

Міністерство освіти і науки України
Харківський державний політехнічний коледж

Іноземна мова (за професійним спрямуванням)

**Методичний посібник
для практичних занять студентів**

зі спеціальності 5.273 «Залізний транспорт»

**спеціалізації 5.273.1 «Монтаж, обслуговування та ремонт
автоматизованих систем керування рухом на залізничному транспорті»**

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Методичний посібник для практичної роботи студентів з дисципліни “Іноземна мова (за професійним спрямуванням)” спеціальності 5.273 «Залізний транспорт», спеціалізації 5.273.1 «Монтаж, обслуговування та ремонт автоматизованих систем керування рухом на залізничному транспорті».

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Методичний посібник розглянутий та рекомендований цикловою комісією гуманітарних та соціально-економічних дисциплін

Протокол № _____ від “ ____ ” _____ 20 ____ р.

Голова циклової комісії _____ (Діброва Л. М.)

Схвалено методичною радою Харківського державного політехнічного коледжу

Протокол № _____ від “ ____ ” _____ 20 ____ р.

Голова методичної ради _____ (Величко В. О.)

В методичному посібнику запропоновано матеріали для практичного вивчення курсу іноземної мови за професійним спрямуванням спеціальності 5.273 «Залізний транспорт». Збірка матеріалів містить в собі англomовні тексти за фахом, розроблені для них завдання, підбір лексики з даної теми, завдання на розвиток навичок аудіювання, усного та писемного мовлення, що дозволяють студентам всебічно оволодіти навичками ефективної комунікації у їхньому академічному та професійному оточенні.

Запропоновані методичні рекомендації призначено для студентів третього курсу за спеціальністю 5.273.1 «Монтаж, обслуговування та ремонт автоматизованих систем керування рухом на залізничному транспорті».

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Objectives: to provide students with common features of technical translation, to expand their worldview, to develop their logical way of thinking.

Особливості перекладу технічних текстів

1 ХАРАКТЕРИСТИКА ТА ОСОБЛИВОСТІ ТЕХНІЧНИХ ТЕКСТІВ

Мова науково-технічної літератури має свої особливості: граматичні, лексичні, фразеологічні, скорочення.

Граматична структура речення науково-технічних текстів має ряд особливостей:

1. Наявність довгих речень, які включають велику кількість другорядних і однорядних членів. При цьому залежні від підмета і присудка слова часто стоять на відстані від того слова, яке вони визначають.

Ex. This approach possesses the advantage over the experimental method of greater flexibility.

2. Вживання багатокомпонентних атрибутивних словосполучень.

Ex. Pulse microwave radar station; airfield surface movement indicator; ect.

3. Вживання означень, утворених шляхом стяжки цілих синтаксичних груп.

Ex. Temperature dependent замість dependent on temperature. Circulation induced effects замість effects induced by circulation.

4. Вживання синтаксичних конструкцій, пасивних конструкцій, зворотів (об'єктний відмінок з інфінітивом, називний відмінок з інфінітивом).

Ex. The application of electronics was changed our life.

5. Наявність пропусків деяких службових слів (артиклів, допоміжних дієслів) особливо в таблицях, графіках, специфікаціях.

Найбільш типовим лексичним признаком науково-технічної літератури є насиченість тексту спеціальними *термінами*, термінологічними словосполученнями. Відмінність терміна від звичайного слова залежить, перш за все, від...його значення. Терміни виражають поняття науково-оброблені і властиві лише конкретній галузі науки і техніки. В лінгвістичному аспекті терміни, як і інші слова мови, мають явище багатозначності. У деяких випадках один і той же термін має різні значення в межах різних наук. Наприклад, в машинобудуванні *valve* - *клапан*, а в радіотехніці *valve* - *електронна лампа*. Особливі труднощі для перекладу викликають випадки, коли один и той же термін має різне значення в залежності від приладу чи обладнання. Наприклад, термін *key* - *ключ*, *шпилька*, *кнопка*, *перемикач* та інші. Вирішальним при перекладі багатозначного терміна є контекст.

Найбільшу складність для перекладу являють собою *терміни-неологізми* (новостворени терміни). Ці терміни не відображені, як правило, в словниках. Особливо багато неологізмів серед фірмових назв, тобто назви тих чи інших виробів, які випускає фірма. Крім термінів у технічних текстах особливе

місце займають стереотипні слова і фрази (кліше). *Кліше* включають ідіоми, усталені вирази, набір готових фраз.

Окрім термінів, технічні тексти характеризуються вживанням спеціальної технічної фразеології. Сюди також відносяться випадки, коли загально-вживане слово в певних словосполученнях набуває термінологічного значення. Наприклад, *electric eye* - *фотоелемент*, *atmospheric disturbance* - *атмосферні перешкоди*.

Характерною рисою сучасної науково-технічної літератури є широке використання різних скорочень і аббревіатур. Слід пам'ятати, що прийняті скорочення є офіційними, загальноприйнятими і їх не можна довільно змінювати та замінювати. Наприклад, *A.C.* - *alternating current*, *H.P.* - *horse power*.

2 ЗАГАЛЬНІ ВИМОГИ ДО АДЕКВАТНОГО ПЕРЕКЛАДУ

- Точна передача тексту оригіналу.
- Ясність викладу думки при максимальній стислості та формі, яка притаманна українській науково-технічній літературі.
- Переклад повинен повністю відповідати загально прийнятим нормам української літературної мови.
- Переклад повинен бути чітким, супроводжуватися відповідними ілюстраціями до тексту. При перекладі слід пам'ятати, що багато термінів науково-технічної літератури багатозначні в різних сферах науки і техніки і, навіть в межах однієї галузі, можуть виступати в різних значеннях. В зв'язку з цим при виборі перекладного еквіваленту потрібно урахувати контекст.
Ex. quide - гід, екскурсовод (розм.); розвідник (військ.); напрямний пристрій (тех.); хвилевід (рад.)

cross - хрест (розм.); хрестовина (тех.); схрещування (біол.).

