

**be over** – закінчитися, підходити до кінця

**compete (against)** – *v* змагатися; *competition* – *n* змагання, конкуренція;

*competitor* – *n* конкурент; *competitive* – *adj* конкурентний

**due to** – *prep* завдяки, внаслідок; *syn thanks to*

**high-speed train** – високошвидкісний потяг; *syn fast train; ant slow train*

**resemble** – *v* походити, мати схожість

### **Exercise 1.3. Read and translate the following combinations.**

By means of railroads; the safest means of travel; to run much faster than; to develop a speed; to develop a new method; due to the advanced technologies; to run a factory; to operate well; to be far slower and lighter; much more comfortable than; not so important as; thanks to new developments; the most powerful modern locomotives; to introduce electricity as tractive power; the introduction of diesel traction; to be ready to meet the challenges; the passenger and freight service; the invention of a steam engine; to draw a train; to be the backbone of any country's economy; to be as successful as; to compete successfully; in terms of construction speed; to combine comfort and safety; to resemble aircraft in design.

**Exercise 1.4. Match the words in the left column with the corresponding synonyms in the right one.**

Goods, to be over, means of transport, safe, to resemble, high speed, to draw, to think, travel, to run, to build, thanks to, competition, to develop, to offer.	Freight, to come to an end, fast, to pull, to operate, to propose, to construct, due to, to invent, contest, to consider, journey, reliable, vehicle, to be like.
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**FROM THE HISTORY OF RAILWAYS: 200 YEARS OF PROGRESS**



(1) Millions of people all over the world spend their time travelling either for pleasure or on business. Some choose automobiles for comfort and mobility; others prefer air travel especially if the distance is long and time is short. Anyway, the railway is by far the most popular means of travel. This holds true whether it involves moving people between countries or on their daily journeys to business centres, as well as for the transport of railfreight nationally and internationally. In combining speed, comfort, safety and perfect service railways have no superior. But their most important function is to carry freight. Railways account for a major part of freight transportation, being, in fact, the backbone<sup>1</sup> of the national economy.

(2) The world is now a very different place from when railways were developed. In May 2004 Britain's National Railway Museum in York organised festivities to commemorate<sup>2</sup> the birth of the world's first steam locomotive 200 years ago. The idea behind Railfest 2004 was to track the progress of rail transport from Richard Trevithick's locomotive of 1804 to Britain's new flagship<sup>3</sup> Pendolino train. To better realise the challenges for modern railways, let us also look back at their start.

(3) The first trains were drawn by horses and transported such products as coal, ore and timber in mines and factories. Later on, the horse railways were used as passenger transport in large cities. However, the boom years of early railways began with the invention of the steam engine at the end of the 18<sup>th</sup> century. There

are a number of key dates in the history of railways. In 1804 Richard Trevithick, an English engineer, built a light and small steam engine for his iron works in Wales. His working model was demonstrated in London where for a shilling the public could travel in a carriage drawn by the steam engine on a circular track of iron rails. The locomotive was called '*Catch-me-who-can*', and people could really catch it because it developed only 12 miles per hour (mph). The locomotive was too heavy and finally broke the rail, thus ending Trevithick's career as an inventor. Yet, he can be rightly credited<sup>4</sup> as the father of the steam locomotive.

(4) Another important date is the year of 1825 when George Stephenson, an engineer of the coal mine in northern England, constructed the steam engine called *Locomotion*. This locomotive was much smaller and lighter than the steam locos developed later on, and it was much slower. However, it could draw a small train of loaded cars and developed an unheard-of speed of 13mph (21km/h). Stephenson was also the builder of the world's first public railway – *the Stockton & Darlington Railroad* (1825) using both steam and horses as tractive power. It began regular service with the only locomotive every day except Sunday. In many senses, 1825 is seen as the start of the Age of railways.



Рис. 1. Rocket as preserved in the Science Museum, London

Yet, Stephenson's really big triumph came in 1829 when he was asked to build another railway, now steam-powered, between Liverpool and Manchester. It was the first truly successful passenger railway in the world. The company offered a prize of 500 pounds for the best steam train. The prize was won by George Stephenson with his famous train *The Rocket*, which is now in London's Science Museum. It could travel at 49 mph, which was very fast at that time. Soon the steam-powered railways were already in wide use. By 1854 every town of any size in England was connected by rail.

(5) The invention of steam locomotives made the railway the first and the most important means of mass transportation. In fact, until the invention of the motorcar in the early 20<sup>th</sup> century, railways had a monopoly on land transport. A major railway project of that time was the construction of Trans-Siberian railway in 1891 which in terms of construction speed (12 years), length (7500km), and volume of work completed was the largest in the world. Europe got access to the Pacific Ocean via Asia.

(6) Since that time many changes have taken place on railways. Had it been possible for the opponents of early railways to live till now, they should have admitted that George Stephenson was eventually right about the bright future for railways. Steel wheels running on steel rails have stood the test of time and do face a bright future. Indeed, railways are the only means of transport with a considerable potential for growth and improvement combining standard rail methods with new technologies. There has been major technical progress during the last 200 years, and the rate of the progress during the last few decades is really breathtaking.

(7) Sometimes one can hear that the ‘golden age’ of railways is over because we live in the age of high technologies and super-high speeds. Modern railways are ready to meet these challenges. They compete effectively in the transportation market of the new global economy. High-speed trains become more and more ‘intelligent’ due to advanced computer technologies. Modern trains resemble aircraft in design, fully automated operation and speed (the world speed record now is 581 km/h) using air or magnetic cushions for levitation. What seems fantastic today turns out to be quite common tomorrow. Advances in rail transportation will make the trains still more powerful and our travel more comfortable with each coming decade [1, 10].

<sup>1</sup> *backbone* – основа, стержень.

<sup>2</sup> *festivities to commemorate* – свята на честь чого-небудь.

<sup>3</sup> *flagship* – флагман.

<sup>4</sup> *he can be rightly credited* – його можна по праву назвати.

**Exercise 1.5. Complete the sentences according to the text.**

1. Railways are of great importance to a country because ... . 2. The very first railways used ... and transported ... . 3. People could catch Trevithick's locomotive because ... . 4. ... built a successful steam locomotive 'The Rocket'. 5. The boom years of early railways began with the invention of ... . 6. Stephenson constructed his 'Rocket' for the railway between ... . 7. Stephenson's locomotive won ... . 8. Nowadays railways ... effectively in the transportation market. 10. Modern railways are ready to meet ... of the age of super-high speeds. 11. By now ... is 581 km/h. 12. ... technologies will make our trains still more powerful. 13. High-speed trains resemble ... in design, fully automated operation and speed.

**Exercise 1.6. Scan the text for the numbers and names mentioned below. Be ready to comment on them.**

Railfest 2004; Pendolino; 'Catch-me-who-can'; coalmine of Killingworth; Stockton & Darlington; 'Rocket'; Richard Trevithick; 500 pounds; 29 mph; George Stephenson; the length of 7500 km; 581 km/h, 12 years.

**Exercise 1.7. Answer the questions.**

1. What is the most important function of railways? 2. What part do railways play in the national economy of a country and why? 3. What are the advantages and disadvantages of railways? 4. What was the idea behind the Railfest 2004 in York? 5. What were the early railways like? What were they used for? 6. What invention caused the boom years of railway development? 7. What do you know about Richard Trevithick? 8. When was the first successful steam locomotive built? What did it look like? 9. Where was the first truly successful passenger railway built? 10. Who built the first public railway? Where did it take place? 11. What was the most challenging railway project of the end of the 19<sup>th</sup> century? 12. Can modern railways compete with road and air transportation? Prove your point of view. 13. What are the main challenges for modern railways? 14. What

changes will take place on railways in future? 15. What is the speed record for modern high-speed trains?

**Exercise 1.8. Make up a short story on one of the suggested topics using word combinations in brackets. Make use of any additional source of information you can find.**

1. **The importance of railways** (play an important part; carry people; transport freight; economic and political development; the most popular means of travel; combine speed, comfort and safety; the backbone of a country's economy).
2. **Early locomotives** (the first attempt to use steam engines; invent a successful steam locomotive; be small and light; not so fast as; draw trains; develop a speed).
3. **The future of railways** (compete; great changes; take place; run powerful locomotives; comfortable cars; develop super-high speeds; intelligent trains operated by electronic computers; introduce advanced technologies; resemble aircraft).

*Supplementary text: UNUSUAL RAILWAYS*

**Read the text and then fill in the table. Give your own arguments in favour of one of the projects.**

<i>Name of the project</i>	<i>Pros</i>	<i>Cons</i>
Gliding Railway		
Balloon Railway		
Railway on Ice		
Tube-Flight Concept		

(1) In the course of railway history many researches were carried out to develop cheaper and more efficient means of transportation. Here are some interesting examples of unusual railways. In 1862 L.D. Girard, a French inventor, surprised the world that he invented *Gliding Railway*<sup>1</sup> based on the entirely new wheelless

design. According to the project the train was to move on six plates. While the train was running the water was to be spread evenly between the plates and the track. When constructed the experimental line was a success. People travelling on this strange railway were surprised by its smoothness, noiseless operation of trains and speed attained. This railway proved much cheaper in the comparison with conventional railways since it did not need a rail track.

(2) In the early 1900s there appeared one of the strangest mountain railways in Austria. It was a balloon railway<sup>2</sup> whose function was to facilitate and speed up the transportation of passengers up a high mountain near Salzburg. It consisted of a large balloon connected to the car. Instead of wheels the car had a slide<sup>3</sup> running on a single rail. When loaded, the car carrying ten passengers rose up the mountain. But when it was to run down, a large tank installed under the car had to be filled with water. It was the increased weight that made the car run down again.

(3) William H. Reinolz, USA, proposed to use a water base for his track. But the water was to be frozen and the trains were to move over a bed of ice. According to Reinolz the atomic energy ought to be used for freezing water, and the track ought to be enclosed in a gallery of transparent plastic to decrease air friction and power losses. The streamlined<sup>4</sup> trains should be made of aluminium.

(4) The idea of using underground tunnels or tubes for high-speed running is being carefully studied by scientists. According to the so-called tube-flight concept<sup>5</sup> streamlined vehicles are to run in a tube. The power source should be installed in cars and they are to transfer air by propellers from the front to the rear. Running in the tube the trains will have small power losses, so speeds up to 2000mph can be theoretically attained. Not all of the proposals for unconventional railways have found practical application. But these ideas have made it possible to build modern high-speed transportation systems [1, 10].

<sup>1</sup> *Gliding railway* – залізниця, заснована на принципі ковзання.

<sup>2</sup> *balloon railway* – залізниця, на якій потяги рухалися за допомогою повітряної кулі.

<sup>3</sup> *a slide* – туп повзунок.



<sup>4</sup> *streamlined* – той, який має обтічну форму.

<sup>5</sup> *tube-flight concept* – ідея швидкісного «польоту» у трубі.

**Exercise 1.9. Can any of these ideas be possibly used nowadays/ in the future? Which of the projects has found practical application? Which of them seems the most fantastic (realistic)?**

## G R A M M A R

### Sentences with the Verb *to be*

PRESENT	PAST	FUTURE
<i>I am (I'm)</i>	<i>was</i>	<i>will ('ll) be</i>
<i>he, she, it is (he's)</i>		
<i>you, we, they are (you're)</i>	<i>were</i>	
NEGATIVE		
<i>I am not (I'm not)</i>	<i>was not (wasn't)</i>	<i>will not (won't) be</i>
<i>he, she, it is not (isn't)</i>		
<i>you, we, they are not (aren't)</i>	<i>were not (weren't)</i>	
INTERROGATIVE		
<i>Am I ...?</i>	<i>Was I, he, she, it ...?</i>	<i>Will you be ...?</i>
<i>Is he (she, it) ...?</i>		
<i>Are you (we, they) ...?</i>	<i>Were they, we, you ...?</i>	

**Exercise 1.10. Object to the sentence according to the model.**

*Model: He was in Kharkiv last month. – Nothing of the kind. He wasn't. He was in Kyiv at that time.*

*I hear it will be cold tomorrow. – Nothing of the kind. It won't. For all I know it will be warm enough.*

1. She was unwell last week. 2. Kate is 18 years old. 3. They were present at the meeting yesterday. 4. The film was boring. 5. There will be a lot of people at the birthday party tomorrow. 6. She was late for the classes. 7. Last summer was

unusually hot. 8. He is very good at languages. 9. They are first-year students. 10. John is in America now.

**Exercise 1.11. Fill in the gaps with the verb *to be* in the appropriate form. Take turns to ask each other questions. Give true answers.**

*Model: What / favourite colour? – What is your favourite colour? – It's violet.*

1. Where / you / born? 2. Which month / you / born? 3. What / the most interesting subject at school? 4. When / Christmas in our country? 5. What / your favourite sport? 6. Where / you when I called you yesterday evening? 7. What / your parents? 8. What / the best (worst) TV programme for you? 9. How big / your family? 10. Where / you from? 11. Why / you late for the lecture yesterday? 12. Which profession / the most popular (difficult, respectable) in our country? 13. You / busy tomorrow? 14. How old / you?

**Exercise 1.12. Put *was*, *were*, *wasn't*, or *couldn't* into the gaps. Practise the conversation between two friends, Sue and Bill.**

*Sue: ... you at Eve's party last Saturday?*

*Bill: Yes, I ... .*

*Sue: ... it good?*

*Bill: Well, it ... OK.*

*Sue: ... there many people?*

*Bill: Yes, there ... .*

*Sue: ... Tom there?*

*Bill: No, he ... . And where ... you?*

*Sue: Oh, I ... come because I ... at Adam's party. It ... fantastic.*

**Exercise 1.13. Translate the sentences.**

1. Він зараз у відрядженні. 2. Вона буде там о п'ятій годині. 3. Його брат – інженер. 4. Він буде радий вас бачити. 5. У цій кімнаті холодно. 6. Вона була

на дискотеці вчора. 7. Його зараз нема вдома. 8. Ви будете завтра вільні?  
9. Тема лекції дуже цікава. 10. Він буде в університеті завтра?

### Sentences with the Verb *to have* (*have got*)

PRESENT	PAST	FUTURE
<b>have = have got</b>	<b>had</b>	<b>will have</b>
he, she, it <b>has = has got</b>		
NEGATIVE		
<b>don't have = haven't got</b>	<b>didn't have</b>	<b>won't have</b>
he <b>doesn't have = hasn't got</b>		
INTERROGATIVE		
<b>Do you have...? Have you got...?</b>	<b>Did you have...?</b>	<b>Will you have...?</b>
<b>Does she have...? Has she got...?</b>		

Дієслова *have* та *have got* використовують майже однаково (*have got* використовують лише в теперішньому часі та розмовній мові, *have* характерно для письмової мови).

Стійке сполучення *have + noun* означає діяльність або звичку:

*have a swim / a good time / a party / a holiday,*  
*have breakfast / dinner / a cup of tea / a cigarette / a break,*  
*have a bath / a shower / a shave / a rest,*  
*have a chat / a row / a dream / fun,*  
*have a look at something / a word with someone.*

#### Exercise 1.14. Make these sentences negative.

1. I usually have breakfast at 8.00. 2. I will have a lot of free time soon. 3. They have rows about home duties. 4. We had a good time on holiday. 5. I've got everything I need. 6. Railways had steam locomotives in the 19<sup>th</sup> century. 7. I had a lot of fun at yesterday's party. 10. He's got some pen friends in Canada.

#### Exercise 1.15. Fill in the gaps using *am, is, are, have or has*.

1. Where ... you from? 2. We ... two lectures on physics every week. 3. My father ... a travel agent. 4. Our University ... several hostels. 5. ... you hungry? 6. My

best friend ... an excellent mark in English. 7. I ... hot. Open the window, please.  
 8. He ... not interested in football at all. 9. He ... everything he needs. 10. What ...  
 the weather like today? 11. What ... his new car like? 12. Let me ... a moment of  
 rest.

## Construction *there + to be*

**Зворот *there is / are* + нова інформація + обставина місця**

Зворот *there + to be* має значення *є, знаходиться, існує*. Переклад починається з обставини місця або присудка, за відсутності обставини.

PRESENT SIMPLE	PAST SIMPLE	FUTURE SIMPLE
<b>There is</b> a book on the shelf. <b>There are</b> (some) books on the shelf. На полиці є книга (книги)	<b>There was</b> a mistake in my paper. <b>There were</b> (some) mistakes in my paper. У моїй роботі була помилка (були помилки)	<b>There will be</b> a new show on TV next week. Наступного тижня по телевізору буде нове шоу
INTERROGATIVE		
<b>Is there</b> a book on the shelf? -Yes, <b>there is</b> (there are some). <b>Are there</b> (any) books on the shelf? -No, <b>there is not</b> (there are not any)	<b>Was there</b> a mistake in your paper? -Yes, <b>there was</b> (there were some). <b>Were there</b> (any) mistakes in your paper? -No, <b>there was not</b> (there were not any)	<b>Will there be</b> a new show on TV next week? -Yes, <b>there will be</b> . -No, <b>there won't be</b>
NEGATIVE		
<b>There is no</b> (isn't a) book on the shelf. <b>There are no</b> (not any) books on the shelf	<b>There was no</b> (wasn't a) mistake in my paper. <b>There were no</b> (not any) mistakes in my paper	<b>There will be no</b> show on TV next week

Примітки: 1. Зворот *there + to be* вказує на існування чого-небудь, що не було раніше згадано в певному місці. Якщо йдеться про вже відомі предмети, то зворот *there + to be* не використовують. Порівняйте:

The book is on the table. – (Ця) книга на столі. (Where is the book?)

There is a book on the table. – На столі (якась) книга. (What is there on the table?)

2. Після *there* можливе вживання дієслів *exist* (існувати), *appear* (з'являтися) і модальних дієслів (*can, must, should, may*).

There **exist** special-type vehicles for monorails. – Існують спеціальні вагони для монорельсових залізниць.

Later, there **appeared** a steam locomotive. – Пізніше з'явився паровоз.

There **must** be some way out. – Має бути якийсь вихід.

3. З переліченням дієслово *to be* завжди узгоджено за числом із тим предметом, що стоїть безпосередньо після нього.

There is a fax machine, three minicomputers and a xerox in Mr. Jones's office.

### **Exercise 1.16. Fill in the gaps with *there + to be* in the appropriate tense.**

1. ... some celebrities at his birthday party last night. 2. ... many students and teachers in the club tomorrow. 3. ... a new underground station in this district in a year? 4. ... an invisible magnetic field between the poles of the magnet. 5. ... a meeting at the University yesterday. 6. ... some pictures on the wall. 7. ... somebody in the corridor when I entered. 8. ... an opposition to the party in power. 9. ... a lot of guests at his wedding yesterday. 10. ... a lot of sights in Kyiv. 11. When he explained everything, ... a long pause. 12. ... any milk left? 13. There ... different sources of energy. 14. There ... no place like home. 15. ... there anything I can do for you?

### **Exercise 1.17. Fill in the blanks with *it is* or *there is*.**

1. ... warm in the room. 2. ... a theatre in our street. 3. ... a lot of work to do. 4. ... five o'clock in the afternoon. 5. ... so nice seeing you again. 6. ... nothing to be done about this. 7. ... often a rainbow after rain. 8. ... a lot of snow this year. 9. ...

very strange that he is late. 10. ... a 'Who, Where, When' contest at our university today. 11. ... cold today; ... a strong wind. 12. ... dark; ... no moon. 13. ... time to begin our lesson. 14. ... no time to explain everything. 15. ... too early to leave yet.

### **Exercise 1.18. Work in pairs. Ask and answer as in the model.**

*Model:* There are two simulators in the laboratory. – *Sorry, I didn't catch. How many simulators are there in it? (Are there any simulators in it?)*

1. There are about ninety students in the hall. 2. There is little bread left. 3. There are ten computers in our laboratory. 4. There were six foreign scientists at the conference. 5. There are some errors in his calculations. 6. There are 25 players in the 'Dynamo' soccer team. 7. It was reported that there were three burglars in the gang. 8. There will be three colleagues at my birthday party.

### **Exercise 1.19. Translate the sentences.**

1. У цьому журналі є цікаві статті про історію залізниць України. 2. У нашому офісі буде нове обладнання за кілька днів. 3. Післязавтра буде лекція про охорону навколишнього середовища (environmental protection). 4. На другому поверсі є бібліотека. 5. У залі було багато народу, коли ми увійшли. 6. Скільки факультетів у вашому університеті? – У нашому університеті п'ять факультетів. 7. У нас залишився хліб? – Так, трохи. 8. На нашому факультеті є дуже гарна лабораторія вагонів. 9. Існують різні види шкіл.

## **Degrees of Comparison of Adjectives and Adverbs**

Тип прикметника	Порівняльний ступінь	Найвищий ступінь
Однокладові hot, easy	hotter easier	the hottest the easiest
Двоскладові (на -y, -ow, -le) happy, narrow, simple	happier narrower simpler	the happiest the narrowest the simplest

Багатоскладові interesting	<b>more</b> interesting	<b>the most</b> interesting
<b>Винятки</b>		
good	better	the best
bad	worse	the worst
much, many	more	the most
little	less	the least

Примітка. 1. Деякі прикметники мають дві форми ступенів порівняння, що відрізняються значенням:

farther, the farthest (віддалений у просторі),  
far further, the furthest (подальший, додатковий),  
older, the oldest (старший за віком),  
old elder, the eldest (старший за положенням у родині).

Edinburgh is *farther/further* away than York. – Едінбург знаходиться далі, ніж Йорк.

For *further* information, see page 6. – Додаткову інформацію дивитися на сторінці 6.

My *elder/older* brother has just got married. – Мій старший брат щойно одружився.

He's *the oldest* student in our group. – Він найстарший у нашій групі.

### Comparative conjunctions and phrases

**as ... as...**

**as young as** – (такий же) молодий, як

**as busy as a bee** – заклопотаний, як бджола

twice as old (as)

удвічі старше (за)

three times as large (as)

втричі більше (ніж)

half the price of

удвічі дешевше

half as much (many)

удвічі менше

twice the length of (twice as long as)

у два рази довше

**than**

younger **than** ... (молодше за ...)

**not so (as) ... as** – не такий, як

This text is **not so** interesting **as** that one.

**the ... the ...** – чим ... тим ...

**The** sooner, **the** better. – Чим скоріше, тим краще.

## Remember the expressions

at least – принаймні

worst of all – гірше за все

most of all – найбільше

best of all – найбільше (найкраще)

at best – у найкращому випадку

so far so good – поки все гаразд

Примітки: 1. Порівняльний ступінь прикметників може бути посилений прислівниками **much** і **far**:

**much** more powerful – набагато потужніший;

**far** cheaper – набагато (значно) дешевший.

Найвищий ступінь порівняння посилений за допомогою **by far**:

He is **by far** the most successful manager in his business. – Він найуспішніший менеджер у цьому бізнесі.

2. Most (of) перед іменником має значення *більшість, більша частина*.

**Most (of the)** experiments were made in the laboratory. – Більша частина експериментів були проведені в лабораторії.

3. Most без артикля або з неозначеним артиклем, перекладають як *дуже, надто, надзвичайно*:

It is **most** important. – Це дуже (надзвичайно) важливо.

This is **a most** interesting fact. – Це дуже (надто) цікавий факт.

**Exercise 1.20. Use the adjective or adverb in brackets either in the comparative or superlative degree. Write a similar true story about yourself.**

I am in my first year at the University and I think it is one of (*important*) periods in my life. Of course, it is (*difficult*) to study at the University than at school. I spend (*much*) of my time at the University and have (*little*) free time for rest or entertainment. But Alex, who is one of my (*good*) friends, is even (*busy*). He lives (*far*) from the University than I do, and has (*little*) free time. Anyway, he finds time to go in for sports, to visit theatres and to read a lot. And at seminars he is always (*brilliant*).



**Exercise 1.21. Compare the two persons using *as ... as* or *not so (as) ... as* according to the model.**

*Model:* Bruce was born in 1991. Kevin was also born in 1991. – *Kevin is **as old as** Bruce.* / Paul is handsome. Andrew isn't very handsome. – *Andrew is **not as handsome as** Paul.*

1. Sally is 17. Jane is 17 too. Sally ... . 2. This summer is unusually hot. Last summer was just warm. Last summer ... . 3. This text is hard to translate. That text was simpler. This text ... . 4. Tom and Diane have just married. They are both happy. Tom ... . 5. Ann is very pretty. So is Nancy. Nancy ... . 6. Gary's jokes are smart. So are Dan's. Dan's jokes ... 7. My room is bigger than yours. Your room isn't ... .

**Exercise 1.22. Put the adjectives into the superlative (*-est / most / least*) or comparative (*-er / more / less*) degree.**

*Model:* This book is **more interesting** than the one I read last week.

1. This is the (*strange*) book I have ever read. 2. We stayed at (*expensive*) hotel in Berlin. 3. Our room was (*comfortable*) than we thought it could be. 4. Our motel was (*cheap*) than all the others in the countryside. 5. Ukraine is very large but the United States is (*large*). 6. Mount Everest is (*high*) mountain in the world. It is (*high*) than any other mountain. 7. It was a wonderful day. It was (*terrific*) day of my life. 8. Which is the (*short*) way to get from the city centre to the University? 9. My grandparents had three daughters. My mother was (*young*) of them. 10. He is the (*bad*) driver I have ever seen. 11. Niagara Falls is one of (*fantastic*) sights in the world. 12. Young Ann is becoming (*pretty*) every day. 13. I think Swiss chocolate is (*tasty*) in the world.

**Exercise 1.23. Put the adjective in brackets into the corresponding form of comparison. Then give true answers.**

1. Which is (*big*): the Earth or the Moon? 2. Which weighs (*much*): gold or silver? 3. Is Kharkiv an (*old*) capital city than Kyiv? 4. What is (*important*) thing to do

when learning a foreign language? 5. Who was (*famous*) woman Prime Minister in Britain? 6. Which is (*large*) city in the world? 7. What is (*high*) speed developed by modern trains? 8. Is wood a (*good*) conductor of electricity than rubber? 9. What is (*beautiful*) place you have ever seen? 10. What is (*valuable*) invention a man has ever made? 11. What is (*interesting*) book you have read? 12. What is (*mysterious*) thing you have ever heard of?

**Exercise 1.24. Read a postcard, which a girl wrote to her mother. Write your own card to someone on some occasion using the adjectives in superlative and comparative degrees. Then decide whose card is the funniest, the most interesting and the most original of all.**

*To my mother,*

*You are the best mother in the whole world. You are the smartest, the brightest, and the funniest of all mothers. You are the nicest friend I've ever known. You are the most wonderful and definitely the least strict. No mum in the world is better than you. You are the greatest mother of all. I love you very, very much!*

*Love, Sandy*

**Exercise 1.25. Translate these sentences.**

1. Його волосся біле, як сніг. 2. Він мій старший брат. 3. Ми маємо значно більше даних, ніж вони. 4. Які співаки найпопулярніші у вашій країні? 5. Ваша машина не така стара, як моя. 6. Цей міст у три рази нижчий за той. 7. Де найближча зупинка автобуса? 8. Її брат такий же високий, як вона. 9. Ця обручка дешевша за ту. 10. Ми зупинилися в найгіршому готелі. Переїждьмо до кращого готелю. 11. Чи не могли б ви порадити менш дорогий ресторан? 12. Чим довше вона говорила, тим менше я розумів.

**Exercise 1.26. Translate the sentences with *most* and *mostly* in different meanings.**

*більшість; велика кількість; найбільш; дуже;  
переважно; більш за все*

1. *Most* elements exist in different forms. 2. Uranium is *mostly* used as atomic fuel. 3. Titanium is a *most* useful construction material. 4. Of all the transportation means railways remain by far the *most* important. 5. *Most* of all I was afraid of being late. 6. He is ten at the *most*. 7. The neutrons and protons represent *most* of the mass of the atom.

