МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РЕСПУБЛИКИ САХА (ЯКУТИЯ)
Государственное автономное учреждение дополнительного профессионального образования
Республики Саха (Якутия)
«Институт развития профессионального образования»
ГБПОУ РС (Я) «Транспортный техникум им. Р.И.Брызгалова»

Учебно-методическое пособие

«Time 4 English» по дисциплине: «СГЦ.02 Иностранный язык в профессиональной деятельности»

для студентов железнодорожных специальностей:
23.02.06 Техническая эксплуатация подвижного состава(локомотивы)
23.02.06 Техническая эксплуатация подвижного состава(вагоны)
23.02.01 Организация перевозок и управление на транспорте (железнодорожном)
23.02.08 Строительство железных дорог, путь и путевое хозяйство

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Учебно-методическое пособие «Time 4 English» по дисциплине: «СГЦ.02 Иностранный язык в профессиональной деятельности» для студентов железнодорожных специальностей: 23.02.06 Техническая эксплуатация подвижного состава(локомотивы), 23.02.06 Техническая эксплуатация подвижного состава(вагоны), 23.02.01 Организация перевозок и управление на транспорте (железнодорожном), 23.02.08 Строительство железных дорог, путь и путевое хозяйство / Составитель Дмитриева Розалия Семеновна. – г. Якутск, 2026 г. – 70 с.

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Учебно-методическое пособие по дисциплине «Иностранный язык в профессиональной деятельности» предназначено для обучающихся по УГС 23.00.00 «Техника и технологии наземного транспорта». Основная цель – развитие у студентов иноязычной коммуникативной компетенции в контексте профессиональной деятельности, связанной с наземным транспортом. Задачи нацелены на развитие устной и письменной коммуникации на иностранном языке, навыков работы с техническими текстами, а также подготовку к решению практико-ориентированных ситуаций.

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1. ПОЯСНИТЕЛЬНАЯ ЗАПИСКА

Учебно-методическое пособие предназначено для студентов железнодорожных специальностей по дисциплине СГЦ 02 «Иностранный язык в профессиональной деятельности», состоят из практических заданий по темам технического английского языка, а также в приложении добавлены словарные диктанты и переводы предложений для закрепления нового лексического материала.

Задачи учебно-методического пособия:

- ознакомить студентов с основной терминологической лексикой по техническому английскому языку, с основами технического перевода;

- переводить письменно с английского на русский язык научно-технические тексты, статьи;

- выполнять упражнения для закрепления нового материала, новой технической терминологии.

- устно излагать свои мысли по инновационным направлениям в сфере технического прогресса во всем мире.

При обучении иностранного языка студенты продолжают овладение новыми языковыми знаниями и навыками и совершенствование уже имеющихся знаний. Расширение словарного запаса студентов происходит за счет овладения употреблением терминов, интернациональной лексикой, новыми значениями известных слов. Студенты выполняют упражнения по переводу с английского языка на русский с соблюдением норм лексической сочетаемости и грамматических законов русского языка. Во время выполнения учебных переводов вырабатываются умения и навыки перевода технического текста, идиом, порядка и способов пользования специальными словарями. Пособие включает 8 тем (TOPIC):

1. TECHNICAL DRAWING / ИНЖЕНЕРНАЯ ГРАФИКА.

2. MATERIALS AND THEIR PROPERTIES / МАТЕРИАЛЫ И ИХ СВОЙСТВА

3. METALS / МЕТАЛЛЫ

4. WELDING / СВАРКА

5. SAFETY EQUIPMENT / ЗАЩИТНАЯ ЭКИПИРОВКА

6. BRIDGES / МОСТЫ

7. HISTORY OF RAILWAYS /ИСТОРИЯ ЖЕЛЕЗНЫХ ДОРОГ

8. RUSSIAN RAILWAYS/ РОССИЙСКИЕ ЖЕЛЕЗНЫЕ ДОРОГИ

Каждая тема состоит из нескольких текстов, предназначенных для различных видов чтения, диалога-беседы по теме занятия (для развития коммуникативных навыков), текстов для перевода с английского на русский.

Приложение 1 состоит из словарных диктантов для повторения лексических средств по пройденной теме и формирует базовый словарный запас обучающихся. Приложение 2 состоит из предложений на русском языке для перевода на английский. В Приложении 3 даются контрольно-измерительные материалы по пройденным темам. Задания всех приложений предоставлены отдельно, чтобы дать возможность преподавателю использовать эти разделы по своему усмотрению.

2. НОРМАТИВНАЯ ПРАВОВАЯ ОСНОВА

1. Федеральный закон 29.12.12 №273-ФЗ «Об образовании в Российской Федерации».

2. Приказ Министерства просвещения РФ от 24.08.2022 № 762 «Об утверждении Порядка организации и осуществления образовательной деятельности по образовательным программам среднего профессионального образования».

3. Федеральные государственные образовательные стандарты среднего профессионального образования (ФГОС СПО) по специальностям 23.02.06 Техническая эксплуатация подвижного состава(локомотивы), 23.02.06 Техническая эксплуатация подвижного состава(вагоны), 23.02.01 Организация перевозок и управление на транспорте (железнодорожном), 23.02.08 Строительство железных дорог, путь и путевое хозяйство

4. Закон Республики Саха (Якутия) от 15 декабря 2014 г. 1401-З N 359-V «Об образовании в Республике Саха (Якутия)».

5. Концепции преподавания общеобразовательных дисциплин с учетом профессиональной направленности программ среднего профессионального образования, реализуемых на базе основного общего образования, утвержденного распоряжением Министерства просвещения Российской Федерации от 30 апреля 2021 г. № Р-98 «Об утверждении Концепции преподавания общеобразовательных дисциплин с учетом профессиональной направленности программ среднего профессионального образования, реализуемых на базе основного общего образования».

6. Приказ Министерства образования и науки РС (Я) от 29.04.2022 г. № 01-03/657 «Устав Государственного Бюджетного Профессионального Образовательного Учреждения Республики Саха (Якутия) «Транспортный техникум им.Р.И.Брызгалова».

7. Рабочая программа учебной дисциплины СГЦ.02 «Иностранный язык в профессиональной деятельности».

3. СОКРАЩЕНИЯ, ТЕРМИНЫ И ОПРЕДЕЛЕНИЯ

Список принятых сокращений (аббревиатур)

- **ИЯ** — иностранный язык.
- **ЛВ** — лексическая единица (слово или устойчивое выражение).
- **ТП** — текстовый перевод (или виды перевода текста).
- **ПК** — коммуникативная компетенция (способность общаться на языке).
- **УЗ** — учебное задание / упражнение.

Список принятых терминов и определений

- **Topic** - тема
- **Exercise** – упражнение
- **Read –** прочитать
- **Translate-** перевести
- **Compare-** сравнить
- **Match-** соотнести
- **Speaking task-** задание для говорения
- **Answer the questions-** ответить на вопросы
- **Complete –** заполнить

4. ОСНОВНАЯ ЧАСТЬ

TOPIC 1: TECHNICAL DRAWING

Ex. 1. Read the following text and translate it.

In the past, technical drawings for industry and architecture were drawn by hand, i.e. people worked at drawing boards with drawing equipment. These hand-drawn diagrams provided clear technical information but were slow and expensive to make. Nowadays working drawings are done on computers, which is much quicker.

Computers can also:

1. Save, change, and recycle the drawings.
2. Make 3D images.
3. Make drawings bigger or smaller.
4. Keep an electronic library of standard parts.
5. Make symmetrical images of components.
6. Make accurate and consistent drawings.

An excellent way to explain the advantages is to think about architectural drawing. Features such as windows and doors can be moved until the architect likes the building. Images of the rooms are created in 3D so the viewer can walk through the rooms. Designers can also experiment with different arrangements of furniture and colours.

Ex. 2. Make nouns from verbs adding the suffixes – er, -or, -ment, -tion

Write	
Develop	
Translate	
Act	
Operate	
Move	
Inform	
Judge	
Teach	
Integrate	

Ex. 3. Match the words with their definitions. One word is odd.

- Architector;
- Hand;
- To save;
- Symmetrical;
- Equipment;
- Viewer;
- Advantage;
- Designer;
- To recycle;
- Feature.

1	To do something with objects in order to use them again. We do this with plastic bottles,cans,etc.	
2	To keep something. For example money, information,etc.	
3	Everything you need for a particular purpose, job, task (modern, office, medical, engineering)	
4	A part of your body	
5	Pluses of something over something	
6	A person who creates images, drawings	
7	A person who designs buildings	
8	When two parts of an object are the same size and shape.	
9	A person who is looking at something or watching something	

TOPIC 1: TECHNICAL DRAWING

Group work.

