

**АНГЛІЙСЬКА МОВА
ДЛЯ СТУДЕНТІВ
ЗАЛІЗНИЧНИХ ВУЗІВ**

Підручник

Частина 1

Харків – 2017



**МІНІСТЕРСТВО ОСВІТИ І НАУКИ
УКРАЇНИ**

**УКРАЇНСЬКИЙ ДЕРЖАВНИЙ
УНІВЕРСИТЕТ ЗАЛІЗНИЧНОГО
ТРАНСПОРТУ**

**АНГЛІЙСЬКА МОВА
ДЛЯ СТУДЕНТІВ
ЗАЛІЗНИЧНИХ ВУЗІВ**

Підручник

Частина 1

Харків – 2017

УДК 811.111(75)

ББК 81.2я7

А 647

Рекомендовано вченою радою Українського державного університету залізничного транспорту як підручник (витяг з протоколу № 8 від 29 листопада 2016 р.)

Рецензенти:

професор, академік АН ВШ України І. С. Шевченко
(ХНУ ім. В. Н. Каразіна),
професори В. П. Сімонок (НЮО ім. Ярослава Мудрого),
Л. С. Піхтовнікова (ХНТУСГ ім. Петра Василенка)

Авторський колектив:

С. М. Донець, О. В. Ель-Кассем, Л. І. Золотаревська,
В. М. Михайленко, О. П. Фіщенко

Англійська мова для студентів залізничних вузів: Підручник
А 647 / С. М. Донець, О. В. Ель Кассем, Л. І. Золотаревська та ін. –
Харків: УкрДУЗТ, 2017. – Ч. 1. – 154 с.

ISBN 978-617-654-067-0

Підручник складено відповідно до програми з іноземних мов для немовних вузів. Мета підручника – підготувати майбутніх спеціалістів залізничного транспорту до професійно-орієнтованого усного та письмового спілкування.

Ефективне оволодіння мовою забезпечується системою комунікативних вправ, що стимулюють інтерес студентів та їх творчу активність. Текстовий матеріал підручника дає багату інформацію стосовно історії, найважливіших аспектів роботи та тенденцій розвитку залізниць як України, так і інших країн світу. Тексти складені за сучасними матеріалами спеціалізованих британських і американських періодичних видань, а саме: *International Railway Journal*, *European Rail Outlook*, *Railway Gazette* та *Railvolution*.

Велика увага приділяється вивченню граматики як основи розуміння та мовлення англійською мовою.

Перша частина рекомендується як базовий курс для студентів вищих та середніх навчальних закладів залізничного транспорту на першому році навчання. Може бути використаний також тими, хто має технічну освіту і бажає самостійно вдосколювати свої навички оволодіння англійською мовою.

УДК 811.111(75)

ББК 81.2я7

ISBN 978-617-654-067-0

© Український державний університет
залізничного транспорту, 2017.

Підручник

Донець Світлана Михайлівна,
Ель-Кассем Олена Володимирівна,
Золотаревська Лада Ігорівна
та ін.

АНГЛІЙСЬКА МОВА
ДЛЯ СТУДЕНТІВ
ЗАЛІЗНИЧНИХ ВУЗІВ

Підручник

Частина 1

Відповідальний за випуск Ель Кассем О. В.

Редактор Третьякова К. А.

Підписано до друку 10.11.16 р.

Формат паперу 60x84 1/16. Папір писальний.

Умовн.-друк.арк. 6,50. Тираж 100. Замовлення №

Видавець та виготовлювач Українська державна академія залізничного транспорту,
61050, Харків-50, майдан Фейербаха, 7.
Свідоцтво суб'єкта видавничої справи ДК № 2874 від 12.06.2007 р.

CONTENTS

Unit 1. <i>Grammar</i> sentences with the verbs <i>to be</i> , <i>to have</i> ; construction <i>there+to be</i> ; degrees of comparison of adjectives and adverbs; countable and uncountable nouns; plural and singular; indefinite (simple) tense; <i>Text</i> From the History of Railways: 200 Years of Progress; <i>Word Building</i> -er (-or), -ion (-sion, -tion, -ation), -ist, -ant (-ent), -able (-ible)	4
Unit 2. <i>Grammar</i> possessive case of a noun; articles; imperative sentences; prepositions of time and place; questions; indefinite (simple) tense in the passive; modal verbs <i>can</i> , <i>may</i> , <i>must</i> and their equivalents; <i>Text</i> Railway Traffic Operation; <i>Supplementary text A</i> : Virtual Rail for Staff Training; <i>Supplementary text B</i> : Engineering; <i>Word Building</i> -ure (-ture), -ment, -ness; -less, -ful, -ly	34
Unit 3. <i>Grammar</i> continuous tense; present participle; pronouns; the use of <i>it</i> ; numerals; <i>Text</i> Railroad Track; <i>Supplementary text</i> Unusual Railways; <i>It's interesting to know</i> Around the World: Track Innovations; <i>Word Building</i> -ity, -ty, -ship; -ous, -ive, -y; -ate, -en	66
Unit 4. <i>Grammar</i> perfect tense; perfect continuous tense; past participle; pronoun <i>one</i> ; <i>Text</i> Underground Railways; <i>Supplementary text A</i> : Light Rail as a Modern Solution for Large Cities; <i>Supplementary text B</i> : Kharkiv Underground; <i>It's interesting to know</i> News in Brief about World Metros; <i>Word Building</i> -ic, -al, -an; -age, -th, -ee; -ize, -(i)fy; en- (em-)	94
Unit 5. <i>Grammar</i> sequence of tenses; indirect speech; pronouns <i>some</i> , <i>any</i> , <i>no</i> and their derivatives; expressions of quantity; <i>Text</i> Railway Construction: Tunnels and Bridges; <i>Supplementary texts A</i> : Various Types of Passenger Stock; <i>Supplementary text B</i> : Freight Cars and Containers; <i>Supplementary text C</i> : Transatlantic Tunnel; <i>Supplementary text D</i> : Russia Proposes Bering Strait Tunnel; <i>Word Building</i> trans-, inter-, re-, under-, sub-; -ary, -ar, -ish; -dom, -hood	123
Appendix	150

UNIT 1

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

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

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

READING RULES

a	e	i, y	u	o
відкритий склад (I)				
[ei] make	[i:] tree	[ai] lie, cry	[ju] duke	[oo] note
закритий склад (II)				
[æ] cat	[e] bed	[i] bit, mystery	[ʊ], [ʌ] put, cut	[ɒ] dog

Exercise 1. Read the following words.

1. Blame, pale, mate, sake, make, fat, van, sane, name, bad, late, ale, plan, stamp, lad, fame, sand, lamp, man, ape, wake, mad, gate, gave, take, sad, came, behave, amaze, same, dam.

2. Eve, me, net, lend, bet, be, left, let, best, slept, met, sea, mete, spend, Pete, eke, men, fee, red, below, desire, degree, express.

3. My, size, tip, style, fit, type, time, system, mine, fine, side, lift, stick, bye, pit-stop, dive, tin, glide, write, gin, miss, pine, pipeline, sin, tint, sink, hide, which, why, write, mystery, virus, typist.

4. Mute, nude, hut, but, cut, mud, use, dust, fuse, tune, gun, cup, stuff, due, tube, cute, dumb, hue, sue, shut, Dutch, jump, shy, fun, duke, during, furious, refuse, curious, duty.

5. So, no, go, smoke, cost, stone, sole, zone, lot, stop, not, on, dome, scope, sock, vote, note, spoke, alone, rock, role, bottle, wrote, joke.

[oo] Oh, no, don't go home alone.

Nobody knows how lonely the road is.

[i:] A sailor went to sea to see what he could see.

But all he could see was sea, sea, sea.

GRAMMAR

Sentences with the Verb *to be* (Речення з дієсловом *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 2. Make the sentences negative and interrogative, translate them.

1. He is a well-known scientist. 2. They are at the lecture. 3. It's all over now. 4. We were friends many years ago. 5. She will be busy tomorrow. 6. My grandfather was a railwayman. 7. It was unusually warm yesterday. 8. The theme of the congress is 'High-Speed Railways'.

Exercise 3. Say the following sentences in the Past and Future Indefinite and add the appropriate time guide (*yesterday, 2 days ago, tomorrow, next week, last month, in a year, tonight, when I was a child, etc.*)

1. Victor is free tonight. 2. John is in America now. 3. I am not very busy this week. 4. He isn't in the mood to talk. 5. The child is ten years old. 6. My younger brother is fond of football. 7. The children are at school. 8. We are first-year students. 9. It isn't cold. 10. What is the weather like today?

Exercise 4. Object to the sentence according to the model.

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

I hear it will be cold tomorrow. – *Nothing of the kind. It won't. 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.

Exercise 5. 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, useful) in our country? 13. You / busy tomorrow? 14. How old / you?

Exercise 6. 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 7. 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. Ви були у Криму минулого літа?
11. Він буде в університеті завтра?

Sentences with the Verb *to have* (*have got*) (Речення з дієсловом *to have* (*have got*))

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

Дієслова *have* та *have got* використовуються майже однаково (*have got* лише у теперішньому часі та у 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 8. Work in pairs. Ask and answer questions as in the model.

Model: Do you have a car? – Yes, I do.

Have you got a car? – No, I haven't.

Ask your partner about the following: a camera, a computer, a bicycle, a credit card, brothers and sisters, his parents/a country house, his sister/a car, his brother/a motorbike, a mobile phone.

Exercise 9. Make these sentences negative.

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

Exercise 10. 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 Academy ... 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 + to be*)

Зворот *there + to be* має значення дієслів *є, знаходиться, існує*. Переклад починається з кінця речення (обставини місця) або з присудка, при відсутності обставини.

PRESENT SIMPLE	PAST SIMPLE	FUTURE SIMPLE
<p><i>There is</i> a book on the shelf. <i>There are</i> (some) books on the shelf. На полиці є книга (книги).</p>	<p><i>There was</i> a mistake in my paper. <i>There were</i> (some) mistakes in my paper. У моїй роботі була помилка (були помилки).</p>	<p><i>There will be</i> a new show on TV next week. Наступного тижня по телевізору буде нове шоу.</p>

INTERROGATIVE		
<p>Is there a book on the shelf? -Yes, there is (there are some). Are there (any) books on the shelf? -No, there is not (there are not any).</p>	<p>Was there a mistake in your paper? -Yes, there was (there were some). Were there (any) mistakes in your paper? -No, there was not (there were not any).</p>	<p>Will there be a new show on TV next week? -Yes, there will be. -No, there won't be.</p>
NEGATIVE		
<p>There is no (isn't a) book on the shelf. There are no (not any) books on the shelf.</p>	<p>There was no (wasn't a) mistake in my paper. There were no (not any) mistakes in my paper.</p>	<p>There will be no show on TV next week.</p>

Примітки: 1. Зворот *there + to be* вказує на існування чогось, що не було раніше згадано у певному місці. Якщо йдеться про вже відомі предмети, то зворот *there + to be* не використовується. 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* можливо вживання дієслів *exist* (існувати), *appear* (з'являтися) та модальних дієслів (*can, must, should, may*).

There exist special-type vehicles for monorails. – Існують спеціальні вагони для монорейкових доріг.

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

There must be some way out. – Повинен бути якийсь вихід.

3. При переліченні дієслово *to be* завжди узгоджується за числом з тим предметом, що стоїть безпосередньо за ним.

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

Exercise 11. Translate the sentences.

1. There are a lot of English books and dictionaries in our library.
2. There is no place like home.
3. There will be some relatives at our

wedding. 4. There exist many interesting books on this subject. 5. There stands a new house at the corner of the street. 6. There may be many ways of solving this problem. 7. There were many children in the street walking to school with flowers in their hands. 8. There is a wide network of railways in our country. 9. Without transportation there could be no civilization. 10. There were no mistakes in her test paper.

Exercise 12. Say these sentences in the Past and Future Simple.

1. There are twelve students in our group. 2. There is a letter for him on the table. 3. There is an underground station nearby. 4. Is there anything I can do for you? 5. There is no bread left. 6. There is nothing to add. 7. There is some flour on the shelf. 8. There are different sources of energy.

Exercise 13. 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 Kiev. 11. When he explained everything, ... a long pause. 12. ... any milk left?

Exercise 14. 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 Academy 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 15. Change the sentences according to the model.

Model: He has a TV set in his room. – There is a TV set in his room.

1. She has a few English books in her library. 2. The list includes only volunteers. 3. She had a message in her e-mail. 4. They have no conveniences in their country house. 5. I had no money left on my account. 6. He didn't have any furniture in his flat. 7. I have some facts to prove it in my report. 8. We'll have a new seminar next week.

Exercise 16. 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 '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 17. Translate the sentences.

1. У цьому журналі є цікаві статті про історію залізниць України. 2. У нашому офісі буде телефон через 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 вашій академії? – У нашій академії п'ять факультетів. 7. У нас залишився хліб? – Так, небагато. 8. У нашому університеті дуже гарна лабораторія вагонів. 9. Існують різні види шкіл.

Degrees of Comparison of Adjectives and Adverbs

(Ступені порівняння прикметників та прислівників)

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

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

Примітка – деякі прикметники мають дві форми ступенів порівняння, що відрізняються за значенням:

- farther, the farthest (віддалений у просторі)
- far further, the furthest (віддалений у просторі, подальший, додатковий)
- old older, the oldest (старший за віком)
- elder, the eldest (старший за положенням у родині)
- Edinburgh is *farther/further* away than York. – Единбург 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.

Порівняльні сполучники та звороти

<i>as ... as ...</i>	as young as – (такий же) молодий, як as busy as a bee – зайнятий, як бджола
<i>twice as old (as)</i>	удвічі старше (за)
<i>three times as large (as)</i>	утричі більше (ніж)
<i>half the price of = half as much as</i>	удвічі дешевше
<i>half as much (many)</i>	удвічі менше
<i>twice the length of (twice as long as)</i>	у два рази довше
<i>two pages less</i>	на дві сторінки менше
than	younger than ... (молодше за ...)
<i>not so (as) ... as</i> – 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 – більш за все

best of all – більше (краще) за все

at best – у найкращому
випадку

so far so good – поки все гаразд

Примітки: 1. Порівняльний ступінь прикметників може посилюватися за допомогою прислівників *much* та *far*:

much more powerful – набагато міцніший;

far cheaper – набагато (значно) дешевший.

Найвищий ступінь порівняння посилюється 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 проводилась у лабораторії.

3. *Most* без артикля або з неозначеним артиклем перекладається словами *дуже, надто, надзвичайно*:

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

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

Exercise 18. Translate the sentences.

1. Each time we laugh we feel better and more content. 2. She does not work at her English as much as she did last year. 3. Her eyes are as black as coal. 4. It takes less time to do a thing right than to explain why you did it wrong. (*H. Longfellow*) 5. 'We have two ears and only one tongue in order that we may hear more and speak less'. (*Diogenes*) 6. Mercury is used in thermometers because it expands as it gets hotter. 7. The more, the better. As wet as a fish. As heavy as lead. 8. This flat is less comfortable than ours. 9. The more we study, the more we know. The more we know, the more we forget. The more we forget, the less we know. The less we know, the less we forget. The less we forget, the more we know. So why study? 10. The

population of this town will increase sixfold in fewer than ten years.
11. The day yesterday was not so fine as it is today. 12. Good, better, best / Never, never rest / 'til your good is better, / And your better best.

Exercise 19. Give the comparative and superlative degrees of comparison and translate the adjectives.

Model: old – older – the oldest

Expensive, sunny, comfortable, noisy, cheap, dangerous, far, long, nice, little, much, sweet, good, fresh, bad, important, safe, young, near.