**Exercise 1.27. Translate the sentences paying attention to different meanings of *as* and *like*.**

*as: як; у той час як; у міру того як; оскільки;  
стільки скільки; також як*

1. As the time passed, stone tools were replaced by metal ones. 2. There are two kinds of transformations, which are known *as* physical and chemical changes. 3. This equipment can be relied upon *as* it is of the highest quality. 4. Every second the Sun sends into space *as* much energy *as* mankind has ever consumed. 5. The outer and inner walls of the house are *as* thick *as* 4 centimetres. 6. At present plastics *as* well *as* metals are widely used in construction. 7. He walked *as* fast *as* he could. 8. We walked *as* far *as* the post-office. 9. Keep the book *as* long *as* you need it.

**like:** *як; подобатися, любити; не може зрівнятися, нема нічого кращого; хотів би; подібний, такий самий; нема бажання; приблизно; точно як; здається, нагадує; дуже нагадує; на відміну від; являє собою*

1. Radio-waves are *like* light waves. 2. I enjoy travelling because I *like* new impressions. 3. We should *like* to know if we can get our order on time. 4. I don't feel *like* going out tonight. 5. You can contact our production manager on this and the *like* issues. 6. It looks *like* raining. 7. *Like* charges repel each other, while *unlike* charges attract each other. 8. *Unlike* his brother, Nick has always kept his word. 9. It was just *like* you said. 10. What is your new flat *like*? 11. She looks very much *like* her mother. 12. There is nothing *like* a cup of hot tea for a headache. 13. It costs something *like* \$100.

## Count and Noncount Nouns. Plural and Singular

Іменники поділяють на злічені та незлічені. Злічені іменники мають однину та множину, перед ними можуть стояти неозначений *a (an)* або означений (*the*) артиклі.

Однина: *a flower, one week, the place, this shop.*

Множина: *some flowers, two weeks, many places, these shops.*

### Plural forms of nouns ending

*-s/-sh/-ch/-x/-o + es: bus – buses, church – churches, tomato – tomatoes.*

Але! *photos, pianos.*

*y → ies: baby – babies.*

Але! *-ay/-ey/-oy + s: day – days, monkey – monkeys.*

*-f/-fe → ves: shelf – shelves, life – lives, wife – wives, knife – knives.*

Але! *roofs, chiefs, safes.*

### Nouns of Greek and Latin origin

basis – bases

stimulus – stimuli

analysis – analyses

phenomenon – phenomena

axis – axes

minimum – minima

crisis – crises

maximum – maxima

formula – formulae

datum – data

## Special cases

a man – men

a woman – women

a child – children

a fish – fish

a sheep – sheep

a deer – deer

an ox – oxen

a person – people

a goose – geese

a tooth – teeth

a foot – feet

a mouse – mice

a penny – pence (сума грошей)

It costs 16 pence.

Але: pennies (монети)

Pennies are made of bronze.

**Незліченні іменники** позначають сфери діяльності та галузі дослідження, матеріали, рідини, їжу, природні явища, абстрактні поняття тощо: *education, economics, water, bread, weather, knowledge, politics, luggage, progress, research, money, vacation, evidence, fruit, hair, information, news, advice, furniture, work.*

Вони зазвичай не мають форми множини і з артиклем *a (an)* не вживані (можливе вживання *the, some*).

*No news is good news. Time is money. He never listens to advice.*

Незліченні іменники також можуть бути виділені як одиничні: *a glass of water, a loaf of bread, a piece of cheese, a cup of tea, a bottle of milk, a can of oil, an interesting item of news, a bit (word) of advice, pieces of luggage, scraps of information.*

Деякі іменники не мають однини і вживаються частіше у множині:

1) *cattle, police, crew, the British.*

*The police **were** called.*

*In 1581 **the Dutch** declared **their** independence from Spain;*

2) парні іменники: *shorts, scissors, pants, glasses, trousers, jeans.*

*The pants are in the drawer. A pair of pants is in the drawer;*

3) *clothes, congratulations, contents, funds (=money), outskirts, savings, thanks, troops.*

*Congratulations on your new job.*

*She lives on the outskirts of Cambridge.*

Слова, що позначають групу людей, можна вживати як в однині, так і множині: *class, club, committee, family, firm, government group, team, army, crowd, jury, majority, minority, public, school, union.*

*Our team **is/are** going to win the game.*

*The family **was (were)** happy to hear the news.*

### **Nouns that have additional meaning in plural**

<i>Singular</i>	<i>Plural</i>
<i>arm</i> – рука	<i>arms</i> – зброя
<i>colour</i> – колір	<i>colours</i> – прапор
<i>custom</i> – звичка, звичай	<i>customs</i> – митниця
<i>good</i> – добро	<i>goods</i> – товар
<i>iron</i> – залізо	<i>irons</i> – наручники
<i>pain</i> – біль	<i>pains</i> – зусилля
<i>scale</i> – масштаб	<i>scales</i> – вага, терези
<i>work</i> – робота	<i>works</i> – завод

### **Exercise 1.28. Write the nouns in plural if possible. Find uncountable nouns.**

Date, umbrella, family, foot, health, woman, knife, holiday, city, potato, tie, photo, datum, life, bus, hair, joke, light, air, lighter, sunshine, branch, oil, advice.

### **Exercise 1.29. Offer your guests something to drink or to eat.**

*Model: Would you like **a** glass of juice? Would you like **some** juice?*

**For ideas:** cheese, chocolate, coffee, beer, biscuits, candy, bread, meat, salad, wine, tea, pizza.

### **Exercise 1.30. Fill in *a (an)* or *some*.**

1. I need ... money. I want to buy ... food. 2. We met ... interesting people at the party. 3. I'm going to open ... window to get ... fresh air. 4. She didn't eat much for lunch. Only ... apple and ... bread. 5. I'm going to make ... table. First I need

... wood. 6. We live in ... big house. There's ... nice garden with ... beautiful trees. 7. Listen to me carefully. I'm going to give you ... advice. 8. I want to write a letter. I need ... paper and ... pen.

**Exercise 1.31. Choose the verb which agrees with the noun.**

1. Twenty hryvnias (seem, seems) a fair price. 2. 500 kilograms (was, were) too big load for this car. 3. A hundred dollars (is, are) a lot of money. 4. Three hours (was, were) enough to write the report. 5. The news (is, are) wonderful. 6. Physics (is, are) difficult for me. 7. Their wages (is, are) high. 8. His trousers (is, are) a bit short. 9. Politics (is, are) interesting for everyone nowadays. 10. Her clothes (is, are) luxurious. 11. Linguistics (has, have) developed rapidly in modern times. 12. The scissors (is, are) quite sharp. 13. The police (is, are) investigating this theft. 14. The public (is, are) asked to help. 15. Sports (is, are) very popular these days. 16. My glasses (is, are) dirty. 17. Your advice (was, were) very useful. 18. Your hypothesis (is, are) very interesting. 19. The fruit (was, were) fresh.

**Exercise 1.32. Translate the sentences.**

1. Я ніколи не п'ю багато води. 2. Ваша інформація дуже важлива. 3. Мені потрібно багато грошей. 4. У кімнаті було багато меблів. 5. Де мої ножиці? 6. Йому потрібні окуляри, але він не може їх знайти. 7. На вулиці було багато людей і машин. 8. Де ваш багаж? 9. Я чув якийсь шум хвилину тому. 10. Будь ласка, переглянь цю газету. Там є цікаві новини. 11. Ваше волосся занадто довге. 12. У неї багато роботи.

## Indefinite (Simple) Tense

PRESENT	PAST	FUTURE
<i>I, you, we, they <b>work</b></i> <i>He, she, it <b>works</b></i>	<i><b>worked</b></i> <i><b>went</b> (2 форма)</i>	<i><b>will</b> work</i>
NEGATIVE		
<i><b>I don't</b> work</i> <i>He, she, it <b>doesn't</b> work</i>	<i><b>didn't</b> work</i>	<i><b>will not (won't)</b> work</i>
INTERROGATIVE		
<i><b>Do you work...</b>?</i> <i><b>Does he, she, it work...</b>?</i>	<i><b>Did he work...</b>?</i>	<i><b>Will you work...</b>?</i>

### Present Indefinite (Simple) Tense

Вживають лише для позначення факту здійснення дії зараз, не вказуючи її тривалість або закінченість. Позначає дію, яка трапляється звичайно, регулярно в теперішньому часі, або констатує позачасові факти і явища. Часто використовують такі обставини: *always, often, seldom, rarely, sometimes, usually, every day, never, frequently, as a rule.*

*I usually get up early.* – Я звичайно встаю рано.

*The Sun rises in the East.* – Сонце встає на сході.

### Exercise 1.33. Make the sentences negative and interrogative.

1. He always comes home late in the evening. 2. I often visit my parents. 3. They study every day. 4. We learn English. 5. They speak English very well. 6. We usually go to the seaside on holiday. 7. My little brother likes cocoa with cereal.

### Past Indefinite (Simple) Tense

Вживають для позначення одноразових або послідовних дій у минулому. Обставини минулого часу: *last month, some days ago, yesterday, long ago, the day before yesterday* та ін. Також вживають у питальних реченнях, що починаються з *when, what time.*



*I worked hard and finally won the prize.*

*When did you see her last?*

**Exercise 1.34. Read the verbs paying attention to different pronunciation of the –ed suffix.**

[t]	[d]	[id]
like – liked	phone – phoned	state – stated
reap – reaped	play – played	end – ended
hope – hoped	cry – cried	fade – faded
miss – missed	snow – snowed	want – wanted
work – worked	tie – tied	spot – spotted
pack – packed	try – tried	upgrade – upgraded

**Exercise 1.35. Make these sentences negative and interrogative.**

1. I went to London last year.
2. He helped his brother yesterday.
3. They studied at the University ten years ago.
4. He read adventure books in his childhood.
5. She gave me some pictures yesterday.

**Future Indefinite (Simple) Tense**

Вживають для позначення майбутніх дій. У сучасній мові допоміжне дієслово *will* вживають для всіх осіб (але *shall* для першої особи можна вживати в офіційному стилі). Обставини часу: *tomorrow, in a year, next week, soon, the day after tomorrow* та ін.

*We will take exams in June.*

*I will go to Kiev next month.*

**Exercise 1.36. Change the verbs in brackets in accordance with the context.**

1. My friend (*work*) at a factory.
2. Our group (*go*) to the theatre next month.
3. My mom (*graduate*) from university 15 years ago.
4. I (*come*) home later than usual yesterday.
5. He (*read*) the book about Robinson Crusoe in his childhood.

6. Schoolchildren (*have*) the longest holidays in summer. 7. William Shakespeare (*be born*) on April 26th, 1564. 8. The teacher (*ask*) the new grammar rule at the next lesson. 9. My little sister usually (*sleep*) till 10 o'clock. 10. My mother (*celebrate*) her birthday two days ago.

**Exercise 1.37. Match a line in A with a line in B. Put the verb in A into the Present Simple and the verb in B into the Past Simple.**

A	B
a I usually ( <i>work</i> ) eight hours a day, but	1) last summer we ( <i>stay</i> ) in a hotel
b Ann usually ( <i>drive</i> ) to work, but	2) last weekend they ( <i>play</i> ) tennis
c Max usually ( <i>watch</i> ) TV in the evenings, but	3) yesterday I ( <i>start</i> ) at 9 a.m. and ( <i>finish</i> ) at 9 p.m.
d Ann and Max usually ( <i>go</i> ) sailing at weekends, but	4) last year it ( <i>snow</i> ) for three months
e It usually ( <i>rain</i> ) a lot in winter, but	5) yesterday she ( <i>walk</i> )
f Max and I usually ( <i>go</i> ) camping in June, but	6) yesterday evening he ( <i>listen</i> ) to music

**Exercise 1.38. Complete the sentences with the positive form of the verb. Remember the past form of irregular verbs.**

*Model:* I didn't go to New York; I went to Chicago.

1. We didn't meet Jim, we ... Max. 2. He didn't leave last Tuesday, he ... last Thursday. 3. We didn't see Alice, we ... Marry. 4. They didn't buy a Volvo, they ... a Saab. 5. You didn't know the answer, Tom ... the answer. 6. I didn't lose my passport, I ... my ticket. 7. We didn't have white wine, we ... red wine. 8. He didn't write a letter, he ... a postcard. 9. The film didn't begin at 6.30 p.m., it ... at 7.30 p.m. 10. Shakespeare didn't write music, he ... plays. 11. Christopher Columbus didn't discover India, he ... America. 12. Beethoven didn't come from Paris, he ...

from Germany. 13. Leonardo da Vinci didn't live in Germany, he ... in Italy. 14. The USA didn't win the last Football World Cup, Italy ... it.

**Exercise 1.39. Test your own knowledge about great explorers (check your answers below). Complete the quiz by using the verbs *be, reach, lead, make, sail* in the Past Simple.**

1. Who \_\_\_\_ the South Pole first?  
**a** Robert Scott; **b** Roald Amundsen; **c** Richard Branson
2. Who \_\_\_\_ the first expedition westwards from Europe to Asia via the Pacific?  
**a** Ferdinand Magellan; **b** Marco Polo; **c** Vasco da Gama
3. Who \_\_\_\_ the second man on the Moon?  
**a** Yuri Gagarin; **b** Neil Armstrong; **c** Edwin Aldrin
4. Who \_\_\_\_ to America first?  
**a** The Vikings; **b** Christopher Columbus; **c** James Cook
5. Which European first \_\_\_\_ contact with the continent of Australia?  
**a** Thor Heyerdahl; **b** Captain James T Kirk; **c** Captain James Cook  
*(1b, 2a, 3c, 4a, 5c)*

**Exercise 1.40. Make sentences in the Past Tense using one word or phrase from each column once only. Remember the Past form of irregular verbs.**

*Model:*

<i>John</i>	<i>did</i>	<i>his homework</i>	<i>2 days ago</i>
-------------	------------	---------------------	-------------------

John	catch	a letter	a year ago
Ann	break	his homework	yesterday
Nelly	fall	a new car	when he was at University
Paul	write	down the stairs	last week
Mark	feel	very happy	the other day
Victor	do	a picture	when she was a child

Sandra	speak	a fish	last Tuesday
Dennis	buy	to his friend	recently
Elizabeth	draw	a glass	the day before yesterday

**Exercise 1.41. Put the verbs into the Past, Present or Future Simple.**

My friend Jack is 35. He (*leave*) Britain when he was 20 and (*go*) to Italy. He (*work*) in Naples for eight years, then he (*move*) to Rome. There he (*meet*) Antonella. They (*get*) married in 2001 and now they (*live*) in Florence. Jack (*teach*) English in a language school. And what Antonella (*do*)? She (*sell*) computer software. But she is going to leave her job because in six months she (*have*) a baby. They are both very happy.

**Exercise 1.42. Translate the sentences.**

1. Він працює на заводі. 2. Він вчився в коледжі багато років тому. 3. Вона добре грає в теніс. 4. Я прочитав цю книгу на тому тижні. 5. Ми любимо добрі фільми. 6. Я відповів на ваше запитання кілька хвилин тому. 7. Куди ми поїдемо? 8. Вона не працює в школі. 9. Ти дивився телевізор вчора? 10. Я прийду завтра. 11. Ви розмовляєте англійською? 12. Ви добре розмовляєте французькою. 13. Ти не допоміг мені вчора. 14. Ми не будемо завтра вчитися. 15. Ми не говорили про це. 16. Вони не живуть у цьому будинку. 17. Куди ви їздили минулого літа? 18. Я не бачив його вчора. 19. Їхні діти ходять до школи? 20. Ми поїдемо влітку в Угорщину. 21. Ви підете додому?

## S P E A K I N G

**Exercise 1.43. a) Work in pairs. Practise the dialogue.**

**At the Railway Ticket Office**

A: Good morning. Can I help you?

B: Yes, please. I want to go to Edinburgh. When's the next train?

A: Let me see. There's one at 10.42. You change at Doncaster. And there's another at 11.15.

B: Is that direct, or do I have to change?

A: That's direct.

B: What time does it arrive?

A: It gets in at ... 14.10.

B: Right. I'll have a return ticket, then, please.

A: When are you coming back? Are you coming back today?

B: No, tomorrow.

A: Ah, so you don't have a day return. You need a period return. That'll be £8.40.

B: Can I pay by credit card?

A: Yes, certainly.

B: Here you are. Which platform does it leave from?

A: Platform 3.

B: Thanks a lot.

A: Goodbye.

**b) Put the lines of the conversation in the correct order and role-play it.**

A: Hello. I'd like a ticket to Newcastle, please.

A: I want to come back this evening, so a day return.

C: How do you want to pay?

A: Return, please.

C: Here's your change and your ticket.

C: Single or return?

A: Twenty, forty, sixty pounds.

C: Day return or period return?

A: Cash, please.

C: Forty-eight pounds fifty, please.

A: Thank you.

c) Work in pairs. Imagine it is 11a.m. Student A works in a railway ticket office. Give Student B the information he/she wants.

Trains to Bristol		
<i>Depart</i>		<i>Arrive</i>
11.25	Change at Derby	12.35
11.50	Direct	12.50
Tickets		
<i>Single</i> £13.50	<i>Day return</i> £19.00	<i>Period return</i> £22.40

## WORD BUILDING

Noun suffixes: *-er (-or)*, *-ion (-sion, -tion, -ation)*, *-ist*, *-ant*

Adjective suffixes: *-ant (-ent)*, *-able (-ible)*

**Exercise 1.44. Translate the following words naming their part of speech.**

Conduct – conductor – conduction; calculate – calculator – calculation;  
 produce – producer – production; conclude – conclusion; load – loader;  
 difference – different; existence – existent; efficiency – efficient; eat – eatable,  
 respond – responsible, understand – understandable, divide – divisible.

**Exercise 1.45. Add one of the suffixes to the following words to name a person's profession. You will have to change some of the words a little.**

Noun suffixes to name a person who does a job	<i>-er</i>	<i>-ian</i>	<i>-ist</i>	<i>-ant</i>
	farmer			

Music, art, farm, manage, photograph, garden, science, politics, electric, drive,  
 mend, academy, physics, mathematics, chemistry, magic, account.

**Express the following in one word denoting the doer of the action.**

*Model: one who sells matches → a match seller*

One who drives a lorry, one who owns houses, one who wishes well, one who rises early, smth that opens cans, smth that washes the floor, smth that kills noise, smth that locates sound, smth that kills pain.

**Exercise 1.46. Let's play a guessing game. Think of one of the jobs, but don't tell the rest of the group. They should ask you *Yes/No* questions to find out what the job is.**

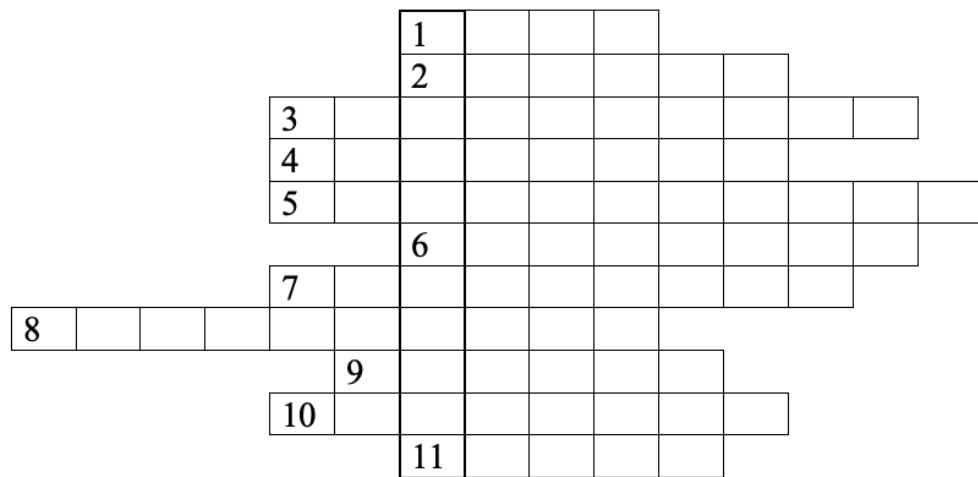
*Model: Do you ... (work inside, earn a lot of money, work regular hours, in shifts)?*

*Do you have to ... (wear a uniform, use your hands, answer the phone)?*

**Exercise 1.47. Fill in the crossword. The vertical line will finally open you the name, which you know very well.**

1. Railway carriages for transporting people and freight.
2. The very first railways used them for drawing trains.
3. An Englishman who demonstrated his working model of a steam engine in London in 1808.
4. The fastest means of transport.
5. It makes modern engines work.
6. Very strong.
7. A person on a journey.
8. The inventor of the world's first steam locomotive.
9. The place where students from different towns live.
10. A person who creates or designs something new.
11. The tractive power of early engines.

[5, 10].





## II. RAIL OPERATION

*Discussion:* Travelling by Train

*Main text:* Railway Traffic Operation

*Supplementary text A:* Virtual Rail for Staff Training

*Supplementary Text B:* Engineering

*Grammar:* Possessive Case of Nouns

Articles

Imperative Sentences

Prepositions of Time and Place

Questions

Indefinite (Simple) Tense in the Passive

Modal Verbs *Can*, *May*, *Must* and their equivalents

*Speaking:* Colloquial Expressions

*Word Building:* -ure (-ture), -ment, -ness; -less, -ful, -ly

### DISCUSSION

**Exercise 2.1. a) Complete the table with the words below. The words are all to do with travelling by train.**

*Ticket office, get on, passenger, information office, platform, buffet car, single, get off, compartment, ticket inspector, catch, miss, engine driver, season, return, book in advance, depart, arrive on time, be delayed, commuter, luggage room, upper (lower) berth, conductor, information board.*

Verbs to do with trains	Kinds of tickets	People	Places

**b) The following sentences describe what you do when you go to the railway station to catch a train, but they are in the wrong order. Put them in the right order, and then report about your recent railway journey to the group. You can add your own sentences to the story.**

- You find your coach and get on the train.

- You book tickets in advance.
- The conductor checks your tickets and helps you with your seat and luggage.
- You get a taxi.
- You look for a porter to take care of your luggage.
- You arrive at the railway station.
- You find your compartment and your berth.
- The conductor announces ‘all aboard please, the train leaves in 5 minutes’.
- You go to the information board to find out about the platform and the track of train departure.
- When on board the train, the conductor takes care of passengers: brings bedclothes, offers tea or coffee.

**Exercise 2.2. In groups, brainstorm the following questions.**

- What does the safety of rail travel depend on?
- What is railway traffic operation, to your mind? What aspects does it include?
- What services and departments are involved in the process?
- What kinds of trains do you know? How is the train schedule compiled?
- Has train operation changed a lot since the early days of railways? How do hi-tech developments and advanced technologies assist in train operation?

## READING



**operation** – *n* управління, експлуатація; *put into operation* – вводити в дію (експлуатацію); *operate* – *v* управляти, працювати, діяти

**require** – *v* вимагати

**trained employees** – кваліфіковані службовці

**ensure** – *v* забезпечувати

**handle trains** – відправляти (пропускати) потяги  
**include** – *v* включати; *inclusion* – *n* включення, додавання  
**marshalling yard (AmE classification yard)** – сортувальна станція  
**in spite of** – *prep* незважаючи на  
**make up (trains)** – *v* складати, формувати (потяги)  
**intermediate** – *adj* проміжний  
**delay** – *v* затримання, запізнення; *be delayed* – затримуватися, спізнюватися  
**arrange** – *v* формувати, організовувати  
**crew** – *n* бригада  
**run** – пробіг; *run (a railway, train)* – *v* управляти (залізницею, потягом)  
**break up (trains)** – розчіплювати, розформовувати (потяги)  
**destination** – *n* пункт призначення  
**in order to** – *conj* для того щоб  
**facilitate** – *v* полегшувати  
**except (for)** – *conj* крім  
**schedule (timetable)** – розклад, графік; *compile a schedule* – складати розклад; *be scheduled* – бути у розкладі  
**arrive** – *v* прибувати; *arrival* – *n* прибуття; *ant depart* – *v* відправляти(ся); *departure* – *n* відправлення  
**take into account** – брати до уваги  
**commuter train** – приміський потяг  
**freight (goods) train** – вантажний потяг  
**management** – *n* управління; *manage* – *v* управляти  
**manual** – *adj* ручний, неавтоматизований  
**according to** – *conj* відповідно до  
**relay** – *v* відправляти, передавати; *syn transfer*  
**assign** – *v* призначати, установлювати; *assignment* – *n* призначення  
**proper** – *adj* відповідний

**centralized traffic control (CTC)** – централізоване управління рухом (диспетчерська централізація)

**entirely** – *adj* повністю

**remote** – *adj* дистанційний

**switch** – *n* перемикач, залізнич. стрілка; *switch on (off)* – *v* вмикати (вимикати)

**move** – *v* рухатися; *movement* – *n* рух

**actuate** – *v* приводити до дії

**admit** – *v* допускати, дозволяти, визнавати

**recent** – *adj* недавній

**design** – *v* проєктувати, конструювати

**traffic density** – густота руху

**utilize** – *v* використовувати; *syn use*

**dispense with** – *v* обходитися без чогось

**adjust** – *v* налаштовувати

**device** – *n* прилад, устаткування; *syn tool, unit*

**train collision** – зіткнення потягів

**decrease** – *v* зменшувати(ся)

**in case of an emergency** – в аварійному стані

**warning** – *n* попередження, застереження; *warn (smb of)* – *v* попереджувати (когось про щось)

**prove** – *v* виявляти, підтверджувати

**consist** – *n* состав; *v (of)* складатися (з)

**contribute (to)** – *v* допомагати, сприяти

**Exercise 2.3. Change the *italicised* words into their synonyms from the active vocabulary.**

*To come to* a station; a long *journey* of a train; *to assemble* trains; a *freight* train; *to inform* the driver of a danger in time; *to operate* a railway; *to leave* a station on time; *to direct* trains through intermediate stations; *to provide for* safety;

*classification yard; to make up a schedule; in case of an extraordinary situation; to be listed in the timetable; to make train operation easier; qualified railway specialists; cars with the same direction; so that not to be late; to consider all the factors; local trains; to transfer all the data to the control centre; to be operated from the distant terminal; to lessen the risk of emergency; to turn on the light; the tools which allow to dispense with manual labour; to regulate all the switches along the route.*

**Exercise 2.4. Choose the appropriate word to build a grammatically correct sentence.**

1. The railroad timetable greatly contributes to providing (*safety, safe, safely*) of train operation. 2. Compiling a timetable is, indeed, one of the most (*complicating, complicated, complicate*) jobs in the operation business. 3. The schedule diagram can be changed with a click of a mouse, which (*automatic, automatically, automated*) adjusts the operations of all trains. 4. The (*printing, print, printed*) schedules of the regular trains form the timetable. 5. It is the business of the operator to keep the trains (*move, moving, moved*) with as little delay as (*possible, possibly, possibility*). 6. The system is designed (*specific, specifically, specified*) for lines with high-density traffic and utilises the (*latest, late, lately*) computer technology.

**Exercise 2.5. Use one of the following suffixes to form derivative nouns from the verbs. There may be no suffix or change of root vowel as well.**

Arrange, complicate, require, train, handle, delay, run, arrive, depart, manage, load, assign, govern, admit, utilise, adjust, collide, prove, contribute, warn, decrease.

<i>-ment</i>	<i>-tion</i>	<i>-ing</i>	<i>-al</i>	<i>-ture</i>	<i>-sion</i>	<i>conversion</i>

## RAILWAY TRAFFIC OPERATION



(1) Modern railway is a huge and complex system. Few passengers realise that it has required the services of a small army of trained railroad employees to make their travel possible. Railway traffic operation must ensure a safe and efficient handling of trains at all stages including stations, freight terminals, marshalling yards, signal and control centres, etc.