Exercises:

1. Main projections of technical drawing.
2. Sizes of papers.
3. Technical drawing tools.
4. Computer-aided drafting.

5. By two views make a draft of the third view, using necessary cross-sections. Zoom 3:1

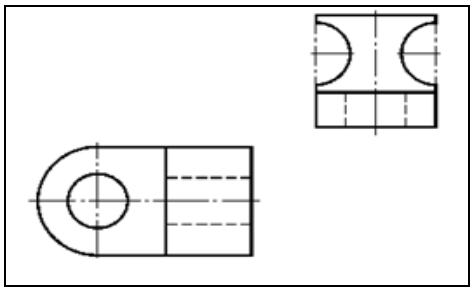


Рис.1 Вид сверху, вид слева

TOPIC 1: TECHNICAL DRAWING

Group work

Exercises:

1. Main projections of technical drawing.
2. Sizes of papers.
3. Technical drawing tools.
4. Computer-aided drafting.
5. By the whole view make a draft of the three views, using sizes.

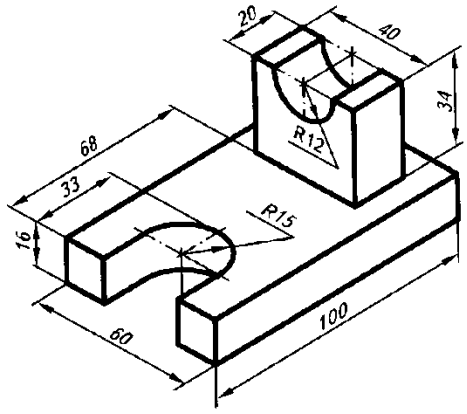


Рис.2 Изометрическая проекция

TOPIC 1: Computer-aided drafting

Ex.1 Translate the words. You have 10 minutes to do this task.

Инженерная графика	
Доска	
Точная информация	

Быстрее	
Перерабатывать	
Симметричное изображение	
Преимущество	
Могут экспериментировать	
Промышленность	
Дорогой	
Стандартные части	
Мебель	
Здание	
Электронная библиотека (панель)	

Ex.2 Now you will make a TRAIN in different computer –aided programs.

- power point;
- figma;
- corel draw;
- krita;
- photoshop;
- instagram story maker.

Prepare the description of this object. The little story about this train. Everything is made in English.

TOPIC 2: MATERIALS AND THEIR PROPERTIES

Ex.1.Read the information in the table below and fill the gaps.

• Material ***• Properties*** ***• Uses***

1. Aluminum		
2. Brass (copper and zinc)		
3. Cement		
4. Copper		
5. Diamond		
6. Glass		
7. Iron		
8. Steel		

9. Wood		
10. Plastic		

Ex.2. Read the information in the table ex.1 again and find out which materials is best for:

(a) water pipes;

(b) a knife cutting a microscope lens;

(c) connecting a socket to the electricity supply;

(d) a bicycle frame;

(e) TV-set.

Ex.3. Match the properties from the table with their opposites below. Use your glossary to help you

• heavy • tough •opaque •rigid •weak •soft

1. breaks easily	
2. clear	
3. easy to shape	
4. hard	
5. light	
6. strong	

Ex.4. Fill in the gaps in the following sentences with suitable words

1. Windows are made of _____ because it is transparent.

2. Water pipes are usually made of _____, but nowadays people also use _____ to produce tubes because they don't rust in contact with water.

3. Cups, dishes are made of _____, but they are not practical because this material breaks easily.

4. In building houses _____is used to hold bricks together.

5. _____is a light silver-coloured metal, which can be easily bent by hand.

TOPIC 3: METALS

CASE. You are a metal designer. Choose one or two metal to produce something interesting, original, useful. It can be earrings, spoon, knife, necklace, tube, decoration etc. While making the task say about:

- Sizes;
- Weight;
- Scheme;
- Prize;
- Metal working process used in it;
- Function of a thing.

TOPIC 3: METALS

Ex.1Read the text very quickly and fill in the gaps with the given words

Machine-tools

1) _____ are used to 2) _____ metals and other materials. The material to be shaped is called the workpiece. Most machine-tools are now 3) _____. Machine-tools with electrical drive are faster and more accurate than hand tools: they were an important element in the development of mass-production processes, as they allowed individual parts to be made in large numbers so as to be interchangeable.

All machine-tools have 4) _____ for holding both the 5) _____ and the tool, and for accurately controlling the movement of the cutting tool relative to the workpiece. Most machining operations generate large amounts of heat, and use cooling fluids (usually a mixture of water and oils) for cooling and lubrication.

Machine-tools usually work materials mechanically but other machining methods have been developed lately. They include chemical machining, 6) _____ to machine very hard materials to any shape by means of a continuous high-voltage spark (7_____) between an electrode and a workpiece. Other machining methods include drilling using ultrasound, and cutting 8) _____ a laser beam. Numerical control of machine-tools and

flexible manufacturing systems have made it possible for complete systems of machine-tools to be used flexibly for the manufacture of a range of products.



Ex.2 Read the text again very carefully and decide if the following sentences are <u>true</u> or <u>false</u>

1. Metals and other materials are shaped by machine-tools _____;
2. Machine-tools usually work automatically_____;
3. Now machine-tools are electrically-driven mostly_____;
4. Most machining operations generate large amount of cooling, and use heat fluids_____;
5. Hand tools are not so fast and accurate as electrically driven ones_____;
6. The very important element in the development of mass production processes were machine-tools;
7. Some machining methods include megasound and bending_____;
8. The workpiece to be shaped is called the material_____.

<u>TOPIC 4 :WELDING</u>

Ex.1 From the list below choose the places where welders are not likely to work

- machine-building factory workshop;
- bridge construction site;
- hospital;

- university department;
- shipyard;
- bank;
- repair shop;
- assembly site;
- bakery.

Ex.2 Read about welders' training, career possibilities and wage rate in the USA and compare with those in your country

What Preparation and Training Do You Need?

To become a Welder you should complete Grade 12 with credits in mathematics (particularly technical math) and some shop courses. Completion of an apprenticeship could take approximately 3 years including 3 periods of 8 weeks (720 hours) in-school theory. Upon successful completion of the training agreement, you will receive a Certificate of Apprenticeship.

What's Your Future as a Welder?

Most workers in this occupation work full-time, sometimes in shift work, usually indoors. Those with the ability to work with high-technology welding applications may have better employment opportunities. The bulk of employment opportunities can be in the non-electrical, machinery, construction and metal-fabricating industries. Some workers will become self-employed.

What is the Wage Rate for Welders?

As an apprentice you would start at a wage rate less than that of a journeyperson. This rate increases gradually as you gain competency. The wage range for fully qualified welders according to the Peel Halton Dufferin HRDC Wage Book is between $9.50/hr to $16.18/hr, with a median salary of $12.50/hr.

Vocabulary

journeyman (person) наемный квалифицированный рабочий

apprentice ученик

plate working обработка листового металла

Ex.3 Complete the sentences to speak about your country to become a

Welder you should get education _____

Welders can work in …_____

Most welders work (full-time/ part-time/ in shift work/ indoors/ outdoors/ self-employed)

The salary for fully qualified welders is _____

Ex.4 Translate the sentences

1. К традиционным типам сварки относятся: электродуговая, кислородно-газовая и контактная электросварка.

2. Каждый сварщик должен знать правила личной безопасности и использовать индивидуальные средства защиты, а также разбираться в международных кодах и стандартах.

3. Во время сварки происходит изменение микроструктуры металла, что приводит к изменению его свойств.

4. При проведении сварочных работ особенно важно контролировать качество шва.

5. Сфера применения сварки охватывает большое количество областей промышленности.

6. Квалифицированный сварщик должен сам уметь подбирать необходимое сварочное оборудование, материалы и технику сварки.

TOPIC 5: SAFETY EQUIPMENT

Ex.1Fill the gaps in the table

Word/phrase	Similar meaning	Opposite meaning
Boiler suit		
Corrosive		
Danger		
Ear defenders		
Explosive		
Flammable		
Goggles		
Hat		
Instruction		

Toxic		
Corrosive		
Warning		
To protect		
Safe		

Ex.2 Write the names of the body's part in English.