Exercise 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 Academy and I think it is one of (*important*) periods in my life. Of course, it is (*difficult*) to study at the Academy than at school. I spend (*much*) of my time at the Academy 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 Academy 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 21. Fill in the gaps with the conjunctions *as* or *than*.

1. Athens is older ... Rome. 2. I don't watch television as much ... you.
3. You get up earlier ... I do. 4. Your friend isn't as clever ... he thinks.
5. France is smaller ... Germany. 6. Mexico isn't as big ... Canada.
7. He can't wait longer ... an hour. 8. He knows physics better ... you.

Exercise 22. 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 8. She got up at 6 a.m. today. I got up at 6.30 a.m. I 9. It is warm today. Tomorrow it will be warm too. Tomorrow it

Exercise 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 Moscow an (*old*) capital city than Kiev? 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?

Think of your own questions and ask your partner three such questions.

Exercise 24. 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. What's (*long*) river in the world? 7. The Everest is (*high*) mountain in the world. It is (*high*) than any other mountain. 8. It was a terrible day. It was (*bad*) day of my life. 9. Which is the (*short*) way to get from the city centre to the Academy? 10. My grandparents had three daughters. My mother was (*young*) of them.

Exercise 25. Translate the sentences with *most* and *mostly* in different meanings.

більшість; велика кількість; найбільш; дуже; головним чином; 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 26. 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 автобусу? 8. Її брат такий же високий, як вона. 9. Ця обручка дешевша за ту. 10. Ми зупинилися у найгіршому готелі. Давайте переїдемо до кращого готелю. 11. Чи не могли б ви порадити менш дорогий ресторан? 12. Чим довше вона говорила, тим менше я розумів.

Exercise 27. Read a post-card, 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 28. Compose questions and give true answers.

*Model: What / good gift / you have ever received? – What is **the best** gift you've ever received?*

1. What / smart person / you have ever known? 2. What / nice place / you have ever seen? 3. What / valuable invention / a man has ever made? 4. What / bad experience / you have ever had? 5. What / interesting book / you have ever read? 6. What / mysterious thing / you have ever heard of?

Exercise 29. Translate the sentences paying attention to different meanings of *as* and *like*.

as: як; у той час 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; щось 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.

**Nouns: Countable and Uncountable
Plural and Singular**

(Зліченні та незліченні іменники.

Однина і множина)

Іменники поділяються на зліченні та незліченні.

Зліченні 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.*

Утворення множини іменників, що закінчуються на:
-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*

Іменники грецького та латинського походження:

<i>basis – bases</i>	<i>focus – foci</i>
<i>analysis – analyses</i>	<i>stimulus – stimuli</i>
<i>axis – axes</i>	<i>radius – radii</i>
<i>crisis – crises</i>	<i>phenomenon – phenomena</i>
<i>phasis – phases</i>	<i>minimum – minima</i>
<i>formula – formulae</i>	<i>maximum – maxima</i>
<i>nucleus – nuclei</i>	<i>datum – data.</i>

Особливі випадки:

<i>a man – men</i>	<i>a goose – geese</i>
<i>a woman – women</i>	<i>a tooth – teeth</i>
<i>a child – children</i>	<i>a foot – feet</i>
<i>a fish – fish</i>	<i>a mouse – mice</i>
<i>a sheep – sheep</i>	<i>a penny – pence</i> (сума грошей)
<i>a deer – deer</i>	<i>It costs 16 pence.</i>
<i>an ox – oxen</i>	Але: <i>pennies</i> (монети)
<i>a person – people</i>	<i>Pennies are made of bronze.</i>

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 та з артиклем *a* (*an*) не вживаються (можливо вживання *the, some*).

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

Незліченні іменники також можуть виділятися 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, можуть вживатися як в однині, так і у 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.

Іменники, які мають у множині додаткове значення:

Однина	Множина
<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 30. Write the nouns in plural if possible. Find ten uncountable nouns.

Flower, umbrella, family, boat, address, foot, health, woman, knife, holiday, city, sandwich, potato, tie, photo, day, datum, date, life, bus, hair, fun, joke, ice, light, ticket, wallet, credit card, air, lighter, laugh, suitcase, sunshine, happiness, branch, label, oil, advice.

Exercise 31. 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 32. 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 33. Choose the correct noun either in singular or in plural.

1. I'm going to buy some new *shoe/shoes*. 2. Martin has got brown *eye/eyes*. 3. Paula has got short black *hair/hairs*. 4. The tourist guide gave us some *information/informations* about the town. 5. We're going to buy some new *chair/chairs*. 6. We're going to buy some new *furniture/furnitures*. 7. It's difficult to get a *work/job* at the moment. 8. We had *lovely weather/a lovely weather* when we were on holiday.

Exercise 34. 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. В неї багато роботи.

Indefinite (Simple) Tense

(Часи групи *Indefinite*)

PRESENT	PAST	FUTURE
<i>I, you, we, they work</i> <i>He, she, it works</i>	<i>worked</i> <i>went</i> (2 форма)	<i>will work</i>

NEGATIVE		
<i>I don't work</i> <i>He, she, it doesn't work</i>	<i>didn't work</i>	<i>will not (won't) work</i>
INTERROGATIVE		
<i>Do you work...?</i> <i>Does he, she, it work...?</i>	<i>Did he work...?</i>	<i>Will you work...?</i>

Present Indefinite (Simple) Tense

Вживається лише для позначення факту здійснення дії у теперішньому часі, не вказуючи на її тривалість або закінченість. Позначає дію, яка відбувається звичайно, регулярно у теперішньому часі або констатує позачасові факти та явища. Часто використовуються 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 35. 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 cereals.

Past Indefinite (Simple) Tense

Вживається 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 вживається у питальних реченнях, що починаються з *when, what time*.

I worked hard and finally won the prize.

When did you see her last?

Exercise 36. Read the verbs paying attention to different pronunciation of the *-ed* suffix.

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

Exercise 37. Name the Past Simple of the following verbs.

Go, help, study, read, ask, give, play, come, fly, begin, get.

Exercise 38. 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

Вживається для позначення майбутніх дій. У сучасній мові допоміжне дієслово *will* застосовується для всіх осіб (але *shall* для першої особи може вживатися 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 39. Make these sentences negative and interrogative.

1. They will live in the country in summer. 2. We will play tennis next weekend. 3. She will study at college next year. 4. They will have a very important match next Saturday. 5. She will leave school in a year.

Exercise 40. Say the sentences in the Past and Future Simple, adding the appropriate time guide. Beforehand, revise the forms of irregular verbs: *come, go, have, read, take, begin, leave, swim, tell, and know.*

1. I usually come to the Academy at nine. 2. He goes to work by metro. 3. I don't often take books from the library. 4. My friend leaves

for Moscow. 5. My son tells me everything. 6. The little boy skates well. 7. The girl learns to dance. 8. He doesn't swim at all. 9. I play tennis every Thursday. 10. We know many English words. 11. She often helps her mother about the house. 12. I study at college.

Exercise 41. 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 the Academy 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. The great Russian poet A.S. Pushkin (*be born*) in 1799. 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 42. 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 43. 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 44. 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 45. 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 46. Translate the sentences.

1. Він працює на заводі. 2. Він вчився у коледжі багато років тому. 3. Вона добре грає у 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 у 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 вчитись. 15. Ми не говорили про це. 16. Вони не живуть у цьому домі. 17. Куди ви їздили минулого літа? 18. Я не бачив його вчора. 19. Їх діти ходять до школи? 20. Ми поїдемо влітку до Москви. 21. Ви підете додому?

READING AND DISCUSSION

Active Vocabulary

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), розроблювати, створювати;
development – *n* розвиток, досягнення, розробка
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 – широко використовуватися
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 – отримати 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 47. 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 48. 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.
--	---

**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, railway is by far the most popular means of travel. 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 backbone¹ 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 organized festivities to commemorate² 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 flagship³ Pendolino train. To better realize 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 18th century. One of the first attempts to use the steam engine for trains was made in 1808 by Richard Trevithick, an English engineer, who demonstrated his

working model in London. This locomotive was looked at with great interest when it ran on a circular track of iron rails. For a shilling the public could travel in a carriage drawn by the steam engine. 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 credited⁴ as the father of steam locomotive.

(4) At about the same time, George Stephenson, an engineer of the coalmine of Killingworth, England, constructed the 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 on the railway and developed an unheard-of speed of 13 mph (21 km/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.

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 29 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 20th century, railway had a monopoly on land transport.

(6) The first two steam locomotives built in Russia were made by the Cherepanovs, father and son, who were skilled mechanics in the Urals (1835). Many people had doubts about the possibility of using steam engines in the Russian winter. In 1837 the first public railway – a 15-mile line between St Petersburg and Tsarskoe Selo was built. In 1891 Trans-Siberian railway construction began which in terms of

construction speed (12 years), length (7500 km), and volume of work completed was the largest in the world. Europe got an access to the Pacific Ocean via Asia.

(7) Since that time many changes have taken place on railways. At present, the total length of the Ukrainian railway system is 22,800 km ranking fourth in the world after Russia, the United States and Canada.

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. Due to computer technologies high-speed trains become more and more ‘intelligent’. They resemble aircraft in design, fully automated operation and speed (the world speed record now is 581 km/h). Advances in rail transportation will make the trains still more powerful and our travel more comfortable with each coming decade.

¹ *backbone* – основа, стержень

² *festivities to commemorate* – свята на честь чого-небудь

³ *flagship* – флагман

⁴ *he can be rightly credited* – його можна по праву назвати

Exercise 49. 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. Thanks to ... Russia was one of the first countries to use steam as 9. 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. The Ukrainian railway system ranks ... in the world. 13. ... technologies will make our trains still more powerful. 14. High-speed trains resemble ... in design, fully automated operation and speed.

Exercise 50. 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 Cherepanovs; a 15-mile line; the length of 7500 km; 22,800 km; 581 km/h, 12 years.

Exercise 51. 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. Who invented the first steam locomotive in Russia? 12. What was the most challenging railway project of the end of the 19th century? 13. Is the ‘golden age’ of railways over? Prove your point of view. 14. What are the main challenges for modern railways? 15. What changes will take place on railways in future? 16. What is the total length of Ukrainian railway system? 17. What is the speed record for modern high-speed trains?

Exercise 52. Make up a short story on one of the suggested topics using word combinations in brackets.

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. The first steam locomotives (*the first attempt to use steam engine; 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*).

Exercise 53. Read the following text and put the linking words on the right in the correct place in each paragraph. The linking words are in the right order.

The Advantages and Disadvantages of Travelling by Train

1. Travelling by train has many advantages. There are no stressful traffic jams, and trains are fast and comfortable. You can use the time in different ways. You can just sit 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.

First of all

Also

For example

Besides

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

CONVERSATIONAL PRACTICE

Exercise 54

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.

WORD BUILDING

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

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

Exercise 55. Translate the following groups of words paying attention to the suffixes:

a) conduct – conductor – conduction; calculate – calculator – calculation; produce – producer – production; excavate – excavator – excavation; conclude – conclusion; load – loader;

b) difference – different; resistance – resistant; existence – existent; efficiency – efficient; permanence – permanent.

Exercise 56. Translate the derivative words and find the root words.

Constructor, exhibition, transporter, demonstrator, demonstration, appearance, connection, limitation, follower, consideration, education, dependant, changeable, breaker, runner, invention, impression, violation.

Exercise 57. Read and translate the words.

Eat – eatable, teach – teachable, understand – understandable, buy – buyable, recommend – recommendable, punish – punishable, read – readable, break – breakable, win – winnable.

Exercise 58

a) 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.

b) 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)?

UNIT 2

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

Text: Railway Traffic Operation

Supplementary text A: Virtual Rail for Staff Training

Supplementary text B: Engineering

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

READING RULES

ГОЛОСНА + r (III)				
a+r	e+r	i, y+r	u+r	o+r
[a:]	[ə:]	[ɜ:]	[ʊ:]	[ɔ:]
<u>far</u>	<u>her</u>	<u>sir</u> , <u>myrtle</u>	<u>fur</u>	<u>nor</u>

Exercise 1

a) read the following words.

Car, north, her, bird, myrtle, turn, sport, verb, first, far, burn, short, stir, sir, thirst, star, merge, dirt, bar, arc, part, sharp, hard, third, harm, serve, service, shirt, skirt, nurse, darling, serf, fir, worker, dark, market, turbine, person, observe, eternal, surplus, surface, furnish, absurd.

b) read the proverbs and think of the corresponding Ukrainian or Russian proverbs.

[ɜ:] An early bird catches the worm.

First come, first served.

As the workman, so is the work.

GRAMMAR

Possessive Case of Nouns

(Присвійний відмінок іменників)

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

- коли йдеться про людей та тварин: *my sister's name, my sisters' 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 фразах, 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 та 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 висловлюється 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 складеним іменником, або рядом визначальних іменників: *the leg of the table* (*the table-leg*), *a world oil demand* (*the world's oil demand*).

Exercise 2. 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 3. 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 4. 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, паровоз Черепанових, у моєї бабусі (вдома), у перукарні, у булочній, діти моєї тітки, життя його батьків.

Exercise 5. Use the Possessive Case if possible.

Model: I stayed at the house of my sister. – I stayed at my sister's house.

1. What is *the name of this village*?
2. Do you like *the colour of this coat*?
3. Do you know *the phone number of Bill*?
4. *The job of my brother* is very interesting.
5. Write your name at *the top of the page*.
6. For me the morning is *the best part of the day*.
7. *The favourite colour of Paula* is blue.
8. When is *the birthday of your mother*?
9. *The house of my parents* isn't very big.
10. *The walls of this house* are very thin.
11. The car stopped at *the end of the street*.
12. Are you going to play *the part of Sylvia* next week?
13. *The manager of the hotel* is on holiday at the moment.

Articles (Артикли)

<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 при узагальненні: <i>Milk is good for kids. (Але: The milk is in the fridge.)</i>
Представники народу, країни: <i>a French woman 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>

Невизначений артикль a (an)	Визначений артикль the	Без артикля
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>
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 даного 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 та 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> (досить), <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>

<i>Невизначений артикль a (an)</i>	<i>Визначений артикль the</i>	<i>Без артикля</i>
	Перед прикметниками у найвищому ступені: <i>He was the smartest of all three brothers.</i>	

Exercise 6. 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 7. 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

(Наказові речення)

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

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

Спонування до дії:

Let	me	read.	Давай я прочитаю.
	him		Нехай він читає.
	her		Нехай вона читає.
	us		Давайте прочитаємо.
	them		Нехай вони читають.
	the student		Нехай студент читає.

Exercise 8. 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 9. Translate the sentences in the Imperative Mood.

1. Їдьте! 2. Не їдьте! 3. Давайте поїдемо! 4. Дайте 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!