(2) In spite of all the differences between freight and passenger train operation, the fundamental principles are the same: to make up a train; to load it with passengers or freight; to handle it through the intermediate stations or terminals with least possible delay; to rearrange the trains and cars as needed; to change the engine and the crew on the longer runs, and to break up the trains at the final destination.

(3) In order to facilitate the problem of train operation, all railroads, except the very short ones, are divided into *sections* or *divisions* operated just as a small railroad. A railroad runs two principal kinds of trains: *regular* trains and *extra* trains. A regular train is a *scheduled* train. Regular trains are all numbered: the trains in one direction have even numbers, while the trains in the opposite direction have odd numbers. An extra train is not scheduled in the timetable; *special trains*, *work trains* and *wreck trains*<sup>1</sup> are examples of extra trains.

(4) The list of times at which a regular train is to arrive at and leave a station is known as the *train's schedule*. The printed schedules of the regular trains form the *timetable*. Compiling a timetable is, indeed, one of the most complicated jobs in the operation business. Dispatchers have to take into account a lot of things, namely, summer or winter service, weekday or weekend schedules, express or slow commuter trains, regular or extra service, freight or passenger trains, etc.

(5) The operation business also includes management of marshalling (classification) yard work. In classification yards loaded freight cars from all the country are sorted according to their final destination, and then joined to others to form a new train. Through the years this has been done manually. Modern yards

use computers and *Automatic Car Identification system (ACI)* to speed the process of car classification. Electronic scanners read colour-coded identification labels on incoming cars and relay the information to yard computers that assign the cars to the proper track. Scanners do it three times faster than any car dispatcher.

(6) Automation has become an important factor in railroad operations. An impressive example is *Centralised Traffic Control (CTC)*, a system in which trains are controlled entirely from a central point through remote operation of switches and signals. The operator sees each train on a large control panel and directs traffic on hundreds of miles of railroad track. There is a separate lever<sup>2</sup> for each switch and signal. When a train enters the controlled section, small light flashes on the panel. It is the business of the operator to keep the trains moving with as little delay as possible. From the terminal the operator pushes a button or moves a lever, actuating switches and signals miles away. The switches and signals are all operated electrically and interlocked<sup>3</sup>, so that it is impossible to admit two trains to the same track.

(7) The most recent system of automatic traffic operation has been developed in Japan. *Autonomous Transport Operation Control System (ATOS)* is designed specifically for lines with high-density traffic and utilises the latest computer technology. A key concept in the development of ATOS is that the operational control should be transferred from the station to the train control dispatcher in the control centre. ATOS is totally different from CTC as it dispenses with the large wall-mounted train location panel<sup>4</sup>. ATOS displays a graphic real-time diagram of the operating status of a train on a computer screen. The schedule diagram can be changed with a click of a mouse, which automatically adjusts the operations of all trains. Under fully automatic operation the dispatcher needs exercise manual control only in unusual situations, all train movements being set by electronic machines.

(8) Telecommunications devices such as the telephone, radio and television have long been used in traffic operation. Thanks to the radio, the danger of train

collisions has been greatly decreased. The locomotive drivers can communicate with wayside stations<sup>5</sup> along the track or with other trains on the route. In case of an emergency the engine driver can radio a warning to other drivers or ask the dispatcher for help. The radio and TV have also proved very useful in the marshalling yards during the sorting and inspection of train consists.

(9) Nowadays the railway industry is witnessing rapid technological advancements, including the adoption of digitalization, automation, and smart technologies. Electronics, telecommunications, and software development are increasingly involved in signalling systems, train control, passenger information, and maintenance management. Digital solutions, such as artificial intelligence (AI) and the Internet of Things (IoT), enhance the efficiency and safety of rail travel devices to improve asset monitoring, predictive maintenance, and operational efficiency. Augmented Reality (AR) and Virtual Reality (VR) technologies are incorporated for training rail staff, passenger entertainment, enhancing the overall railway operation efficiency. Blockchain technology is implemented to improve transparency, security, and efficiency in freight transportation and supply chain management. Smart railway stations and infrastructure equipped with sensors, IoT devices, and digital signage to assist in safety, accessibility, and passenger experience are being increasingly developed. The age of computers and cyber information systems brings about a renewal<sup>6</sup> of railway and its traditional forms of management. High technologies greatly contribute to the safety and efficiency, which are the priorities in traffic operation [1, 10, 11].

<sup>1</sup> *wreck trains* – ремонтні потяги.

<sup>2</sup> *a separate lever* – окремий важіль.

<sup>3</sup> *interlocked* – зчеплені, замкнуті.

<sup>4</sup> *the large wall-mounted train location panel* – велика панель диспетчерської централізації, змонтована на стіні.

<sup>5</sup> *wayside stations* – проміжні станції.

<sup>6</sup> *brings about a renewal* – призводить до відновлення.



**Exercise 2.6. Check how well you remember the facts from the text while answering the questions.**

1. What must railway traffic operation ensure? 2. What are the main stages in handling freight and passenger trains? 3. How can railway operation be facilitated? 4. What kinds of trains do railways run? Is there a difference between regular and extra trains? 5. Why is making a timetable considered to be one of the most complicated jobs? 6. What are the marshalling yards intended for? 7. What are the latest improvements in the work of a modern classification yard? How do computers facilitate the work of marshalling yards? 8. What are the advantages of CTC? 9. How are train movements controlled under CTC? 10. Why is it impossible to admit two trains to the same track? 11. Where was the most recent system of automatic traffic operation designed? How does it differ from CTC? 12. Which devices help to decrease the danger of train collisions? 13. Where do radio devices find wide application? 14. What are the priorities in traffic operation?

**Exercise 2.7. Work in pairs. Give the corresponding term from the text for the following definitions. Ask each other questions and answer them as in the model:**

**Student A:** *What do we call the stations for receiving, classifying and sorting out the trains?*

**Student B:** *We call them marshalling yards or sorting stations.*

1. a railway section operated like a small railway; 2. a printed schedule of regular trains; 3. a list of times at which the regular trains arrive at or leave a station; 4. a train which is not scheduled in the timetable; 5. a scheduled train; 6. a local train which stops at each station; 7. tools for actuating switches and signals from the control centre; 8. a train used to carry freight; 9. a system for the automatic control of train movements from the central panel; 10. a computer system used to speed the process of cars classification; 11. the devices by means of which

locomotive drivers can communicate with wayside stations or with other trains on the route; 12. devices for 'reading' colour-coded labels on cars.

**Exercise 2.8. Translate the sentences paying attention to the *italicised* words.**

1. Railways usually *number* all passenger trains in order to facilitate the problem of their operation. 2. All regular trains are *numbered*. 3. *The number* of the incoming train was announced over the *radio*. 4. *A number of* new devices have been recently introduced. 5. Thanks to the *radio* the car inspector can inform other inspectors in case of an emergency. 6. Railways make use of different *forms* of telecommunications. 7. The printed schedule of regular trains *forms* the timetable. 8. The *scheduled* trains are regular trains; extra trains are not *scheduled* in the timetable. 9. The long-distance train has to change both the locomotive and the crew several times during its *run*. 10. The trains *run* by railways are basically of two kinds: passenger trains and freight trains.

**Exercise 2.9. Choose one or two of the suggested topics and make a presentation based on the information from the text and additional sources.**

- The main principles of railway traffic operation
- Types of trains and compiling a timetable
- Marshalling yard work
- Centralised traffic control
- Computers and high technologies in traffic operation

**Exercise 2.10. What associations do the words *Virtual Reality* trigger in your head immediately? Read the text and be ready to discuss its application on the railway.**

*Supplementary Text A: VIRTUAL RAIL FOR STAFF TRAINING*

(1) Virtual Reality (VR) is presently a hot, up-to-date topic in the field of computer science. Virtual reality can be defined as a computer system which is used to create an artificial world with an ability to navigate through that world

and manipulate objects in that world. The virtual reality system creates full colour 3-dimensional images, tracks the user's body movements and changes the image instantly as the user interacts and moves through the virtual world.

(2) The idea of Virtual Reality appeared well before the advent of the computer, but it is only in recent decades that we have witnessed its increasing application in scientific, educational and training fields as well as in gaming.

(3) Although a great number of areas of human's activity have become automated, there are still a lot of fields where safety and effectiveness depend on human factor, for example, train driving. Improving driver's skills and rail staff's knowledge in train operation is vitally important in terms of ensuring safety of passenger and freight transportation. That is where the VR concept can prove useful.

(4) VR with the electronic technique known as "simulation" creates virtual rail environment. Different types of cab simulators have been used for many years across the industry, but they tend to have a major limitation: they are applied only to driver training and they can only train one person at a time. Now, the latest generation of multiple simulators, created on the base of virtual reality concept, can be networked together to provide joint training for drivers, train controllers and operations control staff, all interacting in multidisciplinary teams. Using virtual reality theatres, a wider range of training scenarios can be provided. It improves workplace communication between train staff, and understanding their roles.

(5) The training session begins with selecting a track, building a number of virtual trains with initial conditions such as train loading, signal states, environmental conditions and where each train starts. During the session the instructor can add different complexities, for example, faults in trains or signals, obstructions on the track such as workers, animals or even a car stopped on a level crossing. The environmental conditions can also be changed, for example, causing a heavy rain or snow-storm to affect visibility or movement on a track line. All

changes are seen immediately and ensure that each training session can be different.

(6) Now the virtual environment is much more realistic and complex than a single training cab in isolation. Train staff can now regularly experience a whole range of dangerous situations to ensure they are prepared if they happen in the real workplace. Integrated simulator training for drivers, train controllers and operation control staff together allows trainees to fully understand how their actions affect each other, which, in effect, helps to reduce human error in critical situations. The VR concept creates the virtual environment that feels, sounds, and reacts the same as the driven train; the only difference is that in this virtual environment mistakes don't have real-world effects [1, 10, 14].

**Exercise 2.11. a) Answer the following questions:** *How do simulators assist in staff training?* and *What are the features of the latest simulators?*

**b) Get ready to report on any other application of virtual reality, whether in industry, service, entertainment, etc.**

**Exercise 2.12. a) Read the text. Choose the most suitable heading for each paragraph:**

- a) Engineers' contribution to society.
- b) Origin and definition of *engineer*.
- c) Women in engineering.
- d) Engineering and science.
- e) Types of engineers.

### *Supplementary Text B: ENGINEERING*

(1) Engineers find solutions to problems that are important to society. They control and prevent pollution, develop new medicines, create advanced

technologies and help explore new worlds. They make the world a cleaner, safer, healthier place by inventing, building and improving all sorts of things from microchips to household appliances, from skyscrapers to spacecraft.

(2) Interestingly, the word *engineer* does not come from the word *engine*. In fact, it comes from the Latin word *ingeniosus* meaning *skilled*. An engineer is really a clever, practical problem solver. Although the fields of engineering and science are connected, there are also differences.

(3) While a scientist will ask why a problem occurs or happens, an engineer will want to know how to solve the problem. As one writer once said: scientists build in order to learn, whereas engineers learn in order to build.

(4) There are all sorts of opportunities in a variety of engineering fields such as aerospace, biomedical, civil, mechanical, and computer engineering. Engineers work alone or in teams, and in all sorts of locations such as offices, factories, research labs, outdoors, and even outer space.

(5) Engineering has often been seen as a male profession. For example, only 9 percent of US engineers are women, while in the UK it is just over 8 percent. However, research shows that women make the best problem solvers. So now it is time for women to engineer the future. Break the stereotype. Build a career. Sign up today! [4].

**b) Choose one type of engineering mentioned in the text to match the inventions listed 1-5.**

1. Railways, roads, bridges = *civil* engineering.
2. Spacecraft, satellites, missiles = ... engineering.
3. MRI scanners, heart pacemakers, artificial limbs = ... engineering.
4. Cars, CD players, washing machines = ... engineering.
5. Microchips, robots, networks = ... engineering.

c) Explain how you became interested in becoming an engineer. Include what you consider to be the special aptitudes that qualify you for this career. Indicate what area of civil engineering you have chosen to go into, and what you think the future of the field itself will be.

## GRAMMAR

### Possessive Case of Nouns

Присвійний відмінок іменників відповідає на питання *чий?* і означає належність предмета до якої-небудь особи. Присвійний відмінок вживається:

- коли йдеться про людей і тварин: *my sister's name, my sister's room, my mother-in-law's flat, the cat's tail, Charles's address, Kate and Alan's yacht (but: Sonia's and Ann's yachts)*;
- у деяких фразях, що позначають час, простір і кількість: *a month's holiday, an hour's walk, a mile's distance, today's newspaper, yesterday's business talks*;
- з назвами країн, міст, рік і словами *world, country, city, ship*: *city's council, country's capital, world's population, ship's crew, London's galleries*;
- для позначення місця, пов'язаного з людиною певної професії чи родичем: *Yesterday I was at my sister's.* – Вчора я був у моєї сестри. *I bought it at the butcher's yesterday.* – Я купив це вчора у м'ясній лавці.

Належність до неживого іменника висловлюють за допомогою прийменника *of*: *the book of the film* (not '*the film's book*'), *the top of the box* (not '*the box's top*'), або складовим іменником, або рядом визначальних іменників: *the leg of the table (the table-leg), a world oil demand (the world's oil demand)*.

**Exercise 2.13. Use the Possessive Case if possible.**

1. I stepped on (the tail of the dog, the dog's tail). 2. (The test of Maria, Maria's test) was written without mistakes. 3. (The leaves of the trees, trees' leaves) are green. 4. Have you seen (the newspapers of yesterday, yesterday's newspaper)? 5. Where is (the cat's food, the food of the cat)? 6. When is (the doctor's visit, the visit of the doctor) arranged? 7. Be careful, (the back of the car, the car's back) is very close to the building. 8. The students have (two months' holidays, holidays of two months) in summer. 9. Where did you last see (the glasses of your mother, your mother's glasses)? 10. Is that (his father's car, the car of his father) over there? 11. (The house's roof, the roof of the house) is red. 12. (The sun's rays, the rays of the sun) are very hot at the Equator.

**Exercise 2.14. Replace the *of*-phrase by the noun in the Possessive Case.**

The wife of Doctor Stanford, the elder sister of Helen, the friend of my brother-in-law, the best suit of my husband, the novels of Dickens, the answers of the students, the dress of the girl, the wishes of my friends, the tools of the workers, the distance of two miles, the population of London, the airport of Kharkiv.

**Exercise 2.15. Read the story and then complete the sentences using nouns in the possessive case.**

*Anna and Victor are married. They have two children, Kateryna and Borys. Kateryna is married to Andriy. Kateryna and Andriy have a daughter, Olena.*

1. Anna is ... wife. 2. Victor is ... husband. 3. Kateryna is ... sister. 4. Borys is ... uncle. 5. Borys is ... brother. 6. Olena is ... niece. 7. Kateryna is ... wife. 8. Kateryna is ... mother. 9. Victor is ... father. 10. Victor is ... grandfather. 11. Olena is ... granddaughter. 12. Andriy is ... husband.

**Exercise 2.16. Build a word combination using -'s, -s' or ... of...:**

*Model:*        the owner / that car – *the owner of that car*  
                  the mother / Ann – *Ann's mother*

The new manager / the company, the result / the football match, the garden / our neighbours, the jacket / that man, the ground floor / the building, the top / the page, the children / Don and Mary, the daughter / Charles, the economic policy / the government, the cause / the problem, the husband / Catherine, the newspaper / yesterday, the husband / the woman talking to Mary, the birthday / my father, the name / this street, the car / the parents / Mike, the toys / the children, the wedding / the friend / Helen.

### Exercise 2.17. Translate word combinations using the Possessive Case.

Книга мого друга, сукня сестри, стіл батька, дім бабусі, м'яч дівчат, школа сина, машина того чоловіка, дитина тієї жінки, у моїй бабусі (вдома), у перукарні, у булочній, діти моєї тітки, життя його батьків.

## Articles

<i>Невизначений артикль a (an)</i>	<i>Визначений артикль the</i>	<i>Без артикля</i>
Злічені іменники в однині, згадані вперше: <i>I have a house. The house is in the country</i>	Незлічені та злічені іменники в однині та множині, коли йдеться про певний предмет або особу: <i>Where are the keys?</i>	Іменники у множині та незлічені іменники з узагальненням: <i>Milk is good for kids.</i> (Але: <i>The milk is in the fridge.</i> )
Представники народу, країни: <i>a French woman</i> <i>a Japanese worker</i>	Океани, моря, ріки; озера та гори у множині: <i>the Red Sea, the Atlantic Ocean, the Alps, the Andes</i> (крім озер в однині та гірських вершин <i>Lake Baikal, Mount Vesuvius</i> )	Абстрактні іменники: <i>freedom, happiness</i>
Деякі вирази кількості: <i>a few, twice a week, a pair of shoes, a little, forty miles an hour, a hundred</i>	Явища або поняття, єдині у своєму роді: <i>the earth, the Queen, the sun, the Moon</i>	Країни, назва яких складається з одного слова, континенти: <i>China, Europe, Asia</i>



<i>Невизначений артикуль a (an)</i>	<i>Визначений артикуль the</i>	<i>Без артикля</i>
Опис людей, предметів, місць: <i>She has a nice face</i>	Країни, назва яких складається з більш ніж одного слова та частини світу: <i>the United States, the East</i> (Але: <i>Great Britain</i> )	Кількісні числівники після іменників: <i>World War One, Chapter three</i>
Професія, представник або предмет певного класу: <i>He is a manager. This is a table</i>	Порядкові числівники: <i>the third chapter the First World War</i>	Вирази з видами транспорту і місця: <i>at home, in/to bed, at/to work, at/to school, by bus, by train, on foot, have breakfast (lunch, dinner)</i>
Після звороту <i>there is</i> перед зліченими іменниками в однині <i>There is a student in the classroom</i>	Театри, музеї, газети та готелі: <i>the Bolshoi Theatre, the Hermitage, the Times, the Hilton</i>	Види спорту, пори року, науки: <i>soccer, autumn, physics</i>
Після слів <i>rather</i> ( <i>досить</i> ), <i>quite</i> (цілком), <i>such</i> (такий), <i>what</i> (який): <i>such a nice girl, quite a young man, what a fine model!</i>	Певна група, клас людей, сім'я: <i>the unemployed, the Petrovs</i>	Планети, сузір'я: <i>Venus, Mars, Milky Way</i>
	Перед прикметниками найвищого ступеня: <i>He was the smartest of all three brothers</i>	

### Exercise 2.18. Fill in a/an or the if required.

1. Amanda is ... student. When she finishes her ... studies, she wants to be ... journalist. She lives with ... two friends in ... flat near ... college where she is studying. ... flat is small but she likes it. 2. It's ... nice morning. Let's go for ... walk. 3. What is ... largest city in ... Canada? 4. I like ... this room but I don't like

... colour of ... carpet. 5. Can you recommend ... good restaurant? 6. We had dinner in ... most expensive restaurant in ... town. 7. Excuse me, please. Can you tell me how to get to ... airport? 8. I'm going away ... next week. 9. Could you close ... door, please? 10. I've got ... problem. Can you help me? 11. I'm just going to ... post-office. I won't be long. 12. There were no ... chairs, so we had to sit on ... floor. 13. ... my sister has just got ... job in ... bank in ... Manchester. 14. Where did you have ... lunch? 15. Rita is studying ... English and ... Maths this term. 16. Please give me ... cup of ... coffee with ... cream and ... sugar. 17. ... Lake Erie is one of ... five Great Lakes in ... North America. 18. We crossed ... Atlantic Ocean. 19. What did you eat for ... breakfast this morning? 20. Last night ... bird was singing outside my house. 21. ... chair you are sitting in is broken. 22. Did you have ... nice holiday? – Yes, it was ... best holiday I've ever had.

### Exercise 2.19. Choose the right word.

1. Where's *milk/the milk*? It's in the fridge. 2. I don't like *milk/the milk*. I never drink it. 3. We went for a swim in the river. *Water/the water* was very cold. 4. I don't like swimming in *cold water/the cold water*. 5. Excuse me, can you pass *salt/the salt*, please? 6. I like this town. I like *people/the people* here. 7. *Vegetables/The vegetables* are good for you. 8. I can't sing this song. I don't know *words/the words*. 9. I enjoy taking *photographs/the photographs*. It's my hobby. 10. He's afraid of *dogs/the dogs*. 11. *Women/the women* live longer than *men/the men*. 12. We had a very nice meal. *Vegetables/The vegetables* were especially good. 13. I like *skiing/the skiing* but I'm not very good at it. 14. Why are *people/the people* violent?

### Imperative Sentences

Стверджувальна форма: *Start the engine!* – Ввімкни двигун!

Заперечна форма: *Do not (don't) stop here!* – Не зупиняйтесь тут!

Спонування до дії:

Let	me	read.	Нумо я почитаю
	him		Нехай він читає
	her		Нехай вона читає
	us		Почитаймо
	them		Нехай вони читають
	the student		Нехай студент читає

### Exercise 2.20. Translate the proverbs in the Imperative Mood.

1. Be slow to promise and quick to perform. 2. Never put off till tomorrow what you can do today. 3. Don't trouble trouble until trouble troubles you. 4. When in Rome, do as the Romans do. 5. Let bygones be bygones. 6. Let sleeping dogs lie.

### Exercise 2.21. Translate the sentences in the Imperative Mood.

1. Їдьте! 2. Не їдьте! 3. Їдьмо! 4. Дозвольте мені поїхати! 5. Нехай він їде куди захоче! 6. Нехай вона робить що захоче! 7. Дайте їм поїхати без проблем! 8. Подивіться на мене. Не дивіться на мене. 9. Вимкніть світло. Не вмикайте світло. 10. Вивчіть це правило. Не вчіть це правило. 11. Розкажіть мені все. Не розказуйте мені всього. 12. Заходьте! Не заходьте!

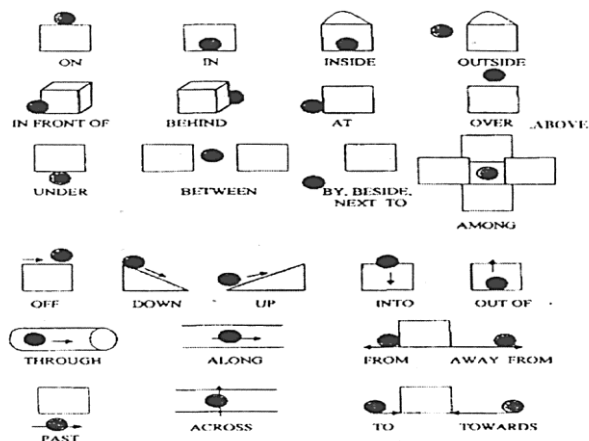
### Exercise 2.22. Translate the sentences using either the Imperative Mood or a more polite form *will you, could you?*

1. Зачиніть двері (ви заважаєте). 2. Зачиніть двері (будь ласка, протяг). 3. Перекладіть ці речення (контрольна робота). 4. Будь ласка, перекладіть цього листа. 5. Зустрінь мене на вокзалі, якщо зможеш. 6. Відкрийте рота (у стоматолога). 7. Чи не могли б ви відкрити вікно? 8. Слухайте уважно. 9. Послухай, будь ласка, цей запис. 10. Вийдіть! 11. Будь ласка, вийдіть, нам треба поговорити.

## Prepositions of Time

<b>IN</b>	in September, in July in summer, in winter in the morning/afternoon/evening in 2010 in a year, in two weeks' time ( <i>через</i> )
<b>ON</b>	on Monday, on Sunday morning on the first of September on Christmas Day
<b>AT</b>	at 3 o'clock, at half past 8 at night, at noon, at midnight, at lunchtime at Christmas, at the weekend at the moment, at the same time at the age of 5
<b>DURING</b>	during the war, during the meeting ( <i>нід час</i> )
<b>FOR</b>	for 5 years, for a week, for several minutes ( <i>протягом</i> )
<b>BEFORE</b>	before lunch, before going to bed ( <i>перед, до</i> )
<b>AFTER</b>	after lessons ( <i>після</i> )
<b>FROM ... TO (TILL)</b>	from morning till night ( <i>з ... до ...</i> )
<b>BY</b>	by 2 o'clock ( <i>до якогось часу</i> )
<b>SINCE</b>	since my childhood ( <i>з якого-небудь часу</i> )
<b>WHILE</b>	while I was reading ( <i>поки, у той час</i> )

## Prepositions of Place and Direction



**Exercise 2.23. Fill in the blanks with prepositions of time and place.**

We are students. ... the morning we go ... the University. Our lectures begin ... 9 o'clock. We have no lectures ... Sundays. We take examinations ... January and June. We do not study ... summer. We come ... the classroom and sit down ... the tables. We take our books and notebooks ... the bags and put them ... the table. During the lesson we go ... the blackboard and write sentences ... it. When the lessons are over, we go ... the classroom and go home. We usually come back ... the University ... 3 o'clock ... the afternoon.

**Exercise 2.24. Translate the word combinations.**

1. During the lecture, for 2 weeks, for a year, before the war, after classes, from Monday till Friday, since 10 o'clock, for two hours, while they were reading, by 10 o'clock, on Saturday morning, by the end of the week, on his holiday, on her birthday, at 12 o'clock, at night, in 15 minutes, in the evening, in winter, in July.
2. З ранку до вечора, під час канікул, о 9 годині, з 5 до 7, за 10 хвилин, у 1995 році, взимку та літом, у травні, вранці та ввечері, з понеділка до суботи, у вівторок, восени, за рік, за 5 днів, уночі, під час уроку, після сніданку, перед зустріччю, цього (того, наступного) року, цього (того, наступного) тижня, цього (того, наступного) місяця, поки вона розмовляє, протягом місяця, з 2008 року, з 5 години дня, у 5 років.
3. На столі, за столом, у столі, під столом, над столом, між столами, у стіл, із столу, перед столом, позаду столу, до столу, від столу, зі столу, біля столу.

**Exercise 2.25. Put *while, during, or for* into each gap.**

1. My uncle died ... the war. 2. The phone rang ... I was having supper. 3. I lived in Paris ... several years. 4. ... I was in Poland I made a lot of friends. 5. I was in hospital ... three weeks. 6. ... my stay in hospital, the nurses looked after me well. 7. A football match lasts ... ninety minutes. 8. I hurt my leg ... I was playing football yesterday. 9. I hurt my leg ... the second half of the match. 10. Traffic is

always bad ... the rush hour. 11. Last week I was held up ... three hours. 12. Peter came round ... we were eating. 13. Peter came round ... the meal.

### Exercise 2.26. Put a preposition from the box into each gap.

*at, in, about, after, for, with, by, on, until, during, to*

James lives ... a small flat ... Cambridge. He lives ... two other boys who are students ... Cambridge University. They work hard ... the week, but ... weekends they invite a lot of friends ... their house. They cook a meal ... their friends, and then they go out ... the pub ... a drink, or they stay ... home and listen ... the music. James has two jobs. ... Mondays, Tuesdays and Wednesdays he works ... a hospital, where he helps to look ... children who are ill. He goes ... the hospital ... bus. He starts ... ten o'clock and works ... quarter ... five. On Thursdays and Fridays, he works ... home. ... the evening, one of the boys cooks a meal. ... dinner they look in the newspaper to see what's on TV or they talk ... their day. They usually go ... bed ... about midnight.

## Questions

### General Questions

Допоміжне дієслово	Підмет	Змістове дієслово	Додаток	Обставина
<i>Do</i>	<i>you</i>	<i>study</i>	<i>English</i>	<i>at the Institute?</i>
Yes, I do. No, I don't.				
<i>Is</i>	<i>he</i>	<i>studying</i>	<i>English</i>	<i>now?</i>
Yes, he is. No, he isn't.				
<i>Have</i>	<i>you</i>	<i>seen</i>	<i>a new film</i>	<i>in our club?</i>
Yes, I have. No, I haven't.				
<i>Will</i>	<i>students</i>	<i>take</i>	<i>exams</i>	<i>in June?</i>
Yes, they will. No, they won't.				
<i>Can</i>	<i>you</i>	<i>speak</i>	<i>English</i>	<i>well?</i>
Yes, I can. No, I cannot.				