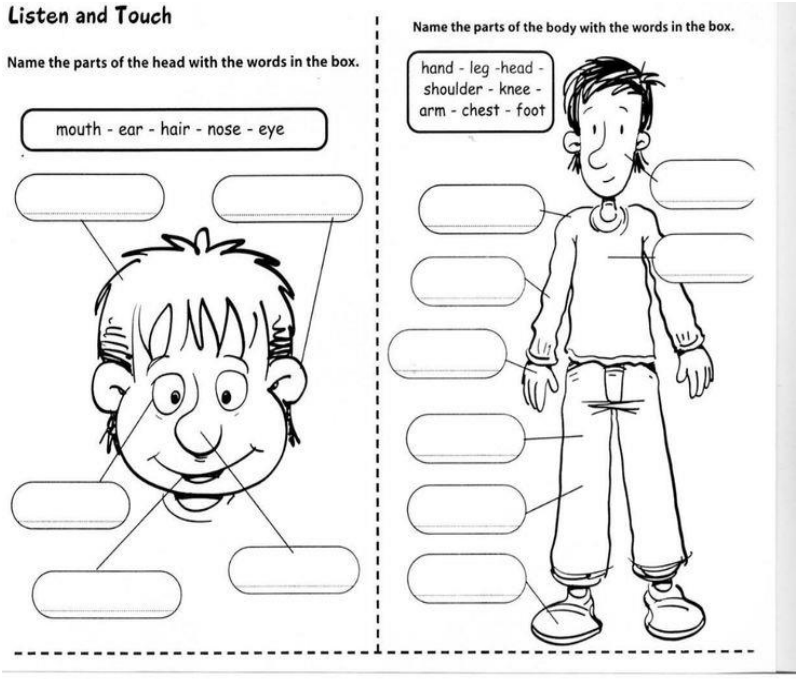


Рис.3 Название частей тела

Ex.3 Translate the text from English into Russian



Рис.4 Защитная экипировка

Ex.4 Complete the sentences using the word skeleton MUST PUT ON and add the names of safety equipment

1. An outdoor engineer.
2. A miner.
3. A builder.
4. A car mechanic.
5. A gardener.
6. A chemical worker.
7. A medical worker.
8. A railway worker.
9. A mountain climber.
10. A welder.

TOPIC 6: BRIDGES

CASE

Make the discussion about the bridge construction on the Lena river.

Roles:

- Head of Republic of Sakha Yakutia
- Ministry of Economics
- Ministry of Construction
- Building company “Bridge”
- Building company “Tunnel”
- Citizen of Yakutsk
- Citizen of Nizhniy Bestyakh
- Director of Transport technical college
- Director of Yakutian Railways

Be ready to speak about the theme according to the role. Be ready to ask questions and answer them.

TOPIC 6: BRIDGES

EXPERIMENTAL BRIDGE

A bridge is a structure built to cross some natural or artificial obstacles such as river,street, railway and so on. First bridges had to be built out of the material close at hand*. In tropical jungles, suspension bridges were made of long bamboo poles. In the places where there were many forests, it was wood.

Simple suspension bridges were made by means of ropes and are still used in some countries. Two parallel ropes were suspended from rocks or trees on each bank of the river with a platform of woven mats laid across them. When the Spaniards reached South America, they found that the Incas** of Peru used suspension bridges made of 6 strong cables, four of which supported a platform and two cables served as handrails***.

In Middle Ages, people constructed wooden beam type bridges. They were usually builton stone piers or wooden piles. Bridges of this type are still used in Japan and India.With the beginning of railway construction in the 19th century, there was a great demand for bridges and the railway companies had capital for building them. The first railway bridges were built of stone or brick. Later there appeared concrete and metal bridges. The first iron bridge crossed the river Severn in Great Britain.

Nowadays some people are experimenting with different unusual materials. One of them is paper. Nobody considers paper to be a very strong material. However, paper-makers have another opinion. In order to prove it they built a paper bridge across a narrow canyon in Nevada. The bridge had a span of 32 ft****. The designers calculated that it could safety span 80 ft. It took engineers only two months to design the bridge, to test and construct it.

For testing, the engineers chose a truck, which weighed 12,000 lb*****. This truck drove quite safely across the paper bridge. The engineers are sure that the bridge can take six times the truckload of 12,000 lb.

The bridge itself weighed 9,000 lb. Therefore, the structure was light enough to be laid into place by helicopter.

Notes: *material close at hand – подручный материал

**Incas – Инки

***handrails – поручни

****ft – фут

*****lb – фунт

Ex.1 Answer the questions

1. Were the first bridges made of steel?

2. Did people construct wooden beam type bridges in Middle Ages?

3. Was there a great demand for railway bridges in the 19th century?

4. Are people experimenting with different unusual materials for constructing bridges?

5. Do paper-makers consider paper to be a strong material?

6. Was a paper bridge built across the river?

7. Is paper a widely used material for the bridge construction?

8. Did it take engineers only 2 years to construct the bridge made of paper?

9. Did engineers choose a train for testing the paper bridge?

10. Can a paper bridge be laid into place by helicopter?

Ex. 2. The words given below have one and the same root, but their meanings are different. Copy and memorize them: a cause – причина; to cause – послужить причиной, поводом; because – потому что; because of – из-за. Insert the right word in the following sentences:

1. The floods were … by heavy rain. 2. The ruin of the empire was … by the loss of freedom and the growth of despotism. 3. Police are trying to find the … of the fire. 4. She left the party … she felt ill. 5. Smoking … cancer. 6. He did badly in his exams … problems at home. 7. I wonder what … her to leave so early. 8. What are the … of this illness? 9. I don't want to … you any trouble. 10. Heavy traffic is … long delays on the roads. 11. After long investigation into the accident, faulty warning lights were found to be the … 12. She's in bad mood … her father won't let her go to the party tonight. 13. The house isn't really suitable for an old person …. all those stairs.

Ex.3 Translate the word combinations.

1) the ten car train; 2) the super express railway line; 3) the electric locomotive service life; 4) the freight train weight; 5) an engine cooling system; 6) the automatic ticket inspection; 7) the low-grade cheap fuel; 8) an emergency stopping device; 9) an old marshalling yard reconstruction; 10) the road transport regulations.

Ex.4 Write the sentences making negative form

1. We (saw) the traffic signal and (stopped) for the red light. 2. While driving a car, you (should speak) on your mobile telephone. 3. This ticket (entitles) you to go by train free of charge. 4. The insurance company (will pay) for repairing the car. 5. Steam-driven trains (are) the most ecologically friendly means of transport. 6.This device can be repaired; you (need) to replace it by a new one. 7. The schedule of this train (has been changed) for the summer period.

TOPIC 7: HISTORY OF RAILWAYS

Ex.1 Read the text very carefully and retell using the plan of retelling

No plans for run down General Motors train station at Dandenong South



Рис.5 Заброшенный вокзал

A train passes through the General Motors train station at Dandenong South.

AN ABANDONED “ghost” station in Dandenong South, unused for more than 20 years and riddled with graffiti, is unlikely to be demolished or refurbished any time soon.

The former General Motors Station is a sight, with trees and shrubbery now growing through platform areas where passengers once waited.

The Public Transport Users Association has called for the station to be upgraded and reopened to accommodate the busy Dandenong South industrial area, but Public Transport Victoria has quashed the proposal.

“Few trains stopping and a lack of legal access was a problem which prevented most people using the station.

The station opened between Dandenong and Hallam stations in 1956 to service the old General Motors Holden factory until it shut down in 1991.

It is believed freight trains still used the station to service the Heinz factory in the 1990s, and the station remained open until 2002, despite the fact the footbridge led to an empty paddock.

PTV spokeswoman Andrea Duckworth said given the current land use in the area, they had no plans now or in the future to operate services at General Motors Station.

***Holden’s history in Dandenong (courtesy of Dandenong & District Historical Society):**

■ 1951: General Motors Holden bought 153 acres in Dandenong near the South Gippsland Freeway and Princes Highway intersection

■ 1956: The Dandenong body and assembly plant opened at a cost of nearly 4.5 million pounds with the capacity to build 152 bodies and assemble 168 vehicles a day — a first in Victoria

■ It was the fourth largest GHM manufacturing plant in Australia, employing more than 3,480 people

■ In the 1950s, there were a number of major factories in the area, including Minster Carpets, Heinz Foods, International Harvester (now IVECO Trucks Australia) and GMH

■ 1962: The millionth Holden, a gold EJ Premier, was built at Dandenong and in 1969, the two millionth Holden, a gold HK Brougham, was made

■ 1971: The GMH national parts distribution complex opened at Dandenong

■ 1973: A truck assembly plant began operations at Dandenong

■ 1980: Local assembly of Isuzu trucks began

■ 1981: The four millionth Holden, a VC Commodore SL/E, was made and the following year, the first Holden front-wheel drive model, Camira JB sedan, was produced

■ In 1986, a joint venture turned it into the sole plant for Toyota Corolla and Holden Nova production. The pact between GMH and Toyota dissolved and in 1991 the plant shut down

Ex2 . Look at the pictures and compare three railway stations



Рис.6 Железнодорожная станция Нижний Бестях



Рис.7 Железнодорожная станция Томмот



Рис.8 Железнодорожная станция Сочи

Railway station	Location	Square	Front image	Interior design	Materials used for	Freight capacity	Passenger capacity

					building	for 1 year	for 1 year

TOPIC 7: HISTORY OF RAILWAYS

Ex.1 Reading the text, prepare for control reading.