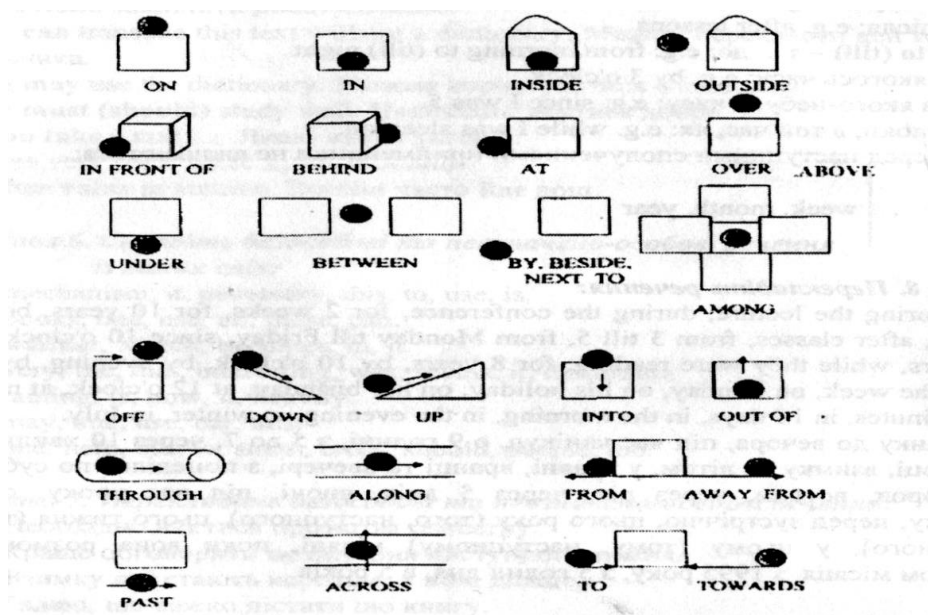
Exercise 10. Translate the sentences using either the Imperative Mood or a more polite form *will you, could you?*

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 (Прийменники часу)

IN	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>)
ON	on Monday, on Sunday morning on the first of September on Christmas Day
AT	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
DURING	during the war, during the meeting (<i>нід час</i>)
FOR	for 5 years, for a week, for several minutes (<i>протягом</i>)
BEFORE	before lunch, before going to bed (<i>перед, до</i>)
AFTER	after lessons (<i>після</i>)
FROM ... TO (TILL)	from morning till night (<i>з ... до ...</i>)
BY	by 2 o'clock (<i>до якогось часу</i>)
SINCE	since my childhood (<i>з якого-небудь часу</i>)
WHILE	while I was reading (<i>поки, у той час</i>)

Prepositions of Place and Direction (Прийменники місця та напрямку)



Exercise 11. Fill in the blanks with prepositions of time and place.

We are students. ... the morning we go ... the Institute. 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 Institute ... 3 o'clock ... the afternoon.

Exercise 12. 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, через 10 хвилин, у 1995 році, взимку та влітку, у травні, вранці та ввечері, з понеділка по суботу, у вівторок, восени, через рік, через 5 днів, вночі, під час уроку, після сніданку, перед зустріччю, цього (того, наступного) року, цього (того, наступного) тижня, у

цьому (тому, наступному) місяці, 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 13. 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 the Crimea 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 14. 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
(Загальні питання)

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
(Спеціальні питання)

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

Alternative Questions
(Альтернативні питання)

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

Tag Questions
(Розділові питання)

<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 15. Give 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 Academy, doesn't he? 8. How long does it take you to get to the Academy? 9. How often do you have your English lessons?

Exercise 16. Fill in the blank spaces with the following words.

<i>what, where, when(2), who, why, whose, how much(2), how many, how, how long</i>
--

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 Academy? – By metro. 12. ... does it take you to clean the room? – Half an hour.

Exercise 17. 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. *The pub* is often the only place for men to meet and to speak. 8. *He* can answer all your questions. 9. The call is *urgent*.

Exercise 18. 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 19. Make tag-questions of these sentences.

1. You do not live in Kiev. 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.

Питання з прийменниками на кінці

Багато дієслів англійської мови вживаються з прийменниками, які зазвичай ставляться у кінці питального речення. При перекладі українською мовою 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 20. 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 ...?*

Exercise 21. Make questions from the statements, asking about the words in italics.

Model: I'm looking at that man. – Who are you looking at?

1. He works for *an insurance company*.
2. I stayed with *some friends*.
3. The pen belongs to *me*.
4. The letter is from *the Tax Office*.
5. I'm worried about *the children*.
6. I'm thinking about *what to cook for supper*.
7. I'm waiting for *the postman*.

Indefinite (Simple) Tense in the Passive

(Часи групи *Indefinite* пасивного стану)

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 випробовує дію на собі.

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

BE + V-ed (Past Participle)	
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 22. 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. The Cherepanovs constructed the first steam locomotive in Russia. – The first Russian locomotive was constructed in the Urals.
3. George Stephenson demonstrated his locomotive in 1829. – Now this locomotive is demonstrated in a London museum.
4. Many changes will take place on railways in the future. – Many changes will be made on railways in

the future. 5. He told them an interesting story. – They were told an interesting story.

Exercise 23. 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 24. 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. I take these books from the library. 5. They robbed the bank last week. 6. They equipped the laboratory with the latest computers. 7. Scientists make wonderful discoveries. 8. Glinka composed the opera 'Ivan Susanin'. 9. A railway line will connect the village with the town. 10. Who wrote this article? 11. A famous architect designed this theatre. 12. The director signed the contract last week. 13. Almost half of mankind speaks Chinese.

Exercise 25. 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 26. Translate the sentences.

1. Його часто посилають до Києва. 2. Телеграму було одержано вчора. 3. Наступного року тут збудують нову станцію метро. 4. Коли повинна бути перекладена ця стаття? 5. Багато нових будинків побудовано минулого року у нашому місті. 6. Це питання буде вирішено наступного тижня. 7. Телеграму відіслали дві години тому. 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 27. 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

(Модальні дієслова *can, may, must* та їх еквіваленти)

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

Present	Past	Future
<i>Необхідність — Повинність — Обов'язок</i> must — have to — be to — should — ought to		
<p><i>I must meet him.</i> – Я повинен його зустріти (категоричне зобов'язання, я так вважаю).</p> <p><i>I have to meet him.</i> – Я повинен його зустріти (мені доводиться, необхідність виконання дії за певних обставин).</p> <p><i>We are to meet at 6.</i> – Ми маємо зустрітися о шостій годині (повинність згідно з планом, розкладом, домовленістю).</p> <p><i>You should (ought to) meet him.</i> – Ти повинен (тобі треба, слід) його зустріти (для виразу порад, рекомендацій).</p>	<p><i>I had to meet him.</i> – Я повинен був (мені довелося) його зустріти.</p> <p><i>I was to meet him.</i> – Я повинен був (передбачалося) його зустріти.</p>	<p><i>I will have to meet him.</i> – Я повинен буду його зустріти.</p>
<i>Здатність — Здібність — Можливість</i> can — be able to		
<p><i>He can swim.</i> – Він може плавати.</p> <p><i>He is able to help you.</i> – Він має змогу тобі допомогти.</p>	<p><i>He could swim.</i> <i>He was able to help you.</i></p>	<p><i>He will be able to help you.</i></p>
<i>Дозвіл — Можливість (Вірогідність)</i> may — be allowed to		
<p><i>You may take it.</i> – Ви можете (вам дозволено) це взяти.</p> <p><i>I am allowed to use the device.</i> – Я маю дозвіл використати цей прилад.</p>	<p><i>I might use the device.</i> <i>I was allowed to leave.</i></p>	<p><i>I will be allowed to use this device.</i></p>

Exercise 28. 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

dance? 6. Can you drive a car? 7. Can you sing? 8. Could you ride a bike when a child? 9. Could you cook when you got married?

Exercise 29. 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 30. 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 31

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 32. Ask permission.

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

Exercise 33. 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 34. 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 35. 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 36. *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 37. Translate the sentences with the structure *one + modal verb*.

Model: *One may suppose ...* . – Можна припустити

One must know... . – Слід знати

One can hear... . – Можна почути

1. One can hear that railways are no more competitive on the global transport market.
2. One must understand that the work of the engine driver requires much experience.
3. One can expect that the average speed of trains will be increased.
4. At the exhibition one could see the latest track-laying machine.
5. One must remember that these rules are very strict.

Exercise 38. 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. Тобі треба 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 питання. 15. Ти не можеш сьогодні піти в кіно. 16. Тобі слід поговорити з його батьком. 17. Я зможу їх побачити завтра. 18. Він повинен буде зробити доповідь на конференцію. 19. Йому доводиться зараз багато працювати.

READING AND DISCUSSION

Active Vocabulary

operation – *n* управління, експлуатація; *put into operation* – вводити в дію (експлуатацію); *operate* – *v* керувати, 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* керувати (залізницею, потягом)

break up (trains) – розчіпляти, розформувати (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* – скласти 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* керування; *manage* – *v* керувати
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, залізнична 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* проектувати, конструювати
traffic density – густина 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(ся), підтверджувати(ся)
consist – *n* склад; *v (of)* складатися (з)
contribute (to) – *v* допомагати, сприяти

Exercise 39. 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 *extra-ordinary* 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 40. 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 utilizes the (*latest, late, lately*) computer technology.

Exercise 41. Use one of the following suffixes to form derivative nouns from the verbs. There may be no suffix or change of root vowels as well.

Arrange, complicate, require, train, handle, delay, run, arrive, depart, manage, load, assign, govern, admit, utilize, 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 realize 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*¹ 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 *Centralized 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 lever² for each switch and signal. When a train enters the controlled section, a 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 interlocked³, 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 utilizes 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 panel⁴. 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 situation, all train movements being set by electronic machines.

(8) Telecommunications devices such as the telephone, radio and television are widely used in traffic operation. Thanks to the radio, the danger of train collisions has been greatly decreased. The locomotive drivers can communicate with wayside stations⁵ 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) The age of computers and cyber information systems brings about a renewal⁶ 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 *wreck trains* – ремонтні потяги

² *a separate lever* – окремий важіль

³ *interlocked* – зчеплені, замкнуті

⁴ *the large wall-mounted train location panel* – велика панель диспетчерської централізації, що монтується на стіні

⁵ *wayside stations* – проміжні станції

⁶ *brings about a renewal* – приводить до відновлення

Exercise 42. 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 of 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 43. 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 44. 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 45. Choose one or two of the suggested topics and make up a story based on the information from the text. Make a good oral presentation of your story.

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

Exercise 46. What associations do the words *Virtual Reality* trigger in your head immediately? Read the text and be ready to discuss it. Before reading ponder upon the following two questions: *How do simulators assist in staff training?* and *What are the features of the latest simulators?*

Supplementary Text A

VIRTUAL RAIL FOR STAFF TRAINING

(1) Virtual Reality (VR) is presently 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 color 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. 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 affects.

Exercise 47

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

(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!

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.

Exercise 48. 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 book tickets in advance.
- You get a taxi.
- You arrive at the railway station.
- You look for a porter to take care of your luggage.
- You go to the information board to know about the platform and the track of train departure.
- The conductor checks your tickets and helps you with your seat and luggage.
- You find your coach and get on the train.
- The conductor announces ‘all aboard please, the train leaves in 5 minutes’.
- When on board the train, the conductor takes care of passengers: brings bedclothes, offers tea or coffee.
- You find your compartment and your berth.

CONVERSATIONAL PRACTICE

Exercise 49. 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 50. Read and translate the following pairs of words.

To depart – departure, to please – pleasure, to press – pressure, to seize – seizure, to sign – signature.

Exercise 51. Form the nouns by adding *-ment* and use them in the sentences.

amuse, engage, improve, achieve

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 52. Form adverbs by adding *-ly* if necessary and use them in the sentences.

complete, smooth, gradual, quick, bright

1. The sun was shining ... and we could ... see the mountain.
2. The surface of the table is ... and clean.
3. The bicycle ran ... down the hill.

4. The agronomist spoke about ... increase of wheat crop. 5. ... the clouds covered the sky and it began raining. 6. I have ... forgotten these words. 7. Our school laboratory has a ... collection of plants, which grow in our region.

Exercise 53. Translate the words.

Hopeless, aimless, windowless, meaningless, breathless, moonless nights, thankless task, limitless hatred, classless society, springless seat, priceless treasure, beautiful, masterful, helpful, dutiful, useful, watchful, forgetful, thankful, painful, dreadful, doubtful, fearful.

Exercise 54. Translate the following words using -less or -ful:

а) безсердечний (*heart*), безсмачний (*taste*), безсонний (*sleep*), безглуздий (*sense*), безмовний (*speech*), беззмінний (*change*), безгрішний (*sin*), безжалісний (*pity*), даремний (*use*), безформний (*shape*), без каблуків (*heel*), неродючий (*fruit*);

б) багатий подіями (*event*), чудовий (*wonder*), законний (*law*), сильний (*force*), фатальний (*fate*), успішний (*success*), моложавий (*youth*), повний зневаги (*scorn*), забутливий (*forget*), уважний (*care*), потужний (*power*), довірливий (*trust*), повний жаху (*fear*).

Exercise 55. Read and translate the words.

Dark – darkness, cheap – cheapness, bright – brightness, near – nearness, great – greatness, smooth – smoothness, hard – hardness, steady – steadiness, idle – idleness, gentle – gentleness.

UNIT 3

Grammar: Continuous Tense

Present Participle

Pronouns

Use of *It*

Numerals

Text: Railroad Track

Supplementary text: Unusual Railways

It's interesting to know: Around the World: Track Innovations

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

READING RULES

С с	[s]	перед i, e, y	cap <u>a</u> city, ce <u>l</u> l, bi <u>c</u> ycle
	[k]	перед усіма іншими голосними та приголосними	<u>c</u> ome, ex <u>a</u> ct, dire <u>c</u> tion
	[tʃ]	у сполученнях ch, tch	<u>ch</u> arge, wat <u>ch</u>
	[ʃ]	перед сполученнями ial, ient	spe <u>cial</u> , eff <u>icient</u> вкл. <u>ch</u> emistry [k], te <u>ch</u> nique [k], ma <u>ch</u> ine [ʃ]

Exercise 1. Practice the following sounds.

[s]	[k]	[tʃ]	[ʃ]
saucer	can	watch	special
once	cat	fetch	efficient
certain	come	catch	especially
cinema	close	match	commercial
centimetre	cake	patch	crucial
December	describe	chain	sufficient
dance	correct	chess	ancient

Exercise 2. Read the following words and explain the rules of reading.

Chalk, picture, chair, mechanic, machinery, French, teacher, exercise, pencil, clean, nice, ceiling, chemistry, mathematics, actual, black, cent, dance, colour, certainly, clock, watch, catch, children, circular, can, ice, nice, neck, space, pact, face, chin, chest, match, catch, cell, chick, chill, watch, charge, patch, snatch, place, chain, cheap, cigarette, cigar, class, species, specialize, specific, cycle.

GRAMMAR
Continuous Tense
(Часи групи *Continuous*)

	Active be+Present Participle (-ing)	Passive be+being+Past Participle (-ed)
<i>Present</i>	I am discussing a new plan now. He is still discussing a new plan. They are discussing a new plan.	A new plan is being discussed . New plans are being discussed .
<i>Past</i>	He was discussing a new plan when the manager came. They were discussing a new plan during the meeting.	A new plan was being discussed when we came. New plans were being discussed during the meeting.
<i>Future</i>	We will be discussing 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 – admiting, be'gin – begining, pre'fer – prefering (але: 'budget – budgeting, 'enter – entering);*
- 4) *signal – signalling, travell – 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 може використовуватися:

- для висловлення меншої впевненості та офіціальності:

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

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

- для висловлення незадоволення, скарги тощо:

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

Past Continuous Tense

Подовжена дія, що відбувалася у 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 завершилась 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 з *Past Simple*, якщо одна дія здійснювалася на фоні іншої.

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

При переліку подій у минулому вживається *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 у 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.

Зворот *to be going to do smth*

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 через хвилину.

Verbs, used only in *SIMPLE* tenses

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

Exercise 3. Translate the following pairs of sentences defining the tense of the verb in each case.