Необхідно пам'ятати, що науково-технічна термінологія постійно розвивається і навіть поширені терміни можуть набувати нових значень. Якщо в тексті оригіналу зустрічається термін, якого немає у словниках даної галузі, то потрібно підібрати (перекладний) еквівалент, скориставшись довідниками або спеціальною літературою даної галузі.

3 ГРАМАТИЧНІ ТРУДНОЩІ ПЕРЕКЛАДУ

Для перекладача науково-технічної літератури особливо важливе знання предмета перекладу - він повинен орієнтуватися у тій предметній галузі, до якої належить призначений для перекладу текст. Під час перекладу потрібно правильно зрозуміти зміст речень, смислові відношення між реченнями та значення метатекстових елементів, що беруть участь в організації тексту.

Як відомо, англійська і українська мови належать до різних гілок індоевропейської родини мов (перша - до германської, друга - до слов'янської). Саме розбіжності в будові мов, у наборі їхніх граматичних категорій, форм та конструкцій і становлять першу велику групу граматичних труднощів перекладу. Так, в українській мові немає артиклів, герундія, часових форм дієслова груп Continuous та Perfect, складних

підметових та додаткових інфінітивних конструкцій, а в англійській мові - дієприслівників, категорії роду іменників і прикметників тощо.

Друга група граматичних труднощів перекладу пов'язана з різним обсягом змісту подібних у двох мовах форм і конструкцій. Так, форма теперішнього часу дієслова-присудка в українській мові відповідає за своїм змістом англійським відповідним формам Present Indefinite, Present Continuous та частково Present Perfect, а форма родового відмінку українського іменника може відповідати за своїм граматичним значенням англійській прийменниково-іменниковій конструкції "of + N" або формі загального відмінку іменника в препозиції до іншого іменника.

Третю групу граматичних труднощів перекладу складають ті граматичні явища мови тексту оригіналу, що мають відмінні від відповідних граматичних явищ мови перекладу функціональні характеристики, наприклад, форми однини і множини іменника наявні і в українській, і в англійській мовах, однак форми конкретних іменників можуть не збігатися (англійське *evidence* вживається тільки в однині, але може перекладатися формою і однини, і множини).

Translate the text

SOLAR ENERGY

Shortage of energy is a major world problem and experts! predict that the present rate of increase in energy can exhaust the; supply of fossil fuels in the twenty-first century; What the world needs is a source of perpetual energy.

Potentially, we have a source of perpetual energy shining down on us. The sun. On clear day in the tropics, the intensity of solar energy can be more than a kilowatt per square metre at mid-day. That amount of energy falling on an area of sixty-four square kilometres is about as much as the whole of the British electricity generating system produces.

There is no charge for the energy that flows so freely from the sun. Unfortunately, its collection and storage can be both difficult and expensive. Some form of storage is necessary because the sun's rays do not reach us on cloudy days or at night. Nevertheless, solar energy is now an economic and practicable solution.

It is possible to convert solar energy directly to electricity by the use of photoelectric cells but for most practicable purposes this is too expensive. Today's solar energy systems are of two types, based on the flat plate collector and the focussing collector. [The flat plate collector, is simpler and cheaper. In its simplest form, the sun's rays fall onto a panel carrying water pipes. The sun heats the water which is then available for use.]

Focussing systems can trap a much higher proportion, of the sun's energy and also produce much higher temperatures. [People have known this principle for a long time. As far back as 212 B.C. Archimedes, using focussing mirrors, set fire on the Roman fleet.]

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

Objectives: to enrich students' vocabulary on the topic; to develop their reading, writing, listening and communicative skills; to expand students' worldview, to develop their logical way of thinking.

Equipment: students' books, computer, audio CDs, handouts, slides.

Vocabulary

I - current

R - resistance

V – voltage

law

Ohm's Law

$R = V / I$ - Resistance equals voltage divided by current.

$I = V / R$ - Current equals voltage divided by resistance.

$V = IR$ - Voltage equals current times resistance.

Problem

Suppose that resistance equals one volt and current equals one ampere.

How much is the resistance?

Solution

$R = V / I$

1volts /1 amp = 1 ohm

Get ready!

Before you read the passage, talk about these questions.

1. Why are numbers and math important to know?
2. What are some errors people can make when working with numbers?

Reading

Read the occupational manual. Then, mark the following statements as true (T) or false (F).

How do they say it?		
<i>Symbol/Number</i>	<i>Interpretations/ Pronunciation</i>	<i>Example</i>
=	is, equals, comes to	$\frac{1}{2} = 0.5$ One half equals point five.
+	and, plus, add	$10 + 5 = 15$ Ten and five comes to fifteen.
-	minus, less, subtract	$10 - 5 = 5$ Ten less five is five.
x	times, multiplied by	$10 \times 5 = 50$ Ten times five equals fifty.
:	divided by, over	$10 : 5 = 2$ Ten divided by five

		is two.
$\frac{7}{8}$	seven eighths	$\frac{1}{8}$ The cable measured one eighth of a meter.
1,200	1,200 one thousand two hundred twelve hundred	The repair cost two hundred dollars.

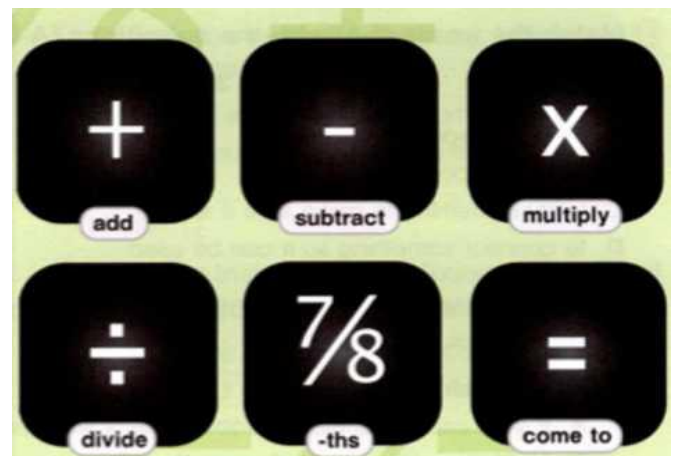
- 1 _ Eight less two means the same thing as eight minus two.
- 2 _ Seven times six equals seven plus six.
- 3 _ $\frac{3}{8}$ is pronounced three times eight.