## Special Questions

<b>who</b> – хто	<b>what</b> – що <b>what (colour)</b> – який	<b>how</b> – як	<b>when</b> – коли
<b>whose</b> – чий, чия, чиє	<b>which</b> – який, котрий	<b>how long</b> – як довго	<b>where</b> – де <b>where from</b> – звідки
<b>whom</b> – кого, кому	<b>what time</b> – котра година	<b>how much (time)</b> – скільки	<b>why</b> – чому
	<b>what size</b> – який розмір	<b>how many (students)</b> – скільки	
	<b>what kind (sort) of</b> – який, якого роду	<b>how far</b> – як далеко	

*How many faculties are there at the University?*

*When did you enter the Academy?*

*What will you read me tomorrow?*

*Whose book have you taken?*

*Where do you come from?*

*What specialists does your faculty train?*

*Who knows this story?*

*How far is it from here?*

*What time is it by your watch?*

*How long does it take you to get to your office?*

## Alternative Questions

<i>Will</i>	<i>you</i>	<i>go</i>	<i>by train <b>or</b> by plane?</i>
<i>Is</i>	<i>he</i>	<i>from</i>	<i>Poland <b>or</b> Ukraine?</i>
<i>Does</i>	<i>he</i>	<i>work</i>	<i>at the plant <b>or</b> in the office?</i>

## Tag Questions

<i>You</i>	<i>live</i>	<i>in Kharkiv,</i>	<i>don't you?</i>
<i>Maria</i>	<i>will do</i>	<i>her work in time,</i>	<i>won't she?</i>
<i>He</i>	<i>has done</i>	<i>the translation,</i>	<i>hasn't he?</i>

<i>You</i>	<i>don't speak</i>	<i>English,</i>	<i>do you?</i>
<i>He</i>	<i>isn't</i>	<i>your friend,</i>	<i>is he?</i>

**Exercise 2.27. Give true answers to the questions.**

1. How old are you? 2 When did you finish school? 3. Do you work or study?  
4. Are you a part-time student or a full-time student? 5. Which of your friends likes football? 6. You will be an engineer in 5 years, won't you? 7. Your group mate lives in a hostel not far from the city centre, doesn't he? 8. How long does it take you to get to the University? 9. How often do you have your English lessons?

**Exercise 2.28. Fill in the blank spaces with the following words.**

*what, where, when(2), who, why, whose,  
how much(2), how many, how, how long*

*Model: What* is your name? – Nick.

1. ... are you late? – Because I missed the train. 2. ... does the film start? – At 9.15.  
3. ... did you see this morning? – Tom. 4. ... did that bike cost? – Two hundred pounds. 5. .... do you want to leave? – At 5 o'clock. 6. ... did you buy at the supermarket? – Some milk. 7. ... sisters have you got? – Two. 8. ... coat is this? – Maria's. 9. ... is the baker's? – It's next to the video club. 10. ... bread have we got? – Half a loaf. 11. ... do you get to the University? – By metro. 12. ... does it take you to clean the room? – Half an hour.

**Exercise 2.29. Put questions to the words in *italics*.**

1. He speaks *English, French, and German*. 2. They worked at this problem *some years ago*. 3. *She* is coming in a day or two. 4. I will be an engineer *in 5 years*.  
5. Helen didn't come *because she missed the train*. 6. They would like to buy *their own house*. 7. *He* can answer all your questions. 8. The call is *urgent*.



**Exercise 2.30. Match a line in A with a line in B and a line in C.**

A	B	C
It's chilly today,	haven't you?	No. How do you do?
You don't like this food,	is it?	Yes. They live next door to me.
You know the Browns,	have you?	Yes. A Renault.
This exercise isn't hard,	do you?	Yes. There was frost last night.
You've got a car,	isn't it?	Well, I find it a bit too salty.
You haven't met Henry,	don't you?	No. It's quite easy.

**Exercise 2.31. Make tag-questions of these sentences.**

1. You do not live in Kyiv. 2. The weather is fine. 3. The film was interesting.  
 4. You have already done your home task. 5. He is writing a letter now. 6. I can take this book for a week. 7. You can't do this work. 8. They will be here soon.  
 9. He will be busy tomorrow.

**Questions with prepositions at the end**

Багато дієслів англійської мови вживають із прийменниками, які зазвичай ставлять **наприкінці питального речення**. З перекладом українською з них починається питання.

**Who** did you speak **to**?

**З ким** ти розмовляв?

**What** are you talking **about**?

**Про що** ти говориш?

**Who** will she dance **with**?

**З ким** вона буде танцювати?

**What** are you thinking **about**?

**Про що** ти думаєш?

**Exercise 2.32. Write questions with a preposition at the end.**

*Model: I'm waiting. – Who are you waiting **for**?*

1. Sh! I'm listening. – *What ... ?* 2. Jane is talking. – *Who ...? What ...?* 3. They're looking everywhere. – *What ...?* 4. Jerry's in love. – *Who ...?* 5. Sophie's getting married. – *Who ...?* 6. She's going on holiday. – *Who ...?* 7. The letter is from the Tax Office. – *Where ... ?* 8. I'm worried about the children. – *What ...?*

**Exercise 2.33. Read the true story and then write the questions.**

A couple called Michael and Kate, who lived in Hereford in England, booked a holiday using the Internet. They thought they were going to Gerona in Spain. When they arrived after their flight, they were puzzled because they saw Italian flags everywhere. When a bus driver refused their pesetas, they realized something was wrong. Michael and Kate only spoke English, so they asked another British couple for help. That was when they discovered that they were in Genoa in Italy. Their mistake was that they had clicked the wrong box.

Questions	Answers
<i>What were the names of the two people?</i>	<i>Michael and Kate.</i>
1. _____ live?	In Hereford.
2. _____ holiday?	They used the Internet.
3. _____ ?	To Gerona.
4. _____ ?	They flew.
5. _____ ?	Because of all the Italian flags.
6. _____ ?	When someone refused their pesetas.
7. _____ ?	Another British couple.
8. _____ ?	They told them they were in Italy.
9. _____ ?	The wrong one.

**Exercise 2.34. Take turns to ask your partner about his/her life.**

**I.** Місце проживання; місце, дата народження; рід занять (робота, навчання); чому вирішили стати інженером; володіння іноземною мовою; улюблений предмет у ЗВО; захоплення; плани на майбутнє.

**II.** Рідне місто; коли було засновано, де розташовано; визначні місця, відомі імена; причина, з якої ви поїхали з рідного міста.

**III.** Сім'я (велика, мала); батьки (вік, робота); сестри, брати; улюблені заняття в сім'ї; домашні тварини; помешкання (дім, квартира); власна сім'я (чи одружені ви або заміжні).

### Indefinite (Simple) Tense in the Passive

Англійське дієслово має два стани: активний (*Active Voice*) та пасивний (*Passive Voice*). Active Voice показує, що підмет сам виконує дію.

People **speak** English there. The students **asked** many questions.

Passive Voice показує, що підмет випробує дію на собі.

English **is spoken** there. The teacher **was asked** many questions.

<b>BE + V-ed (Past Participle)</b>	
Present Simple	<i>The letter is written by him.</i>
Past Simple	<i>The letter was written by him.</i>
Future Simple	<i>The letter will be written by him.</i>

#### **Exercise 2.35. Compare the two sentences in the Active and Passive Voice.**

1. The first railways used horses for drawing trains. – Horses were used on the first railways for drawing trains. 2. Richard Trevithick, an English engineer, built one of the first working models of the steam engine in 1808. – One of the first working models of the steam engine was built in 1808 by Richard Trevithick, an English engineer. 3. George Stephenson demonstrated his locomotive in 1829. – Now this locomotive is demonstrated in a London Museum. 4. He told them an interesting story. – They were told an interesting story.

#### **Exercise 2.36. Form the Past Participle of the following verbs and use them in the sentences.**

*grow, produce, make, deliver, include, employ, speak, pull down*

1. English is ... here. 2. Volvos are ... in Sweden. 3. Is service ... in the bill?  
4. Whisky is ... in Scotland. 5. About one thousand people are ... in that factory.

6. Lots of tulips are ... in Holland. 7. In Britain milk is ... to your doorstep. 8. That block of flats will be ... because it is unsafe.

**Exercise 2.37. Change active sentences into passive ones.**

*Model:* The teacher asked him a question. – *He was asked a question.*

1. They built some new houses in our street last year. 2. The agent must inform the buyers on the arrival of the ship. 3. She left money at home. 4. They robbed the bank last week. 5. They equipped the laboratory with the latest computers. 6. Scientists make wonderful discoveries. 7. A railway line will connect the village with the town. 8. The director signed the contract last week. 9. Almost half of mankind speaks Chinese.

**Exercise 2.38. Write all kinds of questions to these statements.**

1. The money was left at home. 2. The books are taken from the central library. 3. The young workers are trained to use the new equipment. 4. The children of Sparta were given a military education.

**Exercise 2.39. Translate the sentences.**

1. Його часто посилають до Києва. 2. Телеграму було одержано вчора. 3. Наступного року тут збудують нову станцію метро. 4. Коли має бути перекладена ця стаття? 5. Багато нових будинків побудовано минулого року в нашому місті. 6. Це питання буде вирішено наступного тижня. 7. Телеграму надіслали дві години потому. 8. Роботу було закінчено вчора. 9. Ця книга буде перекладена німецькою та іспанською мовами. 10. Делегацію зустрінуть завтра ввечері. 11. Їм показали лабораторію та бібліотеку університету. 12. Днями мені розповіли дуже цікавий випадок.

**Exercise 2.40. Pay special attention to translation of the sentences in the Passive. Begin your translation with prepositions.**

*Model:* Many inventions were not thought **of** before. – *Про велику кількість винаходів ми не думали раніше.*

1. Super-high speeds were not heard *of* thirty years ago. 2. The achievements on the Ukrainian railways are often written *about* in newspapers and magazines. 3. The beginning of our century was spoken *of* as the Golden Age of travel. 4. The program was insisted *on* by many specialists. 5. One of the projects is objected *to*. 6. The experiment was watched *by* a group of scientists. 7. The invention of the steam engine was followed *by* the development of steam ships and locomotives. 8. The conference will be attended *by* railway experts from various countries. 9. Radio communication is affected *by* the weather. 10. My watch is fast; it cannot be relied *upon*. 11. Why was he laughed *at*? 12. He is always listened *to* with great interest. 13. She is very well spoken *of*. 14. Yesterday I saw the film, which is so much spoken *about*. 15. What was he sent *for*? 16. This subject will be dealt *with* in the next paragraph. 17. As an agreement had not been arrived *at*, the dispute was decided by the court.

**Modal Verbs *Can, May, Must* and their Equivalents**

*Perhaps the most valuable result of all education is the ability to make yourself do the thing you **have to** do, when it **ought to** be done, whether you like it or not*

Aldous Huxley, an English writer and philosopher

Модальні дієслова *can, may, must* передають не дію, а ставлення до цієї дії (можливість, бажаність, необхідність та ін.). Після модального дієслова стоїть інфінітив без частки *to*. У заперечних і питальних реченнях модальні дієслова виконують функцію допоміжних дієслів.

Present	Past	Future
Необхідність — Повинність — Обов'язок <b>must — have to — be to — should — ought to</b>		
<p><i>I <b>must</b> meet him.</i> — Я повинен його зустріти (категоричне зобов'язання, я так вважаю).</p> <p><i>I <b>have to</b> meet him.</i> — Я повинен його зустріти (мені доводиться, необхідність згідно з зовнішніми обставинами для того, хто говорить).</p> <p><i>We <b>are to</b> meet at 6.</i> — Ми маємо зустрітися о шостій годині (за планом, розкладом, домовленістю).</p> <p><i>You <b>should</b> meet him.</i> — Ти повинен (тобі треба, слід) його зустріти (загальна порада, рекомендація).</p> <p><i>You <b>ought to</b> respect the elderly</i> (я раджу вам; це необхідно, більшість людей так вважає)</p>	<p><i>I <b>had to</b> meet him.</i> — Я повинен був (мені довелося) його зустріти.</p> <p><i>I <b>was to</b> meet him.</i> — Я повинен був (передбачалося) його зустріти</p>	<p><i>I <b>will have to</b> meet him.</i> — Я повинен буду його зустріти</p>
Здатність — Здібність — Можливість <b>can — be able to</b>		
<p><i>He <b>can</b> swim.</i> — Він може плавати.</p> <p><i>He <b>is able to</b> help you.</i> — Він має змогу тобі допомогти</p>	<p><i>He <b>could</b> swim.</i></p> <p><i>He <b>was able to</b> help you</i></p>	<p><i>He <b>will be able to</b> help you</i></p>
Дозвіл — Можливість (вірогідність) <b>may — be allowed to</b>		
<p><i>You <b>can/can't</b> borrow my car.</i> (дозвіл, неформальний)</p> <p><i><b>Could</b> I use your phone?</i> (більш ввічливе; запит дозволу)</p> <p><i>You <b>may</b> use the phone.</i> (формальне; надання дозволу)</p> <p><i><b>Might</b> I speak to Mr Jones, please?</i> (більш формальне; запит дозволу)</p>	<p><i>I <b>was allowed to</b> leave</i></p>	<p><i>I <b>will be allowed to</b> use this device</i></p>

Present	Past	Future
<i>I'm afraid you <b>can't/mustn't</b> see the patient.</i> (неформальне; відмова) <i>Children <b>may not</b> be left alone (формальне; відмова – письмове повідомлення)</i>		

### Exercise 2.41. Answer the questions as in the model.

*Model:* - Can you dance well?

- Yes, I can. I can dance well enough.

- No, I can't. I can't dance at all.

1. Can you speak English a little? 2. Could you swim when you were five? 3. Can you play football? 4. Can you play the piano? 5. Can you drive a car? 7. Can you sing? 8. Can you cook?

### Exercise 2.42. Say the sentences in past and future.

*Model A:* We **must** learn the new words regularly.

*We **had to learn** the new words regularly.*

*We **will have to** learn the new words regularly.*

1. He must go there at once. 2. She must be at home by 11.00. 3. I must go to this meeting. It is very important. 4. We must pass the examination in physics. 5. I must rewrite the test. I failed last time.

*Model B:* He **can** skate well.

*He **could** skate well.*

*He **will be able to** skate well.*

1. He can continue his studies at the evening department. 2. I can meet you at the metro station. 3. His father can help him in his studies. 4. I can translate this text without a dictionary. 5. She can play tennis three times a week.

*Model C:* You **may** open the window.

*You were allowed to open the window.*

*You will be allowed to open the window.*

1. You may go home after classes.
2. They may continue the experiment.
3. The students may use dictionaries while translating the text.
4. He may take my pen.
5. The tourists may attend the sitting of the Parliament.

**Exercise 2.43. Fill in the gaps using *can* or *can't* with one of the given verbs:**

*come, find, hear, drive, see, speak.*

*Model:* I'm sorry but we *can't come* to your party next Saturday.

1. I like this hotel room. You ... the mountains from the window.
2. You are speaking very quietly. I ... you.
3. Have you seen my bag? I ... it.
4. Catherine got the job because she ... five languages.
5. I ... though I haven't got a driving licence.

**Exercise 2.44. a) Add your sentence beginning it with *I think ... should...* or *I don't think ... should ...***

*Model:* It's late. (*go home now*) – *I think we should go home now.*

That coat is too big for you. (*buy it*) – *I don't think you should buy it.*

1. You don't need your car. (*sell it*)
2. Diane needs a rest. (*have a holiday*)
3. Sally and Colin are too young. (*get married*)
4. You're not well this morning. (*go to work*)
5. James has a toothache today. (*go to the doctor*)
6. The hotel is too expensive for us. (*stay there*)

**b) Give advice to people in the following situations. Use *should*.**

1. My twenty-year-old son just stays at home all day watching television!
2. My car keeps breaking down.
3. I just can't get to sleep these days.
4. Since my father retired, he doesn't know what to do with himself.
5. I just don't know what to do with my hair. It looks awful.
6. I'm overweight.
7. I've got exams next week.
8. My cat's ill.
9. I'm always arguing with my parents.
10. It's my parents' wedding anniversary soon.
11. I'm always late.



### Exercise 2.45. Ask permission.

Зачинити двері, повернутися додому, піти в кіно, встати, запалити, поспати, сісти, піти до буфету, розмовляти французькою.

### Exercise 2.46. Fill in the gaps with *mustn't* (не повинен) or *needn't* (не треба) + one of the verbs: ~~clean~~, forget, hurry, lose, wait, write.

*Model:* The windows aren't very dirty. You *needn't* clean them.

1. We have a lot of time. We ... .
2. Keep these documents in a safe place. You ... them.
3. I'm not ready yet but you ... for me. You can go now and I'll come later.
4. We ... to turn off the lights before we leave.
5. I ... the letter now. I can do it tomorrow.

### Exercise 2.47. Fill in the gaps with *have to* or *had to* + one of the verbs: answer, buy, change, go, ~~walk~~.

*Model:* We *had to* walk home last night. There were no buses.

1. It's late. I ... now. I'll see you tomorrow.
2. I went to the supermarket after work yesterday. I ... some food.
3. This train doesn't go all the way to London. You ... at Bristol.
4. We took an exam yesterday. We ... six questions out of ten.

### Exercise 2.48. Complete the questions.

*Model:* I have to get up early tomorrow. – *What time do you have to get up?*

1. George had to wait a long time. (*How long ... ?*)
2. Liz has to go somewhere. (*Where ... ?*)
3. We had to pay a lot of money. (*How much ... ?*)
4. I have to do some work. (*What exactly ... ?*)
5. He has to work hard these days. (*Why ...?*)
6. You will have to tell the truth. (*When ...?*)

### Exercise 2.49. *Mustn't* or *don't have to*? Choose the correct modal verb.

**Remember that** *don't have to* means *не треба, нема потреби*.

*Model:* We have a lot of work tomorrow. You *mustn't* be late.

1. You *mustn't / don't have to* tell Mary what I told you. It's a secret. 2. The museum is free. You *mustn't / don't have to* pay to get in. 3. Terry is a millionaire. He *mustn't / doesn't have to* go to work. 4. We *mustn't / don't have to* rush. We've got plenty of time. 5. You *mustn't / don't have to* play with guns. They're dangerous. 6. 'Shall I come with you?' – 'You can if you want, but you *mustn't / don't have to*.' 7. Children *mustn't / don't have to* tell lies. It's very naughty. 8. Why did you get up early? You *mustn't / didn't have to* wake up at 7. 9. Is he going to quit? He *mustn't / doesn't have to* leave this job now.

### **Exercise 2.50. Translate the sentences.**

1. Ви можете зустріти його на нашій фірмі. 2. Їй потрібно допомогти матері. 3. Студентам було дозволено користуватися підручниками. 4. Вам потрібно поговорити з ними. 5. Ти повинен написати батькам листа. 6. Я міг це зробити сам. 7. Я зможу допомогти тобі завтра. 8. Можна увійти? 9. Чому їм довелося покинути цей будинок? 10. Він не зможе поїхати в Італію влітку. 11. Вам доведеться зробити цю роботу до понеділка. 12. Я не зможу прочитати цю книгу за тиждень. 13. Вона повинна перекласти цю статтю до середи. 14. Я не можу відповісти на ваше запитання. 15. Ти не можеш сьогодні піти в кіно. 16. Ти повинен поговорити з його батьком. 17. Я зможу їх побачити завтра. 18. Він повинен буде зробити доповідь на конференцію. 19. Йому доводиться зараз багато працювати.

## **S P E A K I N G**

**Exercise 2.51. Complete the conversations with the correct expressions.**  
**Practise these flashes in the dialogues of your own.**

*I'm sorry   Excuse me   of course   Pardon*

A: ... ! Can I get passed?

B: ... ?

A: Can I get passed, please?

B: ... I didn't hear you. Yes, ...

A: Thanks a lot.

*That's right Oh, what a pity Congratulations Never mind I hear*

A: ... you're going to get married soon. ... !

B: ..., next July. July 21. Can you come to the wedding?

A: ... ! That's when we're away on holiday.

B: ... We'll send you some wedding cake.

A: That's very kind.

*Hurry up all right Oh, dear Just a minute I haven't a clue*

A: ... ! Look at the time! ..., or we'll miss the train.

B: ... ! I can't find my umbrella. Do you know where it is?

A: ... But you won't need it. It's a lovely day. Just look at the sky!

B: Oh, ... Let's go, then.

*Good luck See you later Same to you Good idea*

*What about you No, of course not*

A: ... in your exam!

B: ... I hope we both pass.

A: Did you go out last night?

B: ... I went to bed early. ... ?

A: Me, too. ... after the exam. Let's go for a drink.

B: ...

## WORD BUILDING

Noun Suffixes: *-ure (-ture), -ment, -ness*

Adjective Suffixes: *-less, -ful*

Adverb Suffix: *-ly*

**Exercise 2.52. Read and translate the following pairs of words.**

To depart – departure, to please – pleasure, to press – pressure, to seize – seizure, to sign – signature, dark – darkness, cheap – cheapness, bright – brightness, near – nearness, great – greatness, smooth – smoothness.

**Exercise 2.53. Form the nouns by adding *-ment* and use them in the sentences.**

<i>amuse, engage, improve, achieve</i>
--

1. There are a lot of ... in a big city: plays, films, concerts, football matches and so on. 2. At the meeting the chief of our plant told us about the ... in this branch of industry. 3. I have several ... next week. 4. Sales figures continue to show signs of ... .

**Exercise 2.54. a) Translate the adjectives with *-ful* or *-less* suffix.**

Hopeless, aimless, moonless nights, limitless hatred, classless society, priceless treasure, beautiful, helpful, useful, forgetful, thankful, painful, doubtful.

**b) Translate the following words using *-less* or *-ful*.**

Безсердечний (*heart*), безсмачний (*taste*), безсонний (*sleep*), безмовний (*speech*), безжалісний (*pity*), даремний (*use*), безформний (*shape*); багатий на події (*event*), чудовий (*wonder*), успішний (*success*), молоджавий (*youth*), забутливий (*forget*), уважний (*care*), потужний (*power*), сповнений жаху (*fear*).

### III. RAIL TRACK

*Discussion:* Modes of Transportation

*Main text:* Railroad Track

*Supplementary text A:* The Track for the Future

*Supplementary text B:* Around the World: Track Innovations

*Grammar:* Continuous Tense

Present Participle

Pronouns

Use of *It*

Numerals

*Speaking:* Telephone Conversation

*Word Building:* -ity, -ty, -ship; -ous, -ive, -y; -ate, -en

### DISCUSSION

**Exercise 3.1. Compare four forms of transportation: marine, road, rail and air transport. Make up your own story. Decide which kind is:**

the fastest, the cheapest, dependent on weather and geographical conditions, able to transport large quantities of cargo, time-consuming over long distances, risky because of the frequent accidents, often delayed through traffic jams, convenient because of door-to-door transportation.

**Exercise 3.2. In groups discuss the following questions.**

- What do you know about the track? Has it changed greatly in the course of rail development?
- What kinds of tracks do you know?
- What innovations in track construction have you heard of?

### READING



**track** – *n* залізнична колія; *lay down a track* – укласти колію

**feature** – *n* особливість, риса, *v* мати характерну рису, відрізнятися

**permanent way** – верхня будова колії  
**temporary** – *adj* тимчасовий  
**as well** – *adv* також; *as well as* – *adv* також як, а також  
**rest** – *v* опирати(ся), відпочивати  
**heavy** – *adj* важкий, напружений  
**replace** – *v* замінювати, міняти  
**sleeper** (*AmE tie*) – *n* шпала  
**strong** – *adj* міцний, сильний; *ant weak*; *strength* – *n* міцність, сила  
**for** – *prep* для, упродовж, тому що, оскільки  
**fasten** – *v* кріпити; *fastening* – *n* кріплення  
**get acquainted with** – познайомитися з  
**weight** – *n* вага; *weigh* – *v* важити, зважувати  
**support** – *v* підтримувати, підпирати; *n* опора  
**main** – *adj* головний, основний; *syn essential*  
**volume of traffic** – обсяг перевезень  
**gauge** – *n* ширина колії  
**adopt** – *v* пристосовувати, лагодити  
**rolling stock** – рухомий склад  
**exist** – *v* існувати; *existing* – *adj* існуючий  
**border** – *n* границя, кордон  
**treat** – *v* обробляти, ставитися до  
**provide** – *v* забезпечувати; *provide for* – *v* передбачати  
**stability** – *n* стабільність, міцність; *stable* – *adj* стабільний, міцний, тривалий  
**improve** – *v* покращувати, поліпшувати; *improvement* – *n* удосконалення, поліпшення  
**elimination** – *n* усунення; *eliminate* – *v* усувати, ліквідовувати  
**joint** – *n* місце з'єднання; *join* – *v* з'єднувати  
**reduce** – *v* зменшувати, укорочувати; *reduction* – *n* зменшення  
**continuous welded rail (CWR)** – безстиківий (зварний) шлях

**smooth** – *adj* рівний, плавний

**maintenance** – *n* ремонт, експлуатація; *maintain* – *v* підтримувати, обслуговувати

**because of** – *prep* з огляду на, через

**advantage** – *n* перевага, привілей; *ant disadvantage*

**occur** – *v* виникати, з'являтися

**precision** – *n* точність, пунктуальність; *precise* – *adj* точний

**ease** – *n* легкість, простота; *easy* – *adj* легкий

**installation** – *n* встановлення; *install* – *v* встановлювати

**therefore** – *adv* тому, через те

**just** – *adj* справедливий

**increase** [*in 'kri:s*] – *v* збільшувати, збільшення; *n* [*'inkri:s*] – зростання; *ant decrease*

**Exercise 3.3. Change italicised words into their synonyms from the vocabulary.**

*To put* rails on granite blocks, *to ensure* drainage, a greater *steadiness* of the track, the *intensive* traffic, *to abolish* (*liquidate*) rail joints, *to substitute for* iron rails, a *trunk* line, to be *rightly* called; *both* switches *and* rails, *to back up* the idea; the *peculiarities* of modern track; to know *exactly*; the *simplicity* of calculation.

**Exercise 3.4. Arrange the words in pairs of synonyms.**

Increase, feature, tie, power, raise, strength, benefit, decrease, main, travel, advantage, journey, reduce, sleeper, intense, characteristic, heavy, major.

**Exercise 3.5. Read and translate the following word combinations.**

The weakest part of the permanent way; to weaken the track structure; to date back to early days; a temporary track; to be of the same gauge; heavily-used main lines; the two-century-long progress; to serve 15 times as long as iron rails;

volume of traffic; the original gauge; engineering and rolling stock; to be under construction; to treat with creosote; crushed rock; to make the train pass to another track; to be substantially improved; to stabilise the weight of the structure; to weld the rails; to have a far greater weight; maintenance cost; longer life of rails; ballastless solution for high speed lines; to provide a smoother running of trains; a completely new way of thinking; to be justly considered.

## THE RAILROAD TRACK



(1) It is not an easy job to build a railway. The railway begins with laying a track on a strip of land called *the right-of-way*<sup>1</sup>. The track is, in fact, the basic feature of a railway. It is also called the *permanent way* – the term, which dates back to the early days of railroad building. At that time the workers first had to lay temporary tracks to transport materials to the construction site. And only after that they laid down the permanent tracks or the permanent way.

(2) The two-century-long progress of railways changed not only locomotives and cars, but the track as well. The first tracks had no ballast; the rails were made of wood and rested on heavy blocks of granite. Then wooden rails were replaced by iron ones, and granite blocks were replaced by wooden sleepers or ties. This kind of track, however, was not strong enough for heavy steam trains. The discovery of how to make cheap steel was of great importance to the railways, for steel rails had a life 15 times as long as iron rails.