1. She *prepares* her lessons in the evening every day. – She *is* still *preparing* her lessons. 2. He *worked* hard at his English last term. – He *was working* hard at his English when we *came* to see him. 3. I *am* tired, I *will learn* this rule tomorrow. – I *will be learning* this rule all the morning tomorrow. 4. The work *is* usually *done* in time. – The work *is being done* now, and soon it *will be finished*. 5. The safety system *was installed* two years ago. – The safety system *was being installed* all the day yesterday.

Exercise 4. 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 5

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 6. 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 7. 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 8. 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 9. 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 10. Translate the following sentences.

1. З ким розмовляє ваш товариш? – Він розмовляє з нашим вчителем. 2. Куди ви підете увечері? – Ми підемо до парку. 3. Коли задзвонив телефон, вони обговорювали це питання. 4. О десятій ранку він готувався до екзамену. 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

екзамену. 8. Що будується на цьому березі річки? 9. Ми не знали своїх оцінок, тому що наші контрольні ще перевірялись, 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 вчитель стоїть біля столу. 15. Зараз все більше і більше людей вивчають іноземні мови. 16. Ці студенти зараз вивчають нові слова.

Present Participle (-ing) (Дієприкметник дійсного часу)

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*, а також використовується самостійно у функціях означення та обставини.

<i>Функція</i>	<i>Місце у реченні</i>
Означення	<i>a reading girl</i> (перед означуваним словом) – дівчина, яка читає
Означальний дієприкметниковий зворот	<i>The girl reading a newspaper is our student.</i> (після означуваного слова) – Дівчина, що читає газету, наша студентка.
Обставинний дієприкметниковий зворот	<i>(When, while) Looking through the book she came across the description of this process.</i> (на початку або у кінці речення) – Переглядаючи книгу, вона натрапила на опис цього процесу. (або коли вона переглядала книгу ...)
Входить до складу часів групи <i>Continuous</i>	<i>She is reading an interesting book.</i> (разом з допоміжним дієсловом <i>be</i>) – Вона читає цікаву книгу.
Входить у складне доповнення	<i>They watched the ship approaching 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 11. 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 12. 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 13. Translate the following word combinations paying attention to the Present Participle.

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

Exercise 14

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

while; when; after; by; on; since

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 realize 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 17. 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. При написанні диктанту я зробив декілька помилок. 4. Він розмовляв тихо, бо боявся потурбувати дітей, які спали у сусідній кімнаті. 5. Працюючи з цими інженерами, він дізнався багато цікавого. 6. Слухаючи лекцію професора, я записав декілька питань, які я збирався у нього спитати.

Pronouns (Займенники)

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

Exercise 18. Fill in the gaps with the appropriate pronouns.

1. ... go to our Academy every morning. 2. My friend saw ... yesterday in the cinema. 3. The first train carried freight. But ... also carried passengers. 4. This engineer presented a new project of a railway. ... suggested connecting two cities. 5. ... doesn't work at her English hard. 6. ... took our luggage and went to the station. 7. Our friends like to travel. This year ... have visited many European countries. 8. We're staying at a very nice hotel. ... room is very comfortable. 9. We are going to invite all ... friends to the party. 10. Do you think that most people are happy in ... jobs?

Exercise 19. 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 20. 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. The doctor said that she felt ... much better.

Exercise 21. 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 вправи. 3. Вчора 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. Піди 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*

(Вживання *It*)

1. Замінює згаданий раніше іменник-неістоту та перекладається залежно від його граматичного роду.

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

Де моя книга? – **Вона** на столі.

2. Використовується як підмет чи додаток, перекладається як *це*.

It is a magazine. – Це журнал.

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

3. Використовується як формальний або безособовий підмет (не перекладається).

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)*. Перекладається як *саме, це, як раз*.

It was yesterday when I met her at the concert. – Як раз учора я зустрів її на концерті.

It was in Kiev that I ran into my old friend. – **Саме** у 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 22. 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 23. Paraphrase the following sentences using the emphatic construction *It is (was) ... that (who, which)*.

1. *The Cherepanovs* constructed the first steam locomotive in Russia. 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.

Exercise 24. Complete the sentences. Use *it's + A + to + B*.

A	B
difficult, dangerous, easy , impossible, nice, stupid, easy	see you again, wear, understand him , 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"> - для людей або речей поруч з нами. <i>These shoes over there are mine;</i> - для позначення ситуацій у наступному або майбутньому часі. <i>I'm going to Disneyland this month;</i> - коли знаходимося у місці, про яке говоримо. <i>This room is very untidy. (The speaker is now in the untidy room);</i> - для того, щоб познайомити людей одного з одним або представитись по телефону. <i>'John, this is Ann.'</i> <i>'Hello? This is Pam speaking.'</i> 	<ul style="list-style-type: none"> - для людей або речей, які знаходяться на відстані від нас. <i>That chair over there is broken;</i> - для позначення ситуацій у минулому часі. <i>We had a wonderful Christmas that year;</i> - для того, щоб відіслати до чогось, що згадувалось раніше. <i>'She failed her exams.' 'That's bad';</i> - коли, розмовляючи по телефону, ми запитуємо, хто говорить з нами. <i>'Hello? This is Jo. Who's that speaking?'</i>

Exercise 25. 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 26. 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 27. 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 сподобалось подорожувати. 4. У кімнаті дуже темно і я не бачу, що знаходиться у дальньому кутку. 5. Нам цікаво поговорити з ним. Він вчора повернувся з Англії. 6. Зараз шоста година. Гадаю,

дуже рано будити його. 7. Вам буде приємно подивитись на наше місто. Воно дуже змінилося. 8. Я знаю, що йому важко вчитися 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			

ДРОБИ

<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.

Дії

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

9 - 8 = nine minus eight equals one

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

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

Розміри, виміри

3 m x 4 m - three meters by four meters

5 cm³ - five cubic centimetres

60 mph - sixty miles an hour (per hour)

5 cm² - five square centimetres

50 mpg - fifty miles per (to) the gallon

Номери телефонів, автобусів та ін.

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

Дати

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: 3rd 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

Час

Час до 12⁰⁰ дня позначається – а.т., після 12⁰⁰ дня – р.т.

	<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 28. 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 3rd time; 506 samples; 4,790 magazines; 627 hryvnias; on page 733; by tram 27; on the 12th day;
- 3) the 1st of January; on July the 16th, 1661; on August the 2nd, 2002; at the end of 1789; in early 1990s; on June 18, 1997; on December 31, 1991; on the 8th 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 29. 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 30. 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 та 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 31. 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 32. 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.

READING AND DISCUSSION

Active Vocabulary

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

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

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, впродовж, 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, ставитись 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 33. 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 34. 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 35. 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 stabilize 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*¹. 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 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*² 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 1.43 m – the original gauge of the Stockton & Darlington Railway, adopted as a result of the export of English engineering and rolling stock. However, in Ukraine as well as in other CIS³ countries the gauge is broad (1.5 m). That gauge was finally adopted when the first main line Moscow – St. Petersburg was under construction (1842-1851). 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 points⁴.

(5) *Sleepers* support rails and ballast supports sleepers. Sleepers on most tracks were almost all of wood treated with creosote for longer life. Now concrete⁵ 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 lengths⁶. 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 sound⁷ 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*⁸. 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 rails⁹. 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 250 km/h. Whereas ballastless slab track has higher levels of safety, high precision, low life-cycle cost¹⁰, ease of replacement, and short installation time. Therefore slab track is justly considered to be the track for the future.

¹ *the right-of-way* – смуга відведення

² *road-bed* – земляне полотно

³ *CIS* – the Commonwealth of Independent States (СНД)

⁴ *gauge changeover points* – пункти заміни колісних пар

⁵ *concrete* – бетон

⁶ *lengths* – рейкові пліти

⁷ *clickety-clack sound* – стук коліс

⁸ *slab track* – безбаластна колія на збірних бетонних плитах

⁹ *embedded rails* – вмонтований, замурований

¹⁰ *life-cycle cost* – витрати під час періоду використання

Exercise 36. 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 37. 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 38. Choose one of the topics and make up a short story based on the text. Present it to the group.

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).

Exercise 39. Project:

a) **using Internet or any other source of information find something interesting and new about the construction of railroad track: new kinds of tracks, materials and fastenings. Make a good oral presentation with tables, photos, etc.;**

b) **compare different kinds of rails, sleepers and tracks.;**

c) **imagine that you are a famous designer in the field of railroad construction. Work out your own project of a railway track of the future. Present it in class using tables, drawings etc. You can work in groups.**

Supplementary text
UNUSUAL RAILWAYS

(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*¹ 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 early 1900s there appeared one of the strangest mountain railways in Austria. It was a balloon railway² 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 slide³ 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 streamlined⁴ 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 concept⁵ 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 2000 mph can be theoretically attained.

Not all of the proposals for unconventional railways have found a practical application. But these ideas have made it possible to build modern high-speed transportation systems.

¹ *Gliding railway* – залізниця, заснована на принципі ковзання

² *balloon railway* – залізниця, на якій потяги рухалися за допомогою повітряної кулі

³ *a slide* – тунель повзунок

⁴ *streamlined* – той, який має обтічну форму

⁵ *tube-flight concept* – ідея швидкісного «польоту» у трубі

Exercise 40. Think where the ideas from the text can be used today. Which of the projects has found practical application? Which of them seems the most fantastic (realistic)? Can any of these ideas be possibly used in the future?

Exercise 41. 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		

It's interesting to know...

Around the world: track innovations

India

Composite sleepers¹ developed in India could soon be finding home on steel girder bridges² in Europe. Producers see strong export potential for the fibre reinforced plastic³ (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.

¹ *composite sleepers* – КОМПОЗИТНІ ШПАЛИ

² *girder bridges* – БАЛКОВИЙ МІСТ

³ *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 recycled¹ polyolefins and crumbed tyre rubber² – 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 resistance³, resistance to moisture and electrical conductivity⁴. 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.

¹ *recycled* – ПОВТОРНО ВИКОРИСТАНИЙ

² *crumbed tyre rubber* – ГУМОВА КРИХТА ВІД ШИН

³ *resistance* – ОПІР

⁴ *conductivity* – ПРОВІДНІСТЬ

Exercise 42. Think where we can introduce the above-mentioned innovations in Ukraine. Have you got any innovative ideas?

CONVERSATIONAL PRACTICE

Exercise 43. 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 44

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 nouns by adding –*ship* to the following nouns.

Leader, apprentice, owner, relation, professor, acquaintance, companion, citizen, member, friend, author, clerk, editor.

Exercise 45. 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.

Exercise 46. Form adjectives by adding –*ive* to the verbs and translate them.

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

Exercise 47. Define the nouns from which the following adjectives are formed and translate them.

Desirous, melodious, studious, pompous, murderous, dangerous, spacious, righteous, anxious, religious, joyous, thunderous, famous, mysterious, conscious, nervous, suspicious, jealous, adventurous.

Exercise 48. Translate the verbs.

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

UNIT 4

Grammar: Perfect Tense
 Perfect Continuous Tense
 Past Participle
 Pronoun *One*

Text: Underground Railways

Supplementary text A: Light Rail as a Modern Solution for Large Cities

Supplementary text B: Kharkiv Underground

It's interesting to know: News in Brief about World Metros

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

READING RULES

G g	[dʒ]	перед e, i, y	age, engineer, gym <i>вукл.</i> get [g], give [g]
	[g]	перед приголосними та голосними (крім e, i, y); у кінці слів	great, go, big, dog
	[ŋ]	у сполученні ng	bring, wrong, strong

Exercise 1. Practice the following sounds.

[dʒ]	[g]	[ŋ]
language	gold	sing
generation	bag	thing
algebra	girl	working
original	dog	English
engine	good	king

Exercise 2. Read the words and explain the rules of reading.

Garbage, sing, king, bridge, bag, large, great, song, agronomist, language, go, village, agriculture, college, gauge, large, young, forget, cabbage, gorgeous, engineer, George, Germany, struggle, generation, region, again, grain, engagement, grow, geometry, bring, Google, angry, along, change, gymnasium, refrigerator, girl, original, geologist, gel, gene.

GRAMMAR
Perfect Tense
(Часи групи *Perfect*)

	Active have + Past Participle (-ed)	Passive have + been + Past Participle (-ed)
<i>Present</i>	I have just written the letter. She has already written the letter.	The letter has been written by a secretary. All the letters have been written .
<i>Past</i>	We had written the letter before you came to the office (by 6 o'clock yesterday).	The letter had been written before you came in (by 6 o'clock yesterday).
<i>Future</i>	They will have written the letter by 6 o'clock tomorrow.	The letter will have been written by 6 o'clock tomorrow.

Present Perfect Tense

1. Дія відбулася до теперішнього моменту, час здійснення дії не вказано.

I've met a lot of famous people (before now).

She has written twenty books (up to now).

Якщо вказано час, коли була здійснена дія, вживається тільки *Past Indefinite*.

I lost my key the day before yesterday.

Jim went to Canada in 1999.

2. Дія відображає попередній досвід у чому-небудь (часто з прислівниками *never, ever, lately, recently*).

Have you ever been to China?

We have never had a car.

3. Дія закінчилась у недалекому минулому і має безпосередній результат у теперішньому часі (часто з прислівниками *just, already*, які зазвичай стоять після додаткового дієслова, та *yet*, що стоїть у кінці та вживається тільки у питальних і негативних 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 у минулому та триває у теперішньому (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 скінчились 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 та закінчились до якогось моменту або іншої дії у 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 у майбутньому, що виражається 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 3. 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. 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 its 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 5. 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 6. Complete the sentences with a verb from the box. Use the Present Perfect Tense.

break, buy, ~~finish~~, do, go, go, lose, paint, read, take

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 7. 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 8. 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 9. 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 had just passed a small village. we were driving from our country house. the driver phoned 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 10. 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 11. 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 12. Translate the sentences paying attention to different meanings of *for* and *since*.

for: для; впродовж; за; оскільки; бо

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 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 Moscow and we did not see him *since*. 5. *Since* I can't say anything for sure, I'll make no comments so far.

Exercise 13. 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 Tense

(Часи групи *Perfect Continuous*)

	have + been + Present Participle (-ing)
<i>Present</i>	He has been writing a letter since morning. – Він пише листа зранку.
<i>Past</i>	He had been writing a letter for two hours when I came. – Він писав листа впродовж двох годин до того, як я прийшов.
<i>Future</i>	He will have been writing a letter for two hours when I come. – Він писатиме листа впродовж двох годин перед тим, як я прийду.

Present Perfect Continuous Tense

1. Дії, які почалися у минулому та тільки що закінчились.

*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 у 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 Tense

Дії, що почалися до певного моменту у 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 Tense

Дії, що почнуться до певного моменту у 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 у цьому будинку.*

*Next year I **will have been working** in the company for 30 years. – У наступному році буде 30 років, як я працюю у цій компанії.*

Якщо часи групи Perfect вказують на факт звершення дії, то часи групи Perfect Continuous привертають увагу до тривалості дії.

They have lived in London for 10 years (людина привертає увагу до того, що вони живуть у Лондоні).

They have been living in London for 10 years (людина привертає увагу до того, як довго вони живуть у Лондоні).

Exercise 14. 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 15. 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 16. 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 17. Translate the following sentences.

1. Я ніколи не був у Києві. 2. Я не бачу його з понеділка. 3. Прийшла зима і тепер ми знову будемо часто ходити на ковзанку. 4. Вона була здивована: вона ніколи раніше не бачила стільки квітів. 5. Коли я прокинувся, мати вже встала та 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 уклала 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 у кіно. 11. Статтю ще не написано. 12. Цю книгу буде перекладено до кінця наступного року. 13. Це питання вже вирішено.