Vocabulary

Fill in the blanks with the words and phrases from the word bank.

BANK: **add times less plus comes to hundred**

1. Three _____ two is six.
2. Four plus seven _____ eleven.
3. Fifty _____ twenty equals thirty.
4. One thousand plus four hundred is fourteen _____.
5. To get ten, _____ three and seven.
6. Fifteen _____ two is seventeen.



Read the sentence and choose the correct word.

1. One **fourth** / **times** is equal to 0.25.
2. Nine **over** / **less** eight equals one.
3. Start with seven. **Subtract** / **Add** three. This equals four.
4. Six **multiplied by** / **divided by** two is twelve.
5. Six **over** / **plus** three equals two.
6. Twenty **less** / **divided by** four equals five.
7. Five plus six **equals** / **over** eleven.

Writing

Solve the following problems using the formulas of Ohm's Law.

- 1) $R = 80$ ohms $V = 55$ volts $I = ?$
- 2) $I = 10.500$ amps $V = 2.000$ volts $R = ?$
- 3) $I = 0,24$ amps $R = 1,36$ ohms $V = ?$

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
Thank you for active participation.

Objectives: to enrich students' vocabulary on the topic; to develop their reading, writing, listening and communicative skills; to expand students' worldview, to develop their logical way of thinking.

Equipment: students' books, computer, audio CDs, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some of the different ways to measure electricity?
- 2 Why must electricians understand how to calculate ohms?

Reading

Read the college course catalogue describing an electricity class. Then, mark the following statements as true (T) or false (F).

Do you want to be an electrician? Do you want to have a high voltage summer?

Then take this class.

In this course, students learn the basics of electricity. They start by learning about **electrons**, the source of electricity. Then, they study electric **currents**. For instance, they learn the differences between **AC** and **DC**. Students also learn the different units of measurements. They will be able to calculate **amperes**, **volts** and **watts** in a circuit. The class will even use **ohms** to calculate **resistance**. By the end students will have all the basics. They will be on their way to being great electricians!

- 1 _ Students will learn how to calculate measurements for electricity.
- 2 _ The class is for anyone who works as an electrician.
- 3 _ Students should understand currents before they enter the class.

Vocabulary

Match the words (1-6) with the definitions (A-F).

1 _ voltage 2 - AC 3 _ DC 4 _ ohm 5 _ current 6 _ volt

- A) a measurement of the force of electricity
- B) a current that flows in two directions
- C) a measurement showing resistance
- D) the quantity of electricity in a wire
- E) the strength of moving electricity
- F) a current that flows in one direction



Fill in the blanks with the words from the word bank.

WORD BANK **electron** **resistance** **watt** **amperes**

1. A(n) _____ is too small to see without a powerful microscope.
2. Many wires are made out of copper because of its low _____.
3. A(n) _____ measures how much electrical power is being used.
4. A common way to measure electric current is _____.

Read, then complete the sentences, using the correct variant:

The circuit consists of a **voltage source**, a **resistor** and a **conductor**. A voltage source supplies current. A resistor reduces current. A conductor connects the elements of the circuit.

Compare circuit a) with circuit b). What is the difference between them? Current passes through circuit a) while no current passes through circuit b). Circuit b) has an open. No current through circuit b) results from an open. An open and a short are troubles in a circuit. A trouble in a circuit may result in no current in it.

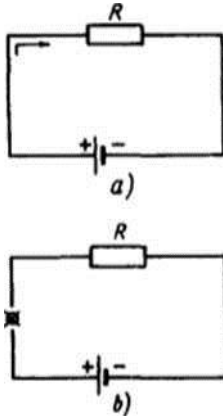


Fig.1

Complete these sentences, using the correct variant:

- | | |
|----------------------------|--|
| 1. Circuit a) consists of | a) resistors and conductors. |
| | b) a voltage source and resistors. |
| | c) a voltage source, a resistor and a conductor. |
| 2. A voltage source | a) conducts current. |
| | b) reduces current. |
| | c) supplies current. |
| 3. A conductor | a) connects the elements. |
| | b) supplies voltage. |
| | c) conducts current. |
| 4. A resistor | a) connects the elements. |
| | b) supplies current. |
| | c) reduces current. |
| 5. No current results from | a) an open. b) a short. |

Speaking

Answer the following questions:

1. What elements does a circuit consist of?
2. What is the function of a voltage source?
3. What is the function of a conductor?
4. What is the function of a resistor?
5. When is there no current in a circuit?
6. What does an open or a short result in?
7. What does no current in a circuit result from?

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some different types of trains?
- 2 What types of trains are used in metropolitan areas?

Reading

Read the magazine article (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 1, Ex.2). Then, choose the correct answers.

Vocabulary

Match the words (1-6) with the definitions (A-F) (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 1, Ex.3).

Read the sentence pairs. Choose which word or phrase best fit each blank.

1. passenger train / freight train

- A. A _____ primarily transport cargo.
- B. There are many types of _____ used for transportation.

2. subway / monorail

- A. Passengers on a _____ ride in underground tunnels.
- B. A _____ uses only one track for support and guidance.

Listening

Listen to a conversation between a man and a woman (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 1. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You and Student B are discussing how to get a location. Talk to Student B about:

- how far away the location is
- what forms of transportation you can take
- how you would like to get there

Student B: You are going to a location with Student A. Talk about how you will get there.