(3) The permanent way of today consists of steel rails, fastened to cross-ties placed in a bed of gravel ballast. Now let us get acquainted with some important elements of railroad track more closely. *Road-bed*<sup>2</sup> is the foundation for laying the ballast, ties and rails. *Rails* differ greatly in weight according to the kind of traffic and load they have to support. The largest and heaviest rails are laid in the main-line tracks, which carry the largest volume of traffic. Today, steel rails on lines with heavy traffic weigh as much as 60 or more kilograms to the metre.



(4) The distance between the rails is called *the gauge*. The standard gauge in most North American and European countries is 1.43m – the original gauge of the Stockton & Darlington Railway, adopted as a result of the export of English engineering and rolling stock. However, in Ukraine the gauge is broad (1.5m). Railways with the broad gauge also exist in a number of European countries, such as Spain and Finland. Differences in the gauge cannot but cause problems for international traffic crossing the borders. Recently a great number of projects have been studied to cut the time spent by trains at gauge changeover points<sup>3</sup>.

(5) *Sleepers* support rails and ballast supports sleepers. Sleepers on most tracks were almost all of wood treated with creosote for longer life. Now concrete<sup>4</sup> is considered to be the ideal material for railway sleepers. Concrete sleepers have a far greater weight than wooden ones and thus provide greater stability of track and higher speeds.

Sleepers rest upon a bed of crushed rock or gravel, which is called *ballast*. Ballast is a very important element of the track for it is the ballast that supports the track structure, holds the track in position and provides the needed drainage. Some railways have two or more tracks. In order to make trains pass from one track to another, railways have a *switch*, which is a very important element of the track.

(6) Since the railroad beginning, the track structure has been substantially improved. One of the greatest improvements was the elimination of rail *joints* – the weakest part of the track. In order to reduce the number of joints rails are welded into continuous lengths<sup>5</sup>. Most main lines in Europe are constructed with *continuous welded rail (CWR)*. CWR has greater strength, provides a smoother running of trains at far greater speeds and reduces maintenance costs. One of its noticeable effects – for passengers at least – is the elimination of the characteristic clickety-clack sound<sup>6</sup> as the train crosses rail joints.

(7) Another recent improvement is the use of *ballastless* track for new high-speed and heavy freight lines. More and more countries replace traditional

ballasted track with the so-called *slab track*<sup>7</sup>. The principle is based on a completely new way of thinking in railway construction. Sleepers, fastenings and ballast bed are not needed because of the concrete slab superstructure with embedded rails<sup>8</sup>. The slab track has more advantages over ballasted track in terms of maintenance. Simple ballasted track needs continuous investment in track machines, equipment and manpower. Problems with ballast bed may occur where trains operate at speeds above 250km/h. Whereas ballastless slab track has higher levels of safety, high precision, low life-cycle cost<sup>9</sup>, ease of replacement, and short installation time. Therefore, slab track is justly considered to be the track for the future [1, 9, 10].

<sup>1</sup> *the right-of-way* – смуга відведення.

<sup>2</sup> *road-bed* – земельне полотно.

<sup>3</sup> *gauge changeover points* – пункти заміни колісних пар.

<sup>4</sup> *concrete* – бетон.

<sup>5</sup> *lengths* – рейкові пліти.

<sup>6</sup> *clickety-clack sound* – стук коліс.

<sup>7</sup> *slab track* – безбаластна колія на збірних бетонних плитах.

<sup>8</sup> *embedded rails* – вмонтований, замурований.

<sup>9</sup> *life-cycle cost* – витрати під час періоду використання.

### **Exercise 3.6. Match the terms in the left column with their definitions in the right column.**

- |                           |  |
|---------------------------|--|
| 1. <i>permanent way</i>   | a) the distance between rails                            |
| 2. <i>rails</i>           | b) the combination of rails, ties and ballast            |
| 3. <i>gauge</i>           | c) rails with reduced number of joints                   |
| 4. <i>sleepers (ties)</i> | d) the mechanism moving trains from one track to another |
| 5. <i>switch</i>          | e) a track, having concrete cover, instead of ballast    |
| 6. <i>joint</i>           | f) the place where the ends of rails meet                |
| 7. <i>ballast</i>         | g) wooden supports for rails                             |
| 8. <i>slab track</i>      | h) long steel bars on which trains run                   |
| 9. <i>CWR</i>             | i) the support for the track structure                   |

**Exercise 3.7. Answer the following questions.**

1. What is the origin of the term *permanent way*? 2. What elements does the permanent way consist of? 3. What is the difference between the modern railroad track and the track of the early days of railways? 4. What is the gauge? Where are the standard and the broad gauges used? 5. Why does crossing borders become a problem in some countries? 6. What is the weakest part of the track and why? 7. What is the switch intended for? 8. What does the weight of the rails laid in the track depend on? 9. Which rails are laid in the heavily used main lines? 10. How can we make wooden ties last longer? 11. Is ballast an important element of the track? Why is it important? 12. What advantages do continuous welded rails have? 13. Why do concrete sleepers replace the wooden ones? What are their strong points? 14. What other improvements in the track structure do you know? 15. For which lines is it suitable to use slab track with embedded rails? 16. How does the design of the slab track differ from that of the common ballasted track? 17. What are the advantages of the slab track?

**Exercise 3.8. Choose one of the topics and make up a short story based on the text and/or any other source of information.**

1. **The early and the modern railroad track** (the right of way, permanent way, the basic feature, to consist of, wooden rails, to be replaced by iron rails, sleepers, to be not strong enough, to rest on granite blocks, to have no ballast).
2. **Rails and ties** (to be laid in the main lines, to weigh 60 kg to the metre, elimination of rail joints, CWR, to have greater strength, to provide smoother running at greater speeds, to support rails, to be treated with creosote, the greater weight of concrete sleepers).
3. **Ballasted and ballastless track** (a bed of crushed rock, to support the track structure, slab track, superstructure with embedded rails, to have advantages in terms of maintenance, to be laid in high-speed routes).

### *Supplementary text A: THE TRACK FOR THE FUTURE*

(1) The centuries-old traditional track structure of rails, ties and ballast is now being challenged by innovative *concrete slab track*. From the late 1960s onwards, there has been an increase in the use of concrete slab technology throughout the world, especially for high-speed lines, heavy rail, light rail and tram systems. The incentive is to develop a strong and durable track structure that will permit high-speed passenger and heavy-load freight trains to operate consistently and smoothly with low maintenance costs.

(2) The term «slab track» is used to describe non-ballasted track structures consisting of a concrete slab placed on a subbase over a prepared subgrade (roadbed). The ballast is replaced by a rigid concrete track slab which transfers the load and provides track stability. The rails may be directly fastened to the concrete slab, about half a meter thick, without ties. A similar but less expensive alternative is to accurately position concrete ties and then pour a concrete slab between and around them. This method is called «cast-in precast sleeper track».

(3) Various types of concrete slab track are in service in Japan, Europe and North America. There are broadly five types of slab track system: embedded rail, booted sleepers, direct fixing and resilient baseplates, cast-in sleepers, floating slab. The slab track system can be selected to suit particular requirements. For example, booted sleepers or floating slab will perform well for locations sensitive to ground vibration. With the floating slab track the concrete slab can be supported upon soft resilient bearings. It is expensive and requires more depth or height, but can reduce noise and vibration by around 80 %.

In some cases, the traditional fastening system is abandoned in favour of an embedded rail system. A version of the slab track, developed in the Netherlands, has the rail continuously embedded in a channel cast within the concrete base slab. None of the traditional track fastening is needed, as the rail is surrounded by a resilient, long-life elastomer.

(4) Slab track offers the following advantages over traditional ballasted track:

- *Very low maintenance requirements.* There are examples of slab track installations where little or no maintenance (including rails and pads) has been carried out for over 25 years.
- *Higher speed operation.* Concrete slab track offers a greater degree of trackbed stability than ballasted track. Therefore, higher running speeds are achievable.
- *Long design life.* An estimate of design life for traditional ballasted track is around 15 years, after which, the track requires renewal. A concrete track slab is typically constructed with a design life of at least 60 years.
- *Increased reliability.* These systems offer the advantage of superior stability and almost complete absence of deformation at speeds in excess of 250 km/h due to the absence of any ballast.
- *Low whole life cost.* Although the capital cost of slab track systems is higher than the equivalent ballasted track, the long design life and minimal maintenance for slab track systems means that overall their whole life cost is lower than that of traditional ballasted track.

(5) The slab track system for transit applications in the United States and for high-speed rail in Europe and Japan has performed well over the recent decades. All new high-speed lines in Japan are built on slab track support systems. Slab track sections are in service on the Canadian Pacific Railway, the Long Island Railroad and in the Eurotunnel under the English Channel. Slab track is used extensively on corridors where light rail shares the slab track pavement with automobiles, trucks and/or buses. Because of the continued increase in tonnage to be carried by railroads and the expected growth in high-speed passenger rail corridors, with the smaller deviation in the rail geometry allowed for high-speed rail, the need for a stronger track structure is apparent. Concrete slab track technology is expected to fill the need for stronger track [1, 9, 10].

**b) Answer the questions to the text.**

1. Why has slab track been developed? 2. How does slab track differ from traditional ballasted track? 3. Why are different configurations of slab track needed? What are the main types? 4. What are the most important advantages of slab track? 5. Where are slab track systems used?

**Exercise 3.9. a) Read about innovative materials for sleepers.**

*Supplementary Text B: AROUND THE WORLD: TRACK INNOVATIONS*  
**India**

Composite sleepers<sup>1</sup> developed in India could soon be finding home on steel girder bridges<sup>2</sup> in Europe. Producers see strong export potential for the fibre reinforced plastic<sup>3</sup> (FRP) sleepers. The FRP sleeper weighs 54 kg, compared with a weight of between 100 and 171 kg for a wooden sleeper and 171 kg for a steel sleeper. This makes the FRP sleeper easier to transport and handle. Other major advantages are a life of up to 50 years, compared with up to 10 years for wooden sleepers and up to 20 years for steel sleepers as well as zero maintenance because FRP is corrosion free and unaffected by climatic conditions and ultraviolet rays. These factors also give the FRP sleeper the lowest life-cycle cost [9, 13].

<sup>1</sup> *composite sleepers* – композитні (складові) шпали.

<sup>2</sup> *girder bridges* – балочний міст.

<sup>3</sup> *fibre reinforced plastic (FRP)* – волокнистий армований пластик.

**United States**

TieTeck is the world's leading producer of thermoplastic composite railroad sleepers. They are produced from recycled<sup>1</sup> polyolefins and crumbed tyre rubber<sup>2</sup> – the post-consumer and post-industrial waste. The TieTek composite sleeper is a successful application of technology to create alternative products for the railway industry. Composite sleepers show good physical resistance<sup>3</sup>, resistance to moisture and electrical conductivity<sup>4</sup>. They will not crack due to poor

weather conditions and offer long-term economic benefits not found in other materials. The sleepers have been installed in commercial freight and transit track across the USA and seven other railroad systems [9].

<sup>1</sup> *recycled* – повторно використаний.

<sup>2</sup> *crumbed tyre rubber* – гумова крихта від шин.

<sup>3</sup> *resistance* – опір.

<sup>4</sup> *conductivity* – провідність.

**Exercise 3.10. Project a) Using Internet or any other source of information find something interesting and innovative about the construction of modern railroad track: new kinds of rails, sleepers, fastenings, materials, etc. Make a presentation with tables, photos, etc.**

**b) Is there anything of the kind introduced on Ukrainian railways? Study the issue and report on your findings.**

## G R A M M A R

### Continuous Tenses

	Active be+Present Participle (-ing)	Passive be+being+Past Participle (-ed)
<i>Present</i>	I <b>am discussing</b> a new plan now. He <b>is</b> still <b>discussing</b> a new plan. They <b>are discussing</b> a new plan	A new plan <b>is being discussed</b> . New plans <b>are being discussed</b>
<i>Past</i>	He <b>was discussing</b> a new plan when the manager came. They <b>were discussing</b> a new plan during the meeting	A new plan <b>was being discussed</b> when we came. New plans <b>were being discussed</b> during the meeting
<i>Future</i>	We <b>will be discussing</b> a new plan tomorrow at 5	-

## Spelling:

1. *argue – arguing, hate – hateing, love – loveing (але: age – ageing, dye – dyeing, agree – agreeing, see – seeing).*
2. *hit – hitting, run – running, stop – stopping.*
3. *ad'mit – admitting, be'gin – beginning, pre'fer – prefering (але: 'budget – budgeting, 'enter – entering).*
4. *signal – signaling, travel – travelling (AmE.: signaling, traveling).*
5. *carry – carrying, enjoy – enjoying, hurry – hurrying.*
6. *die – diying, lie – liying.*

## Present Continuous Tense

1. Подовжені дії, що здійснюються під час говоріння (*still, now, at 11 o'clock, from 5 to 9 o'clock*) або в теперішній період часу (*today, this week, this season*).

*Please, don't make so much noise. I **am studying**. (not I study)*

*Tom and Ann **are talking and drinking** in a café. Tom says, 'I'm **reading** an interesting book at the moment.'*

*'You **are working** hard today.' 'Yes, I have a lot to do.'*

2. Ситуації, які швидко змінюються:

*The population of the world **is rising** very fast. (not rises)*

3. Майбутні дії, якщо виказується намір їх здійснення або впевненість у їх виконанні.

*What **are you doing** tomorrow evening?*

*I **am going** to the theatre.*

Примітка. *Present Continuous Tense* також можна використовувати:

- для висловлення меншої впевненості та офіціальності:

*I **am hoping** you can lend me \$100.*

*I'm afraid we must **be going**;*

- висловлення незадоволення, скарги тощо:

*He **is continually borrowing** money from me.*



## Past Continuous Tense

Подовжена дія, що відбувалася в певний момент у минулому або в певний відрізок часу.

*I **was reading** a book at seven yesterday.*

*In June that firm **was carrying on** negotiations for the purchase of wheat.*

*Past Continuous* не вказує на те, чи завершилася дія:

*Tom **was cooking** the dinner* (= він готував обід і не відомо, чи приготував він його).

*Tom **cooked** the dinner* (= він приготував обід).

Примітка. *Past Continuous* часто стоїть разом із *Past Simple*, якщо одна дія здійснювалася на фоні іншої.

*Tom **burned** his hand when (while) he **was cooking** the dinner.*

Для переліку подій у минулому вживають *Past Indefinite*, незалежно від тривалості дії.

*I **came** home early, **rested** from five till six, and then **worked** the whole evening.*

## Future Continuous Tense

1. Подовжена дія, що буде відбуватися в певний момент у майбутньому або в певний відрізок часу.

*This time tomorrow they **will be sitting** in the cinema. They **will be watching** a film.*

*I **will be preparing** for my examination in May.*

2. Намір здійснити дію або впевненість у її здійсненні (замість *Future Indefinite Tense*).

*He **will be meeting** us at the station.*

## Future with *be going to*

*To be going to* виражає намір здійснити дію або впевненість у її здійсненні у майбутньому.

*We were going to ship these goods by the steamer.* – Ми збиралися відправити цей товар пароплавом.

*The sky is clearing up; the rain is going to stop in a minute.* – Небо прояснюється; дощ ущухне за хвилину.

### Static Verbs that are not used in Continuous

Ментальний та емоційний стан	Чуттєве сприймання	Відношення	Інші
believe	appear	(dis)agree	be
(dis)like	hear	promise	consist
know	look (=seem)	surprise	depend
remember	see	satisfy	include
understand	seem	deny	matter
want	smell	impress	own
prefer	sound	astonish	need
imagine	taste	mean	lack

### Exercise 3.11. Complete the following sentences putting the verbs in brackets into the Present Simple or Present Continuous Tense.

1. Alec and Mary are Scottish. They (*come*) from Glasgow. 2. They'll be here very soon. They (*come*) by car. 3. Liza can't answer the phone. She (*have*) a bath. 4. She (*have*) two new pairs of jeans. 5. I (*think*) that all politicians tell lies. 6. I (*think*) about my girlfriend. She's in New York at the moment. 7. Be quiet! I (*watch*) my favourite programme. I always (*watch*) it on Thursday evenings. 8. John's not at home. He (*see*) the doctor about his sore throat. 9. I (*see*) the problem but I can't help you. 10. This room (*be used*) usually for big meetings. But today it (*be used*) for a party.

### Exercise 3.12. a) Role-play the dialogue.

A: What do you do?

B: I'm an interior designer. I decorate people's houses, and give them ideas for furniture and lighting.

A: And what are you doing at the moment?

B: Well, now I'm working on a house. I'm working on a hotel. I'm designing a new dining room for the Hilton.

**b) Work in pairs. Make up similar dialogues with some of the jobs below.**

**For ideas:** a film director, a mechanic, a football manager, an artist, an architect, a ski instructor, a journalist, a travel agent, an actor, a farmer.

**Exercise 3.13. Choose the Past Simple or Past Continuous Tense.**

I *met* / *was meeting* a friend while I *did* / *was doing* the shopping. I *paid* / *was paying* for my things when I *heard* / *was hearing* someone call my name. I *turned* / *was turning* round and *saw* / *was seeing* Paula. She *wore* / *was wearing* a bright red coat. We *decided* / *were deciding* to have a cup of coffee. While we *had* / *were having* a drink, a waiter *dropped* / *was dropping* a pile of plates. We all *got* / *were getting* a terrible shock. While the waiter *picked* / *was picking* up broken plates, he *cut* / *was cutting* his finger. We *left* / *were leaving* the café and *said* / *were saying* goodbye. I *finished* / *was finishing* my shopping and *went* / *was going* home.

**Exercise 3.14. Change the Infinitive in brackets into the respective Continuous Tense.**

1. Now a new railway (*be built*) between two cities. 2. Last year in June they (*construct*) a tunnel through the mountain. 3. Now they (*install*) new equipment at their laboratory. 4. When I came the problem (*be discussed*). 5. When our group was in London a new deep-level tunnel (*be completed*) there. 6. The director (*be reported*) the news when I entered the room. 7. Yesterday at the meeting this man (*sit*) near me. 8. The day before yesterday from ten to half past eleven the students (*work*) in the chemical laboratory.

**Exercise 3.15. Tom wants you to visit him but you are very busy. Look at your diary for the next few days and explain to him why you can't come. (Use the Present Continuous for arranged actions.)**

*Tom:* Can you come on Monday evening?

*You:* Sorry, I'd love to but *I'm playing volleyball* ...

*Tom:* What about Tuesday evening then?

*You:* I can't I'm afraid. ...

*Tom:* Well, what are you doing on Wednesday evening?

*You:* ...

*Tom:* I see...

**Exercise 3.16. What are these people going to do? Write sentences using the words: vet, actress, pilot, interpreter, chief, teacher, lawyer, athlete.**

*Model: Frank and I are learning to fly. – We're going to be pilots.*

1. Lisa loves children. She ... . 2. Maria's good at languages. 3. Mary's at drama school. 4. Sue and Peter are studying law. 5. Anna loves animals. 6. Bill cooks very well. 7. Bob can run very fast.

**Exercise 3.17. Translate the following sentences.**

1. З ким розмовляє ваш товариш? – Він розмовляє з нашим учителем.  
2. Куди ви підете ввечері? – Ми підемо до парку. 3. Коли задзвонив телефон, вони обговорювали це питання. 4. О десятій ранку він готувався до іспиту.  
5. Я не робив записи, коли він читав лекцію. 6. Чи буде вона займатися англійською з 9 до 11? 7. Не телефонуй їй завтра, вона буде готуватися до іспиту. 8. Що будують на цьому березі річки? 9. Ми не знали своїх оцінок, тому що наші контрольні ще перевіряли, коли ми пішли з інституту. 10. Чи часто ви відвідуєте своїх друзів? 11. Що ви пишете? – Ми пишемо слова сьомого уроку. 12. Вони часто пишуть диктанти? 13. Хто стоїть біля вікна? – Моя сестра. 14. Під час уроку наш учитель стоїть біля столу. 15. Зараз усе

більше людей вивчають іноземні мови. 16. Ці студенти зараз вивчають нові слова.

## Present Participle (-ing)

*Present Participle (Participle I)* – неособова форма дієслова, що має властивості дієслова і прикметника (*verbal adjective*). *Present Participle* входить до складу дієслова-присудка часів групи *Continuous*, використовують і самостійно у функціях означення та обставини.

Функція	Місце у реченні
Означення	<i>a <u>reading</u> girl</i> (перед означуваним словом) – дівчина, яка читає
Означальний дієприкметниковий зворот	<i>The girl <u>reading</u> a newspaper is our student</i> (після означуваного слова) – Дівчина, яка читає газету, наша студентка
Обставинний дієприкметниковий зворот	<i>(When, while) <u>Looking through</u> the book she came across the description of this process</i> (на початку або наприкінці речення) – Переглядаючи книгу, вона натрапила на опис цього процесу ( <i>або</i> Коли вона переглядала книгу ...)
Входить до складу часів групи <i>Continuous</i>	<i>She is <u>reading</u> an interesting book</i> (разом з допоміжним дієсловом <i>be</i> ) – Вона читає цікаву книгу
Входить у складне доповнення	<i>They watched the ship <u>approaching</u> the shore</i> – Вони спостерігали, як пароплав підходив до берега

Примітки: 1. У реченні дієприкметники можуть виконувати функцію вставного звороту:

*beginning with* – починаючи з;

*judging by* – судячи з;

*speaking of (for)* – говорячи про (на користь);

*broadly (generally) speaking* – говорячи взагалі;

*strictly (roughly, frankly) speaking* – строго (грубо, відверто) кажучи.

2. Закінчення *-ing* може бути в іменників або прикметників:

*an interesting (burning) question* – цікаве (невідкладне) питання;

*a building* – будова, дім.

**Exercise 3.18. Give the Present Participle of the following verbs and translate them. Write word combinations with participles.**

Build, grow, bring, obtain, find, produce, teach, return, tell, change, write, read, make, speak, see, say, begin, offer, save, equip, get, take, burn, show.

**Exercise 3.19. Translate the sentences with the Present Participle.**

**a) as an *attribute***

1. The locomotives developing high speeds are used to draw passenger trains.  
2. Ballast supporting the track structure is made of broken stone. 3. The engineers taking part in the conference spoke about the latest achievements of our railway engineering. 4. Countries facing the energy crisis have to introduce power-saving technologies. 5. Most of trains running the service on suburban lines operate on electricity.

**b) as an *adverbial modifier***

1. Organizing international railway exhibitions we demonstrate the latest locomotives, cars, modern machinery. 2. Discussing the project the engineers spoke of its advantages. 3. The locomotive must develop a higher tractive effort when drawing a heavy train. 4. When designing the Trans-Caspian Railway, the engineers had many difficulties. 5. The scientists paid great attention to railway electrification while working out the general development plan.

**Exercise 3.20. Translate the following word combinations paying attention to the Present Participle.**

А	В
професор, який читає лекцію студент, який вивчає англійську методи, що покращують процес дівчинка, яка питає дорогу інженер, який знає іноземну мову людина, яка пропонує свою послугу хлопчики, які грають на вулиці директор, який одержує лист	вивчаючи іноземну мову розуміючи це правило знаходячи нові засоби переїжджаючи на нову квартиру перекладаючи тексти арабською дивлячись на нову картину створюючи нові умови нагріваючи цю суміш до 50 градусів

**Exercise 3.21. a) Substitute the subordinate attributive clause for a clause with the Present Participle.**

*Model: All the people who live in this house are students. – All the people living in this house are students.*

1. The woman *who is speaking now* is our secretary. 2. The apparatus *that stands on the table in the corner of the laboratory* is quite new. 3. People *who take books from the library* must return them in time. 4. There are a lot of students in our group *who take part in all kinds of extracurricular activities*.

**b) Substitute the subordinate adverbial clause for a clause with the Present Participle.**

*Model: As he felt more at ease, the man spoke in a louder voice. – Feeling more at ease, the man spoke in a louder voice.*

1. *Since he knew the man very well*, Robert was not surprised to hear the news.  
2. *As she thought that he would be offended*, Ann decided to tell him nothing.  
3. *Since he needed a shelter for the night*, Peter decided to go to the neighbour's house.

**Exercise 3.22. Rewrite sentences using the information in brackets.**

*Model:* That girl is Australian. (She is talking to Tom.)

*The girl talking to Tom is Australian.*

1. A plane crashed into the sea yesterday. (*It was carrying 28 passengers.*)
2. When I was walking home, there was a man. (*He was following me.*)
3. I was woken up by the telephone. (*It was ringing.*)
4. At the end of the street there is a path. (*The path leads to the river.*)
5. Some paintings were stolen from the palace. (*They belong to the Queen.*)

**Exercise 3.23. Rewrite the sentences, using one of the following words and a participle clause with *-ing*.**

<i>while when after by on since</i>
-------------------------------------

*Model:* He finished work and went home. – After finishing work, he went home.

1. He read a book and ate his supper.
2. He worked hard and saved a lot of money.
3. I came to live in the country a few years ago. I now realise how much I hated living in town.
4. He graduated from the university, and went off to work in Australia.
5. When you go abroad, it is advisable to take out travel insurance.
6. I came across a wonderful book. I was browsing in our local bookshop.
7. I worked hard, and I managed to pass all my exams.
8. When you open a tin, be careful not to cut yourself.
9. When we heard the weather forecast, we decided not to go camping in the mountains.

**Exercise 3.24. Translate the sentences using the Present Participle.**

1. Студенти, які багато займаються англійською, зможуть розмовляти цією мовою через два роки.
2. Розмовляючи з Петром, ми розглянули багато проблем.
3. Пишучи диктант, я зробив декілька помилок.
4. Він розмовляв тихо, бо боявся потурбувати дітей, які спали в сусідній кімнаті.
5. Працюючи з цими інженерами, він дізнався багато цікавого.
6. Слухаючи лекцію професора, я записав декілька запитань, які я збирався в нього спитати.



## PRONOUNS

Особові		Присвійні		Зворотні
Називні	Об'єктні			
<i>Хто?</i> <i>Що?</i>	<i>Кому? Чому?</i> <i>Кого? Чого?</i>	<i>Чий? Чия?</i> <i>(з іменником)</i>	<i>Чий? Чия?</i> <i>(самостійно)</i>	<i>Як? (сам)</i>
I	me	my	mine	myself
you	you	your	yours	yourself
he	him	his	his	himself
she	her	her	hers	herself
it	it	its	its	itself
we	us	our	ours	ourselves
you	you	your	yours	yourselves
they	them	their	theirs	themselves

### Exercise 3.25. Fill in the gaps with the appropriate pronouns.

1. We go to ... University every morning. 2. The first train carried freight. But ... also carried passengers. 3. ... doesn't work at her English hard. 4. ... took their luggage and went to the station. 5. Our friends like to travel. This year ... have visited many European countries. 6. We're staying at a very nice hotel. ... room is very comfortable. 7. He is going to invite all ... friends to the party. 8. Do you think that most people are happy in ... jobs? 9. These are my friends. ... names are Ann and Victor. 10. The company has ... head office in Kyiv. 11. Put on ... coat when you go out, it's very cold.

### Exercise 3.26. Choose the right word.

1. Is this *your* / *yours* book? 2. It is *their* / *theirs* problem, not *our* / *ours*. 3. That is not *my* / *mine* umbrella. *My* / *Mine* is yellow. 4. They know *our* / *ours* address but we don't know *their* / *theirs*. 5. *My* / *Mine* room is bigger but *her* / *hers* is nicer. 6. Is this camera *your* / *yours*? 7. They've got two children but I don't know *their* / *theirs* names.