Past Participle (-ed)

(Дієприслівник минулого часу)

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*, а також використовується самостійно у функціях означення та обставини.

Функції Past Participle у реченні

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 строгі лінії.
Обставинний дієприкметниковий зворот	<i><u>When built</u>, this house will be the highest in our street.</i> – Коли цей дім збудують, він буде найвищим на нашій вулиці. <i>Metal bars become longer <u>if heated</u>.</i> – Металеві бруси подовжуються, якщо їх нагріти.
Входить до складу всіх часів пасивного стану	<i>That house was <u>built</u> two years ago</i> (після допоміжного дієслова <i>be</i>). – Той дім було збудовано два роки тому.
Входить до складу часів групи <i>Perfect</i>	<i>The construction firm has recently <u>built</u> a house in our street</i> (після допоміжного дієслова <i>have</i>). – Ця будівельна фірма нещодавно збудувала будинок на нашій вулиці.

Exercise 18. 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 19. 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 the 19th century England.

Exercise 20. Compare the pairs of sentences and define the function of participles.

1. The steam locomotive invented by G. 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 21. Read and translate the word combinations paying attention to the Participle.

A

all developed countries;
the apple divided into three parts;
the information obtained recently;

B

книга, яка була залишена вдома;
метод, впроваджений на
виробництві;
стаття, перекладена декількома
мовами;

the railway built between the two towns;	виступ, надрукований у газеті;
help offered by the teacher;	дані, одержані у попередньому тесті;
the lecture delivered by a well-known person;	іспити, складені на минулому тижні;
the research made in the laboratory;	тест, запропонований видатним вченим;
the film shown to the students;	речі, знайдені у шафі;
the letter sent to his parents	експеримент, проведений ретельно

Exercise 22. 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 23. Choose the necessary form of the Participle.

1. We listened to the girl (*singing, sung*) Russian folk songs. 2. We listened to the Russian 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. Read the (*translated, translating*) sentences once more. 12. I picked up the pencil (*lying, lain*) on the floor. 13. Do you know the girl (*playing, played*) in the garden? 14. The (*losing, lost*) book was found at last. 15. Look at the beautiful flowers (*gathering, gathered*) by the children.

Exercise 24. Complete the sentences with participles from the following verbs.

low, 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 25. Translate the following sentences using participles.

1. Вона дала мені книжки, *взяті* у бібліотеці. 2. Я розмовляв з нашим студентом, *який брав участь* у конференції. 3. Викладач відповів на питання, *що поставили* студенти. 4. *Принесений* викладачем журнал був дуже цікавим. 5. *Готуючись* до екзамену, 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 *закритими* дверима. 9. Вона показала мені парасольку, *куплену* у Лондоні. 10. Мені хотілося забути історію, *яку він розповів*.

Pronoun One

(Неозначено-особовий займенник *One*)

• Виражає невизначену особу та перекладається безособовим зворотом.

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.

• Використовується для заміни раніше згаданого іменника для уникнення повторення, 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 26. Translate the following sentences.

1. *One* may say that studying foreign languages is a 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 27. Use the appropriate substitute words instead of italicized 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 by 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 28. A asks B some questions. Use the information in the box to write B's answers. Use *one* in the answers.

<i>B</i> doesn't need a car	<i>B</i> has just had a cup of coffee
<i>B</i> there is a chemist' in Mill road	<i>B</i> can't ride a bicycle
<i>B</i> hasn't got a pen	<i>B</i> hasn't got an umbrella

A: Can you lend me a pen?	B: I'm sorry, I haven't got one.
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,

READING AND DISCUSSION

Active Vocabulary

mean (*meant, meant*) – *v* означати, мати на увазі

average – *adj* середній, середня величина

adult – *adj* дорослий

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

besides – *adv* крім того

cause – *v* спричиняти, приводити 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* іти 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 29. 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 30. 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 31. 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, Russia, Japan, China, and India. About 120 cities worldwide currently have metro networks, carrying more than 150 million

passengers daily. The reason of 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 *Moscow Metro* is the busiest, with 3.2 billion annual passengers (more than twice as many as the *New York Metro*). The Moscow Metro stations finished¹ in marble and granite are also famous for their unique architecture and artistic mosaic decorations.

(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) 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.

(6) The new automated high-speed line *Meteor* of the *Paris Metro* system claims to be the forerunner² of the 21st 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.

(7) The optimum solution for a typical large city will inevitably be a multimodal mix³. 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-ways⁴. They stop at stations located every half-mile and trigger⁵ 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 environments⁶ than roads, emit no pollution and only as much noisy as a private car. Disabled⁷ 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).

(8) 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 *finished* – оздоблені

² *the forerunner* – попередник

³ *a multimodal mix* – єдина інтегрована транспортна мережа

⁴ *exclusive right- of-ways* – спеціалізовані смуги відведення

⁵ *trigger* – туп вмикають, переключають

⁶ *pedestrian environments* – пішохідні переходи

⁷ *disabled* – інваліди

Exercise 32. 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 the electric traction have when introduced on underground railways? 5. How many cities in the world have metro systems? 6. What are the Moscow metro and the London Underground famous for? 7. What innovations have been introduced in metros lately? 8. What unique features does the high-speed line *Meteor* in Paris have? 9. Where are the automated lines in use now?

10. Why is automatic operation system better than manual? 11. What is the *Light Metro*? 12. How many countries have the light metro? 13. What are the distinctive features of the light rail? 14. What are the advantages of the light metro in a modern big city?

Exercise 33. 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 19th century. 3. (*Перша пасажирська підземна залізниця*) was opened in London on the 10th of January, 1863. 4. This new and strange way of travel (*завдавав*) many discomforts. 5. The steam locomotives (*заповнювали тунелі паром та 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 34. 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 of having underground railway 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 35. Choose one of the topics and make up a short story based on the text.

- 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 of 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 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 characterized 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 fashion 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 signalized junctions.

(8) A derivative of LRT is Light Metro. Such railways are characterized 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 36. Answer the questions.

1. When and why was Light Rail developed? 2. How does LR differ from heavy rail? from traditional trams? 3. What is Light Metro?

Exercise 37. 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.

Exercise 38. Think about the advantages and disadvantages of different kinds of city transport. Fill in the table and make a speech in favour of one of city transport.

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

Supplementary Text B

KHARKIV UNDERGROUND

(1) Kharkiv was the sixth city in the CIS and the second 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 *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 *Barabashova* and *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) In 2005 the city celebrated the 30th anniversary of its underground. On the eve of this anniversary the city got the long-expected present – two new stations – *Botanical Garden* and *The 23rd of August*.

Nowadays, 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.

Exercise 39. Translate the word combinations in brackets.

1. At the beginning of 70s the surface transport (*не міг впоратися*) with growing (*пасажирообігом*). 2. The situation (*ускладнювалась*) by the relief of the city. 3. The first variant, (*метрополітен для внутрішньоміських перевезень*), was chosen. 4. The (*перша секція*) of Kharkiv underground was (*введена в експлуатацію*) in August 23, 1975.

Exercise 40. True or false? Give the correct version.

1. The surface transport could cope with growing passenger turnover at the beginning of 70s. 2. There were three variants of Metropolitan system under consideration. 3. The first in the USSR experimental underground bridge of closed type was built over the Dniper river. 4. Three lines of Kharkiv underground cross in four change stations.

Exercise 41. 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 ‘Kharkivmetroproject’. Name your own stations and present your sketches of station interior.**

Exercise 42. 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
Moscow	1935	302	182	6,55 mln
Tokyo	1927	304	290	8,7 mln
Berlin	1902	147	195	1,39 mln
Chicago	1892	166	151	542,000
Washington	1976	171	90	611,000
Shanghai	1995	420	278	3,56 mln
St Petersburg	1955	114	67	2,25 mln
Seoul	1974	287	348	5,61 mln

It is interesting to know ...

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 2billion). Unlike most other metros, NY metro has local and express tracks that form one seamless transport network.

* *centenary* – сторіччя

- **Humburg** Metro has put into operation the first two of new generation of environmentally-friendly Metro trains. These trains are claimed to be up to 92 % recyclable¹. This has been achieved by using a practicable dismantling² concept, using environmentally-friendly materials and chemicals without increasing the weight of the trains, and by the reducing the number of the materials used.

¹ *recyclable* – повторно використаний

² *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.

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 been also developed. The system is connected to the ATC so that trains in the area stops automatically if any object larger than 30 cm in diameter enters the track area in stations.

- **Meteor**, the first fully-automated metro line in Paris, is equipped with driverless *trainset**. 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.

* *a trainset* – секція потяга

- **Moscow** metro, which claims to be the busiest metro in the world, is to install ticket vending machines (TVM) in all its 165 stations in response to complaints about long queues at ticket counters. The 270 km metro carries a daily average of 8.8 million passengers, or 3.2 billion a year. That is more than New York and Paris combined and nearly four times the figure for London. Even the notoriously overcrowded Tokyo subway has 15 % less passengers annually. *The Moscow Times* listed the world's busiest metros, in terms of passengers/year, as follows: Moscow 3.2 billion, Tokyo 2.7 billion, Seoul 1.6 billion, New York and Mexico City 1.3 billion, Paris 1.2 billion, Osaka 957 million, London 886 million, Hong Kong 798 million, and St Petersburg 784 million.

• **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** 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).

* *a peplemover* – рейковий автобус

Exercise 43. Project. What interesting facts about underground systems of different countries do you know? Find them or present your own project with maps, photos etc.

CONVERSATIONAL PRACTICE

Exercise 44

a) social expressions. Match an expression in column A with a reply in column B.

A	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 45

a) make up dialogues on the topic 'Travelling in the city'. Explain to the city guests how to get to their hotel (the centre of the city, some monuments, shopping centres, theatres, cinema palaces, 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: <i>-ic, -al, -an</i>
Noun Suffixes: <i>-age, -th, -ee</i>
Verb Suffixes: <i>-ize, -(i)fy</i>
Verb Prefix: <i>en- (em-)</i>

Exercise 46. Form nouns using the suffix *-age*. Translate them.

Marry, use, root, herb, break, post, anchor, dose, wreck, mile, percent.

Exercise 47. Translate the nouns ending *-ee*.

Assignee, trustee, addressee, presentee, grantee, votee, trainee, refugee, referee, consignee, payee, arrestee, examinee, employee, interviewee, abandonee.

Exercise 48. Translate the pairs of words.

long – length

dead – death

true – truth

strong – strength

breathe – breath

warm – warmth

deep – depth

broad – breadth

grow – growth

Exercise 49. Translate the following verbs.

Mineralize, hospitalize, specialize, localize, generalize, standardize, naturalize, tyrannize, patronize, collectivize, popularize, realize, centralize.

Exercise 50. Translate the verbs with the suffix *-fy*.

Simplify, glorify, purify, classify, horrify, falsify, personify, terrify, certify, intensify, justify, electrify.

Exercise 51. Translate the verbs with the prefix *en-(em-)*.

Encage, entrap, embed, embody, endanger, enable, enact, enclose, encamp, encase, endanger, enrich.

Exercise 52. Form adjective from the words using *-an (-ian, -n)*.

Africa, Mexico, Russia, America, Scandinavia, Kant, Ukraine, Hungary, Siberia, Syria, Paris, Australia, Arab, Shakespeare, Crimea, Chile, Canada, crocodile.

UNIT 5

Grammar: Sequence of Tenses. Indirect Speech

Pronouns *Some, Any, No* and their Derivatives

Expressions of Quantity

Text: Railway Construction: Tunnels and Bridges

Supplementary text A: Various Types of Passenger Stock

Supplementary text B: Freight Cars and Containers

Supplementary text C: Transatlantic Tunnel

Supplementary text D: Russia proposes Bering Strait Tunnel

Word Building: trans-, inter-, re-, under-, sub-; -ary, -ar, -ish; -dom, -hood

READING RULES

U u	[u:]	у відкритому складі після звуків [r], [l], [dʒ]	lunar, rule, June
	[juə]	перед r + ГОЛОСНА	pure, cure
Y y	[j]	на початку слова та перед ГОЛОСНИМ	yet, year, beyond
ph	[f]		philosophy, photo

Exercise 1. Read the following words.

lunar	cure	yet	philosophy
rule	lure	year	photo
June	mural	yes	physics
July	endure	yard	phase
flute	impure	yellow	phenomenon
plume	secure	yesterday	telephone
lute	during	you	phonetics
junior	impurity	young	phrase
rural	durable	beyond	pharmacology
plural	fury	Yankee	physician

GRAMMAR

Sequence of Tenses

(Правила узгодження часів)

Якщо присудок головного речення стоїть у минулому часі, то присудок підрядного речення повинен стояти в одному з минулих часів.

<i>He says that</i>	<i>He said that</i>
he will translate this text tomorrow.	he would translate that text tomorrow.
he translates such texts without a dictionary.	he translated such texts without a dictionary.
he is translating this text now.	he was translating that text at that time.
he has already translated this text.	he had already translated that text.
he translated this text yesterday.	he had translated that text the day before.

1. Одночасні дії: *Past Indefinite* (головне речення) → *Past Indefinite* або *Past Continuous* (підрядне речення).

We knew he drank only fruit juice. – Ми знали, що він п'є тільки фруктовий сік.

2. Дія підрядного речення відбулася раніше дії головного речення: *Past Indefinite* → *Past Perfect* або *Past Perfect Continuous*.

I was sure that he had left Washington D.C. – Я був упевнений, що він поїхав з Вашингтона.

3. Дія підрядного речення відбудеться пізніше дії головного речення: *Past Indefinite* → *Future-in-the-Past*.

I hoped that I would find him at the conference. – Я сподівався, що знайду його на конференції.

Виключення з правила узгодження часів

Якщо дієслово у підрядному реченні виражає загальновідомий факт або ситуацію, яка досі не змінилася та відповідає існуючому стану речей, дієслово у підрядному реченні може стояти у теперішньому або майбутньому часі.

*Galileo **proved** that the earth **moves** round the sun.* – Галілео довів, що Земля обертається навколо Сонця.

*I **came** to tell you that I **will vote** against you.* – Я прийшов тобі сказати, що голосуватиму проти тебе.

Exercise 2. Translate the following sentences.

1. She *thinks* that you *passed* your examination in physics. She *thought* that you *had passed* your examination in physics. 2. They

know you will graduate from the institute next year. They *knew* you *would graduate* from the institute the next year. 3. She *wants* to know whether you *completed* your work yesterday. She *wanted* to know whether you *had completed* your work the day before. 4. We *know* that the young writer *is working* on a novel. We *knew* that the young writer *was working* on a novel. 5. We *knew* that you *had gone* sightseeing. 6. He *said* he *had lost* his way. 7. He *knew* that I never *missed* the seminars. 8. We *thought* that we *would be able* to see our old friends. 9. They *thought* I *could* drive a car. 10. I *knew* he *was experimenting* at the lab. 11. We *considered* that she *had* already *obtained* her Master's degree in mathematics.

Exercise 3. Write the principal sentence in the past and point out that the action of the subordinate clause took place:
a) after it; b) simultaneously; c) before it.

Model: She says that she takes books from the library.

a) She said that she would take books from the library.

b) She said that she took books from the library.

c) She said that she had taken books from the library.

1. I know that they will discuss the plan at the meeting. 2. We think that you will enjoy this film. 3. We know that there are many places of interest there. 4. We are glad that you enjoy your trip. 5. I am afraid Ann does not know anything about her friend's plans. 6. Nick says that the city makes a great impression on him.

Exercise 4. Translate the following sentences.