Writing

Write an email to your friend about how to get to your place.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are different parts of a train?
- 2 How are a train's wheels attached to its cars?

Reading

Read the textbook excerpt (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 2, Ex.2). Then, choose the correct answers.

Vocabulary

Write a word that is similar in meaning to the underlined part. (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 2, Ex.3).

Read the sentence pairs. Choose which word or phrase best fit each blank.

1. freight cars / passenger car

- A. Trains being used to ship goods are equipped with _____
- B. Travelers ride in a _____

2. trucks / wheels

- A. A train's _____ are intended to roll on the tracks.
- B. _____ are what sit below a train car.

Listening

Listen to a conversation between a yard master and an inspector (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 2. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a yard master. Talk to Student B about: if a train has been inspected; what to inspect on a train; what types of cars the train has

Writing

Complete the report

Train Inspection Report	
Both the	<input type="text"/>
cars and freight cars on this train were inspected. The <input type="text"/> on the cars are safe to operate. The bogies have also been checked. This train includes a caboose and a <input type="text"/> .	
Both of these components were inspected and are <input type="text"/> to operate.	

Summing-up

Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are the parts of a train's wheelsets?
- 2 How are wheelsets mounted into a bogie?

Reading

Read the textbook passage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 4, Ex.2).

Vocabulary

Match the words (1-7) with the definitions (A-G) (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 4, Ex.3).

Write a word or phrase that is similar in meaning to the underlined part.

1. The rim of the train's wheel guides it along the track, but the train should never ride directly on it. f _ _ n _ _
2. The combination of an axle and two wheels is the component which is fixed into the bogie. _ _ e _ l _ _ t
3. The apparatus that reduces friction from the wheel/rail interface to the car gives passengers in a car a smoother ride. _ h _ _ k a _ _ _ r _ e _

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 4. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a rail employee. Talk to Student B about:
work for the day; wheelsets; shock absorbers

Writing

Use the textbook passage and the conversation above to complete the new employee's notes.

Type of train working on: Freight Train

The bogie has wheelsets.

They reduce stress of .

But it still has that we'll have to work on.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some different kinds of sleepers?
- 2 What are some different measurements of a railroad track?

Reading

Read the email. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 6, Ex.2).

Vocabulary

Match the words (1-6) with the definitions (A-F) (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 6, Ex.3).

Read the sentence pairs. Choose which word best fits each blank.

1. hardwood / concrete

- A. Sleepers made of _____ do not need to be treated with preservative.
 B. _____ ties are made from the wood of broad-leaved trees.

2. tie / track

- A. A _____ can be made of wood or concrete,
 B. A _____ is supported by sleepers.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 6. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are managing the construction of a railroad track. Talk to Student B about:

- what supplies need to be ordered
- the benefits and drawbacks of different kinds of sleepers
- what you recommend

Writing

Complete the report

Track Status Report

The ties in this area of track were inspected. The tracks are in good condition. However, the _____ need to be replaced. I recommend replacing them with _____ sleepers because the _____ sleepers wear out more quickly. Also the spacing of the ties needs to be changed so that it is closer together.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some different types of rails?
- 2 How can rail sections be joined together and held in place?

Reading

Read the stock list. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 7, Ex.2).

Vocabulary

Fill in the blanks with the correct words or phrases from the word bank. (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 7, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. creep/ weld

- A. Rails often _____ in the direction of rail travel.
B. It is often necessary to _____ rail sections together.

2. flat bottom rail /bullhead rail

- A. A _____ has a wider foot and narrower head
B. A _____ has a foot and head that are roughly even.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 7. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a sales representative. Talk to Student B about:

- what items are being manufactured
- what items are in stock
- what items can be put on hold

Writing

Rail Solutions **Call Record**

Name of Caller: _____

Call regarding: _____

Actions taken: _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some weight and volume measurements?
2. Why do shipping companies have weight or volume requirements?

Reading

Read the webpage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 11, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 11, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. short ton / tonne

- A. _____ is equal to 1000 kg.
- 2000 lbs is the same as a _____.

2. cubic meter / kilogram

- A. _____ is a unit of weight or mass.
- To measure volume, you could use a _____.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 11. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a shipping company employee. Talk to Student B about:

- the weight of a shipment
- the size of a shipment
- if your company can ship the item

Homework

Use the webpage and the conversation above to complete the form.

Smith and Nelson Rail Shipping

Shipping Request Form

What do you need to ship? _____

How much does it weigh? _____

If shipping a liquid, what is the total volume? _____

Where are you shipping it to and from? _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some advantages of train travel over other types of transportation?
- 2 How do time zones affect train travel?

Reading

Read the tourist guide. Then, complete the table (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 12, Ex.2).

Vocabulary

Match the words (1-6) with the definitions (A-F) (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 12, Ex.3).

Read the sentence pairs. Choose the sentence that uses the underlined part correctly.

1. A. How many durations is this trip?
B. The hotel is only 20 meters away.
2. A. This train can travel 200 kph.
B. The restaurant is 30 mph away from the train station.
3. A. The next big town is 250 kilometers away.
B. The passenger was tired and slept for several yards.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 12. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: Student A: You are train station employee. Talk to Student B about:

- the duration of his or her trip
- how time zones affect his or her trip
- the speed of the train

Writing

Use the tourist guide and the conversation above to complete the comment card.

New River Train Station

Comment Card

Were you satisfied with your experience at the train station today? Yes / No

Why or why not? _____

Did you receive any help from an employee? Yes / No

If yes, how did the employee help you? _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.

Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some different kinds of signals used in rail yards?
- 2 Why is understanding different signals so important?

Reading

Read the signaling guide. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 14, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 14, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. torpedo / fusee

- A. The workers placed a _____ on the track to warn the engineer to stop.
- B. If visibility is low, you can use a _____.