### Exercise 3.27. Finish the sentences with *myself* / *yourself* etc.

*Model: I cut myself with a knife.*

1. Be careful! That plate is very hot. Don't burn ... 2. I'm not angry with you. I'm angry with ... 3. They never think about other people. They only think about ... 4. When people are alone they often talk to ... 5. I got out of bath and dried ... with a towel. 6. He fell off the ladder but he didn't hurt ... 7. I'd like to know more about you. Tell me about ... (one person) 8. Goodbye! Have a good holiday and look after ... ! (two people) 9. Ann had a good holiday. She enjoyed ... 10. I don't want you to pay for me. I'll pay for .... 11. If you want more tea, help.... 12. They decorated their house.... 13. The film... was not good but I liked the music. 14. I don't think Victor will pass the exam. He... doesn't think he'll pass it.

### Exercise 3.28. Translate the following sentences.

1. Мої підручники лежать на столі, а його – на дивані. 2. У мене дуже старий підручник. У ньому немає п'ятої виправи. 3. Учора вони взяли наші журнали і залишили нам свої. 4. Моя книжка дуже важка для мене, а його книга – легка. 5. Я чув це від людини, яка була там сама. 6. Поглянь у дзеркало, ти себе не впізнаєш. Ти дуже брудний. Підйди помийся. 7. Я завжди готую собі сніданок сам. 8. Він переклав цю статтю самостійно. 9. Вони збудували цей дім самі. 10. Вона відчула себе зовсім молодою.

### Use of *It*

1. Заміняє згаданий раніше іменник-неістоту, перекладають залежно від його граматичного роду.

*Where is my book? – **It** is on the table.*

*Де моя книга? – **Вона** на столі.*

2. Використовують як підмет чи додаток, перекладають як *це*.

***It** is a magazine. – **Це** журнал.*

*I am going to do **it**. – Я збираюся **це** зробити.*

3. Використовують як формальний або безособовий підмет (не перекладають).

*It is spring now.* – Зараз весна.

*It is getting dark.* – Стає темно.

*It is five o'clock now.* – Зараз п'ята година.

*It is dangerous to drive so fast.* – Небезпечно їздити так швидко.

*It often rains in late autumn.* – Наприкінці осені часто йде дощ.

4. Емфатична конструкція *It is (was) + визначальне слово + that (who, which, when)*. Перекладають як  *саме, це, як раз*.

*It was yesterday when I met her at the concert.* – **Саме** вчора я зустрів її на концерті.

*It was in Kyiv that I ran into my old friend.* – **Саме** в Києві я випадково зустрів свого старого друга.

*It is our group which will participate in the competition.* – **Це (Саме)** наша група братиме участь у змаганні.

### Exercise 3.29. Translate the following sentences.

1. Where is my suit? – It is in the wardrobe. 2. It is the book of a well-known English writer. 3. Have you watched this film? – No, I have not. But I am going to do it. 4. Look at this building. It is the highest building in our city. 5. It is important to learn new English words every day. 6. It is hard to learn this subject in a short time. 7. It is known that new railway will connect two big cities. 8. It is no use missing lessons. It would be difficult to pass the exam. 9. It was the railway that became the shortest way from Europe to Asia. 10. It is the railways that are the most popular means of travel. 11. It was only yesterday when we discussed the plan of work at the project. 12. It gets dark early in winter. 13. It was raining cats and dogs. 14. It got colder.

**Exercise 3.30. Paraphrase the following sentences using the emphatic construction *It is (was) ... that (who, which)*.**

1. George Stephenson built the first steam-powered railway between Manchester and Liverpool *in 1829*. 2. *Climatic conditions* made the construction of this line difficult. 3. *In 1891* the construction of Trans-Siberian railway began. 4. *The first steam trains* opened up a new era in transportation. 5. *Railways* are the safest and the most popular means of communications. 6. *Differences in the track gauge* cause problems for international traffic crossing the borders. 7. All new high-speed lines in Japan are built on *slab track support systems*.

**Exercise 3.31. Complete the sentences. Use *it's + A + to + B*.**

A	B
difficult, dangerous, <del>easy</del> , impossible, nice, stupid, easy	see you again, wear, <del>understand him</del> , meet people, go out alone, sleep, save

*Model: It's easy to understand him* because he speaks very slowly.

1. ..., Jill. How are you? 2. ... at night. There is always a lot of noise. 3. A lot of cities are not safe. ... at night. 4. If you haven't got a well-paid job, ... money. 5. ... warm clothes in hot weather. 6. Everybody is very friendly in this town. ... .

This / These	That / Those
<ul style="list-style-type: none"> <li>- для людей або речей поруч із нами. <b><i>These</i></b> shoes over there are mine;</li> <li>- для позначення ситуацій у наступному або майбутньому часі. <i>I'm going to Disneyland <b>this</b> month;</i></li> <li>- коли знаходимося в місці, про яке говоримо. <b><i>This</i></b> room is very untidy. (<i>The speaker is now in the untidy room</i>);</li> </ul>	<ul style="list-style-type: none"> <li>- для людей або речей, які знаходяться на відстані від нас. <b><i>That</i></b> chair over there is broken;</li> <li>- для позначення ситуацій у минулому часі. <i>We had a wonderful Christmas <b>that</b> year;</i></li> <li>- для того щоб відіслати до чогось, що згадували раніше. '<i>She failed her exams.</i>' <b><i>That's</i></b> bad';</li> </ul>

<p>- для того щоб познайомити людей один з одним або представитись по телефону.  <i>'John, <b>this</b> is Ann.'</i>  <i>'Hello? <b>This</b> is Pam speaking'</i></p>	<p>- коли, розмовляючи по телефону, ми запитуємо, хто говорить з нами.  <i>'Hello? This is Jo. Who's <b>that</b> speaking?'</i></p>
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**Exercise 3.32. Put *this, these, it or they* into the gaps.**

*Model:* A: Bob, *this* is my mother.

B: Hello, Mrs Smith.

1. Take ... bags into the kitchen. 2. I don't like ... music. 3. Is ... book John's? – Yes, ... is. 4. Are ... books Mary's? – Yes, ... are. 5. How much are ... glasses? – ...'re very cheap. 6. ... exercise is very easy. – No, ... isn't. ...'s difficult.

**Exercise 3.33. Put *that, those, it or they* into the gaps.**

1. Is ... your brother over there? 2. Look at ... beautiful flowers! 3. What's ... in your bag? 4. Is ... house Ann's? – Yes, ... is. 5. Are ... boys your brothers? Yes, ... are. 6. How much is ... hi-fi? – ...'s \$350. 7. Do you like ... shoes? – No, I don't. ...'re horrible.

**Exercise 3.34. Translate the following sentences.**

1. Зараз зима. 2. Йому було важко перекладати цю статтю, бо він не знав багато слів. 3. Так дивно, що йому не сподобалося подорожувати. 4. У кімнаті дуже темно, і я не бачу, що знаходиться в дальньому кутку. 5. Нам цікаво поговорити з ним. Він учора повернувся з Англії. 6. Зараз шоста година. Гадаю, дуже рано будити його. 7. Вам буде приємно побачити наше місто. Воно дуже змінилося. 8. Я знаю, що йому важко навчатися в інституті і працювати на заводі. 9. Студентам було легко розмовляти з ним англійською. 10. Тут дуже спекотно, чи не так?

## NUMERALS

Кількісні <i>Cardinal</i>	Порядкові <i>Ordinal</i>	Кількісні <i>Cardinal</i>	Порядкові <i>Ordinal</i>
1 - one	the first	11 - eleven	the eleventh
2 - two	the second	12 - twelve (a dozen)	the twelfth
3 - three	the third	13 - thirteen	the thirteenth
4 - four	the fourth	20 - twenty (a score)	the twentieth
5 - five	the fifth	21 - twenty-one	the twenty-first
6 - six	the sixth	100 - one (a) hundred	the hundredth
7 - seven	the seventh	1000 - one (a) thousand	the thousandth
8 - eight	the eighth		
9 - nine	the ninth		
10 - ten	the tenth		
0 - ( <i>BrE</i> ) -nought, ( <i>AmE</i> ) - zero, ( <i>розм.</i> ) - oh			
101 - one hundred and one (books)			
1001 - one thousand and one			
1235 - one thousand two hundred and thirty-five = twelve hundred and thirty-five			
2, 045, 328 - two million forty-five thousand three hundred and twenty-eight			

## Fractions

<i>Прості дроби</i>	<i>Десяткові дроби</i>
$\frac{1}{2}$ - a half (half of a kilometre)	0.2 - point two
$\frac{1}{3}$ - a third (third of a ton)	1.56 - one point five six
$\frac{1}{4}$ - a fourth, a quarter	3.5 % - three and half per cent
$\frac{1}{5}$ - a fifth	1 % - one per cent
$\frac{2}{3}$ - two thirds	
$1\frac{1}{2}$ - one and a half	
$\frac{3}{4}$ - three fourths, three quarters	

### Запам'ятайте:

* у два рази, два рази - <i>twice</i>	* раз - <i>once</i>
* у три рази, три рази - <i>three times</i>	* пара - <i>a pair, a couple</i>
* у чотири рази - <i>four times</i>	* дюжина - <i>a dozen</i>

* у чотири рази вище - <i>four times as high</i>	* півдюжини - <i>half a dozen</i>
* у ... рази вище - <i>числівник + fold</i>	

*The reaction was accelerated tenfold.* – Реакція прискорилося у 10 разів.

### Mathematical operations

$7 + 3 = 10$  seven plus (and) three equals (is) ten

$9 - 8 = 1$  nine minus eight equals one

$10 \times 3 = 30$  ten times (multiplied by) three equals (is, makes) thirty

$20 : 5 = 4$  twenty divided by five equals (is) four

### Measurement

3m x 4m - three meters by four meters

5 cm<sup>3</sup> - five cubic centimetres

60 mph - sixty miles an hour (per hour)

5 cm<sup>2</sup> - five square centimetres

50 mpg - fifty miles per (to) the gallon

### Numbers of telephones, buses, etc.

Tel: 14 – 07 – 44 one-four-oh-seven-double four

in Room 203 = room two-oh-three

to take bus 67 = sixty-seven

on page 305 = three hundred and five = three – [ou] five.

### Dates

BC = Before Christ – до Різдва Христового, до нашої ери (до н. е.)

AD = anno domini = нашої ери (н. е.)

1900 – nineteen hundred

1806 – eighteen oh six

1999 AD – nineteen ninety-nine [ei di:]

2000 BC – twenty hundred, two thousand [bi: si:]

2002 – two thousand (and) two, twenty hundred and two

2015 – twenty fifteen

GB: 3<sup>rd</sup> January 1998 = 3/1/98 = the third of January nineteen ninety-eight

US: January 3, 1998 = 1.3.98 = January the third, nineteen ninety-eight.

## Time

*Час до 12<sup>00</sup> дня позначають – а.м., після 12<sup>00</sup> дня – р.м.*

	<i>GB</i>	<i>US</i>	<i>Formal</i>
7.00	seven o'clock, seven a.m.		seven hundred hour
7.03	three past seven	three after seven	seven oh three
7.15	a quarter past seven	a quarter after seven	seven fifteen
7.30	half past seven	half after seven	seven thirty
7.35	twenty-five minutes to eight	twenty-five minutes before eight	seven thirty - five
7.57	three minutes to eight	three minutes before eight	seven fifty-seven
12.00	midday, noon		twelve hundred hours
	midnight		twenty-four hundred hours

### Exercise 3.35. Read the numerals.

1) 5; 15; 50; 51; 12; 20; 11; 112; 201; 10; 446; 376; 267; 6,000,000; 0.85; 5.3; 0.6;  $\frac{1}{3}$ ;  $7\frac{1}{8}$ ;  $\frac{1}{2}$ ;  $4\frac{1}{4}$ ; 1,234; 1.234.

2) 1,005 students; 5,400,000 coins; 6.75 miles; by bus 9; in room 218; the 3<sup>rd</sup> time; 506 samples; 4,790 magazines; 627 hryvnias; on page 733; by tram 27; on the 12<sup>th</sup> day.

3) The 1<sup>st</sup> of January; on July the 16<sup>th</sup>, 1661; on August the 2<sup>nd</sup>, 2002; at the end of 1789; in early 1990s; on June 18, 1997; on December 31, 1991; on the 8<sup>th</sup> of July; at the beginning of 1770; in late 60s.

4) 5.4 tons;  $\frac{2}{3}$  of an inch; 0.2 pound; 9,152 gallons, 26.5 ounces;  $\frac{4}{9}$  of a mile; 0.1 foot; 7.89 grams.

5) The thirtieth kilometre, the second hour, the eleventh night, the eightieth year, the hundredth passenger, the first day, the sixteenth locomotive, the second proposal, the twentieth coach, the fifth floor.

### Exercise 3.36. Change cardinal numerals into ordinal.

6; 60; 7; 8; 18; 82; 9; 19; 91; 12; 100; 103; 300; 425; 705; 2,000; 7,056.



**Exercise 3.37. Translate and read the word combinations.**

а) 4 лютого 2001; 25 травня 1837; 17 серпня 1907; 8 червня 43 р. н. е.; у червні 305 р. н. е.

б) 50 фунтів; 300 автомобілів; 61 фунт; два мільйони тонн; сотні шухляд; тисячі людей; 281 долар; десятки полісменів; шість тисяч гривень; п'ять ваших книжок; троє моїх друзів.

*Dozen, hundred, thousand і million не мають закінчення –s після числа, few або several.*

*Three dozen bottles, a few hundred times, several million pounds.*

але: *We've got dozens (of) bottles. She made millions in the property market.*

**Exercise 3.38. Put in dozen(s) (of), hundred(s) (of), thousand(s) (of) or million(s) (of).**

1. He had to sign his name five (*hundred*) times. 2. We export 40 (*million*) tons a year. 3. I just need to borrow a few (*hundred*) pounds. 4. I've told you (*million*) times. 5. (*Thousand*) refugees are flooding into the country. 6. Could I have two (*dozen*) eggs?

**Exercise 3.39. Say the following.**

1. Your telephone number. 2. Your date of birth, your relatives' date of birth. 3. The approximate population of your home village (town, city) and your country. 4. The floor where your apartment is.

## **S P E A K I N G**

**Exercise 3.40. Complete the three telephone conversations. Use the phrases from the box. Role-play the dialogues.**

No, it isn't. I'll just get her.

Can I take a message?

Great! See you on Sunday at ten. Bye!

Never mind. Perhaps next time. Bye!

This is Jo speaking.

I'll ring back later.

I'm having a party on Saturday. Can you come?

Can I speak to the manager, please?

**I.** A: Hello. Can I speak to Jo, please?

B: ...

A: Oh! Hi, Jo. This is Pat. I'm just ringing to check that Sunday is still OK for tennis.

B: Yes. That's fine.

A: ...

B: Bye! See you soon.

**II.** A: Hello. Is that Liz?

B: ...

A: Hello. Liz here.

B: Hi, Liz. It's Tom. Listen! ...?

A: Oh sorry, Tom. I can't. I'm going to my cousin's wedding.

B: ...

A: Bye!

**III.** A: Hello. Barclays Bank, Chasswood.

B: Hello. ...

A: Hold on. I'll put you through ... I'm afraid Mr Smith isn't in his office. ...?

B: Don't worry. ...

A: All right. Good bye.

## WORD BUILDING

Noun Suffixes: *-ity, -ty, -ship*

Adjective Suffixes: *-ous, -ive, -y*

Verb Suffixes: *-ate, -en*

### **Exercise 3.41. a) Form nouns by adding – *ity* (*-ty*) to the adjectives.**

*Model: active (adj) – activity (n) (активний – активність)*

Capacious, certain, various, curious, human, fatal, stupid, public, able, equal, regular, extreme, possible, probable, desirable, responsible, domestic, absurd.

### **b) Form collective nouns by adding –*ship* to the following nouns.**

Leader, apprentice, owner, relation, professor, citizen, member, friend, author.

### **Exercise 3.42. a) Form adjectives by adding –*y* to the following nouns.**

Grass, star, rain, velvet, chalk, room, water, foam, snow, fog, frost, wind, silk, mist, sand, slang, milk.

### **b) Form adjectives by adding –*ive* to the verbs and translate them.**

Collect, reflect, respect, attract, prevent, construct, oppress, communicate, create, imitate, regulate, interrogate, illustrate, alternate, demonstrate.

### **Exercise 3.43. Define the nouns from which the following adjectives are formed and translate them.**

Melodious, murderous, dangerous, spacious, righteous, anxious, religious, joyous, thunderous, famous, mysterious, nervous, jealous, adventurous.

### **Exercise 3.44. Name as many derivative words from these verbs as you only can.**

Graduate, facilitate, activate, accumulate, sanitize, legislate, originate, agitate, indicate, circulate, dedicate.

## IV. UNDERGROUND RAILWAYS

*Discussion:* Advantages and Disadvantages of City Transport

*Main Text:* Underground Railways

*Supplementary Text A:* Light Rail as Modern Solution for Large Cities

*Supplementary Text B:* Kharkiv Underground

*Supplementary Text C:* News in Brief about World Metros

*Grammar:* Perfect Tenses

Perfect Continuous Tenses

Past Participle

Pronoun *One*

Attributive Groups

*Speaking:* Social Expressions

*Word Building:* -ic, -al, -an; -age, -th, -ee; -ize, -(i)fy; en- (em-)

### DISCUSSION

**Exercise 4.1. a) Think about the advantages and disadvantages of city transport. Fill in the table comparing different means of public transportation in terms of their efficiency, cheapness, accessibility, comfort, speed, etc.**

<i>Kind of transport</i>	<i>Advantages</i>	<i>Disadvantages</i>
Underground		
Light Rail		
Tram		
Trolley-bus		
Bus		
Taxi		

**b) Tell your story supporting it with the examples of your own logistics throughout the day.**

## Exercise 4.2. In groups discuss the following questions.

- What do you know about the history of the underground?
- Have you heard about *Light Metro*? What is it like?
- How old is the Kharkiv metro? What anniversary has it celebrated recently?
- If you know any interesting facts or stories about underground systems, share this information with the group.

## READING



**mean** (*meant, meant*) – *v* означати, розуміти

**average** – *adj* середній, середня величина

**adult** – *adj* дорослий

**fear** – *v* боятися, побоюватися; *n* боязнь, побоювання, страх

**besides** – *adv* крім того

**cause** – *v* спричиняти, призводити до, викликати; *cause discomfort* – спричиняти незручності

**cost** – *n* ціна; *construction cost* – ціна будівництва

**narrow** – *adj* вузький

**wonder** – *n* здивування, чудо; *v* дивуватися, цікавитися; *wonderful* – *adj* дивовижний, чудовий

**fill** – *v* наповнювати; *full* – *adj* повний

**introduce** – *v* впроваджувати

**frequent** – *adj* частий; *v* [fri 'kwent] часто відвідувати, бувати; *frequency* – *n* частотність

**spread (out)** – *v* розповсюджувати(ся)

**follow** – *v* йти слідом за

**currently** – *adv* тепер, у цей час

**reason** – *n* причина

**traffic congestion** – транспортне перевантаження, затор

**environment** – *n* навколишнє середовище; *environment protection* – захист навколишнього середовища; *environment pollution* – забруднення навколишнього середовища

**annual** – *adj* річний, щорічний

**employ** – *v* використовувати, застосовувати

**conversion** – *n* переведення, перехід

**conventional** – *adj* звичайний, традиційний; *syn common*

**cheap** – *adj* дешевий

**reliable** – *adj* надійний

**vehicle** – *n* транспортний засіб

**promise** – *v* обіцяти; *promising* – *adj* багатообіцяльний, перспективний

**carrying capacity** – пропускна спроможність

**allow** – *v* дозволяти

**feed** – *v* постачати, підводити, живити

**claim** – *v* заявляти, стверджувати

**equip** – *v* обладнувати

**prevent** (*from smth*) – *v* не допускати, стримувати

**pay attention to** – приділяти увагу

**Light Rail** – система міського рейкового транспорту («легкий транспорт»)

**urban** – *adj* міський; *suburb* – *n* передмістя, околиці

**dedicated lines** – спеціалізовані лінії; *syn purpose-built lines*

**approach** – *v* наближатися, підходити; *n* підхід, метод

**quiet** – *adj* тихий, спокійний, неголосний

**avoid** – *v* уникати

**compatible** – *adj* сумісний

**emit** – *v* випромінювати, виділяти; *emission* – *n* випромінювання, викид

**remarkable** – *adj* значний, видатний; *remark* – *n* зауваження, вислів; *v ~ on* помічати, відмічати, висловлюватися.

**Exercise 4.3. Change the words in *italics* into their synonyms from the active vocabulary.**

The *typical* resident of a big city, *grown-up* citizens, *to declare* one's rights on the property, *commuter* trains, *to bring* electric traction *into use*, *to be afraid of* getting deep under the ground, *to send out* much pollution, *purpose-built* high-speed line, *to result in* the increase of carrying capacity, *common* types of cars, *to use* the latest technologies, *to permit* automated metros to operate safely, *to comment on* some important issues, the most advanced *transportation means*, *city rail* mass transit network.

**Exercise 4.4. Complete the sentences with the verbs *introduce, frequent, warn, fill, emit, pay attention* and *claim*.**

1. He poured her a drink, then ... his own glass. 2. It is important to ... to the questions of safety on railway transport. 3. The company ... that their product 'makes you thin without dieting'. 4. I ... you not to walk home alone. 5. Let me ... myself. 6. The bar was ... by actors from the nearby theatre. 7. The Earth ... natural radiation.

**Exercise 4.5. Read and translate the following word combinations.**

By turns, to reduce construction costs, no wonder, a sardine-box-railway, to make engineers introduce electric traction, when put into service, much more frequent services, to be finished in marble, to be treated as a kind of art, renewal of equipment, ticketing machines, passenger carrying capacity, driverless systems, high-capacity heavy metros, glass safety door barriers, warning light and sound systems, to use codes in the rails, compatible with pedestrian environments, low-floor light rail vehicles, urban rail mass transit network, to get across town quickly, for added security, more than twice as many.

## UNDERGROUND RAILWAYS



(1) Metro is defined as an underground railway system in which trains run in tubes under the earth. In America it is known as *subway*, in Britain as *tube* or *underground*, in France and Ukraine as *metro*.

Metro has always meant more to the city than a way to get to work and back home. During its long history it has been, by turns, the city's lunchroom, library, dormitory, shelter, chapel, bazaar, concert hall, hospital and even maternity ward. It is calculated that the average resident of a big city spends more than a year in the metro over the course of their adult life.

(2) The first underground passenger railway was opened in London in 1863. It was *the Metropolitan Railway*, only 3.75 miles (6 km) in length. At first, Londoners feared to get deep under the ground. Besides, this new and strange way of travel caused discomfort for passengers. The tunnels were made as small as possible in order to reduce construction costs. The coaches themselves were small and narrow. No wonder that people called this underground line a 'sardine-box-railway'. The small windows in the trains were made in the roof so that passengers could see nothing. The oil and gas lamps used gave little light, so passengers had to take candles with them. Steam locomotives filled the tunnels with steam and smoke. It was this discomfort that later on made engineers introduce electric traction. When put into service, electric trains eliminated steam and smoke and ensured much more frequent services for passengers.

(3) Since that time underground railways have spread rapidly all over the world. London Metropolitan was followed by metros in Budapest, Berlin, and Paris, and later on in the rest of Europe, North and South America, Japan, China, and India. About 180 cities in 56 countries currently have metro networks, carrying more than 150 million passengers daily. The reason for metro building is the same as 100 years ago – traffic congestion and environmental protection. According to the statistics, the *London Underground (LU)* is the oldest and longest (415 km) metro system in the world, while the *Tokyo Subway* is the



busiest, with 3.2 billion annual passengers (more than twice as many as the *New York Metro*).

(4) Modern underground railways offer more comfort and better service for passengers. Metro operators around the world employ the latest technologies in such spheres as architecture treated as a kind of art, safety systems, automatic driving and ticketing, etc.

The top priority task is the conversion of conventional metro lines to full automation. Automatic operation has a number of essential advantages: it is cheaper and more reliable than manual; it will use less energy; it will need fewer vehicles and operate shorter trains more frequently; and, finally, it promises better service and passenger carrying capacity.

(5) A key concept with driverless operation is the safety and security of passengers, and this is where most of the innovations are being made. The automatic train operation system regulates train speed precisely, controls acceleration and braking, activates on-board passenger announcements, unlocks doors at stations, and operates the trains so that energy is saved. A platform track intrusion detection system has also been developed. The system is connected to the ATC so that trains in the area stop automatically if any object larger than 30 cm in diameter enters the track area in stations.

(6) Today's technology allows high-capacity heavy metros to operate safely and efficiently under automatic control. The *Victoria Line* system in London, the most fully automatic line now in operation, uses codes in the rails for both safety signalling and automatic driving. Code systems feed information to a central computer, which calculates where the train should be at any given time, and instructs the train to slow down, speed up, stop, etc.

(7) The new automated high-speed line *Meteor* of the *Paris Metro* system claims to be the forerunner<sup>2</sup> of the 21<sup>st</sup> century metro. It has the platforms equipped with a glass safety door barrier to prevent passengers from falling onto the line. The doors slide open in synchronisation with the train doors. The doors

are also equipped with a warning light and sound system for deaf and blind passengers. The control centre has full video monitoring of all station platforms and the inside of trains for added security.

(8) The optimum solution for a typical large city will inevitably be a multimodal mix<sup>3</sup>. Therefore, in recent years great attention has been paid to developing the so-called *Light Rail*. There are now more than 400 light rail systems in about 50 countries, with a further 100 planned. Light rail is a modern form of public transit, combining the qualities of both tram and metro. Electric trains made up of 2 to 4 cars carry passengers along certain routes in urban areas as well as neighbouring suburbs. The trains run in dedicated lines, either in the medians of city streets or in exclusive right-of-ways<sup>4</sup>. They stop at stations located every half-mile and trigger<sup>5</sup> traffic lights to turn green on their approach so that the trains only stop at stations.

Light rail acts as an efficient, quiet, smooth, and comfortable alternative to get across town quickly, avoiding congestion. Light rail trains are good neighbours; they are more compatible with pedestrian environments<sup>6</sup> than roads, emit no pollution and are only as noisy as a private car. Disabled<sup>7</sup> and old people are able to travel just as easily as everyone else – station platforms are at the same level as the floors of the trains (or there exist special low-floor light rail vehicles).

(9) Metros are of crucial importance for efficient, sustainable mobility in cities worldwide. Today's demographic, economic and environmental factors mean that it is essential to go on developing urban rail mass transit networks in big cities. The next 100 years could very possibly be more remarkable than the metro's first century [1, 10, 13].

<sup>1</sup> *finished* – оздоблені.

<sup>2</sup> *the forerunner* – попередник.

<sup>3</sup> *a multimodal mix* – єдина інтегрована транспортна мережа.

<sup>4</sup> *exclusive right- of-ways* – спеціалізовані смуги відведення.

<sup>5</sup> *trigger* – тут вмикають, перемикають.

<sup>6</sup> *pedestrian environments* – пішохідні переходи.

<sup>7</sup> *disabled* – інваліди.

**Exercise 4.6. Answer the following questions.**

1. Where was the world's first underground railway built? 2. What made people think about the construction of underground transport? 3. Why did people experience many discomforts in the early London Metropolitan? 4. What advantages did electric traction have when introduced on underground railways? 5. How many cities in the world have metro systems? 6. What are the Tokyo Subway and the London Underground famous for? 7. What innovations have been introduced in metros lately? 8. How is the safety of driverless operation provided? 9. What unique features does the high-speed line *Meteor* in Paris have? 10. Where are the automated lines in use now? 11. Why is the automatic operation system better than manual? 12. What is the *Light Metro*? 13. How many countries have the light metro? 14. What are the distinctive features of the light rail? 15. What are the advantages of the light metro in a modern big city?