1. Я думала, що ви запізнитесь у кіно. 2. Ми вважали, що ви працюєте над дипломним проектом. 3. Ми думали, що ви вже знайшли свій проект. 4. Я знав, що ви отримали квиток у театр. 5. Вона сказала, що збирається поїхати до міста. 6. Він сказав, що взяв у бібліотеці усі необхідні книги. 7. Вона сказала, що піде до музею наступного тижня. 8. Я був упевнений, що ви перекладали статтю без словника. 9. Я не знала, що діти голодні. 10. Ми не були впевнені, що ці шедеври живопису так вразять вас. 11. Ми були впевнені, що цей палац пов'язаний з ім'ям та біографією видатного російського письменника.

Direct and Reported Speech

Пряма мова (*Direct Speech*)

He said, 'I want to go home,' and walked out. – Він сказав: «Я хочу піти додому» – та вийшов.

Непряма мова (*Reported Speech*)

He said that he wanted to go home, and walked out. – Він сказав, що хоче піти додому, та вийшов.

Розповідні речення у непрямій мові

<i>Direct Speech</i>	<i>Reported Speech</i>
'I <u>work</u> hard,' he said.	He said (that) he <u>worked</u> hard.
'I <u>am working</u> hard,' he said.	He said (that) he <u>was working</u> hard.
'I <u>have worked</u> hard,' he said.	He said (that) he <u>had worked</u> hard.
'I <u>worked</u> hard,' he said.	He said (that) he <u>had worked</u> hard.
'I <u>will work</u> hard,' he said.	He said (that) he <u>would work</u> hard.
'I <u>have been working</u> hard,' he said.	He said (that) he <u>had been working</u> hard.
'I <u>am going to work</u> hard,' he said.	He said (that) he <u>was going to work</u> hard.
'I <u>can work</u> harder,' he said.	He said (that) he <u>could work</u> harder.
'I <u>may work</u> harder,' he said.	He said (that) he <u>might work</u> harder.
'I <u>must work</u> harder,' he said.	He said (that) he <u>had to/must work</u> harder.
'I <u>should work</u> harder,' he said.	He said (that) he <u>should work</u> harder.
'I <u>ought to work</u> harder,' he said.	He said (that) he <u>ought to work</u> harder.

Примітки: 1. *To say* може змінюватися на *to tell*, якщо є особа, до якої звернена пряма мова (сполучник *that* іноді опускається).

He said to me, 'The talks have started.' – *He told me (that) the talks had started.*

She said, 'I have enough.' – *She said (that) she'd had enough.*

2. Зміни займенників та прислівників:

this – that	yesterday – the day before
these – those	the day before yesterday – two days before
now – then	ago – before
today – that day	next year – the next year, the following year

tomorrow – the next day the day after tomorrow – two days later	here – there
---	--------------

Exercise 5. Put *say / said* or *tell / told* into gaps.

Model: He said (*that*) he was at school yesterday.

He told the teacher (*that*) he was at school yesterday.

1. Sandra ... that she went to India for a holiday.
2. Sandra ... Bob that she didn't see the Taj Mahal.
3. What did Anna ...?
4. What did Anna ... Peter?
5. She ... it was cold in the park.
6. He hasn't ... us his address.
7. Did he ... you his telephone number?
8. They ... that Alice left last week.
9. What did Barbara ... about the dinner party?
10. She ... Alice that it was an awful party.
11. Have you ... Jack about the film?
12. Why did you ... that?
13. ... me what you need.
14. Have you ... the doctor about it?
15. He doesn't ... me anything.
16. Why didn't she ... goodbye?
17. ... him to be quiet.

Exercise 6. Complete the reported sentences with the correct tenses.

1. 'I'm tired.' She said she ... tired.
2. 'You play very well.' He told me I ... very well.
3. 'Can you help us?' They asked if I ... help them.
4. 'We're leaving.' They told us they
5. 'She hasn't brushed her hair.' I noticed that she ... her hair.
6. 'John's had an accident.' Pam rang to say that John ... an accident.
7. 'I left school at fifteen.' Her letter said that she ... school at fifteen.
8. 'She won't say anything.' I knew she ... anything.
9. 'Nobody will know.' I thought nobody
10. 'This letter has been opened.' I could see that the letter

Exercise 7. Sally went to see a landlady called Mrs Mawby about renting the flat. Now she is telling her friend, Paul, about it. Report the sentences according to the model.

Model: 'The rent is \$ 50 a week.' – *The landlady said the rent was \$ 50 a week.*

1. 'It's a quiet flat and the neighbours are nice.' – Mrs Mawby said
2. 'The rent includes gas and electricity.' – She told me that ...
3. 'I need \$100 deposit.' – Then she said
4. 'I decorated the living room recently.' – She told me that ...
5. 'You'll have to make up your mind soon.' – She told me
6. 'You can move in immediately.' – She

said that 7. ‘I’ll give you a ring soon,’ said Sally. – I told Mrs Mawby that ...

Exercise 8. Put in the right tenses.

I had a really funny evening yesterday, Mary. I got talking to this boy in the pub, very nice-looking he was, and I could see he (*fancy*) me. He said he (*never meet*) anybody like me before, and he felt I (*have*) a very unusual kind of beauty. ‘Oh, yes?’ I said. Then he asked me if I (*want*) a lift home, so I said no. I (*be*) hungry, so we went out for a curry.

I asked him what he (*do*) for a living, and he said he (*do*) some undercover for the CIA at the moment. He said he (*can not*) give me his address because he (*move*) around all the time. So I asked him why he (*think*) I (*want*) his address. Then he asked if he (*can*) have my phone number. He said he (*call*) me today to fix for me to go to America with him. So I asked him why he (*want*) to take me to America, and he said he (*think*) he (*fall*) in love with me. I knew he (*lie*), but it was kind of fun. Anyway, I told him I (*have*) got a boyfriend already, but he said that (*not matter*). We (*be*) meant for each other, he said, and nobody (*go*) to stand in our way, because our lives (*be*) written in the stars. Then he borrowed \$20 from me to pay the bill because he said he (*leave*) his wallet at home, and he went off to the toilet, and I never saw him again.

Питальні речення у непрямій мові

<i>Direct Speech</i>	<i>Reported Speech</i>
‘Do you work hard enough?’ she said to him.	She asked him <u>if</u> he worked hard enough. – Вона запитала, <u>чи</u> працює він досить наполегливо.
He asked me, ‘Shall I phone her?’	He asked me <u>whether</u> he should phone her.
He asked me, ‘What time is it?’	He asked me what time it was.
He asked me, ‘Where can I put it?’	He asked me where he could put it. <i>або</i> He asked me where to put it.

Примітки: 1. У питанні з *to be* може залишитися непрямий порядок слів.

He asked, 'What is the price of this car?' – He asked me what was the price of that car. (або ... what the price of that car was)

2. У відповідях на загальні питання слова *yes* та *no* опускаються.

I asked him whether he would go there. He answered that he would. (He answered that he wouldn't)

3. Для одержання інформації, поради тощо ми ставимо непрямі запитання, що починаються словами *Could you tell me ... ?*, *I wonder ...*, *I want to know ...*, *I doubt ...* та інші.

I wonder whether to phone her. (or ... whether I should phone her.)

Do you know what time it is?

I doubt whether I can finish this work in time.

Exercise 9. Read this article about stress interviews. Underline all the indirect questions.

The Stress Interview

A few weeks ago, Melissa Morrow had a stress interview, one which featured tough, tricky questions and negative evaluations. First, the interviewer asked why she couldn't work under pressure. Before she could answer, he asked who had written her application for her. Melissa was shocked but she handled herself very well. She asked the interviewer whether he was going to ask her any serious questions. Then she left.

Companies sometimes conduct stress interviews to see how candidates handle pressure. Suppose, for example, that there is an accident in a nuclear power plant. The plant's public relations officer must remain calm when reporters ask how the accident could have happened. Be aware, however, that in some countries, like the United States, certain questions are not allowed unless they are directly related to the job. If your interviewer asks how old you are, you can refuse to answer. The interviewer also should not ask whether you are married or how much money you owe. If you think a question is inappropriate, ask how it relates to the job. If it doesn't relate to it, you don't have to answer.

Exercise 10. Put the following sentences in the Indirect Speech beginning with the words given in brackets.

1. Where did I put the book? (*I forgot ...*) 2. Who has given you this nice kitten? (*She wanted to know...*) 3. Where can I buy an English-Russian dictionary? (*He asked me ...*) 4. How long will it take your brother to get to Madrid? (*He wondered ...*) 5. Where is he going? (*He didn't tell anybody ...*) 6. Where has he gone? (*Did you know ...*) 7. Where is he? (*Did you know ...*) 8. When is he leaving school? (*I wanted to know ...*) 9. Where does he live? (*Nobody knew ...*) 10. When will he come back? (*She asked them ...*) 11. Where did she buy this hat? (*He wanted to know ...*) 12. How much did she pay for it? (*I had no idea ...*)

Exercise 11. Read the report of an interview with Gary Wilmot, an actor, then write the actual words of an interview.

I asked Gary what sort of music he liked, and he told me that he had always liked jazz. In fact, he played in a jazz band called *Sax Appeal*. When I asked him where the band played, he told me they mainly played in small clubs. I asked him, if he had ever played a Shakespearean role, and he told me that he had. He'd played Othello in Stratford in 1989, and he'd enjoyed it very much. Finally, I asked him if he ever wanted to direct a play, and he told me that he hoped to one day, but he didn't know when it could happen because he was so busy acting.

Interview

Interviewer: What sort of music do you like, Gary?

Gary: I have always liked In fact ... called *Sax Appeal*.

I.: Where ...?

G.: We

I.: ... a Shakespearean role?

G.: Yes, ... Othello in Stratford in 1989, ... very much.

I.: ... direct a play?

G.: ... one day, but

Exercise 12. Turn these into indirect questions, beginning *I asked*.

1. What's Peter's address? 2. When's the new manager coming?
3. How does she know my name? 4. Why are all the windows open?
5. How many books does he want? 6. Where do they keep the money?

7. What time is the meeting? 8. When does the last train leave? 9. How does the photocopier work? 10. How often does Ann go shopping?

Exercise 13. Turn these into indirect questions, beginning *I wonder*.

1. Do they like me? 2. Will I be ready in time? 3. Is there any food in the house? 4. Is service included or not? 5. Can I pay by cheque? 6. Does my hair look funny? 7. Has the postman already been? 8. Do they speak English? 9. Am I doing the right thing? 10. Is the meeting on Tuesday or Wednesday?

Наказові речення у непрямій мові

<i>Direct Speech</i>	<i>Reported Speech</i>
' <u>Work</u> harder!' she said to him.	She told him <u>to work</u> harder.
' <u>Don't lie down</u> ,' he said to us.	He told us <u>not to lie down</u> .
'Please, <u>stay</u> with us tonight,' he said to her.	He asked her <u>to stay</u> with them that night.
' <u>Let's play</u> football,' he said.	He suggested <u>playing</u> football.
'You'd <u>better visit</u> her,' he said.	He suggested <u>that I visit</u> her.
' <u>If I were you</u> , I'd see a doctor,' he said.	He advised <u>me to see</u> a doctor.
She said, 'I will wait for you.'	She <u>agreed (promised)</u> to wait for me.
The doctor ordered, 'Rest for a week.'	Her doctor <u>ordered</u> her to rest for a week.

Примітка – після деяких дієслів (*suggest*) вживається герундій або підрядне речення, яке вводиться сполучником *that*, найчастіше з модальним дієсловом.

He suggested trying something else. (... that I should try ...)

Після *ask, tell, order, command* та ін. обов'язково має стояти доповнення. *Say* в наказових реченнях не використовується.

Exercise 14. Change the sentences as in the model.

Model: I won't tell anybody. (He promised) – He promised not to tell anybody.

1. I'll cook supper. (*She offered*) 2. Leave early. (*He advised me*)
 3. Please, close the door. (*She asked me*) 4. I'll stop smoking. (*She promised*)
 5. Why don't I do the shopping? (*He offered*) 6. You ought

to tell the police. (*She advised me*) 7. Wait outside. (*I told her*) 8. OK. I'll pay half. (*He agreed*) 9. Park round the corner. (*She told me*) 10. Phone me before nine. (*She told me when*) 11. Say you're ill. (*I told him what*) 12. We'll pay for the tickets. (*We offered*)

Exercise 15. Write the following sentences in the indirect speech.

Model: 1. 'When did you receive this letter?' my friend said to me. – *My friend asked me when I had received this letter.*

2. 'Don't make noise,' said Tom's mother to him. – *Tom's mother asked him not to make noise.*

1. 'Do you like my pies, Ann?' asked her grandmother. 2. 'Sit down at the table and do your homework,' said Tom's mother to him. 3. 'What did you do at school yesterday, John?' said his father. 4. 'Will you play the piano today, Helen?' asked her aunt. 5. My uncle said, 'We'll visit you next week.' 6. 'Don't cross the street under the red light,' said the man to Nick. 7. 'I took a very good book from our library yesterday,' said Mike to his father. 8. 'Come to my house tomorrow, Jane,' said Lena.

Exercise 16. First read, then report what the flight attendant told the passengers before takeoff.

Model: Do not smoke in non-smoking areas or in the toilets. – *She told them not to smoke in non-smoking areas or in the toilets.*

1. Please, fasten your safety belts before takeoff. 2. Put your bags in the overhead lockers. 3. Please keep your seats upright during takeoff. 4. Do not run in the aisles. 5. Please do not leave your seats during takeoff or landing. 6. Do not use stereo equipment. 7. Press the button to call a flight attendant. 8. Please do not obstruct the emergency exits.

Exercise 17. Translate the sentences.

1. Вона запитала мене, чи знаю я його батьків. 2. Вона запитала, де навчається цей студент. 3. Ми хотіли знати, чи повернувся ваш брат до Нью-Йорка. 4. Він попросив нас не розмовляти. 5. Художник спитав нас, чи можемо ми показати йому наші малюнки. 6. Він спитав, де ми дістали квитки. 7. Архітектор запитав, хто проектував цей дім. 8. Вона просила нас повторити усі слова та граматику. 9. Він запитав, хто з нас хоче їсти. 10. Ми не знали, хто перекладав цю статтю.

Pronouns *Some, Any, No* and their Derivatives

(Займенники *some, any, no* та їх похідні)

Стверджувальне речення	<i>There are some important articles in this magazine.</i> – У цьому журналі є декілька важливих статей. <i>Take any magazine.</i> – Візьми будь-який журнал.
Питальне речення	<i>Are there any important articles in this magazine?</i> – Чи є будь-які важливі статті у цьому журналі?
Заперечне речення	<i>There are not any important articles in this magazine. (There are no important articles in this magazine.</i> – У цьому журналі немає жодних важливих статей.

Some

Використовується у стверджувальних реченнях.

She's got some interesting ideas. – В неї декілька цікавих ідей.

There's some mud on the carpet. – На килимі бруд (перед незліченними іменниками не перекладається).

There are some 20 students in the room. – У кімнаті приблизно 20 студентів.

Примітка – може використовуватися у питальних реченнях, що є пропозицією, проханням або коли очікується позитивна відповідь.

'Could I have some coffee?' 'Sure.' – «Чи можу я попросити кави?» «Звичайно».

'And would you like some biscuits?' – «Чи не бажаєте печива?»

Any

1. Використовується замість *some* у негативних реченнях і у більшості питань.

Do you know any good jokes? – Чи знаєш ти які-небудь анекдоти?

He hasn't got any money. – У нього немає грошей.

2. У реченнях з *if*, а також зі словами *never, hardly, without, refuse, doubt* (що мають негативне значення).

We got there without any difficulty. – Ми дістались туди без труднощів.