2. color light / engine bell

- A. The _____ indicated that the train needed to stop.
- B. The engineer rang his _____ to warn people he was approaching.

3. signals / flags

- A. Torpedoes, fusees, and whistles can all be types of _____.
- B. _____ are a pieces of fabric that you can use to signal.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 1. Unit 14. Ex.6, 7). Mark the following statements as true (T) or false (F)

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a railroad employee. Talk to Student B about:

- the bad weather
- what you should do to prepare
- how to stay safe

Writing

Use the signaling guide and the conversation above to complete the safety report.

Smith and Nelson RR

Daily Safety Report

Weather conditions: _____

Measures taken for safety: _____

Accidents: _____

Summing-up

Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some different types of railway turnouts?
- 2 Why is it important to understand the differences between types of turnouts?

Reading

Read the signaling guide. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 1, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 1, Ex.3).

Read the sentences and choose the correct words or phrases.

1. A **crossing / trap point** is the point where two rails meet.
2. The train can go right or left at the **left hand turnout / Y turnout**.
3. Another word for a turnout is a **frog / switch**.
4. A railway **pointy / double slip** allows trains to move to another track.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 1. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a railroad planner. Talk to Student B about:

- what turnout to use at an intersection
- why a kind of turnout is not suitable
- what turnout you think is best

Writing

Use the conversation above to complete the development notes for the intersection.

Littleton RR

Development Notes Intersection G

Planner Name and Date: _____

Type of turnout: _____

Describe how the intersection will function: _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some of the components of a turnout?
- 2 What happens when turnout components break or malfunction?

Reading

Read the textbook excerpt. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 2, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 2, Ex.3).

/Place the correct words and phrases from the word bank under the correct headings.

Word Bank: *check rail, point machine, switch blade, stock rail, point blade, miming rail, guard rail, switch motor*

<i>Moving Rails</i>	<i>Fixed Rails</i>	<i>Motorized Components</i>

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 2. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are an instructor. Talk to Student B about:

- the names of different turnout components
- the functions of turnout components
- your assessment of Student B's knowledge

Writing

Use the conversation above to complete a student's notes.

Railway Engineering 102 **Crossings/Parts**

Stock Rails: These _____

Switch Blades: _____

Switch Motor/Point Machine: _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
Thank you for active participation.

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Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are the different types of railway curves?
- 2 What factors do you have to consider when building a curve?

Reading

Read the signaling guide. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 3, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 3, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. *compromise figure / derail*

- A. If the train goes around the curve too fast, it will _____.
- B. The cant is too high; we have to set it at a _____.

2. *lateral acceleration / superelevation*

- A. The _____ has to be set at the right degree.
- B. Without cant, passengers feel too much _____.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 3. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a railway inspector. Talk to Student B about:

- the condition of a curve
- what maintenance is required
- when the repairs should be done

Writing

Use the conversation above to complete a maintenance report.

State Railroads

Maintenance Report

Manager Name: _____

Date Serviced: _____

Describe the problem: _____

Describe the work performed: _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.

Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What are some different methods of freight transport by rail?
- 2 What equipment is needed to handle intermodal containers?

Reading

Read the signaling guide. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 4, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 4, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. *rolling highway* / *intermodal*

- A. We transported 10 semi trucks via _____.
- B. Most commercial freight moves by _____ transportation.

2. *shipping* / *piggyback*

- A. We couldn't afford the _____ fees for air transport.
- B. _____ is the best way to transport semi trailers by rail.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 4. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a freight company employee. Talk to Student B about:

- what cargo he or she has
- what method of transport he or she requires
- what services you offer

Writing

Use the conversation above to complete the client satisfaction form.

A&G Freight Services

Client Satisfaction Form

What freight did you ship? _____

What mode of transportation did we use to ship your cargo? _____

Describe your experience with our employees. _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.

Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What kinds of cargo are typically sent by train?
- 2 What cargo requires special handling or equipment?

Reading

Read the advertisement for a shipping company. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 5, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 5, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. **bulk commodity / packaged goods**

- A. After rail travel, _____ go directly to store.
 B. _____ is something used to describe raw materials.

2. **aggregate / beam**

- A. We received six loads of mixed _____.
 B. A construction _____ provides structural support.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 5. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a shipping manager. Talk to Student B about:

- today's incoming cargo loads
- what time the cargo is coming
- where the cargo is going

Writing

Use the conversation above to complete the shipping schedule.

J.p. Spring Shipping & Freight Shipping Schedule

Date: _____

Incoming cargo load: _____

Food products? Yes / No

Summary of loading tasks: _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.

Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

Before you read the passage, talk about these questions.

- 1 What is a boxcar?
- 2 What are some options that boxcars can come with?

Reading

Read the webpage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 6, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 6, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1.Capacity /refrigerated

- A. Cool items can be kept cold in a boxcar that is _____.
- B. This boxcar has too much cargo for its _____.

2.Bulkhead /cushioning

- A. Fragile cargo requires _____to be kept secure during transit.
- B. A _____also keeps items from moving around in the boxcar.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 6. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are an employee at a boxcar manufacturer. Talk to Student B about:

- boxcar ordering and options
- the function of different parts
- the types of doors used

Writing

Use the conversation above to complete the boxcar order form.

Order Form

Boxcar options - please specify what options you would like for your boxcar and why.

Interior: _____

Doors: _____

Cargo safety while in transit: _____

Other: _____

Summing-up

Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are the rails on a passenger coach, and what are they for?
- 2 What would you look for when inspecting a passenger coach for safety?

Reading

Read the inspection report. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 8, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 8, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. gangway bellows / carriage

- A. When moving between cars, the _____ provides safe passage.
- B. Railway passengers travel in a _____.

2. tumblehome / dome

- A. The roof and the body of a coach meet at the _____.
- B. A _____ body panel curves inward.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 8. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a railroad manager. Talk to Student B about:

- what he or she found in their inspection
- what needs to be fixed
- what can wait

Writing

Use the conversation above to complete the inspection form.