**Exercise 4.7. Translate the word combinations in brackets.**

1. Metro is defined as (*підземна залізнична система*) in which trains run in (*труби*) under the earth. 2. (*Перевантаження руху*) was already felt in the streets in the middle of the 19<sup>th</sup> century. 3. (*Перша пасажирська підземна залізниця*) was opened in London on the 10<sup>th</sup> of January, 1863. 4. This new and strange way of travel (*завдавав*) many discomforts. 5. The steam locomotives (*заповнювали тунелі паром чи димом*). 6. Electric trains (*усунули*) steam and smoke and (*забезпечили більш швидке*) service for passengers. 7. The Victoria Line system in London is the most (*повністю автоматизована лінія*) now in operation. 8. Light rail is a modern form of public transit, (*яка поєднує якості трамвая та метро*).

**Exercise 4.8. Agree or disagree with the following statements. Give your arguments according to the text.**

1. Metro has always meant a way to get to work and back home. 2. The reason for having underground railways in every major city is traffic congestion. 3. Public didn't experience any discomfort while travelling by early metros. 4. Automatic driving hasn't been introduced widely yet. 5. Light rail connects neighbouring suburbs with the centre of a city. 6. Light rail trains aren't compatible with pedestrian environments. 7. Disabled people and senior citizens can't travel independently by this friendly form of transit. 8. Station platforms are at the same level as the floors of the trains (or there exist special models of low-floor light rail vehicles).

**Exercise 4.9. Choose one of the topics and make up a short story based on the text and any additional source of information.**

- The world's first underground.
- Metros worldwide.
- Automated underground systems.
- The Light Metro.

*Supplementary Text A:* **LIGHT RAIL AS A MODERN SOLUTION FOR LARGE CITIES**

(1) Big cities worldwide face the same problem. The capacity of the street network is not enough for cars, trams and buses, while underground systems are too massive and expensive outside the city centre. Light rail combining the benefits of a tram, metro and commuter train is seen as a modern solution to this eternal problem of city congestion.

(2) Conventional rail technologies including high-speed, freight, commuter/regional, and metro/subway/elevated urban transit systems are considered to be 'heavy rail'. Light rail or light rail transit (LRT) is a form of urban rail public transportation that generally has a lower capacity and speed than heavy rail, but higher capacity and speed than traditional street-running tram

systems. The term LR was devised in 1972. ‘Light’ in this context is used in the sense of ‘intended for light loads and fast movement’, rather than referring to physical weight, since the vehicles often weigh more than those on the so-called heavy rail systems. The investment in infrastructure is also usually lighter than would be found for a heavy rail system.

(3) Modern light rail technology has primarily German origin because the Germans did not destroy the tramway systems as had happened especially in the USA and UK after World War II, but developed them into model light rail systems (Stadtbahnen). All large and most medium-sized German cities maintain light rail networks.

(4) There are two general types of LR. Firstly, there is the traditional type where trains run along the streets sharing space with road traffic (usually in the dense city centre). And secondly there is the type where trains run along their own right-of-way and are separated from road traffic, but still have to comply with traffic laws. There are many LR systems which have a combination of the two, with both on-road and off-road sections. LR can also be elevated or routed through tunnels where the street area is already used. A combination of these is used to match local conditions and helps to increase both the capacity and the speed of LR.

(5) In practice, LR is characterised by the following features.

- It works in the tunnels as a metro.
- On its own right of way, it works like a train.
- On the streets it works like a traditional tramway or a bus.
- On the market squares and other pedestrian areas, it works much like an old-fashioned slow streetcar or coach.

(6) LR usually operates electric trains since they are fast, quiet, and non-polluting. These trains may be powered with overhead cables, or through the use of a third rail. LR is often networked with commuter rail, subway, and buses. It usually runs at set intervals or times to match other means of transport.

(7) The main advantage of LR is that it is cheaper and more flexible since it can be operated on the road with mixed traffic. It has a much simpler signalling than heavier rail systems, often relying on the driver. When it is running along a highway it can be given priority at signalised junctions.

(8) A derivative of LRT is Light Metro. Such railways are characterised by exclusive rights of way, advanced train control systems, short headway capability, and floor level boarding. These systems approach the passenger capacity of full metro systems, but can be cheaper to construct.

(9) It's hard to find a city in America or Europe that isn't planning, proposing, studying or actually building a LR system. There are now more than 400 LR systems in about 50 countries, with a further 100 planned.

**Exercise 4.10. a) True or false? Give the correct version.**

1. LR is a form of suburban rail transit. 2. LR was introduced to help cities cope with traffic congestion. 3. LR can only use dedicated right-of-way. 4. Metro, LR and trams are tightly interlinked in a city traffic network. 5. Only megapolises can afford LR. 6. The term LR, as opposed to heavy rail, refers to light capacity [1, 10].

**b) Answer the questions.**

- 1) When and why was Light Rail developed?
- 2) How does LR differ from heavy rail? from traditional trams?
- 3) What types of Light Metro do you know?
- 4) What are the specific features of Light Rail?

*Supplementary Text B: KHARKIV UNDERGROUND*

(1) Kharkiv was the second city in Ukraine to have a metro. At the beginning of the 70s the transportation problem in Kharkiv became very acute. The surface transport couldn't cope with growing passenger turnover. The situation was complicated by the relief of the city, its narrow central streets and

large-scale construction of new residential areas in the outskirts of Kharkiv. The only way out was the construction of the Kharkiv Metropolitan system.

(2) There were two variants under consideration: the ordinary underground only for urban transportation and the other variant, which would provide for the possibility for metro trains to come out to suburban railway sections. No matter how promising the second project seemed, it would have required a new rolling stock, longer platforms and tunnels of greater diameter while the construction technologies didn't allow doing this.

(3) In August 1975 the first section of Kharkiv underground was put into operation. While constructing the underground a number of developments and innovations were applied. On the *Saltovskaya* line the first in the former USSR experimental metro bridge of original construction was built over the river Kharkiv. It was a closed type bridge, 336 metres in length, which connected the *Barabashova* and the *Kievskaya* stations. In the centre of the city the underground line crossed the Kharkiv and the Lopan rivers and ran under the railroad tracks of Southern railway.

(4) Nowadays, the Kharkiv underground has three autonomous lines, almost 40 km in length, with 26 stations. These lines cross in three change stations. Annually, the underground handles 250 million passengers. It is equipped with the latest machinery and has a perfect air-conditioning system, which makes the Kharkiv underground one of the most reliable and convenient underground systems in Ukraine.

[borrowed from different articles presented in Wikipedia The Free Encyclopedia]

#### **Exercise 4.11. Translate the word combinations in brackets.**

1. At the beginning of 70s the surface transport (*не міг впоратися*) with growing (*пасажирообігом*). 2. The situation (*ускладнювалася*) by the relief of the city. 3. The first variant, (*метрополітен для внутрішньоміських перевезень*), was chosen. 4. The (*перша секція*) of Kharkiv underground was (*запущена в експлуатацію*) in August 23, 1975.

**Exercise 4.12. True or false? Give the correct version.**

1. The surface transport could cope with growing passenger turnover at the beginning of the 70s. 2. There were three variants of the Metropolitan system under consideration. 3. The first experimental underground bridge of closed type was built over the Dniper river. 4. Three lines of Kharkiv underground cross in four change stations.

**Exercise 4.13. Project.**

- In groups of three or four discuss the possibilities of extending Kharkiv Metro lines. Where can they emerge into the open and be transformed into Light Rail?
- Imagine yourself being the main architect of 'Kharkiv Metro Project'. Name your own stations and present your sketches of station interior.

**Exercise 4.14. Here you will find information about the network of underground systems in major cities all over the world. Which is the oldest, youngest, longest, shortest of them? Which of them has the largest or smallest number of stations?**

<i>City</i>	<i>Year of construction</i>	<i>Length (km)</i>	<i>Number of stations</i>	<i>Daily riders</i>
London	1863	408	273	2,99 mln
New York	1868	373	468	4,33 mln
Paris	1900	213	380	4,05 mln
Chicago	1892	166	151	542,000
Tokyo	1927	304	290	8,7 mln
Berlin	1902	147	195	1,39 mln
Seoul	1974	287	348	5,61 mln
Washington	1976	171	90	611,000
Shanghai	1995	420	278	3,56 mln



**Exercise 4.15. Read the text and summarise in a few sentences the most interesting facts about the mentioned underground systems.**

*Supplementary Text C: NEWS IN BRIEF ABOUT WORLD METROS*

- **New York's** subway celebrated its centenary in 2004. You can assess the New York subway in purely numerical terms – track-km (1377), daily trains operated (6700), employees (48,000), annual capital investment (\$US 2 billion). Unlike most other metros, NY metro has local and express tracks that form one seamless transport network [10].

- **Hamburg** Metro has put into operation the first two of a new generation of environmentally-friendly Metro trains. These trains are claimed to be up to 92 % recyclable<sup>1</sup>. This has been achieved by using a practicable dismantling<sup>2</sup> concept, using environmentally-friendly materials and chemicals without increasing the weight of the trains, and by reducing the number of the materials used [10].

<sup>1</sup> *recyclable* – повторно використаний.

<sup>2</sup> *dismantling* – розбирання, демонтаж.

- **Nuremberg** Metro is the first metro in the world which converted a manually-operated line to full automation in spring 2006. It has equipped two metro lines with a fleet of 30 two-car driverless trains. A number of firsts are claimed for this project:

- the first driverless metro to be built in Germany;
- the first operational metro line to be converted to driverless operation;
- the first combined operation of driverless and manned trains [10].

- **Meteor**, the first fully-automated metro line in Paris, is equipped with driverless *trainset*<sup>3</sup>. The commercial speed of 40 km/h is highly attractive as compared to the 20-25 km/h achieved on conventional lines. This gives a capacity

of 40,000 passengers per hour in each direction, by far the highest capacity of any fully automated system of public transport in the world. From this perspective, an automated metro is perhaps ideally suited to serving routes like a sports stadium or concert arena. This automated line will increase passenger capacity on one of the busiest transport corridors through the heart of Paris [10].

<sup>3</sup>*a trainset* – секція потяга.

- **The International Association of Public Transport (UITP)** predicts that more and more cities worldwide will open its fully-automated driverless systems. They have been around for more than three decades but until recent years the applications have mainly been *peplemovers*<sup>4</sup> in airports, port areas, or connectors to residential areas. Now both heavy and light metros extensively use driverless systems (*Heavy Metros*: Paris Meteor, Nuremberg (U1/U2), Lyon Line D, etc. *Light Metros*: Copenhagen, London Docklands, Toronto (Scarborough), Vancouver SkyTrain).

<sup>4</sup>*a peplemover* – рейковий автобус.

**Exercise 4.16. Project.** Make a presentation about any modern underground system of your choice. Surf the Internet to present your own project with maps, photos etc.

## G R A M M A R

### PERFECT TENSES

	<b>Active</b> <b>have + Past Participle (-ed)</b>	<b>Passive</b> <b>have + been + Past Participle (-ed)</b>
<i>Present</i>	I <b>have</b> just <b>written</b> the letter. She <b>has</b> already <b>written</b> the letter	The letter <b>has been written</b> by a secretary. All the letters <b>have been written</b>

<i>Past</i>	We <b>had written</b> the letter before you came to the office (by 6 o'clock yesterday)	The letter <b>had been written</b> before you came in (by 6 o'clock yesterday)
<i>Future</i>	They <b>will have written</b> the letter by 6 o'clock tomorrow	The letter <b>will have been written</b> by 6 o'clock tomorrow

### Present Perfect Tense

1. Дія відбулася до теперішнього моменту, час здійснення дії не вказаний.

*I've met a lot of famous people (before now).*

*She has written twenty books (up to now).*

Якщо вказаний час, коли була здійснена дія, вживають тільки *Past Indefinite*.

*I lost my key the day before **yesterday**.*

*Jim went to Canada in **1999**.*

2. Дія відображує недавній досвід будь-чого (часто з прислівниками *never, ever, lately, recently*).

*Have you **ever** been to China?*

*We have **never** had a car.*

3. Дія закінчилась у недавньому минулому і має безпосередній результат у теперішньому часі (часто з прислівниками *just, already*, які зазвичай стоять після додаткового дієслова, і *yet*, що стоїть наприкінці та вживаний тільки в питальних і заперечних реченнях).

*I've lost my wallet. (I haven't got it now)*

*Jim has gone to Canada. (= he is in Canada or on his way there)*

*Would you like something to eat? – No, thanks! I have **just** had lunch!*

*Don't forget to post the letter, will you? – I have **already** posted it!*

*Has Ben come **yet**? – Бен **вже** прийшов?*

*They have not completed it **yet**. – Вони **ще не** закінчили це.*

4. Дія почалася в минулому і триває зараз (часто з обставинами часу *since* та *for*).

*I've lived here **for** twenty years (**since** 1995; **since** I left school). – Я живу тут двадцять років.*

*Але: I lived there for twenty years. (I don't live there now).*

*How long have you worked as a teacher? (you still work there).*

5. З обставинами часу *this year, today, this week, this term* (якщо ці періоди часу не закінчилися до моменту говоріння).

*Ron hasn't studied very much **this term**.*

*I haven't seen Tom **today**. Have you?*

### Past Perfect Tense

Дії, що відбувались і закінчилися до якогось моменту або іншої дії в минулому.

*I had translated the article **by** five o'clock.*

*George didn't want to go to the cinema with us because he had already seen the film twice.*

*It was my first time in an airplane. I was very nervous because I hadn't flown before.*

### Future Perfect Tense

Майбутні дії, які будуть здійснені до певного моменту або певної дії в майбутньому, виражено за допомогою прийменника *by*.

***By** the time you get home, I will have cleaned the house from top to bottom.*

*They will have finished **by** tomorrow afternoon.*

### Exercise 4.17. Match a line in A with a line in B.

A	B
Joe is happy because	he has just burnt the meal.
Richard is sad because	he has just got some good news.
Tim is worried because	his girlfriend has gone away on business.
Malcolm is excited because	his daughter hasn't come home yet.
Ken is annoyed because	his wife has just given birth to a baby.

**Exercise 4.18. Fill in *just*, *already* or *yet* into each gap.**

*Model:* I'm not hungry. I've *just* eaten my lunch.

1. Peter hasn't phoned ... and it's ten o'clock.
2. Tina's ... told me that you won. Congratulations!
3. We've ... seen that film – it was on last week.
4. Have you been to the doctor ...? No, I haven't.
5. Lock the door! I've ... seen her coming up the path.
6. Careful! She's ... passed her driving test.
7. Has the postman been ...?
8. Yes, he's ... been. He was here a long time ago.

**Exercise 4.19. Open the brackets, using verbs in the Present Perfect or Past Simple Tense.**

1. I (*live*) in London for eight years, and I don't want to move.
2. He (*live*) in Oxford for two years, and then in 1993 he (*move*) to London.
3. The rain (*stop*) and the sun is shining in the sky again.
4. The rain (*stop*) half an hour ago.
5. Mary (*buy*) a new flat.
6. I (*buy*) a pair of gloves yesterday.
7. We (*meet*) Ann and Paul three years ago. How long you (*know*) them?
8. Alex (*meet*) his friend two hours ago.
9. We just (*discuss*) our new plan.
10. I (*see*) Peter today.
11. I (*not see*) you for a long time. I (*see*) you in the town two or three days ago, but you (*not see*) me. I (*be*) on a bus.

**Exercise 4.20. Complete the sentences with a verb from the box. Use the Present Perfect Tense.**

<i>break, buy, finish, do, go, go, lose, paint, read, take</i>
--

*Model:* 'Are they still having a dinner?' 'No, they have finished.'

1. I ... some new shoes. Do you want to see them?
2. 'Is Tom here?' 'No, he ... to work.'
3. '... you ... the shopping?' 'No, I'm going to do it later.'
4. 'Where is your key?' 'I don't know. I ... it.'
5. Look! Somebody ... that window.
6. Your house looks different. ... you ... it?
7. I can't find my umbrella. Somebody ... it.
8. I am looking for Sarah. Where ... she ...?
9. 'Do you want the newspaper?' 'No, thanks. I ... it.'

**Exercise 4.21. Answer the following questions using the words in brackets.**

*Model:* When did you last smoke? (*for two years*) – *I haven't smoked for two years.*

1. When did it last rain? (*for ages*)
2. When did they last visit you? (*since June*)
3. When did you last play tennis? (*for a long time*)
4. When did you last drive? (*six months*)
5. When did you last go to Spain? (*never*)

**Exercise 4.22. Read the news story and put the verbs in brackets into the Present Perfect or Past Simple (Active or Passive).**

**The Loch Ness Wallet**

14 years ago Spanish tourist Gaspar Sanchez (*drop*) his wallet into the waters of Loch Ness in Scotland. His passport, his car keys, his business card and his money (*lose*) in 150 m of water. This week the phone (*ring*) in Senor Sanchez's Barcelona flat and a Scottish policeman told him, 'Sir, your wallet (*find*)! It (*discover*) last Sunday on the bed of the loch by some scientists in a submarine looking for the Loch Ness monster!'

Senor Sanchez said, 'The whole thing is absolutely amazing. Apparently, my wallet and its contents (*put*) in the post to me already. I should get them tomorrow. I can't believe it!'

**Exercise 4.23. Complete the sentences in three different ways, using your own ideas. Write sentences using the Past Simple, Past Continuous, and Past Perfect.**

1. When the car broke down...	<i>we <b>had just passed</b> a small village.</i> <i>we <b>were driving</b> from our country house.</i> <i>the driver <b>phoned</b> the company</i>
2. When I finally got to the airport...	

3. When we climbed to the top of the mountain...	
4. When the police arrived at the hotel...	

**Exercise 4.24. Put the verbs into the Past Perfect or Past Simple.**

1. The house was very quiet when I got home. Everybody (*go*) to bed. 2. I felt very tired when I got home, so I (*go*) straight to bed. 3. Sorry I'm late. The car (*break*) down on my way here. 4. There was a car by the side of the road. It (*break*) down and the driver was trying to repair it. So we (*stop*) to see if we could help. 5. 'Was Tom there when you arrived?' – 'No, he (*go*) home.' 6. 'Was Tom there when they arrived?' – 'Yes, but he (*go*) home soon afterwards.'

**Exercise 4.25. Use the Future Perfect to put the beginnings and ends together.**

<i>BEGINNINGS</i>	<i>ENDS</i>
I ( <i>not finish</i> ) the report by Monday, ...	and we'll be able to get a smaller house.
In a couple of years the children ( <i>leave</i> ) home ...	and it's needed for Monday morning.
On our next wedding anniversary ...	I ( <i>drive</i> ) for fourteen hours non-stop.
When I get home tonight ...	I ( <i>work</i> ) for forty years.
When I retire ...	we ( <i>be</i> ) married for twenty-five years

**Exercise 4.26. Translate the sentences paying attention to different meanings of *for* and *since*.**

***for***: для; упродовж; за; оскільки

1. The unusual phenomenon occupied the boy's thoughts *for* hours. 2. See what I have *for* you, my boy. 3. *For* a few years Albert Einstein lived in Prague. 4. His unexpected arrival was a great surprise *for* everybody. 5. In 1993 our Institute was given the status of the Academy *for* great successes in training specialists *for*

railway transport. 6. Einstein always answered all students' questions, *for* there were no foolish or simple questions *for* him.

**since:** з; з тих пір (як), бо, оскільки

1. *Since* the Moon is the nearest body to the Earth, we know more about it than about any planet. 2. *Since* that time, the railway has become the most popular means of transport. 3. *Since* the atomic structure became known, many chemical processes became much cheaper. 4. He left for Spain and we have not seen him *since*. 5. *Since* I can't say anything for sure, I'll make no comments so far.

**Exercise 4.27. Work in pairs. Make questions by choosing a beginning from A to a suitable ending from B below. If possible, ask and answer further questions, giving details, as in the example.**

*Q: Have you ever lost your luggage?*

*A: Yes, I have.*

*Q: Where did you lose it?*

*A: I lost it when I flew to Berlin last year.*

*Q: Did you get it back?*

*A: I got it back in the end, but I had to wear the same clothes for a couple of days.*

**A**

Have you ever

Have you worked

How often have you

How many times have you

Where's the furthest you've

What's the worst journey you've

**B**

travelled abroad (on business)?

ever had?

had an interview?

missed a flight or connection?

been ill this year?

been late for class this year?

had a serious argument at home?

ever travelled?

in this company for long?

lost your job?



## PERFECT CONTINUOUS TENSES

	<b>have + been + Present Participle (-ing)</b>
<i>Present</i>	He <b>has been writing</b> a letter since this morning. – Він пише лист зранку
<i>Past</i>	He <b>had been writing</b> a letter for two hours when I came. – Він писав лист упродовж двох годин до того, як я прийшов
<i>Future</i>	He <b>will have been writing</b> a letter for two hours when I come. – Він писатиме листа впродовж двох годин перед тим, як я прийду

### Present Perfect Continuous

1. Дії, які почалися в минулому і тільки закінчилися.

*You are out of breath. **Have you been running?***

*That man over there is bright red. I think he **has been sunbathing.***

2. Дії, які почалися в минулому та ще триватимуть на момент говоріння.

*How long **have you been learning** English?*

*I **have been waiting** here since 2 o'clock.*

### Past Perfect Continuous

Дії, що почалися до певного моменту в минулому і тривали до цього моменту.

*Ken **had been smoking** for 30 years when he finally gave it up.*

*I was very tired when I arrived home. I **had been working** hard all day.*

### Future Perfect Continuous

Дії, що почнуться до певного моменту в майбутньому і триватимуть до цього моменту.

*On Saturday, we **will have been living** in this house for a year. – У неділю буде річниця, як ми живемо в цьому будинку.*

*Next year I **will have been working** in the company for 30 years. – У наступному році буде 30 років, як я працюю в цій компанії.*

Якщо часи групи Perfect вказують на факт здійснення дії, то часи групи Perfect Continuous вказують на тривалість дії.

They have lived in London for 10 years (Людина вказує на те, що вони живуть у Лондоні).

They have been living in London for 10 years (Людина вказує на те, як довго вони живуть у Лондоні).

**Exercise 4.28. Match a line in A with a line in B.**

A	B
Ann has been sunbathing.	She is furious.
She has been shopping.	She has got paint in her hair.
She has been working in the garden.	She is crying.
She has been reading for hours.	Her back hurts.
She has been watching a sad film.	She hasn't got any money left.
She has been waiting for hours.	She is a bit burnt.
She has been doing the housework.	She is soaking wet.
She has been decorating the bathroom.	The house smells of onions and garlic.
She has been cooking.	Her eyes hurt.
She has been bathing the children.	Everything is spotless.

**Exercise 4.29. Choose the correct verb form.**

1. How long *has Angela been living* / *does Angela live* in Paris?
2. She *has been finding* / *has found* a good job.
3. Alan *has been* / *has gone* to South America.
4. Angela *has bought* / *bought* her flat a few months ago.
5. How long *has she known* / *has she been knowing* Jean-Pierre?
6. Tom *worked* / *has been working* as a postman for a month.
7. He *has visited* / *has been visiting* ten museums today.
8. He is tired because *he has travelled* / *has been travelling* around London all day.

**Exercise 4.30. Write full questions using the Present Perfect Simple or Continuous form.**

1. How long / you / write / that report? – About 6 hours. 2. How many reports / you / write? – Six in total. 3. Have / you / wait / a long time? – Yes, about an hour. 4. Where / he / live? – In five different countries. 5. Where / they / live? – In France since last year. 6. Who / she / interview / all morning? – Candidates for the post of receptionist. 7. How many / they / interview / this morning? – Two people. One of them from Vietnam.

**Exercise 4.31. Put the verb in brackets in the appropriate tense.**

My wife and I (*live*) in our present house in the country for five years. We (*move*) here after our second child (*be*) born. We (*live*) in town for ten years, and (*decide*) that as soon as we (*can*) afford it, we (*move*) away from the smoke and the noise of the city centre, which we finally (*do*) in 1985. We never (*regret*) it. We (*be*) reminded of the wisdom of our decision every morning when we (*draw*) the curtains to see open fields stretching before us. When the children (*have*) breakfast, they (*rush*) outside to play, which they (*do*) whatever the weather. Whilst they (*play*) outside, we somehow manage to start the day.

**Exercise 4.32. Fill in with the appropriate past form.**

	<b>Indefinite</b>	<b>Continuous</b>	<b>Perfect</b>	<b>Perfect Continuous</b>
<i>Past</i>	I took	I was taking	I had taken	I had been taking

In 1894 a steamship (*sail*) across the Atlantic Ocean from England to America. The sun (*shine*) and a gentle breeze (*blow*). The ship (*sail*) for three weeks and was halfway to its destination – New York. The passengers (*relax*) on deck when suddenly they (*hear*) a loud bang. They all (*jump*) up, (*run*) to the edge of the boat and (*look*) over the side. To their horror they saw that they (*hit*) some hard object which (*tear*) a hole in the side of the ship. Water (*pour*) into the steamship at an

alarming speed. Fortunately, another ship arrived half an hour later, just in time to save everyone on board.

### Exercise 4.33. Translate the following sentences.

1. Я ніколи не був у Києві. 2. Я не бачу його з понеділка. 3. Настала зима, і тепер ми знову будемо часто ходити на ковзанку. 4. Вона була здивована: ніколи раніше не бачила стільки квітів. 5. Коли я прокинувся, мати вже готувала сніданок. 6. Ви коли-небудь бачили цей фільм? – Ні. 7. Я знаю, що вона працює над цією статтею вже три тижні. 8. Ти вже склала нарешті свої речі? Таксі вже десять хвилин чекає біля під'їзду. 9. Я знаю цю жінку вже кілька років. 10. Коли він прийшов додому, ми вже пішли в кіно. 11. Статтю ще не написано. 12. Цю книгу буде перекладено до кінця наступного року. 13. Це питання вже вирішено.

## PAST PARTICIPLE

*Past Participle (Participle II)* – неособова форма дієслова, що має властивості дієслова і прикметника (*verbal adjective*). *Past Participle* входить до складу дієслова-присудка часів групи *Perfect, Passive Voice*, використовують ще самостійно у функціях означення та обставини.

### Use of Past Participle

Означення	<i>The <u>constructed</u> railway was 15 miles long</i> (перед означуваним словом). – Збудована залізниця була 15 миль довжиною. <i>The railway <u>constructed</u> carried heavy traffic</i> (після означуваного слова). – Збудована залізниця здійснювала великий обсяг перевезень
Означальний дієприкметниковий зворот	<i>The house <u>built in our street</u> has simple and severe lines</i> (після означуваного слова). – Будинок, збудований на нашій вулиці, має прості та чіткі лінії

Обставинний дієприкметниковий зворот	<i><b>When <u>built</u>, this house will be the highest in our street.</b></i> – Коли цій дім збудують, він буде найвищим на нашій вулиці. <i><b>Metal bars become longer <u>if heated</u>.</b></i> – Металеві бруси подовжуються, якщо їх нагріти
Входить в усі часи пасивного стану	<i><b>That house was <u>built</u> two years ago</b></i> (після допоміжного дієслова <i>be</i> ). – Той дім було збудовано два роки тому
Входить в усі часи групи <i>Perfect</i>	<i><b>The construction firm has recently <u>built</u> a house in our street</b></i> (після допоміжного дієслова <i>have</i> ). – Ця будівельна фірма нещодавно збудувала будинок на нашій вулиці

**Exercise 4.34. Give the Past Participle of the verbs and write word combinations with them.**

Build, grow, bring, obtain, find, produce, teach, return, tell, change, write, read, make, speak, see, say, begin, offer, save, equip, get, take, burn, show.

**Exercise 4.35. Translate the sentences paying attention to the Past Participle.**

1. She put a plate of *fried* fish in front of me. 2. The coat *bought* last year is too small for me now. 3. Nobody saw the things *kept* in that box. 4. My sister likes *boiled* eggs. 5. We stopped before a *shut* door. 6. They saw *overturned* tables and chairs and pieces of *broken* glass all over the room. 7. This is the church *built* many years ago. 8. The books *written* by Dickens give us a realistic picture of 19th century England.