Modern railways differ greatly from the early ones. The first railways used horses for drawing trains and were made of wood. In 1767 an ironmaster Abraham Darby started making rails of cast iron. The first attempts to use the steam engine to draw passenger and freight trains were made in 1808 by an English inventor Richard Trevithick.

In 1829 George Stephenson, an English engineer, constructed the world's first steam locomotive. He also built the first public railway in England between Stockton and Darlington. He called his new steam engine "Locomotion". Another railway was built in 1830 to link Manchester and Liverpool (its length was 48 km).

The early locomotives were small and slow. They were not as safe and powerful as they are today. Some accidents were caused because of broken rails or wheels. However, the early trains did not have brakes. Most accidents happened when two trains crashed into each other, because there were no proper signals.

The first railway carriages were small and uncomfortable. They looked like stage coaches. In England the carriages for the first class passengers had three compartments with soft seats and doors at either side. There was a high seat at the back for the guard and a rack on the roof for luggage. The second class carriages also had roofs, but low sides and hard seats. The third class passengers had to ride in uncovered wagons without seats at all. These early trains had neither heating nor lighting.

The prototype of the modern sleeping car appeared in the middle of the 19th century. Its inventor was George M. Pullman, an American publisher.

The first steam locomotives in Russia were built by the Cherepanovs, father and son. So thanks to them Russia was among the first countries to use steam traction.

The first Russian passenger 28-km railway was built between St. Petersburg and Tsarskoye Selo. The railway was used by the Tsar's family for travelling to the countryside. The construction of the St. Petersburg - Moscow railway was finished in l851. It operated successfully, though many people doubted the possibility of using steam engines in the Russian winter. In 1891 the building of the world's longest Trans-Siberian Railway began; it was put into operation in 1905.

Ex.2 Questions for discussion:

1. What was used to draw the first railways?
2. What were the first railways made of?
3. Who made the first attempt to use the steam engine to draw trains?
4. Who invented the first steam locomotive?
5. Were the early railways safe or dangerous?
6. How did the compartments of the first railway carriages look like?
7. Who was the inventor of the modern sleeping car?
8. Who built the first Russian locomotive?
9. What first railways in Russia do you know?
10. When was the world's longest railway put into operation?

Ex.3 Match the names and the inventions

George M. Pullman		The first steam locomotives in Russia
the Cherepanovs, father and son		rails of cast iron
Abraham Derby		the world's first steam locomotive
George Stephenson		The prototype of the modern sleeping car

Ex.4. Speaking task

- Give a brief description of 2 pictures;
- say what that pictures have in common;

- say in what photo people make mistakes;

- name out the mistakes, express your opinion.





TOPIC 7: HISTORY OF RAILWAYS

THE OLDEST RAILWAY IN RUSSIA

The St.Petersburg–Moscow mainline is considered to be the oldest and the most outstanding railway in Russia. In the thirties of the 19th century much was spoken about the necessity of its construction and various projects were proposed by Pravdin, Safonov, Muravjov, Abaza, but all of them were rejected. In June 1839, the professors of the Moscow Engineering Institute P.P.Melnikov and N.O. Kraft were sent to the USA for the purpose of studying experience gained by the Americans in constructing and operating the railways. Melnikov's report about the results of their trip laid down the basis of the future railway project. According to this project «chugunka» was planned as a double-track line, 664 km long, with the 5 feet gauge (now the standard), steam powered. The speed of passenger and freight trains was supposed to be 34.4 km/h and 16 km/h respectively. The construction began in 1843 and lasted 8 years. From the very beginning the builders faced many hardships because of severe climatic and difficult geological conditions. Hundreds of kilometers of track were laid down through forests and marshes, many rivers were crossed. It should be noted that the line is virtually straight and level. 185 bridges and 19 viaducts were built to make the line as straight as possible. There is a legend that the route of the railway was chosen by the tsar Nikolay I, who took the map and the ruler, drew a straight line between the two cities on the map and ordered this line to be the route of the railway. But the fact is that the construction of the line was

preceded by long and thorough surveying work, a great part of which was done by P.P.Melnikov himself. All the component parts of the track, bridges and viaducts were produced at Russian plants by using only domestic materials, including timber for sleepers and cast iron for rails. One has to give credit [нужно отдать должное] to the first railway builders, who laid the track in extremely difficult conditions. They worked from dawn till sunset, often in water up to their knees and their main tools were spades and axes. P.P. Melnikov proposed to mechanize the railway construction, but his idea was not backed up because it required a lot of expenses., Nevertheless, four excavators were bought in the USA on Melnikov's recommendation. It is interesting to note that at that time there were only seven excavators in the world. The other three ones were operated in the USA and Great Britain. The railway was officially opened for public traffic on November 1, 1851. The first train departed from St.Petersburg at 11.15 and arrived in Moscow 21 hours 45 minutes later. There were 17 passengers in the first-class cars, 63 – in the second-class cars and 112 – in the third-class cars. The speed of the first trains was 40 km/h but two years later it was increased up to 60 km/h. It was the world's record in the speed of passenger trains. It should be added that the Alexander Engineering Works was established in St. Petersburg to provide this railway with locomotives and cars.

Ex.1. Answer the following questions.

When were the first projects of the railway construction proposed? 2) Why was it necessary to connect the two capitals in Russia? 3) Whose project of construction was accepted? 4) Why were Melnikov and Kraft sent to America? 5) When did the construction begin? 6) How long did the construction last? 7) Why was it difficult to build the railway? 8) What was built to make the line as straight as possible? 9) Is there any legend about the construction? 10) What were the rails and sleepers made of? 11) What equipment was used for the construction? 12) What was done to facilitate the workers' labor? 13) When was the railway officially opened for public traffic? 14) What time did the first train depart from St. Petersburg and arrive in Moscow? 15) How many passengers were there in the first train? 16) What was its speed? 17) What plant was established to provide this railway with rolling stock?

Ex.2. Arrange the following sentences in a chronological order, put questions to the underlined words. Using your questions tell about the beginning of railway construction in Russia.

The first steam locomotive was tested in Nizhniy Tagil. 2) The first railway carrying passengers was officially opened for public traffic in 1851. 3) Such engineers as P.K. Frolov, A.S. Yartsev, and I.I. Polsunov made great contribution to the development of railway transport in Russia. 4) The first tram ways were laid down in the Urals. 5) The history of railway construction in Russia began in the second half of the 18'h century. 6) I.I. Polsunov invented the stationary steam engine in 1763. 7) At the beginning of the 19th century it was decided to build the railway connecting two Russian capitals. 8) A.S. Yartsev suggested using cast iron rails instead of wooden ones in 1788. 9) The Cherepanovs constructed the first steam locomotive. 10) Goods were transported in carts driven by the water wheel. 11) The construction of the St.Petersburg-Moscow line began in 1843 and lasted eight years. 12) The first tram ways were used for carrying coal, ore and other goods. 13) The railway constructed by P.K. Frolov was horse-powered. 14) P.K. Frolov built "chugunka" in the Altai Mountains.

Ex.3. Complete the sentences and add your own information to develop the situation.

1) The history of railway construction… . 2) The first tram ways… . 3) The first rails and sleepers… . 4) Coal and other goods… . 5) In the Western Europe the carts with coal were driven by the workers, but in Russia… . 6) The wooden carts were called… . 7) Much was done for the railway construction by… . 8) Yartsev suggested replacing… . 9) The first railway with cast iron rails… . 10) The Cherepanovs, father and son… . 11) The first steam engine… . 12) The first steam locomotive could… . 13) The Nizhniy Tagil railway… .

TOPIC 8: RUSSIAN RAILWAYS

THE GREAT SIBERIAN TRACK

"The Great Siberian Track" is a well-known name in the history of the Russian State. It was given to the unique railway that connected the European part of the country with the Pacific Coast.

The history of railway construction in Russia started at the end of the 19th century. Railway mainlines were laid down from the Western borders of the country to St. Petersburg and Moscow, from the center to the Volga region and from Ural to Central Asia. In 1892, the railway network in Russia had a total length of 32,000 km. That very year Samara-Zlatoust railway was built which later became a liaison between railways in the European part of Russia and the Trans-Siberian Mainline. On March 15 1891, Alexander III issued an imperial prescript addressed to future Emperor Nicholas II that stated: "I command to start constructing a railway across all Siberia to connect the Siberian region with the European part of Russia. I also entrust you with groundbreaking* of the Great Siberian Track in Vladivostok."

Two projects of the future mainline were proposed – "the southern version" and "the northern version". "The northern version" suggested by the Minister of Railways K.N. Posyet won. According to his project the railway was shorter by 400 km and was passing by the Siberian high road** and populated areas.