Countrywide

Railroad

Inspection Form

Summary of inspection findings: _____

Damage to outer body: _____

Suggested repairs: _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.

Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What should you know about rapid transit systems before traveling?
- 2 What are some advantages and disadvantages of using rapid transit?

Reading

Read the blog post. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 9, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 9, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. electric passenger railway / third rail

- A. A high voltage _____ is extremely dangerous.
 B The advantage of a(n) _____ is not having to park a car.

2. subway / grade separation

- A. Using _____, rapid transit is separated from street traffic.
 B. During rush hour, the _____ is often over-crowded.

3. rapid transit / rush hour

- A. During _____, trains can be very crowded.
 B. When taking _____ a new city, it's good to have a map.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 9. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a co-worker in an office. Talk to Student B about:

- advice for getting around a new city
- whether the metro is better than renting a car
- whether the metro is safe

Writing

Use the conversation above to complete the rapid transit survey.

Springfield Metro Survey

What metro line did you take in Springfield? _____

Did you use a transit map? If so, did you find it easy to use? _____

Please comment on the condition of the trains and/or stations. Were they clean?

Well-lit? _____

Summing-up

Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What types of rail have you used in your country?
- 2 Which type of rail do you prefer, and why?

Reading

Read the magazine article. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 10, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 10, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. seating area / zone pricing

- A. Lines that go long distances may use _____ for fares.
B. Some trains don't have a large _____ so riders must stand.

2. major / express

- A. Most _____ cities have multiple rail systems.
B. _____ trains skip stations for faster service.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 10. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a local resident. Talk to Student B about:

- their visit to the area
- types of rail
- which is better for different areas

Writing

Use the conversation above to complete the email.

Dear Jack,

You're right, the rail services here are excellent. Their _____ offers _____ to another. I didn't have to stand once, and the _____ are large and comfortable. I wanted to see some parts of the country, so I used _____. The trains didn't run very often, but they were on time. They use _____, so the further I went the more I paid. I was told the locals use _____ to get to and from work. I didn't try it, though, since I didn't visit the _____. Wish you were here! Chris

Summing-up

Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What is long distance rail travel like where you come from?
- 2 What are some things to plan for with international rail travel?

Reading

Read the webpage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 11, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 11, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. international rail / coach seating

- A. When traveling on _____, carry your passport at all times.
- B. The most economical way to travel is in _____.

2. customs / passport

- A. For international travel, everyone needs a _____.
- B. Luggage is usually inspected at _____.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 11. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a railway ticket operator. Talk to Student B about:

- what he or she needs
- the type of ticket you recommend
- services provided

Writing

Use the conversation above to complete the brochure.

• • • Railways International

Who we are: _____

What we provide for you: _____

Ready to buy your ticket? What we recommend: _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.

Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are some ways to pay for railway passage?
- 2 What are the differences between tokens and tickets?

Reading

Read the webpage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 12, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 12, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. cash-on-board / AFC

- A. _____ allows a passenger to pay after boarding.
 B. _____ is a system the railway uses to charge fare.

2. single journey / stored value

- A. Just get a _____ if you aren't coming back on the train.
 B. If you'll ride the train every day, get a _____.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 12. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a ticket office clerk. Talk to Student B about:

- what he or she needs
- what you recommend and why
- what the total cost is

Writing

Use the conversation above to complete the subway fare options poster.

Urban Transit System

Fare Options

Single Rides: _____

Multiple Rides: _____

Fares can be purchased at: _____

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
 Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are some advantages of high-speed rail?
- 2 What are some disadvantages of high-speed rail?

Reading

Read the webpage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 13, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 13, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. existing line /dedicated line

- A. The high-speed train runs exclusively on a(n) _____.
- B. The high-speed train shares a(n) _____.

2. navigate /reach

- A. Be careful to _____ that curve at a low speed.
- B. What is the highest speed this train can _____?

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 13. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a rail manager. Talk to Student B about:

- what the options are for a high-speed train
- the pros of each option
- the cons of each option

Writing *Use the conversation above to complete the high-speed rail analysis.*

Analysis		
List the pros and cons of the options for constructing a high-speed rail system below.		
Option	Pro	Con
build <input type="text"/> line	use new technology, could be <input type="text"/> ever built, track would be smooth	<input type="text"/>
use existing line	less <input type="text"/>	needs <input type="text"/> , not as smooth, slower

Summing-up Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What kind of technology is used to run maglev trains?
- 2 What are some advantages of maglev trains?

Reading

Read the webpage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 14, Ex.2).

Vocabulary

Match the words (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 14, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1. EMS /EDS

- A. In _____, magnets are attached to both the train and the tracks.
 B. In _____, magnets on the train are repelled by a steel track.

2. Inductrack / Levitation

- A. _____ prevents the train from touching the tracks.
 B. _____ is a type of electrodynamic suspension.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 2. Unit 14. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a reporter. Talk to Student B about:

- maglev trains
- what you already know
- the differences between different types

Writing

Use the conversation above to complete the reporter's outline.

Notes: Maglev Trains		
Type of train	Advantages	Disadvantages
1. EMS	<input type="text"/> functions at any speed	Is not as <input type="text"/> as EDS
2. EDS	Is more <input type="text"/> than EMS	<input type="text"/> only works at high speeds

Summing-up Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

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Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are some parts of a train's braking system?
- 2 What are some potential problems with a train's brake system?

Reading

Read the manual. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 1, Ex.2).

Vocabulary

Match the words (1-7) with the definitions (A-G) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 1, Ex.3).

Read the sentences and choose the correct words or phrases.