**Exercise 4.36. Compare the pairs of sentences and define the function of participles.**

1. The steam locomotive invented by George Stephenson developed low speed. – When invented, the steam locomotive played an important part in transportation.  
2. The first railways built used slow locomotives. – The railway, when built, will shorten the way between two cities. 3. The rails heated by the sun become longer. – Rails become longer when heated. 4. The trains drawn by horses were short and light. – When drawn by electric locomotives, the trains may have more than 90

cars. 5. The radio used for the sorting of trains makes the work of railwaymen much easier. – If used, the electronic computers will make the sorting of trains far more efficient.

**Exercise 4.37. Read and translate the word combinations paying attention to the Participle.**

<b>A</b>	<b>B</b>
all developed countries;	книга, яка була залишена дома;
the information obtained recently;	метод, впроваджений на
the railway built between the two	виробництві;
towns;	стаття, перекладена декількома
help offered by the teacher;	мовами;
the lecture delivered by a well-known	дані, одержані в попередньому
person;	тесті;
the research made in the laboratory;	іспити, складені минулого тижня;
the film shown to the students;	тест, запропонований видатним
the letter sent to his parents	ученим;
	речі, знайдені в шафі;
	експеримент, проведений ретельно

**Exercise 4.38. Rewrite the sentences. Each time use the information in brackets to make an -ed clause.**

*Model:* The man was taken to hospital. (*he was injured in the accident*) – *The man injured in the accident was taken to the hospital.*

1. The window has now been repaired. (*it was broken in the last night's storm*)
2. Most of the suggestions were not very practical. (*they were made at the conference*)
3. The paintings haven't been found yet. (*they were stolen from the museum*)
4. Did you hear about Bob's car? (*it was damaged badly this morning in the car crash*)

**Exercise 4.39. Choose the necessary form of the Participle.**

1. We listened to the girl (*singing, sung*) Ukrainian folk songs.
2. We listened to Ukrainian folk songs (*singing, sung*) by the girl.
3. The girl (*washing, washed*) the floor is my sister.
4. The floor (*washing, washed*) by Helen looked very clean.
5. Who is that boy (*doing, done*) his homework at the table?
6. The exercises (*doing, done*) by the pupils were easy.
7. The house (*surrounding, surrounded*) by high trees is very beautiful.
8. The wall (*surrounding, surrounded*) the house was very high.
9. The girl (*writing, written*) on the blackboard is our best pupil.
10. Everything (*writing, written*) here is quite right.
11. Do you know the girl (*playing, played*) in the garden?
12. The (*losing, lost*) book was found at last.
13. Look at the beautiful flowers (*gathering, gathered*) by the children.

**Exercise 4.40. Complete the sentences with participles from the following verbs.**

*blow, call, ~~invite~~, live, offer, post, read, sit, study, wait, work*

*Model:* None of the people invited to the party can come.

1. Tom has a brother ... in a bank in London and a sister ... economics at the university in Glasgow.
2. Somebody ... Jack phoned while you were out.
3. All letters ... today should arrive tomorrow.
4. When I entered the waiting room there was nobody ... except for a young man ... by the window and ... a magazine.
5. A few days after the interview, I received a letter ... me a job.
6. There was a tree ... down in the storm last night.
7. Sometimes life must be very unpleasant for people ... near airports.

**Exercise 4.41. Translate the following sentences using participles.**

1. Вона дала мені книжки, *взяті* в бібліотеці.
2. Я розмовляв із нашим студентом, *який брав участь* у конференції.
3. Викладач відповів на запитання, *що поставили* студенти.
4. *Принесений* викладачем журнал був дуже цікавим.
5. *Готуючись* до іспиту, я прочитав багато книжок, *написаних*

нашими викладачами. 6. Дуже цікаво читати твори, *написані* дітьми. 7. Це мої доповіді, *прочитані* минулого року. 8. Ми стояли перед *зачиненими* дверима. 9. Вона показала мені парасольку, *куплену* в Лондоні. 10. Мені хотілося забути історію, яку він *розповів*.

## PRONOUN ONE

1. Виражає невизначену особу, перекладають як безособовий зворот.

*One should say that making a timetable is a very complicated job.* – Треба сказати, що складання розкладу – дуже важка робота.

*One can't learn a language in six weeks.* – Не можна вивчити мову за шість тижнів.

2. Використовують для заміни раніше згаданого іменника для уникнення повтору, після *the, the only, the main* та *every*.

*'Is this your umbrella?' 'No, mine's the big blue one (= umbrella).'* – «Це твоя парасолька?» «Ні, моя велика, синя (парасолька)».

*I think his best poems are his early ones (= poems).* – Гадаю, що його найкращі поеми – це ранні (поеми).

*The only jokes I tell are the ones that I hear from you.* – Я лише розповідаю ті анекдоти, що чую від вас.

### Exercise 4.42. Translate the following sentences.

1. *One* may say that studying foreign languages is hard work.
2. *One* must understand that the work of a driver requires much experience.
3. *One* can expect that a new metro line will be opened soon.
4. At the exhibition *one* could see the last works of the famous artist.
5. At the conference *one* should mention the latest achievements of the plant.
6. *The only ones* who will benefit are the shareholders.
7. *One* after another, tropical storms battered the Pacific coastline.
8. Great pictures make *one* think.



**Exercise 4.43. Use the appropriate substitute words instead of *italicised* ones.**

1. I think this department store is bigger than that *department store*. 2. These shoes are less comfortable than those *shoes*. 3. My watch isn't working well. I must buy a new *watch*. 4. I've got a pair of black gloves but I must buy brown *gloves* to match my new shoes. 5. I think my watch is ten minutes slow. What's the time on your *watch*? 6. This English book is too easy for me. Please give me a more difficult *book*. 7. I don't like these pictures. They're too dark. I saw better *pictures* in a shop in our street. 8. I think this show will be more interesting than the last *show*.

**Exercise 4.44. A asks B some questions. Use the information in the box to write B's answers. Use *one* in your answers.**

<i>B doesn't need a car</i>	<i>B has just had a cup of coffee</i>
<i>B there is a chemist' in Mill road</i>	<i>B can't ride a bicycle</i>
<i>B hasn't got a pen</i>	<i>B hasn't got an umbrella</i>

A: Can you lend me a pen?	B: I'm sorry, <b>I haven't got one.</b>
A: Would you like to have a car?	B: No, I don't ...
A: Have you got a bicycle?	B: No, I can't ...
A: Can you lend me an umbrella?	B: I'm sorry, ....
A: Is there a chemist near here?	B: Yes, ...
A: Would you like a cup of coffee?	B: No, thank you, ...

## ATTRIBUTIVE GROUP

У функції означення можливе використання як прикметників, так і іменників. Головним позначеним словом у такій низці іменників є останній іменник.

<i>Артикль</i>	<i>Іменник у ролі означення</i>	<i>Позначений іменник</i>
The	land	<b>transport</b>
The	land transport	<b>improvement</b>
The	land transport improvement	<b>problem</b>

*life test* – випробування на строк праці

*labour cost* – витрати на робочу силу

*safety standard* – стандарт, який встановлює правила техніки безпеки

*College Science Improvement Program* – Програма вдосконалення наукової роботи в коледжах (США)

*emergency snow clearing* – термінове розчищення снігових заметів

*rail transport movement table* – графік руху залізничного транспорту

**Exercise 4.45. Find the headword of the word combinations and translate them.**

Automatic train operation system, a glass safety door barrier, low-floor light rail vehicles, a platform track intrusion detection system, evening school, school evening, oil output, the shoe factory, world disarmament conference, train duty dispatcher, rail track maintenance, information control systems, flight navigation equipment, traffic flow density control, school bus service, the research program results, the traffic speed increase issue, the New York region newspaper ad, the temperature limit determination device, the railway bridge reconstruction tender, the household goods store sale, the London underground extension project, the steam engine invention, solar energy accumulation process, the modern house ventilation facilities, the deep sea current measuring device, the car speed calculation formula, the high quality concrete sleepers, traditional ballasted track design life, light rail public transportation, service and passenger carrying capacity, high-capacity heavy metros operation, on-board passenger announcements, urban rail mass transit networks.

**Exercise 4.46. Translate the word expressions using nouns.**

Кам'яна стіна, залізний міст, торгівля нафтою, ринок бавовни, цукрові плантації, ціни внутрішнього ринку, зменшення цін на м'ясо, банкнота в десять центів, міська рада, студентський гуртожиток, заводська лабораторія випробування двигунів.

**S P E A K I N G**

**Exercise 4.47. a) Social expressions. Match an expression in column A with a reply in column B.**

<b>A</b>	<b>B</b>
Mind your own business.	Thank you.
I've changed my mind.	Where to?
Excuse me.	I don't feel very well.
Mind the step.	Ouch! Too late.
Sorry!	I don't mind. You choose.
Pardon?	Never mind. It doesn't matter.
I don't care what he does.	I'll say it again for you.
It serves him right.	Oh, no. I hate decisions.
Here you are.	Why? What did he do?
Come on!	All right. All right. I didn't mean to be noisy.
What's up?	Yes, can I help you?
It's up to you.	What again?
Do you want this one or that one?	That's not very nice. I thought you two were friends.

**b) Compose short dialogues using these expressions.**

**Exercise 4.48. a) Make up dialogues on the topic 'Travelling in the city'. Explain to a city guest how to get to their hotel (the centre of the city, some monuments, shopping centres, theatres, etc). Use the expressions:**

- Excuse me, how can I get to...?
- Is this the right way to...?
- It's over there (not far from here; within 5 minutes' walk; next to; straight ahead; two blocks away; round the corner; opposite the hotel; nearby).
- You'd better take a taxi.
- Is there a bus to the airport?
- It takes you ten minutes to get there on foot.

**b) Translate the dialogue.**

- Вибачте мені, як пройти до готелю «Інтурист»?
- Униз по цій вулиці, потім поверніть біля світлофора і ви побачите готель.
- Дякую.
- Не варто подяки. Будьте обережні, переходьте вулицю по підземному переходу (pedestrian subway), на дорозі сильний рух (the traffic is heavy).
- Ви дуже добрі.

## **WORD BUILDING**

Adjective Suffixes: *-ic, -al, -an*

Noun Suffixes: *-age, -th, -ee*

Verb Suffixes: *-ise (-ize), -(i)fy*

Verb Prefix: *en- (em-)*

**Exercise 4.49. Form nouns using the following suffixes and translate the words formed:**

*-age*: marry, use, root, herb, break, post, anchor, dose, wreck, mile, percent.

*-ee*: employ, assign, trust, address, present, grant, train, refuge, refer, consign, pay, arrest, examine, interview, abandon.

**Exercise 4.50. Translate the pairs of words.**

Long – lengthth, dead – deathth, true – truthth, strong – strengthth, breathe – breathth, warm – warmthth, deep – depthth, broad – breadthth, grow – growthth.

**Exercise 4.51. Translate the verbs with *-ise\**, *-fy* suffixes and *en-* prefix.**

Specialise, localise, generalise, standardise, popularise, realise, centralise; simplify, glorify, purify, classify, horrify, falsify, personify, terrify, certify, intensify, justify, electrify; **en**cage, embed, embody, endanger, enable, enact.

\*in AmEn the suffix *-ize* is used

**Exercise 4.52. Form adjectives from the words using *-an* (*-ian*, *-n*).**

Africa, Mexico, America, Scandinavia, Shakespeare, Hungary, Syria, Paris, Australia, Arab, Crimea, Chile, Canada, crocodile.

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# ДОДАТОК

## ACTIVE VOICE

	<b>Indefinite</b>	<b>Continuous be + V-ing</b>	<b>Perfect have + V-ed (3φ)</b>	<b>Perfect Continuous have been + V-ing</b>
<b>Present</b>	<b>V(s)</b> I <i>write</i> a letter. She <i>writes</i> a letter	<i>I am writing</i> a letter now	<i>I have just written</i> a letter	<i>I have been writing</i> a letter for an hour
<b>Past</b>	<b>V-ed (2φ)</b> I <i>wrote</i> a letter an hour ago. I <i>worked</i> hard	<i>I was writing</i> a letter when you called me	I said that I <i>had already written</i> a letter	<i>I had been writing</i> a letter when you came
<b>Future</b>	<b>will + V</b> I <i>will write</i> a letter next week	<i>I will be writing</i> a letter at 5.	<i>I will have written</i> a letter by 5	<i>I will have been writing</i> a letter for an hour tomorrow

## PASSIVE VOICE

	<b>Indefinite be + V-ed (3φ)</b>	<b>Continuous be being + V-ed (3φ)</b>	<b>Perfect have been + V-ed (3φ)</b>
<b>Present</b>	The letter <i>is written</i>	The letter <i>is being written</i> now	The letter <i>has been written</i>
<b>Past</b>	The letter <i>was written</i>	The letter <i>was being written</i> when you called	He said that the letter <i>had not been written</i> yet
<b>Future</b>	The letter <i>will be written</i>		The letter <i>will have been written</i> by 5 o'clock

## PRONOUNS

<b>особові</b>	I      you    he      she    it      we      you    they me    you    him    her    it      us      you    them
<b>присвійні</b>	my    your    his      her    its      our    your    their mine   yours   his      hers   its      ours   yours   theirs
<b>зворотні та підсилювальні</b>	myself, yourself, himself, herself, itself, ourselves, yourselves, themselves
<b>взаємні</b>	each other, one another
<b>вказівні</b>	this (these), that (those), such, the same
<b>питальні</b>	who, whom, whose, what, which
<b>відносні та з'єднувальні</b>	who, whom, whose, what, which, that
<b>невизначені</b>	some, any, one, all, each, every, other, another, both, many, much, few, little, either, no, none, neither



## FUNCTIONS OF MODAL VERBS AND EXPRESSIONS

USE	PRESENT/FUTURE	PAST
Ability	<p>He <b>can</b> read Arabic.</p> <p>She's <b>able to</b> run a marathon</p>	<p>He <b>could/was able to</b> read Arabic when he was four (<i>дія, що повторюється – здібність у минулому</i>).</p> <p>He <b>was able to</b> escape (<i>одинична дія</i>)</p>
Possibility	<p>He <b>can</b> win the race. (<i>90 % впевненості.</i>)</p> <p>They <b>could</b> still be at school. (<i>50 % впевненості; можливо, вони ще у школі.</i>)</p> <p>Tom <b>may</b> be studying in his room. (<i>може бути; 50 % впевненості; можливо, він ще навчається.</i>)</p> <p>He <b>might</b> want some more food. (<i>40 % впевненості; можливо, він бажає ще поїсти.</i>)</p> <p><b>It's likely that</b> he will arrive tonight.</p> <p><b>He is likely to</b> arrive tonight</p>	<p>She <b>could have</b> been killed in the car crash. (<i>На щастя, вона залишилася жива.</i>)</p> <p>He <b>may have</b> spoken to Jenny yesterday. (<i>Можливо, він говорив з Дженні.</i>)</p> <p>He <b>might have</b> forgotten. (<i>Можливо, він забув.</i>)</p> <p><b>It was likely that</b> he had arrived the day before.</p> <p><b>He was likely to</b> have arrived the day before</p>
Probability	<p>They <b>will</b> be home soon. (<i>100 % впевненості; передбачення.</i>)</p> <p>Greg <b>should</b> win easily. (<i>90 % впевненості; він переможе без зусиль; лише до майбутнього.</i>)</p> <p>They <b>ought to</b> be home by now. (<i>90 % впевненість; напевно, вони будуть удома.</i>)</p>	<p>He <b>should have</b> received his prize by now. (<i>На цей час він, можливо, вже його одержав.</i>)</p> <p>They <b>ought to have</b> arrived an hour ago. (<i>Напевно, вони вже приїхали.</i>)</p>

Logical assumption	<p>She <b>must</b> be working. (90 % впевненості; я впевнений, вона ще працює.)</p> <p>She <b>can't</b> be over forty. (Я впевнений, що їй не більше як сорок років.)</p> <p>He <b>couldn't</b> be at work (Я не думаю, що він на роботі.)</p>	<p>She <b>must have</b> been working. (Я впевнений, що вона працювала.)</p> <p>She <b>can't have</b> stolen the money. (Я впевнений, що вона не крада грошей.)</p> <p>He <b>couldn't have</b> been at work yesterday. (Я не думаю, що він був на роботі вчора.)</p>
Permission	<p>You <b>can/can't</b> borrow my car. (дозвіл або відмова; неформальний.)</p> <p><b>Could</b> I use your phone? (більш ввічливе; запит дозволу.)</p> <p>You <b>may</b> use the phone. (формальне; надання дозволу.)</p> <p><b>Might</b> I speak to Mr Jones, please? (більш формальне; запит дозволу.)</p> <p>I'm afraid you <b>can't/mustn't</b> see the patient. (неформальне; відмова.)</p> <p>Children <b>may not</b> be left unaccompanied. (формальне; відмова – письмове повідомлення.)</p>	<p>He <b>wasn't allowed to/couldn't</b> cross the border.</p> <p>He <b>was allowed to</b> enter the country (not: <del>could</del>)</p>
Necessity	<p>I <b>must</b> buy a new jacket. (Я так вважаю.)</p> <p>He <b>has to</b> put some petrol in the car. (необхідність згідно з зовнішніми обставинами для того, хто говорить.)</p> <p>I've <b>got to</b> go to the bank now. (неформальне.)</p> <p>My car <b>needs</b> repairing. <u>or</u> My car <b>needs to</b> be repaired. (це необхідно.)</p> <p>They <b>don't have to/don't need to/needn't</b> come if they don't want to. (відсутність необхідності.)</p>	<p>I <b>had to</b> buy a new jacket. (Я повинен був.)</p> <p>Since his car was being repaired he <b>had to</b> go to York by train.</p> <p>I <b>had to</b> go to the bank yesterday.</p> <p>My car <b>needed</b> repairing. <u>or</u> My car <b>needed to</b> be repaired. (це було необхідно.)</p> <p>She <b>didn't have to</b> go. (відсутність необхідності.)</p>

	<p>I <b>ought to</b> get my hair cut. (<i>це необхідно.</i>)</p>	<p>He <b>needn't have</b> worn such heavy clothes. (<i>Йому можна було не одягати такі важкі речі, але він це зробив.</i>)</p> <p>She <b>didn't need to/didn't have to</b> buy any apples. (<i>Їй не треба було купувати яблука і вона їх не купила.</i>)</p>
Advice	<p>You <b>should</b> drink more water. (<i>загальна порада; я раджу вам.</i>)</p> <p>You <b>ought to</b> respect the elderly. (<i>я раджу вам; більшість людей так вважає.</i>)</p> <p>You <b>had better</b> finish it. (<i>це гарна ідея; порада щодо певної ситуації.</i>)</p> <p><b>Shall I</b> buy that car? (<i>запит поради.</i>)</p>	<p>You <b>should have</b> gone to bed earlier last night. (<i>але ви цього не зробили.</i>)</p> <p>He <b>ought to have</b> seen a doctor earlier. (<i>але він цього не зробив.</i>)</p> <p>It <b>would have been better</b> if you had finished it yesterday. (<i>але ви цього не зробили.</i>)</p>
Criticism	<p>You <b>could</b> at least help me</p>	<p>You <b>could have</b> at least helped me last night.</p> <p>They <b>should have</b> tried harder. (<i>але вони цього не зробили.</i>)</p> <p>You <b>ought to have</b> behaved yourself yesterday. (<i>Було б добре це зробити, але ви цього не зробили.</i>)</p>
Obligation	<p>I <b>must</b> go on a diet. (<i>я повинен; я так вважаю.</i>)</p> <p>I <b>have to</b> go on a diet. (<i>я повинен; так сказав лікар.</i>)</p> <p>We <b>ought to</b> help the poor. (<i>це добре, але люди не завжди це роблять.</i>)</p>	<p>I <b>had to</b> go on a diet a month ago.</p> <p>I <b>had to</b> go on a diet a month ago</p>
Requests	<p><b>Can I</b> borrow your book? (<i>неформальне.</i>)</p> <p><b>Could I</b> borrow your book? (<i>ввічливо.</i>)</p>	

	<p><b>May I</b> have a cup of coffee, please? (формальне.)</p> <p><b>Might I</b> use your phone? (дуже формальне.)</p> <p><b>Will you</b> phone Jane tonight? (дружнє.)</p> <p><b>Would you mind</b> sending this fax? (ввічливе.)</p>	
Offers	<p><b>Can I/we</b> do anything for you? (неформальне.)</p> <p><b>Shall I/we</b> do it for you? (формальне.)</p> <p><b>Would you like me</b> to help you?</p>	
Suggestions	<p><b>Shall</b> we dance?</p> <p><b>I/We can</b> go now if you like.</p> <p><b>We could</b> leave if you want</p>	He <b>could have</b> consulted a lawyer
Prohibition	<p>You <b>can't</b> smoke there. (вам не дозволено.)</p> <p>You <b>mustn't</b> smoke there. (це заборонено.)</p> <p>You <b>may not</b> smoke there. (формальне.)</p>	They <b>couldn't</b> smoke there. (їм не було дозволено.)
Duty	<p>Everyone <b>must</b> obey the law.</p> <p>People <b>ought to</b> be more tolerant. (це добре, але вони не завжди це роблять.)</p>	<p>All the villagers <b>had to</b> obey the law.</p> <p>He <b>ought to</b> have been more tolerant. (це було добре, але вони цього не зробили.)</p>

## USE OF PREPOSITIONS AFTER WORDS AND EXPRESSIONS

<b>afraid of</b>	Are you <i>afraid of</i> spiders?
<b>agree with</b>  <b>agree about</b> <b>agree on</b> <b>agree to</b>	I entirely <i>agree with</i> you. He left the firm because he didn't <i>agree with</i> their sales policy. We <i>agree about</i> most things. Let's try to <i>agree on</i> a date. I'll <i>agree to</i> your suggestion if you lower the price
<b>arrive at (in)</b>	What time do we <i>arrive at</i> Cardiff? When did you <i>arrive in</i> England?
<b>depend on</b> <b>independent of</b>	We may play football – it <i>depends on</i> the weather
<b>die of (from)</b>	More people <i>died of</i> flu in 1919 than were killed in this war. A week after the accident he <i>died from</i> his injuries
<b>divide into</b>	The book <i>is divided into</i> three parts
<b>drive into</b>	Granny <i>drove into</i> a tree again yesterday
<b>explain smth to smb</b>	Could you <i>explain</i> this rule <i>to</i> me?
<b>get in (to), out of</b> <b>(car, taxi, small boat)</b>	When I <i>got into</i> my car, I found the radio had been stolen
<b>get on (to), off (train, plane, bus, ship, bike, horse)</b>	We'll <i>be getting off</i> the train in ten minutes
<b>impressed with/by</b>	I'm very <i>impressed with/by</i> your work
<b>interest / interested in</b>	When did your <i>interest in</i> social work begin? Not many people <i>are interested in</i> grammar
<b>(a) lack of, (to) lack</b>	<i>Lack of</i> time prevented me from writing. Your mother <i>lacks</i> tact
<b>laugh at</b>	I hate being <i>laughed at</i>
<b>listen to</b>	If you don't <i>listen to</i> people, they won't listen to you
<b>look at</b> <b>look after</b> <b>look for</b>	Stop <i>looking at</i> me like that. Thanks for <i>looking after</i> me when I was ill. Can you help me <i>look for</i> my keys?
<b>operate on</b>	They <i>operated on</i> her yesterday evening

<b>pay for</b>	Excuse me, sir. You haven't <i>paid for</i> your drink
<b>pleased with smb</b> <b>pleased with/about/at smth</b>	The boss is very <i>pleased with</i> you. I wasn't very <i>pleased with/about/at</i> my exam results
<b>proof of</b>	I want <i>proof of</i> your love. Lend me some money
<b>reason for (not of)</b>	Nobody knows the <i>reason for</i> the accident
<b>remind of</b>	She <i>reminds me of</i> a girl I was at school with
<b>responsible/responsibility for</b>	Who's <i>responsible for</i> the shopping this week?
<b>run into (= meet)</b>	I <i>ran into</i> Philip at Victoria Station this morning
<b>search</b> <b>search for (= look for)</b>	They <i>searched</i> everybody's luggage. The customs were <i>searching for</i> drugs at the airport
<b>shocked at/by</b>	I was terribly <i>shocked at/by</i> the news of Peter's accident
<b>sorry about</b> <b>sorry for/about</b>	I'm <i>sorry about</i> your exam results. I'm <i>sorry for/about</i> breaking your window
<b>speak to/with</b>	Could I <i>speak to/with</i> your father for a moment?
<b>surprised at/by</b>	Everybody was <i>surprised at/by</i> the weather
<b>think of/about</b>	I'm <i>thinking of/about</i> studying medicine
<b>translate into (not in)</b>	Could <i>translate this into</i> Greek for me?

## BRITISH AND AMERICAN ENGLISH

<i>British English</i>	<i>American English</i>	<i>Ukrainian Equivalent</i>
advertisement	commercial	реклама (на телебаченні)
air host(ess)	flight attendant	стюард(еса)
anti-clockwise	counterclockwise	проти годинникової стрілки
autumn	fall	осінь
banknote	bill	банкнота
barrister	lawyer, attorney	адвокат
bath	bathtub	ванна
bill	check	рахунок
booking office	ticket office	залізнична каса
biscuit	cookie	печиво
blinds (for windows)	shades	жалюзі
carriage	car	вагон
cash dispenser	ATM (automatic teller machine)	банкомат
cashier	teller	касир
centre of the city	downtown	центр міста
chair	department	кафедра (у закладі вищої освіти)
chemist's	drugstore, pharmacy	аптека
chips	French fries	смажена картопля
cinema	movie theater	кінотеатр
clever	smart	кмітливий
coach	bus	туристичний автобус
company	corporation	крупна компанія
cooker, oven	stove	кухонна плита
country	nation	країна
crossroads	intersection	переїзд, перехрестя
cul-de-sac	dead end	тупик
current account	checking account	поточний рахунок у банку
dinner jacket	tuxedo	смокінг
doctor	physician	лікар
double track	double line	двоколійна залізниця

draughts	checkers	шашки
driver	engineman	машиніст
dust bin	garbage can	ящик для сміття
enquiry office	information bureau	довідкове бюро
faculty	department	факультет
flat	apartment	квартира
form	grade	клас (у школі)
fortnight	two weeks	два тижні
full stop	period	крапка
goods shed	freight house	товарний склад
government, cabinet	administration	уряд
ground floor	first floor	перший поверх
the High Street	Main Street	головна вулиця міста
on holiday	on vacation	у відпустці
lend	loan	позичати
lift	elevator	ліфт
liquidizer	blender	міксер
lorry	truck	вантажівка
Ltd. (limited)	Inc. (incorporated)	ТОВ
luggage	baggage	багаж
main road	highway	шосе
pavement	sidewalk	тротуар
petrol	gasoline, gas	бензин
primary school	elementary school	початкова школа
post code	zip code	поштовий індекс
queue	line	черга
railway	railroad	залізниця
rolling stock	equipment	рухомий склад
rubber	eraser	гумка
secondary school	high school	середня школа
shop	store	магазин
shopping centre	mall	торговельний центр
shunting	switching	маневри
sleepers	railroad ties	шпали



subway	pedestrian underpass	підземний перехід
thousand million	billion	мільярд
timber	lumber	деревина
toilet	bathroom, restroom	туалет
tram	street car	трамвай
trousers	pants, slacks	штани
underground, tube	subway	метро
zebra (pedestrian)	cross walk	пішохідний перехід
crossing		

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## TECHNICAL ENGLISH FOR RAILWAY STUDENTS

Частина 1

Відповідальний за випуск Ель Кассем О. В.

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