I refused to give him any help. – Я відмовився надати йому допомогу.

3. У стверджувальних реченнях означає *будь-який*.

Any of us could help you. – Кожний з нас може Вам допомогти.

No

Це більш виразний спосіб сказати *not a* або *not any*. На початку речення завжди вживається *no*.

Sorry, I've got no time.

No tourists ever come to our village.

None of his friends likes his wife.

	thing	body	one	where
some	<i>something</i> щось, що-небудь	<i>somebody</i> хтось хто-небудь	<i>someone</i> хтось хто-небудь	<i>somewhere</i> де-небудь куди-небудь
any	<i>anything</i> що-небудь	<i>anybody</i> хто-небудь	<i>anyone</i> хто-небудь	<i>anywhere</i> де-небудь куди-небудь
	у стверджувальних реченнях			
	все що завгодно	всякий будь-який	всякий будь-який	усюди
no	у негативних реченнях при негативній формі дієслова			
	ніщо	ніхто	ніхто	ніде, нікуди
no	<i>nothing</i> ніщо	<i>nobody</i> ніхто	<i>no one</i> ніхто	<i>nowhere</i> ніде, нікуди
every	<i>everything</i> все	<i>everybody</i> усі, кожний	<i>everyone</i> усі, кожний	<i>everywhere</i> усюди

He asked somebody to help him.

They have done something.

Anybody could do it. Can anyone show me the way to the station?

I couldn't understand anything from his letter.

Nobody failed in this examination yesterday.

No one expected such news.

Nothing interesting happened while I was away.

Exercise 18. Choose the right word.

1. Have you got (*some / any*) free time on Wednesday afternoon?
2. There's (*something / anything*) strange about the way Pete's acting today.
3. Is there (*something / anything*) we should bring to the meeting?
4. (*Some / Any*) of Laure's friends were at the party last night.
5. I had three sets of house keys, and I can't find (*some / any*) of them now.
6. Hardly (*some / any*) of the smaller cars have enough leg room for Jill.
7. Do you know if (*some / any*) of the Morrises are coming on Sunday?
8. Can I get you (*some / any*) coffee? I've just made (*some / any*).
9. She refuses to have (*something / anything*) to do with her family now.
10. If there's (*some / any*) soup left, could you put it in the fridge, please?
11. Never trust (*someone / anyone*) who has a perfectly tidy desk.

Exercise 19. Put the pronouns *something, anything, nothing or everything*.

Model: My husband taught his son everything he knows.

1. The patient has a bad memory. She can't remember
2. I think there is ... wrong with my watch.
3. We've got ... to eat. We've got only ... to drink.
4. The student didn't understand ... because she heard
5. Does he know ... about computers? – Yes, he knows ... because he is the best specialist in computer science at Harvard University.
6. He felt terrible. He couldn't do
7. ... is all right, the patient is much better today.
8. Is there ... interesting in the program of the concert?
9. I could see ...: it was quite dark.
10. Give me ... to drink.
11. I didn't take any money with me, so I couldn't buy
12. My new eyeglasses are very good, I can see ... now.
13. I saw ... near the wood that looked like a tent.

Exercise 20. Put *some* or *any* if needed.

1. This car hardly uses ... petrol.
2. This car doesn't use ... petrol; it's battery-powered.
3. Would you like ... beer?
4. In Belgium they make a stew with ... beef and ... beer.
5. Do you ever read ... novels?
6. I read ... wonderful novels by O'Brien when I was on holiday.
7. Are your sisters ... doctors too?
8. We met ... doctors at the party.
9. Could you lend me ... money?
10. Is ... money something you worry about?
11. Do you like ... mushrooms?
12. Are there ... mushrooms left?
13. We need ... more milk.
14. Cheese is made from ... milk.

Exercise 21. Put in *no / none / nobody*.

1. 'Why can't I have toast for breakfast?' – 'Because there's ... bread.'
2. 'My students expect me to know everything.' – '... knows everything.'
3. ... newspaper tells the whole truth.
4. 'What were your photos like?' – 'I'm afraid ... of them came out.'
5. 'Do you think he's honest?' – ' ... politician is completely honest.'
6. ... of the people there remembered seeing anything unusual.
7. I've got ... patience with people like her.
8. There's ... I can talk to in this place.
9. ... of you cares what I think.
10. He had ... money, ... job and ... place to live.

Exercise 22. Put in *some, any, no* or their derivatives.

1. Can ... wash the dishes?
2. Tell me ... about this man. I don't know him.
3. There is ... in the room, it is empty.
4. Is there ... at home?
5. She has ... money to buy the book.
6. I don't know ... Chinese words.
7. There is ... I can do for you, I'm sorry.
8. ... knows the right answer.
9. You may take ... book you like.
10. Are you waiting for ... ?
11. Who has already seen this film? –
12. You can say ..., I don't believe you.

Exercise 23. Match a line in A with a line in B.

A	B
He told the police that he knew He didn't tell the police	anything. nothing.
I think they live I don't mind I'll live	anywhere in London. somewhere in London.
Anybody Nobody	phoned you, sorry. can cook. It's easy.
I've searched I can't find it	anywhere. everywhere.
I thought I'd know I didn't know	somebody at the party. anyone at the party.
My parents never took me My parents took me	everywhere when I was young. anywhere when I was a kid.
Jane always got Jane didn't have	everything she wanted. anything to wear.
I've already had I've had	something to eat. nothing to eat.

Exercise 26. Decide which answer is correct.

1. I can't go out tonight. I have (*any, bit, several, some*) work to do.
2. I know this place. I've been here a (*bit, few, little, several*) times before.
3. There are (*lots, much, numerous, several*) casinos in Las Vegas. They're everywhere you look.
4. Planes are big polluters. They cause a (*considerable lot, great deal, a large deal, small amount*) of pollution.
5. There's been a (*bit, few, little, lot*) of rain but not very much.
6. It's very peaceful on the island because there are (*any, many, much, no*) cars.
7. It'll cost us a certain (*amount, deal, few, number*) of money, but it won't be a lot.
8. There are a (*big deal, large amount, large number, little bit*) of bugs in the program. I'm surprised there are so many.

READING AND DISCUSSION

Active Vocabulary

vast – *adj* великий, значний, просторий; *syn huge*

complex – *adj* складний; *syn complicated*

comprise – *v* включати, вміщувати; *syn include, consist of*

track facilities – колійне господарство; *facilities* – можливості, зручності, обладнання

be familiar with – знати, бути знайомим

goods yard – вантажна станція; *syn freight yard*

bridge – *n* міст; *v* будувати міст, з'єднувати мостом

civil engineer – будівельник; *civil engineering* – цивільне будівництво

regard – *v* розглядати, вважати(ся); *as regards, regarding* – у відношенні, що стосується; *regardless of* – незважаючи на

multipurpose – багатоцільовий; *purpose* – *n* ціль, мета; *purpose-built* – спеціально збудований

booking office – квиткова каса; *book tickets* – *v* замовляти квитки

demand – *n* вимога, попит; *v* вимагати; *syn need, require*

be capable of – бути спроможним; *capability* – *n* здатність, спроможність, потужність

spans and supports – прогони та опори

simple – *adj* простий, легкий; *simplify* – *v* спрощувати

stream – *n* потік, струмок, напрям; *streamline* – обтічний, обтічної форми

gain fame – набути слави

erect – *v* будувати, споруджувати; *syn build, construct*
cable – *n* канат, трос; *syn rope*
unbelievable – *adj* неймовірний; *believe* – *v* вірити
probably – *adv* ймовірно, можливо
take into consideration – брати до уваги
vary – *v* міняти(ся); *syn change*
dangerous – *adj* небезпечний
significant – *adj* значний, важливий; *syn important, essential*
obstacle – *n* перешкода
boring – *n* буріння; **bore** – *v* бурити
regular – *adj* звичайний, постійний; *syn ordinary*
actually – *adv* дійсно
proceed – *v* продовжувати, просуватися
layer – *n* прошарок, шар
onward – *adj* подальший; *syn further, farther*
challenging project – складний, перспективний проект
summit – *n* вершина, верх, найвищий ступінь
lack – *n* нестача, відсутність; *v* не вистачати, бракувати
incorporate – *v* поєднувати
delivery – *n* доставка

Exercise 27. Find synonyms among the following words.

Terminal, maintenance, to vary, huge, to continue, a freight yard, vast, to get, further, to proceed, to demand, to comprise, to regard, repair, load, to gain, to differ, onward, complicated, to design, a goods yard, to include, to construct, difficult, a passenger station, to require, freight, to consider.

Exercise 28. Translate the following sentences, paying attention to the italicized words.

1. I don't *regard* a degree as a meal ticket for life. 2. *As regards* his job, it isn't promising. 3. Give my best *regards* to your relatives! 4. You should not introduce this innovation *regardless of* operational risk. 5. *With regard to* your letter of 1st January I would like to give my best *regards to you*! 6. Railway specialists should *regard* the latest technologies in daily routine. 7. *Regardless of* what you say, I have a high opinion of him.

Exercise 29. Translate the word combinations.

A vast area; maintenance of track and track facilities; goods yards and depots; multipurpose system; waiting halls; technical service area; facilities for passengers and railway staff; an important branch of railway engineering; bridges, capable of carrying much greater loads; a fallen tree across a stream; the fastest current journey; bridge of the suspension principle; a world-wide fame; a system of steel cables; a method of erecting the bridge; the width and depth of the gap to be bridged; direct railway routes through mountains; the only way through an obstacle; to be studied afresh; the purpose-built rolling stock; to protect against weather conditions.

RAILWAY CONSTRUCTION: TUNNELS AND BRIDGES

(1) Railway construction is a vast complex area comprising building of new structures, modernization, refurbishment, maintenance of track and track facilities, etc. The railway structures we are all familiar with include stations, goods yards, depots, as well as tunnels, bridges, viaducts and other structures.

(2) The designing of a station building in a large city is a very complicated job for civil engineers and architects since these buildings are regarded as part of the city's public centre. A modern passenger station or a terminal is a huge multipurpose system comprising the terminal building with booking and information offices, waiting halls, luggage rooms and facilities for passengers and railway staff; platforms, technical service area (locomotive and car depots, passenger operation yard, etc).

(3) Bridge construction is a very important branch of railway engineering. In many ways, the story of bridge building is the story of civilization and people's progress. For hundreds of years men have built bridges over fast rivers, deep ditches or rocky canyons. The development of railways demanded stronger bridges capable of carrying much greater loads than ordinary road bridges.

(4) A bridge consists of spans and supports. Modern bridges are of several types. The simplest and the oldest type of bridge is *a beam bridge*¹, its prototype being a fallen tree across a stream. The most interesting types are *a suspension bridge*² and *an arch bridge*³. A simple bridge of the suspension principle was made by early men by

means of ropes suspended from rocks or trees on each bank of the river, and is still used in countries such as Tibet. The first modern suspension bridge to carry railway tracks was designed by John Roebling, who gained a worldwide fame as the builder of *the Niagara Falls suspension bridge* and *New York's Brooklyn Bridge*. According to his plan, two large towers on the Brooklyn and Manhattan sides of the river were to be erected, from which a system of steel cables hung, thus holding the bridge. Today engineers know how to do these things and they have special machines. But for that time it was almost unbelievable. The bridge, opened in 1883, fifteen years after it was begun, became one of the wonders of the nineteenth century. It is still today, carrying more traffic than ever before.

(5) A modern bridge probably demands greater skill from a designer and builder than any other civil engineering project. Many things should be taken into consideration, and they may vary widely according to the local conditions, the type and volume of traffic, the width and depth of the gap to be bridged, the nature of the foundations, building materials and the method of erecting the bridge.

(6) Thousands of miles of world railroads are built in tunnels. Tunnels are engineering structures to provide direct automobile or railway routes through mountains or under water. Tunnelling is an extremely costly, difficult and dangerous job but there are places where a tunnel is the only way through obstacles. The Alps may serve as an example. It was only in 1871 that the Alpine pioneer, *Mont Cenis tunnel*, 8 miles in length, was opened for traffic, which allowed direct railway connection between France and Italy. In an era of manual labour the excavation and construction of the tunnel was a Herculean task.

(7) A significant progress has been made in tunnel boring since that time. New technologies and boring methods made tunnelling a regular thing in railroad engineering. The Alps, for instance, will soon be almost as full of holes as some of the famous cheeses, which this mountain region produces. A remarkable project was started 15 years ago to construct the world's longest tunnel under the Swiss Alps. 57-kilometre long Gotthard tunnel will allow high speed connection on the north-south commercial route between Germany and Italy. By the time it opens for service in 2017, it will exceed the 53.8-kilometre Seikan rail tunnel linking the Japanese islands of Honshu and

Hokkaido and the world's longest road tunnel, the 24.5-kilometre Laerdal in Norway.

(8) Probably, the greatest engineering project of our century is *the Channel Tunnel* linking Britain to France and Belgium. The idea of connecting the Isles of Great Britain to mainland Europe is a fantasy that can be dated nearly 200 years back. In 1988 the question of the Channel Tunnel was studied afresh by a group of French and British engineers and the work actually began. The work proceeded very quickly and was successfully completed in about 6 years. Opened to traffic in 1994, *Eurotunnel* runs under the sea through a layer of dense chalk. Two main tunnels, with a service tunnel⁴ between them, carry one-way rail traffic. Cars and trucks carried by rail make crossing in 35 min, about an hour less than by ferry. The high-speed Channel Tunnel Rail Link required the construction of the London Tunnel and the Thames tunnel in 2004. The fastest current journey to Paris is 2 h 15 min, 1 h 20 min to Lille, 1 h 51 min to Brussels. Onward connections to Amsterdam (Netherlands) and Cologne (Germany) are being considered.

(9) Another challenging project which took five years to realize is the Tibet railway. This is now the world's highest railway running at altitudes⁵ of 4050 m above the sea level and with its summit at 5072 m. Building a railway at this altitude presented a number of significant engineering problems, not least⁶ permafrost, freezing temperatures and lack of oxygen⁷. In some areas bridges up to 11.7 km in length were constructed. The purpose-built rolling stock incorporates a number of innovative features for high-altitude operations, including oxygen delivery systems and fully hermetic trains like airplanes to protect against extreme weather conditions.

(10) Today, modern high-speed railway lines need significantly more tunnelling. This is due to the necessity to keep the lines as straight and as flat as possible to make operating with speeds of 300 to 350 km per hour possible. Derived from the Olympic motto 'Citius - altius - fortius', developments in tunnelling can be described with the words 'faster - larger - deeper - longer'.

¹ *beam bridge* – балковий міст

² *arch bridge* – аочний міст

³ *suspension bridge* – підвісний міст

⁴ *service tunnel* – службовий тунель

⁵ *altitude* – висота

⁶ *not least* – особливо

⁷ *oxygen* – кисень

Exercise 30. Answer the questions.

1. What do railway buildings include? 2. Why is station designing regarded to be a complicated task? 3. What facilities of a passenger station are mentioned in the text? 4. What services does a modern railway station offer to the passengers? 5. What are the main features of a bridge? 6. What types of bridges are mentioned in the text? What is the simplest one? 7. Who is the pioneer of the suspension bridge? 8. What does New York Brooklyn Bridge look like? 9. What factors should be taken into account by bridge developers? 10. Why do railway builders sometimes resort to tunnelling while constructing new railways? 11. Why was the Channel Tunnel constructed? How long did it take to build it? 12. How long is the current journey from London to Paris by Eurostar? 13. What is unique about the Tibet Railway?

Exercise 31. Prove the statements with the facts from the text.