The building of the Great Siberian Track began in 1893. Construction rates were very fast despite the fact that the railroad went through swamps, thick taiga, crossed major rivers and huge mountains. In less than 15 years, more than 8,600 km of track were laid down. At first 10,000 workers were involved in the construction. Later their number went up to 100,000. Job and living conditions were extremely tough. The main tools were spades, picks, axes, wheelbarrows and horse-drawn carts. The building of the gigantic mainline was a heroic deed accomplished by Russian construction workers due to their tenacious efforts and courage. Some of Trans-Siberian stations bear their names – Rukhlovo, Vyazemskaya, Baranovsky, Snarsky,

Adrinovka, etc. The Minister of Railways Vitte wrote: “The Great Siberian Railway breathed life into boundless Siberian lands.”

Notes: *ground-breaking – начало строительства (дороги)

**high road – тракт

Ex.1 Translate the fragment of the text.

Ex.2. True/False statements.

1. The Trans-Siberian Mainline connects the Asian part of Russia with the Pacific Coast.

2. Alexander III commanded to start constructing the Great Siberian Track.

3. The first rail of the future Trans-Siberian Railway was laid down in Vladivostok.

4. The project of the Trans-Siberian Mainline was proposed by the Minister of Railways Vitte.

5. The length of this railway is more than 5,000 km.

6. Foreign workers and engineers took part in the construction.

7. The track went through swamps and taiga.

8. The latest machines and mechanisms were used for the railway construction.

9. The construction lasted 15 years.

10. The Great Siberian Railway breathed life into boundless Siberian lands.

1	2	3	4	5	6	7	8	9	10

Ex.4 Write top 10 best railway stations in Russia, explaining the benefits of them.

TOPIC 8: RUSSIAN RAILWAYS

RUSSIAN HIGH-SPEED TRAINS COMPARISON: SAPSAN, STRIZH, AND LASTOCHKA

Sapsan

Sapsan train is the fastest train in the country. Since its launch in 2009 it has revolutionised train travel in Russia, reaching speeds of up to 250 km/h as it hurtles

through the Russian countryside. The Sapsan service cuts the journey time in half for passengers travelling between St.Petersburg,Moscow and Nizhny Novgorod. Sapsan is not just valued for its speed. It is a high-quality Siemens train, whose modern interior is equipped with special soundproofing, day and night lighting, curtains on the windows, air conditioning and heating, ample luggage and coat storage, decent toilet facilities and a good restaurant car. The train offers every service you could possibly desire while travelling – tour booking and taxi ordering services, a souvenir shop for those last-minute gifts, and a 'mini office' which includes a photocopier, printer and scanner (a lifesaver if you've forgotten to print the museum tickets for your destination). What's more, the Sapsan is a great method of travel for disabled passengers. Carriage doors are wide and automatic and the floor in all areas of the train is the same level, allowing passengers in wheelchairs to easily move around. One carriage is specially equipped with a wheelchair space, call button, and disabled toilet. On-board perks depend on your chosen Sapsan ticket and seat class, which includes Basic, Economy, Economy+, Business, First, and Dining Class. Basic and Economy seats are essentially the same, with the exception that Economy passengers have access to the entertainment portal (complete with films, music, newspapers, books and audiobooks, kids' entertainment, and information about the Sapsan, Moscow and St Petersburg).

- **Economy+** passengers receive all this plus a complimentary cold meal and a personal electric socket at their seat.
- **Dining Class** passengers are allocated a table in the restaurant car for the duration of their journey, and pay a 2,000 rouble deposit when booking their ticket to be spent on refreshments during the route.
- **Business Class** tickets include a free travel kit, pillow, hot meal and use of the Business Lounge at the station.
- **First Class** passengers receive all of the above plus personal reading lamps and spacious reclining seats, so you can lie back, relax and admire the passing landscape.

- There is one more level of luxury aboard the Sapsan train. At the head of the train in the First Class carriage is the **Conference Suite** – a separate four-person compartment with a minibar, reclining chairs, sofa, television and a PlayStation games console.

On the newest Sapsan trains introduced in 2020, all seat classes have personal plug sockets, there are water coolers in every carriage, and there is new Family Carriage with entertainment and a play area for small children.

- **Routes:** the Moscow – St Petersburg route depart you between the two capitals in as little as three-and-a-half hours. Sapsan also serves the route between St Petersburg – Moscow – Nizhny Novgorod, which runs via the Golden Ring city of Vladimir. The entire journey takes eight hours and the Moscow – Nizhny Novgorod takes less than four hours.
- **Prices:** between St Petersburg and Moscow, Sapsan train tickets generally start from 2,500 roubles for an Economy ticket and 5,700 roubles for Business Class. Between Moscow and Nizhny Novgorod, tickets start from 1,400 roubles for Economy and 4,500 for Business.
- **Speed:** the Sapsan travels at a maximum speed of 250 km/h.

Strizh

The Strizh train takes its name from another superb flier, the swift. Served by Spanish-built Talgo trains, this service was first launched in Russia in 2014 and today it serves the Moscow – Nizhny Novgorod and St Petersburg – Samara routes. Unlike Sapsan, the Strizh also served one international route between Moscow – Warsaw – Berlin, although this was sadly cancelled at the beginning of the pandemic. On board, the Strizh is not as modern as the Sapsan, but you can still expect a high level of comfort, with Wi-Fi, air conditioning, and heating in every carriage. Passengers in any seat class also have access to the 'Fellow Traveller' multimedia portal, where you can see an interactive map of your journey, read information about the train, order meals from the restaurant and read news. Passengers in premium classes also have access to films, books, music and Wi-Fi through their portal. As well as a

restaurant car, the Strizh also has a bar-style buffet car serving snacks. Those travelling the daytime Moscow – Nizhny Novgorod route can choose between Second or First Class seating or First Class sleeping compartments (the ideal way to rest on your inter-city journey!) All seated carriages are equipped with spacious seats, reading lights and power outlets, and First Class also includes a complimentary meal. In the First Class sleeper cabins are two beds, sockets, hygiene kits, towels and bed linen, and some cabins also include a television, private toilet and shower. Those making the longer journey aboard the night train between St Petersburg – Nizhny Novgorod – Samara can sit in First or Second Class seats, or alternatively stay in Deluxe.

- **Routes:** Moscow – Nizhny Novgorod, with a journey time of less than four hours. St Petersburg – Nizhny Novgorod – Samara (no stopping in Moscow) takes between 19 – 20 hours.
- **Prices:** Moscow – Nizhny Novgorod tickets cost around 1,200 roubles for Economy Class, 2,000 roubles for Business Class, and 3,000 roubles for First Class sleeper. St Petersburg – Samara tickets cost from 3,300 roubles for Second Class sleeper and 8,000 roubles for a First Class sleeper.
- **Speed:** the Strizh train travels at a maximum speed of 200 km/h

Lastochka

The final high-speed train on our list today is the Lastochka (‘swallow’ in Russian) which serves numerous routes around European Russia as well as a handful of routes in Siberia too. The Lastochka is the most basic of the three trains we have discussed, yet is still a quality carrier served by German-built trains. There are no sleeper wagons aboard the Lastochka service, only seated carriages in Basic, Economy, Economy+ and Business Classes. In Economy you have a personal plug socket, in Economy+ you travel in a comfortable, adjustable leather seat, and in Business Class you have all of the above plus a complimentary meal. The Standard type of Lastochka trains only have Basic Class seated carriages, however the Premium Lastochka trains serving southern Russian routes and the Standard Premium

trains on various services around St Petersburg and Moscow offer the full range of seat classes. There are seats and toilets for disabled passengers on all trains.

- **Routes:** of Lastochka's many routes, the ones most popular among tourists include: Krasnodar - Imeretinsky Resort, where the Sochi Winter Olympic Park is located (just under five hours); Krasnodar - Rostov-on-Don (less than three-and-a-half hours); Ekaterinburg - Tyumen (four-and-a-half hours); Moscow to the Golden Ring cities of Kostroma and Ivanovo (four hours or less); Moscow - Nizhny Novgorod (four hours); St Petersburg - Vyborg (one hour); St Petersburg - Oranienbaum (50 minutes); St Petersburg - Petrozavodsk (approximately five hours); and St Petersburg - Pskov (three-and-a-half hours). There is a St Petersburg – Moscow Lastochka service, but this is a daytime journey taking nearly seven hours, so most tourists prefer to take the quicker daytime Sapsan or the longer overnight train.
- **Prices:** ticket prices vary greatly depending on the service. For an average comparison, a Moscow – Nizhny Novgorod ticket costs 900 roubles for a Basic Class seat.
- **Speed:** the Lastochka train travels at a maximum speed of 160 km/h.

Exercise 1.Fill in the blank using the text information

Information	**Sapsan**	**Strizh**	**Lastochka**
Year			
Routes			
Prices			
Speed			
Advantages(3 points)			
Disadvantages (3 points)			
Did you try?			

When?			