- 1 If the **angle cock / driver's brake valve** doesn't work, the system loses air.
- 2 The **brake cylinder / brake pipe** goes from one end of the train to the other.
- 3 The **main reservoir / brake block** supplies air to the whole system.
- 4 The **compressor / equalizing reservoir** often controls the train's doors.
- 5 Most trains use **feed valves / pneumatic brakes** to stop.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 1. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a train inspector. Talk to Student B about:

- the parts that you checked on a train
- which part wasn't working properly
- how long repairs will take

Writing

Complete the inspection report. **Brake System Inspection Report**

Inspector Name: Daniel Martin

Supervising Engineer: Olivia Smith

Inspection findings: On January 31st, I inspected the train's _____ system. I checked a number of devices in the system. Ms. Smith suggested the problem might be with the _____ reservoir. However, it seems to be _____ the proper level of _____. I also checked the brake _____. The cylinder's _____ is applying the correct amount of pressure to the brake block. And the _____ seems to be responding to pressure adequately. I did find a problem with the triple _____. It is not _____ changes in _____. This can prevent application of the brake. I informed Ms. Smith that it needed to be fixed before the train ran again. She reported that it would be fixed in about a _____ and a _____.

Summing-up

Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 How is electricity used on a train?
- 2 Why are regular inspections of trains important?

Reading

Read the inspection report. Then, mark the following statements as true (T) or false (F) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 4, Ex.2).

Vocabulary

Read the sentence pair. Choose the sentence that uses the underlined part correctly.

- 1 A The sand box helps the train stay on track in wet weather.
B The driver operates the train from the main alternator.
- 2 A The system stays cool because of a turbocharger.
B Power for heating each car comes from the auxiliary alternator.
- 3 A Radiators circulate cool air through the locomotive.
B The fuel tank can hold up to 5,000 gallons.
- 4 A The handle for the brake is located on the control stand.
B The motor blower gives power to the entire engine.

Fill in the blanks with the correct words or phrases from the word bank. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 4, Ex.4).

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 4. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a railroad manager. Talk to Student B about:

- what repairs are needed for a locomotive • how long the repairs will take
- what to do while repairs take place

Writing

Complete the repair schedule. **Repair Schedule**

Currently, two _____ in the Continental Railroad fleet need _____:

Locomotive Name: The _____ Arrow

Problems: damage to the _____ and air _____

Comments: The sand box has a small hole in it, which is causing sand to leak out. The air intakes need new _____. The current ones are very dusty, which means dirty _____ air _____ is _____ circulating _____ through _____ the _____ train.

Length of repair work: Repairs should only take half a day. They are scheduled for next week.

Summing-up Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are some typical duties of a railway technician or maintenance person?
- 2 What is used to connect train cars?

Reading

Read the training guide. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 6, Ex.2).

Vocabulary

Match the words or phrases (1-6) with the definitions (A-F) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 6, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1 **bidirectional / self-powered**

- A The cars are _____. Each has its own motor.
B Since the train is _____, it doesn't need to be turned around.

2 **consist / generator**

- A This _____ has seven passenger cars.
B The _____ creates power that is distributed through the engine.

3 **DEMU/ push-pull train**

- A A _____ has a locomotive but can be driven from both ends.
B The _____ is one of three types of diesel multiple units.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 6. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are an experienced railway technician. Talk to Student B about:

- what type of trains are used by your company
- what tasks need to be completed
- how certain tasks take place

Writing

Write a training guide introduction for a railway technician. Include: the type of train the person will work with, features of that train, and the person's tasks.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting.
Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What some different types of tracks?
- 2 How do railway signaling systems differ between your country and other countries?

Reading

Read the manual introduction. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 7, Ex.2).

Vocabulary

Match the words or phrases (1-7) with the definitions (A-G) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 7, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1 Permissive signal / Absolute signal

- A _____ can tell trains to stop completely.
B _____ can tell trains to slow down or stop briefly.

2 secondary track / main track

- A Trains need permission to occupy a _____.
B A _____ can be occupied without permission.

3 Approach / Restricting

- A _____ indicates that trains can move at restricted speed.
B _____ tells trains to slow to 35 mph, then stop at the next signal.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 7. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are an engineer's apprentice. Ask Student B about:

- the difference between two railroad structures
- a mistaken belief on the subject the meanings of different signals

Writing

Write some notes from an engineer's apprentice. Include: the difference between main and secondary tracks, what signal aspects are, and how to identify at least one signal aspect.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are some parts of a block system?
- 2 What advantages do automatic blocking systems have over manual blocking systems?

Reading

Read the textbook passage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 9, Ex.2).

Vocabulary

Fill in the blanks with the correct words or phrases from the word bank. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 9, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1 single track ABS / double track ABS

- A A _____ maintains distances between trains in one direction.
B A _____ must prevent trains from colliding head-on.

2 rail joints / bonds

- A ABS systems use _____ to divide tracks into blocks.
B _____ continue track circuits and connect blocks.

3 interlocking / track circuit

- A A(n) _____ determines if a train occupies a particular set of tracks.
B Switches and signals are managed by a(n) _____ so they do not conflict.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 9. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a student. Talk to Student B about:

- automatic block systems
- double and single track ABS
- block signals

Writing

Write down the notes the student would have taken with the teacher. Include: the two types of ABS systems, how their uses differ, and how they are built differently.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 How are cab signaling systems different from wayside-only signaling systems?
- 2 What are some types of cab signaling?

Reading

Read the webpage. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 10, Ex.2).

Vocabulary

Read the sentence pairs. Choose which word or phrase best fits each blank.

1 continuous / intermittent

- A Information is provided constantly by a(n) _____ system.
B With a(n) _____ system, information is sent when the cab passes wayside signals.

2 warning / pulse code

- A Some systems send a _____ to transmit a signal to the cab.
B When the cab ignores a signal, the system sends a _____.

3 ATS / ATC

- A The _____ will stop the train if it ignores a stop signal.
B The _____ uses its steady supply of information to control the train's speed.

4 AWS / ATO

- A The British _____ uses magnets to transmit signals.
B The _____ system allows trains to be piloted automatically.