1. The designing of a station building in a large city is a very complicated job. 2. In many ways, the story of bridge building is the story of civilization and people's progress. 3. Modern bridges are of several types. 4. The first modern suspension bridge to carry railway tracks was designed by John Roebling. 5. Tunnelling is an extremely costly, difficult and dangerous job. 6. The government of China has recently completed the project of building the railway to Tibet.

Exercise 32. Translate the word combinations.

Цілі цивільного будівництва; включати до себе різні види станцій; складне завдання, що стосується вашого проекту; розглядати різні шляхи; вокзал цього міста; колійне господарство нашої залізниці; замовляти квитки в цій касі; дуже незвичайний віадук; вимагати все необхідне обладнання; прогони та опори цього моста; набути популярності в певних колах; звичайний балковий міст; відомий арочний міст, підвісний міст через ріку;

долати всі перешкоди; товстий прошарок ґрунту; зводити хмарочос; змінюватися на краще.

Exercise 33. Give explanation for the following.

Railway construction is

A modern passenger station is

Channel Tunnel Rail Link is

A suspension bridge is

A beam bridge is

Tunnels are

Exercise 34. Read the additional text A and give your opinion. Answer the questions.

1. What do the engineers try to obtain designing passenger vehicles?
2. Why are many and varied types of carriages needed?
3. What cars does the passenger rolling stock include?
4. What innovations have been introduced since the early days?
5. What is a significant feature of most American long-distance trains?

Supplementary Text A

VARIOUS TYPES OF PASSENGER STOCK

Designing passenger vehicles the engineers try to obtain maximum comfort for passengers as well as improvements in ventilation and interior finishes¹. We know the passenger rolling stock of today to comprise several types of cars. There exist *sleeping* and *dining* cars, *coaches* for day and night service, *saloon* coaches for tourists, etc. The modern rolling stock is built with two types of inside arrangement. One is the compartment type with a side corridor, and the other is the open vehicle with a central passage. There is also a fleet of *restaurant* cars, *parcel* vans and *underground* cars for urban transportation.

The design of passenger rolling stock varies greatly in different countries according to their geography, climate, economic and industrial development, etc. For instance, many North American or Russian journeys are of such a length as to require night travel. Consequently, a far greater proportion of American and Russian rolling stock must be designed to allow comfortable sleeping than it has ever been necessary in Great Britain. By the way, the prototype of a modern sleeping car was invented by an American publisher

M.Pullman in the middle of the 19th century. And he was also the first to design and build the so-called *hotel* car, which was followed by a restaurant car, the forerunner² of the modern dining car.

In general, British and Continental railways have favoured the compartment type of coach for day travel. In the course of time the British first-class sleeping cars have developed into the *single-room* vehicles of great comfort, each room with its own toilet and a berth for one person only, as well as almost every service expected in the bedroom of a first-class hotel.

In the United States and Canada, on the other hand, the centre-corridor type of coach (with reclining chairs³ to be brought to the full horizontal position at night) has been in universal use. Modern *Pullman* coaches are often different in every train. A feature of most American long-distance trains is the *rear-end observation* car⁴.

Many innovations have been introduced in car construction since the early days. Nowadays *double-decker* passenger trains allowing railways to increase passenger handling capacity are getting increasingly used. Modern carriages are made of lightweight steel, aluminium, plastics and reinforced fiberglass⁵. The application of these materials has resulted in considerable reduction of the rolling stock weight and, in addition, has increased the resistance of cars to corrosion.

Intrain Entertainment Systems⁶ being introduced on modern high-speed trains make long-distance journeys more enjoyable for passengers. Seat-back screens will provide passengers with on-board information as well as internet access, music, videos, full-length films, games, etc. Passengers buy a scratch card⁷ for €3.50 giving them access to more than 40 items on a menu.

Thus, new state-of-the-art materials and design improvements provide better comfort for passengers.

¹ *interior finishes* – внутрішнє оздоблення

² *forerunner* – передвісник

³ *reclining chairs* – відкидні крісла

⁴ *rear-end observation car* – останній вагон з великими вікнами (для туристів)

⁵ *reinforced fibre-glass* – тверде скловолокно

⁶ *Intrain Entertainment System* – мультимедійна розважальна система для пасажирів

⁷ *scratch card* – карта доступу до системи

Exercise 35. Which of the mentioned types of cars are typical of the Ukrainian railways? Describe the interior of a typical Ukrainian car (a modern car). Compare our passenger rolling stock with that of Europe.

Exercise 36. Read the additional text B and give your opinion. Answer the questions.

1. What does the freight rolling stock consist of? 2. What kinds of special wagons do you know? 3. What do you know about transportation of freight in containers? 4. What is known as piggyback transport?

Supplementary Text B

FREIGHT CARS AND CONTAINERS

Railways carry enormous quantities of many things essential to our daily life such as foodstuffs, steel, coal, etc, that is why many and varied types of carriages and wagons are needed on a railway system. All these cars have different structure.

The freight rolling stock consists of *boxcars*¹, *open-box cars*², *flat cars*³ and many kinds of special wagons. The boxcar is the most common type employed to transport products requiring protection from weather. A special type of boxcar is a *refrigerator car* used for hauling food products. Another type of car is a *tank car*⁴ intended for liquid goods. Coal, gravel, ore and other similar goods are conveyed in *open-top cars* designed for mechanized loading and unloading. The simplest type of car is the *flat car* used to carry heavy machinery parts, steel rails, timber, as well as containers.

Special wagons are intended for transportation of certain freight (for freight in bulk, bucket wagons for bitumen, wagons with double decks, etc.).

Container traffic⁵ is a progressive method of delivering freight from door to door. It offers a solution in the eternal door-to-door competition of railways against road vehicles. Transportation of

freight in containers gives the most positive results. Generally, goods are packed into containers at factories or warehouses⁶, and containers then loaded on ordinary flat wagons. There is also a special category of containers, which require specially adapted wagons. Containers not only protect the most delicate products but also reduce the cost of loading and unloading.

In the United States this container principle is now being carried a great deal further by what is known as piggyback⁷ transport. Modern methods are applied to the movement of freight so as to reduce to a minimum manual labour. One such method is known as palletization⁸.

Ukrainian railways are equipped with new high-capacity, *multiple-wheel freight cars*⁹. These cars with automatic brakes and *automatic coupling*¹⁰ ensure *high-speed haulage*¹¹ of very heavy trains. Freight cars of today are made largely of steel, as it is stronger than wood and will not burn.

¹ *box car* – товарний вагон

² *open-box car* – відкритий товарний вагон

³ *flat car* – вагон–платформа

⁴ *tank car* – цистерна

⁵ *container traffic* – контейнерні перевезення

⁶ *warehouse* – склад, складське приміщення

⁷ *piggyback transport* – контрейлерне перевезення (перевезення навантажених причепів та вантажних автомобілів на залізничних платформах)

⁸ *palletization* – транспортування вантажів на піддонах або носилках до місця розвантаження

⁹ *multiple wheel freight car* – багатовісний вантажний вагон

¹⁰ *automatic coupling* – автоматичне зчеплення

¹¹ *high-speed haulage* – високошвидкісні перевезення

Exercise 37. Read these texts quickly. Tell a partner what you found most interesting. Which of the proposed projects seems more realistic to you?

Supplementary Text C
TRANSATLANTIC TUNNEL

Engineers have proposed cutting journey times from New York in the United States to London in the United Kingdom to 54 minutes, travelling on a magnetically raised train. The idea is that the train will travel through a tunnel floating in the Atlantic Ocean. The tunnel will be 150 feet below the surface of the sea and it will be nearly 5,000 kilometres long. The train will travel at 8,000 kph (20 times the speed of today's fastest trains).

Giant anchors will be sunk into the bottom of the sea, in some places up to eight kilometres deep. 54,000 tunnel sections will be transported by a special ship and will then be lowered into place. The tunnel sections will then be attached to the anchors. The tunnel will have to stand up to some of the Atlantic's strongest currents including part of the Gulf Stream. The tunnel will probably cost \$12 trillion and need one billion tons of steel. It will take decades to build. If it is built, it would be the largest and the most expensive engineering project in the history of the world.

Supplementary Text D
RUSSIA PROPOSES BERING STRAIT TUNNEL

Plans to build a 100 km rail tunnel under the Bering Strait separating Siberia from Alaska, and 600 km of connecting railways were presented at a conference 'Mega projects of Russia's East' staged in Moscow on April 24, 2007. The idea in itself is not new. Czar Nicholas II first raised the prospect of a Bering Strait rail link in 1905, 38 years after his grandfather sold Alaska to America for \$ 7.2 million.

The tunnel, which will cost up to \$US 12 billion to build, will also contain a road, oil and gas pipelines, and electricity and optic-fibre cables. It forms part of a \$US 65 billion public-private partnership scheme to supply oil, gas and electricity to North America.

A 3500 km line is planned in Russia from Pravaya Lena, south of Yakutsk, to Uelen on the Bering Strait, while 2000 km of new railway would be needed in North America across Alaska and northern Canada to the railhead at Fort Nelson.

The proposed tunnel would be twice as long as the Channel Tunnel between the United Kingdom and France. The tunnel would raise the prospect of a continuous train ride spanning three-quarters of the world – from New York to London over Canada and Russia

The railway could carry up to 100 million tonnes of freight a year, sufficient to pay back the cost of building it in 20 years.

WORD BUILDING

Prefixes: *trans-*, *inter-*, *re-*, *under-*, *sub-*

Adjective suffixes: *-ary*, *-ar*, *-ish*

Noun suffixes: *-dom*, *-hood*

Exercise 38. Translate the words, paying attention to prefixes.

under- underline, undervalue, understatement, undertake, underset, undercharge, undersell, underpay, underground, underproduction, underestimate;

trans- transcontinental, transformation, trans-Siberian, trans-Atlantic, transplantation, transplant;

inter- international, interdepartmental, to intermix, interact, interrelate, interdepend, Internet, interface, intercity, interplanetary;

re- rearrange, refurbish, remake, recopy, reread, resell, recover, refill, reappear, reorganize, re-examine, re-elect, re-unite;

sub- subtitle, subagent, subrent, submental, subsystem, subnormal, subsensible, subdivision, subordinate.

Exercise 39 Translate the adjectives paying attention to suffixes:

a) legendary, revolutionary, momentary, elementary, reactionary, solitary, military, supplementary, primary, preliminary, ordinary, literary, disciplinary;

b) blackish, fattish, sweetish tea, babyish, Swedish, British, foolish, Danish, Scottish, English, waterish eyes, bookish words, Anglo-Irish.

Exercise 40. Translate the nouns paying attention to suffixes *-dom* and *-hood*.

Kingdom, freedom, childhood, manhood, Christendom, wisdom, officialdom, neighbourhood, falsehood, parenthood, motherhood, brotherhood, girlhood.

APPENDIX

Irregular Verbs

Infinitive	Past Simple	Past Participle	Translation
awake	awoke	awaken	прокидатися, будити
be	was/were	been	бути
become	became	become	ставати
begin	began	begun	починати(ся)
bend	bent	bent	згинатися
break	broke	broken	ламати(ся)
bring	brought	brought	приносити
build	built	built	будувати
burn	burnt, burned	burnt, burned	палити
buy	bought	bought	купувати
catch	caught	caught	ловити
choose	chose	chosen	вибирати
come	came	come	приходити
cost	cost	cost	коштувати
cut	cut	cut	різати
deal	dealt	dealt	мати справу
do	did	done	робити
draw	drew	drawn	малювати, тягнути
drink	drank	drunk	пити
drive	drove	driven	їхати, приводити у дію
eat	ate	eaten	їсти
fall	fell	fallen	падати
feed	fed	fed	годувати
feel	felt	felt	почувати(ся), відчувати
fight	fought	fought	боротися
find	found	found	знаходити
fly	flew	flown	літати
forget	forgot	forgotten	забувати
freeze	froze	frozen	замерзати
get	got	got, gotten	отримувати
give	gave	given	давати
go	went	gone	йти, їхати
grow	grew	grown	зростати
hang	hung	hung	вішати

Infinitive	Past Simple	Past Participle	Translation
have	had	had	мати
hear	heard	heard	чути
hide	hid	hidden, hid	ховати
hold	held	held	тримати
keep	kept	kept	тримати, зберігати
know	knew	known	знати
lay	laid	laid	класти
lead	led	led	вести
leave	left	left	покидати
let	let	let	дозволяти, пускати
lie	lay	lain	лежати
light	lit, lighted	lit, lighted	освітлювати
lose	lost	lost	втрачати, губити
make	made	made	робити
mean	meant	meant	означати
meet	met	met	зустрічати(ся)
pay	paid	paid	платити
put	put	put	класти
read [ri:d]	read [red]	read [red]	читати
ride	rode	ridden	їхати верхи
ring	rang	rung	дзвонити
rise	rose	risen	підійматися
run	ran	run	бігти
say	said	said	говорити, сказати
see	saw	seen	бачити
seek	sought	sought	шукати
sell	sold	sold	продавати
send	sent	sent	відправляти, посилати
set	set	set	встановлювати
shake	shook	shaken	трусити
show	showed	shown	показувати
shut	shut	shut	закривати
sing	sang	sung	співати
sit	sat	sat	сидіти
sleep	slept	slept	спати
speak	spoke	spoken	говорити, розмовляти

Infinitive	Past Simple	Past Participle	Translation
spend	spent	spent	витрачати
spread	spread	spread	поширювати(ся)
stand	stood	stood	стояти
steal	stole	stolen	красти
strike	struck	struck	бити, страйкувати
swim	swam	swum	плавати
take	took	taken	брати
teach	taught	taught	викладати
tell	told	told	розповідати
think	thought	thought	думати
throw	threw	thrown	кидати
understand	understood	understood	розуміти
wake	woke	woken	будити, прокидатися
wear	wore	worn	носити
win	won	won	перемагати
write	wrote	written	писати

Фонетичні правила читання голосних

Тип складу	I тип відкритий	II тип закритий	III тип r після голосного	IV тип r між голосними
a	[ei] hate	[æ] hat	[a:] hard	[ɛə] care
o	[ou] note	[ɒ] not	[ɔ:] nor	[ɔ:] more
u	[ju:] tube	[ʊ], [ʌ] put, cut	[ə:] turn	[juə] cure
e	[i:] Pete	[e] met	[ə:] her	[iə] here
i, y	[ai] fine, my	[i] till, gyps	[ə:] girl, Byrd	[aiə] fire, tyre

Порядок слів у стверджувальному реченні

Обставина часу, місця	Підмет	Обставина способу дії	Присудок	Додаток	Обставина
In winter	children	often	play	snowballs	in the school yards.
	He	usually	does	his homework	in time.

Стверджувальне речення	The shops close / don't close at 7 tonight.
Питальне речення	Do the shops close at 7 tonight?
Спонукальне речення	Shut the door. / Don't shut the door.
Окличне речення	What a slow train this is!

Active Voice

	Indefinite	Continuous be + V-ing	Perfect have + V-ed (3 ф.)	Perfect Continuous have been + V-ing
Present	V(s) <i>I write</i> a letter. <i>She 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.
Past	V-ed (2 ф.) <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>I said</i> that <i>I had already written</i> a letter.	<i>I had been writing</i> a letter when you came.
Future	will + V <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

	Indefinite be + V-ed (3 φ.)	Continuous be being + V-ed (3 φ.)	Perfect have been + V-ed (3 φ.)
Present	The letter <i>is written</i> .	The letter <i>is being written</i> now.	The letter <i>has been written</i> .
Past	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.
Future	The letter <i>will be written</i> .		The letter <i>will have been written</i> by 5 o'clock.