Exercise 2. Make out the presentation about one fastest train of Russia. Don't forget about:

-8 slides

-English language

-specification

-photos

TOPIC 8: RUSSIAN RAILWAYS

RAILWAY JOBS

Ex.1. Scan the text and choose what it is mostly about.

a) The necessity of education for railway jobs

b) The variety of railway careers

c) Functions of the railway employees

d) Human resource management in the RW Holding

Not everyone knows that the number of the Russian Railways Holding employees is more than 650,000 people. Railway workers maintain railway transport and infrastructure, transporting passengers and goods. There are many railway specialities: a trackman, a train driver, a dispatcher, a station attendant, etc.

The professions of railway workers involve an incredibly wide variety of work, starting with physically hard jobs and ending with doing mental work that requires highly skilled and relevant knowledge.

Most of the existing professions of railway workers do not re- quire higher education. It is enough to graduate from a college or specialized courses. However, if you are not interested in such job positions as a road repairman or a rail car loader, but plan to be- come a station manager, training at a transport university is a must.

Some other specialities require engineering knowledge. These are linked with computer engineering, operation of railways, technology of transport processes, thermal engineering, mechanical engineering, design of new rolling stock,

implementation of the intellectual transport systems. They give greater career opportunities.

If you want to contribute to railway technology, be ready that the process of training lasts from five to six years. Mathematics in a railroad profession plays an important role. Especially important is its use in calculating the time of arrival of trains, as well as carrying out construction and repair work and managing trans- port processes.

To get a position on the railway you must have excellent health and good physical shape. Working conditions are rather difficult. Trains must run 24/7, and railway people work regardless of the time of day or weather conditions. Even in rain or snow, or under the hot summer sun, work continues. Some railway professions involve constant communication with the customers. Such employees must be sociable, polite and resistant to stress. The safety of passengers depends on the actions of employees.

Ex.2Answer the questions.

1.What career opportunities do railway companies provide?

2. What railway jobs need engineering knowledge?

3. In what way does the safety depend on the railway worker's action?

4. What skills should have a railway worker?

5. What railway professions do you know?

Ex.3 Match the professions and duties

Trackman	Receives and transmits information to coordinate operations of trains
Dispatcher	Works at a service station
Train driver	Responsible for managing the safe and efficient operation of a passenger
Station attendant	Repair the railway road
Train conductor	Make technical maintenance of wagons

Wagon repairman	Drive, maintain the locomotive

Ex.4 Write your personal skills on list

Skill	**Very confident**	**Not so confident**	**Not confident at all**
Responsible			
Sociable			
Resistance to stress			
Work hard			
Have good health			

5. ПРИЛОЖЕНИЕ

Приложение 1

Словарные диктанты

Словарный диктант представляет собой перевод слов с русского на английский язык, при котором преподаватель диктует только русский вариант, студенты записывают синхронный перевод данного вокабуляра. Критерии оценки:

Балл	**Процентное соотношение правильных ответов**
«5»	90-100%
«4»	80-90%
«3»	55-70%
«2»	Меньше 55%

Инженерная графика

1. Развитие.
2. Производить.
3. Слабость
4. Соединять.
5. Увеличить.
6. Типичный
7. Подходящий.
8. Прокладывать.
9. Измерять.

Материалы

1. Проволока.
2. Электродуговая сварка.
3. Плавкий.
4. Изготовлять.
5. Соединение.
6. Сварной шов.

7. Heat welding.
8. Filler.
9. Resistance welding.
10. Riveting.
11. Source.
12. To shield.

Цифры

1. 56374299
2. 13007
3. 132684
4. 84600
5. 567891212
6. 895000002
7. 2 февраля 2016 год
8. 28 июля 1897 год
9. 14 августа 1663
10. 19 ноября 2001

Глаголы

1. Inform.
2. Publish.
3. Introduce.
4. Investigate.
5. Original.
6. Write.
7. Important.
8. Popular.
9. Leader.
10. Build.

Гаджеты

1. Device

2. Beautiful.
3. Display.
4. Include.
5. Supply.
6. Battery.
7. Enjoy.
8. Imagination.
9. Modernization.
10. Furniture.
11. Invented.
12. User.
13. Message.
14. Earphones.
15. Alarm clock.

Поезда

1. Тяговый подвижной состав.
2. Маневрировать.
3. Тормозная система.
4. Тележка.
5. Максимальная скорость.
6. Колея.
7. Ускорение.
8. Сверхскоростной поезд.
9. Вес.
10. Напряжение.

Материалы, металлы

1. Свойство.
2. Гнуть.
3. Очки.
4. Медь.

5. Воспламеняющееся.
6. Зерно.
7. Шлифовальный станок.
8. Обработка.
9. Rolling.
10. Gloves.
11. Shape.
12. Boiler suit.
13. Ductile.
14. Steel.
15. Milling machine.
16. Hammering.

Универсальные слова

1. Passenger.
2. Teacher.
3. Underground.
4. Wednesday
5. Year.
6. Tomorrow.
7. Dinner.
8. Airplane.
9. Breakfast.
10. Ticket office.
11. Builder.
12. Favourite.
13. Morning.
14. Sugar.
15. Cucumber.

1. Оборудование.

2. Столица.
3. Завтрак.
4. Прямые.
5. Устройство.
6. Путешествие.
7. Развитие.
8. Брюки.
9. Спальня.
10. Дворец.
11. T-shirt.
12. Dinner.
13. Scientist.
14. To relax.
15. Safety.
16. Weekend.
17. Pretty.
18. Bridge.
19. Artist.
20. Kitchen.

Защитная экипировка

1. Спецодежда.
2. Перчатки.
3. Сапоги.
4. Наушники.
5. Каска.
6. Защитные очки.
7. Знак.
8. Уши.
9. Глаза.
10. Строитель.

11. Сварщик.
12. Альпинист.
13. Железнодорожник.
14. Надеть.

Приложение 2

Перевод предложений

Материалы, защитное оборудование при сварке.

1. Свинец – эластичный материал, поэтому его легко можно гнуть руками.

2. Во время работы мы используем токарный станок, фрезерный станок и шлифовальный станок.

3. Умный материал может принять изначальную форму при повышении температуры.

4. Дженерал Моторз купили 16 высокоскоростных поездов.

5. Электрические провода сделаны из алюминия.

6. Многие мосты сделаны из стали.

7. Строитель должен надеть сапоги, спецодежду, перчатки и каску.

8. Сварка – это процесс, при котором металлические части соединяются путем нагревания и давления.

9. Существует несколько типов обработки металла: экструзия, волочение, чеканка, прокатка.

10. Использование автомобилей приносит удобство и скорость в нашу жизнь.

11. Роллс Ройс – это 6-тицилиндровая модель, которая продавалась с 1925 года.

Типы вопросов:

1. Он живет в Москве или Якутске?

2. Где лежит мой ноутбук?

3. Любят ли англичане пить чай?

4. Студенты поедут летом на юг или на север?

5. Когда начинается вечеринка Дня рождения?

6. Мария предпочитает играть в боулинг или смотреть фильм?

7. Кто принес цветы с шоколадом?

8. Как выглядит брат твоего друга?

9. Любит ли она играть в теннис?

10. Уроки заканчиваются в 16.00?

Универсальная тема

1. Слесарю по ремонту вагонов необходимо проверить колесные пары.

2. Здесь запрещено курить.

3. Признаками неисправности может быть посторонний звук

4. Мой дядя продал авто и купил велосипед и мотороллер

5. Убытки работы этого локомотива невозможно вернуть за 1 месяц

6. Сейчас миллионеры дарят друг другу дорогие морские судна

7. Топ-менеджер сдаст в среду окончательный готовый бизнес-план на 2017 год.

Фразовые глаголы:

1. Пожалуйста, убавь звук своего радио

2. Вы похожи на своего дедушку

3. Моя мама обещала мне заботиться о котенке

4. Я всегда жду с нетерпением каникул

5. С самого утра я ищу мой блокнот

6. Было очень жарко, поэтому мне пришлось снять куртку

7. На что ты смотришь?

8. Джон в хороших отношениях с начальником фирмы

9. Партия поддерживает семьи с детьми от 3 и более

10. Джессика всегда держится на расстоянии от лошадей.

Степени сравнения прилагательных:

1. Якутия – самый холодный регион в России

2. Москва больше, чем Санкт-Петербург

3. Альпы – самые высокие горы в Европе

4. Твой английский стал лучше сейчас

5. Эта книга интереснее, чем то.

Простое прошедшее время \ Past Simple

1. Вчера Мэри начала писать книгу

2. Во время работы они сделали топор

3. Я забыл сделать СРС.

4. Парни дрались за чемпионский титул

5. Стивен купил медные провода и свинцовые пули

6. Вчера мы с друзьями были в кафе, ели пиццу.

7. Мы посмотрели фильм

8. Я прочел эту книгу

9. Ты поел?