Match the words or phrases (1-4) with the definitions (A-D) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 10, Ex.3).

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 10. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are an engineer that has recently been hired by a railway.

Talk to Student B about:

- cab signal systems

- active systems
- intermittent and continuous systems

Writing

Write a brief guide to a railway's cab signaling system. Include: the types of system, whether it is intermittent or continuous, and what happens when a signal is ignored.

Summing-up

Was this unit useful for you? Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are some parts of centralized traffic control?
- 2 How are traffic control systems improving with technology?

Reading

Read the article. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 11, Ex.2).

Vocabulary

Match the words or phrases (1-9) with the definitions (A-I) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 11, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1 CTC / TCS

A A _____ is any system which monitors and controls traffic.

B With _____, trains for an entire nation can be directed from a single location.

2 fiber optic link / train management system

A A _____ sends pulses of light in order to communicate.

B A _____ will use satellite communications to control train operation.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 11. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a train traffic control manager. Talk to Student B about:

- the CTC mock-up
- switches and links
- upgrading the system

Writing

Complete the summary on CTC for an employee manual.

A CTC functions as a communication center for a large area. An in the central office can supervise the movements of many different trains. Axle on the track transmit information about the of trains. These are monitored on a - in the CTC.

There are several different ways in which a CTC can communicate with the trains. In the past, pole links and ground communications were used. These days, the trend is for more advanced . CTCs are using more advanced train management systems with the help of technology, links, and .

Information is more accurate and is transmitted and received more quickly with these new technologies.

Summing-up Was this unit useful for you? Thank you for active participation.

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Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

1 What precautions do railroads in your country take to ensure safety at railroad crossings?

2 What would you do to make railroad crossings in your country safer?

Reading

Read the report. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 12, Ex.2).

Vocabulary

Match the phrases (1-6) with the definitions (A-F) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 12, Ex.3).

Fill in the blanks with the correct words or phrases from the word bank.

obstruction	crossbuck	trespass	fencing	illegal	bell	penalty
-------------	-----------	----------	---------	---------	------	---------

1 I knew there was a railroad there as soon as I saw the _____.

2 The man could not see if a train was coming due to a large _____.

3 She was surprised by the height of the _____ they put up around the lot.

4 Lawmakers are trying to make it _____ to carry a weapon on a train.

5 The _____ for riding a train without paying for a ticket is pretty severe.

6 You can tell the train is coming as soon as the _____ starts ringing.

7 It is a crime to _____ on railroad tracks.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 12. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a rail company manager. Give three recommendations to Student B that would improve safety around your railroads. Mention:

- cattle guards
- warning horns
- crossing gates

Writing

Write a letter to a government official, letting him to know how your rail company plans to improve railway safety. Include: what your company plans to do, when it plans to do, and why it can't do other actions.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

Objectives: introducing and practicing new vocabulary on the topic; developing students' reading, writing, listening skills, improving their English communication in a work environment; expanding students' worldview, developing their logical way of thinking.

Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are some safety features of modern railcars?
- 2 How can seating arrangements increase or decrease safety in passenger cars?

Reading

Read the article. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 13, Ex.2).

Vocabulary

Match the words or phrases (1-10) with the definitions (A-J) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 13, Ex.3).

Read the sentence pairs. Choose which word or phrase best fits each blank.

1 **impact / luminescent striping**

A _____ is a form of emergency lighting.

B Unidirectional seating prevents injury in the case of an _____.

2 **locomotive crush zone / CEM**

A A _____ is designed to absorb force in an accident.

B _____ is important in order to reduce injuries or death.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 13. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a manufacturer's employee. Talk to Student B about:

- newly designed railcars
- safety features of the railcars
- why the safety features are important

Writing

Describe a company's train safety features. Include: crush zones, seating arrangements, and lighting.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

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Equipment: students' books, Digi books -Virginia Evans. Career Paths. Career Paths-Rail Transportation, computers, handouts, slides.

Get ready!

- 1 What are some problems that railroad maintenance workers deal with?
- 2 Why is track maintenance important?

Reading

Read the job description. Then, choose the correct answers (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 14, Ex.2).

Vocabulary

Match the words or phrases (1-8) with the definitions (A-H) (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 14, Ex.3).

Fill in the blanks with the correct words or phrases from the word bank.

Hyrrail truck	Grinding	slow order	clear	cracked	defects
---------------	----------	------------	-------	---------	---------

- 1 The rail is _____, but it hasn't broken in two yet.
- 2 According to the _____, trains can only travel ten miles per hour in this area.
- 3 The workers found several _____ that must be repaired.
- 4 _____any irregularities will return the rail to its original shape.
- 5 The _____ is able to drive on top of the rails.
- 6 The tracks were shut down so workers could _____branches from a recent storm.

Listening

Listen to a conversation. (Virginia Evans. Career Paths. Rail Transportation. Book 3. Unit 14. Ex.6, 7). Mark the following statements as true (T) or false (F) and complete the conversation.

Speaking

With a partner, act out the roles based on the conversation. Then, switch roles.

Student A: You are a railroad maintenance manager. Talk to Student B about:

- the lines that need repairs
- the repairs that are needed
- the order of the repairs

Writing

Write an email about a maintenance crew's tasks for this week. Include: what line they'll be working on, what repairs need to be made, and a list with the order of the repairs.

Summing-up

Was this unit useful for you? I hope you learnt something new and interesting. Thank you for active participation.

References

1. Virginia Evans -Jenny Dooley -Tom White /Career Paths. Rail Transportation/ UK, Express publishing, 2017
2. Ibbotson M/_ Professional English in use: Engineering. Cambridge University Press/- 2009
3. Коваленко А. Загальний курс науково-технічного перекладу.-К.: "Фірма "Інкос", 2002. -317 с.
4. <https://www.expresspublishing.co.uk/>
5. <https://www.cambridge.org/>