10. Мы еще не сдали экзамен

11. Они вчера играли в футбол

12. В прошлом году она жила в Нью-Йорке

13. В школе я изучал французский язык

14. Вчера мы сходили в кино с друзьями

Простое будущее время \ Future Simple

1. Летом я поеду в Турцию

2. Мы все сдадим зимнюю сессию

3. Поезд прибудет в 7 часов утра

4. Нам принесут свежую газету

5. Мой брат купит Лексус Алтеза 2003 года

6. В эти выходные я буду ремонтировать старый грузовик

Модальные глаголы:

1. Ты должен много кушать.

2. Вам следует отдать деньги мне.

3. Можно ли встретить тебя вечером?

4. Мне приходится купить новый телевизор.

5. Мне нужно продать машину.

6. Тебе следует уехать в город

7. Ты должен надеть маску

8. Я могу стрелять из кольта

9. Могу ли я пригласить тебя на концерт?

10. Моему брату приходится искать новую работу.

Поезда

1. TGV раскупили 10 высокоскоростных поездов

2. Многие перевозки отправляются через электровозы

3. Поезда обычно состоят из 3-7 вагонов

4. Междугородние поезда возят огромное количество пассажиров и груза каждую неделю

5. Скорость поездов в Железных дорогах Якутии составляет 60 км/ч.

Приложение 3

ПРОВЕРОЧНЫЕ РАБОТЫ

Прежде чем приступить к выполнению контрольного задания №1, вам необходимо повторить следующие разделы курса английского языка:

1. Формы Indefinite (Present, Past, Future) в действительном залоге
2. Предлоги места
3. Наречие
4. Модальные глаголы

Проверочная работа №1

Variant 1

Exercise 1. Put the verbs in brackets in Present, Past, Future Simple

1. Usually the train (leave) at 10 o'clock.
2. Our grandparents (live) now in Moscow.
3. He (visit) them regularly last year.
4. As a rule I (go) to my Academy by bus.
5. She (work) abroad next year.
6. She (not like) poems.
7. Your children usually (ask) many questions.
8. My brother (like) music.
9. What you (do) yesterday?
10. His sister (go) to the seaside next July.

Exercise 2. Match the words and word combinations in column A with their Russian equivalents in column B.

A		**B**
waiting room		сигнальщик
master		кнопочные переключатели
in an emergency		начальник

signalman		купе
sleeping car		читать вслух
to read aloud		зал ожидания
push-button switches		в случае аварии

Exercise 3. Translate the sentences

1. Проводник был очень вежлив с пассажирами общего вагона.

2.Я могу быть вам чем-то полезен?

3.Я спросил у кассира, могу ли я купить билет в купейный вагон.

4.Я буду вам очень благодарен, если вы покажете мне город.

Exercise 4. Put in the appropriate words from the list:

1.... I go to the Institute by bus.

2. I do my morning exercises ...

3. We shall have invited you ...

4. Who has seen him ...?

5. He had worked here ...

6. ... the plant was producing new machines.

1) before the Institute

2) by Tuesday

3) during October

4) every day

5) recently

6) usually

Exercise 5. ***Read the sentences, replacing the italicized Russian words with their English equivalents.***

1. *Современный* ticket-vending machines have been *недавно* installed at the railway station.

2. Railway transport is an important *отрасль* of industry employing thousands of people.

3. Our company *предоставлять* free technical *поддержка* for those buying our computer *оборудование*.

4. Professor Wilson was invited to speak about the results of his *исследование*.

5. We asked high school students to *принять участие в* an anti-drugs campaign.

6. No one wants to *принимать на работу* somebody who badmouths (=says unpleasant things about) their former *работодатель*.

7. *Доступ* to this confidential information was denied to journalists.

8. The company plans to *увеличить* its *штат* to 1,000 *сотрудники*.

Exercise 6. Describe the picture (10 sentences)



Variant 2

Exercise 1. Put the verbs in brackets in the right form:

1. Peter and Ann (go) away five minutes ago.
2. I (write) the letter but I (not send) it.
3. He just (go) away.
4. She already (answer) the letter.
5. I (read) these books when I was at school.
6. I can't go out because I (not finish) my work.
7. I already (tell) you the answer yesterday.

8. What you (do) tomorrow in the morning?

9. I (not meet) him last week.

10/ I (like) them very much.

Exercise 2. Match the words and word combinations in column A with their Russian equivalents in column B.

A		**B**
fail-safe		допустимая скорость
semi-automatic		надежный
for this purpose		грузовой вагон
human error		полуавтоматический
to identify oneself		с этой целью
permissible speed		опознавать себя
freight wagon		человеческий фактор

Exercise 3. Translate the sentences

1.Вы можете заказать билеты на поезд через Интернет.

2.Наше турагентство организует автобусные туры в Финляндию, Польшу и Италию.

3.Правое крыло железнодорожной станции закрыто на (for) реконструкцию. Там будут установлены автоматические камеры хранения и автоматы для размена монет.

4.Извините, но мы не принимаем дорожные чеки.

Exercise 4. Put in the appropriate words from the list:

1. We have ... done our work.

2. What are you doing ...?

3. He was going home ...

4. Will you have read the book ...?

5. Did you see them ...?

6. We translated this text....

1) just

2) last week

3) now

4) when we met

5) 2 hours ago

6) already

Exercise 5. Translate the words given in brackets into English.

1. No one wants to *принимать на работу* somebody who badmouths (=says unpleasant things about) their former *работодатель*.

2. Such engineers as Frolov, Yartzev and Polsunov made great contribution (вклад) to the *развитие* of railway transport in Russia.

3. *Различные транспортные средства* are used for transporting passengers and freight over long distances.

4. The first suspension bridges (подвесные мосты) were made of six strong cables, four of which *поддерживать* a platform and two cables served as handrails.

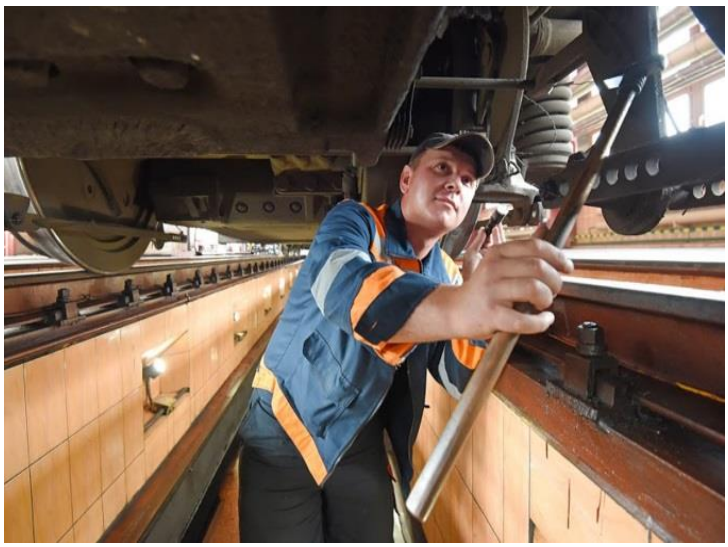
5. Siemens has won a contract to *оборудовать* China‟s first 300km/h line with signaling and communications equipment.

6. At the end of the conference, all the *участники* were asked to fill out a questionnaire.

7. The track gang (путевая бригада) must inspect a railway track and track *сооружения* all year round.

8. Regular servicing guarantees the smooth *работа* of the *оборудование*.

Exercise 6. Describe the picture (10 sentences)



Проверочная работа №2

Для выполнения контрольного задания №2, вам необходимо повторить следующие разделы курса английского языка:

1. Формы Indefinite (Present, Past, Future) в действительном залоге

2. Задание 5 представляет собой письменное описание картинки, где должны быть отражены действия до момента и после произошедшего инцидента. Количество предложений – 15.

Variant 1

1. **Read the text.**

A famous welder

Professor Evgeny Oscarovich Paton (1870-1953) was born in 1870 in Nice, France. He studied at Dresden Technical University and at St Petersburg Institute of Railway Engineers.

Paton was a pioneer in joining and welding technology. He formulated the main principles of arc welding; he developed welding equipment, tools and techniques. During World War II, Paton supervised the production of equipment and technology for automated welding of special steels for tanks (T-34), bombs and other

military hardware. After the war, more than 100 bridges were constructed under his supervision.

The first all-welded bridge in the world was named after the great scientist and welder – the Paton Bridge. He decided to make a bridge for people to enjoy the beauty of the place. The construction began in 1940, but the war stopped the project.

The bridge is one of the largest in Europe. It is 1.543 meters long. 10.688 welds were made to connect 264 blocks. It is extremely strong. 135.000 vehicles drive the bridge every day.

Answer the following questions

1) What Paton is famous for?

2) What are the examples of Paton's production?

3) How would you describe the Paton Bridge?

2. Write down verbs in Present Simple, Past Simple или Future Simple.

1. We … (go) roller-skating last Saturday.
2. Our granny … (bake) meat-pies every weekend.
3. We … (write) an essay tomorrow.
4. I really … (enjoy) the opera yesterday.
5. Where your husband … (work) five years ago?
6. British people … (prefer) tea to coffee.
7. Tom, you … (meet) me at the railway station next Sunday?

3. Look at the pictures and name the objects



4. Translate the instruction from English into Russian

3.2 Emergency information

In case of emergency, immediately interrupt the Power, compressed-air and Gas. Further measures can be found in the "Power supply" user manual or in the documentation of further peripheral devices.

4 Putting into operation

⚠ DANGER

Risk of injury due to unexpected start-up.

For the entire duration of maintenance, servicing, dismounting and repair work, the following instructions must be adhered to:

- Switch off the power supply and close off the gas supply.
- Switch off the compressed-air and pull the mains plug.

4.1 Equipping the torch

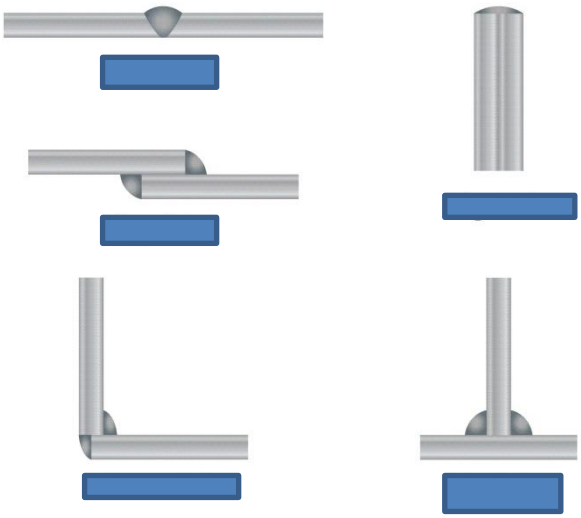
⚠ CAUTION

Risk of injury

Piercing or puncture caused by electrode tip.

- Do not reach into the danger zone and wear protective gloves.

5. **Write the types of welding joint(Butt, T-butt, Corner, Lap, Edge)**



5. Speak on topic



Variant 2

1. Read the text

Welding Gases

There is a variety of different types of gases that are used in welding. One of the major ways that gases are used for shielding the area to be welded from gases that come from the atmosphere. The reason the welding are needs to be shielded is because these other gases can change the way the weld looks or make it difficult to use.

Acetylene gas. This is a flammable gas that is colorless, and some people say it smells like garlic. The periodic table designation is C2H2. This gas is the hottest of all hydrocarbon gases because it has a structure that is called the triple bond. When you combine this gas with oxygen, which is how is often used, the temperature of the flame can get as high as 5.580 degrees Fahrenheit. This gas can be used for small or large projects. It is often called oxyacetylene when combined with oxygen. Uses: for bracing, welding, cutting and soldering. It is usually stored in pressurized steel cylinders.

Answer the following questions

1) Why people use gases in welding?

2) What is acetylene gas?

3) What is acetylene gas used for in welding?

2. Write down verbs in Present Simple, Past Simple или Future Simple.

1. Where she usually … (celebrate) her birthdays?

2. … you (have) a big family?

3. Newton … (invent) the telescope in 1668.

4. When … this accident (happen)?

5. I always … (send) Christmas cards to my grandparents.

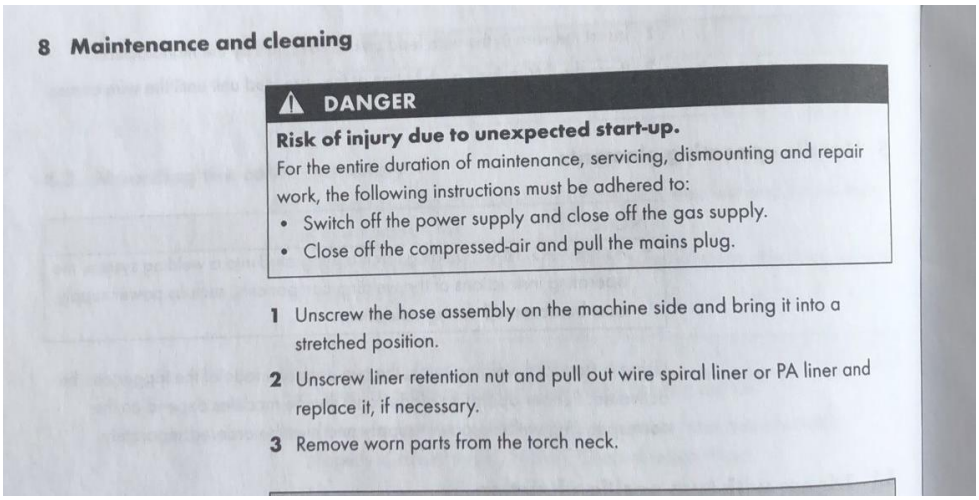
6. Nina and Nick … (get married) in two weeks.

7. Stanley … (have) two sons and a daughter.

3. Look at the pictures and name the objects



4. Translate the instruction from English into Russian



8 Maintenance and cleaning

⚠ DANGER

Risk of injury due to unexpected start-up.

For the entire duration of maintenance, servicing, dismounting and repair work, the following instructions must be adhered to:

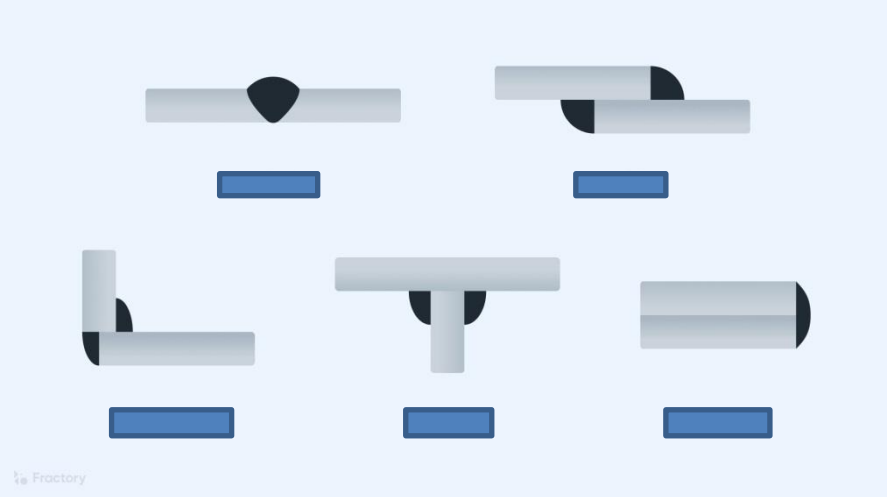
- Switch off the power supply and close off the gas supply.
- Close off the compressed-air and pull the mains plug.

1 Unscrew the hose assembly on the machine side and bring it into a stretched position.

2 Unscrew liner retention nut and pull out wire spiral liner or PA liner and replace it, if necessary.

3 Remove worn parts from the torch neck.

5. Write the types of welding joint(Butt, T-butt, Corner, Lap, Edge)



5. Speak on topic



Проверочная работа №3

Прежде чем приступить к выполнению контрольного задания №3, вам необходимо повторить следующие разделы курса английского языка:

1. Present Simple
2. Present Continuous
3. В задании 9 необходимо устно ответить на вопросы, оценивается правильный порядок предложений, полноценный ответ.

VARIANT 1

Ex.1 Fill the gaps with suitable words

1. Toyota is a very _____car.

2. Radio was a great _____of the 19th century.

3. Electrical, solar, kinetic – are different types of _____

4. Generator produces _____

5. _____are the best invention in medicine.

Ex.2. Match the terms from the list below with the pictures

Lathe drilling machine milling machine planer

Ex.3 ***Read the text.***

A. In the past, technical drawings for industry and architecture were drawn by hand, i.e. people worked at drawing boards with drawing equipment. These hand-drawn diagrams provided clear technical information but were slow and expensive to make. Nowadays working drawings are done on computers, which is much quicker.

B. Computers can also:

1. Save, change, and recycle the drawings;
2. Make 3D images;
3. Make drawings bigger or smaller;
4. Keep an electronic library of standard parts;
5. Make symmetrical images of components;
6. Make accurate and consistent drawings.

C. An excellent way to explain the advantages is to think about architectural drawing. Features such as windows and doors can be moved until the architect likes the building. Images of the rooms are created in 3D so the viewer can walk through the rooms. Designers can also experiment with different arrangements of furniture and colours.

Ex.4 Choose the correct answer to questions below.

1) What is the text about?

a. Computer-assisted design

b. Working with computers

2) What is paragraph A about?

a. The history and future of CAD systems

b. The connection between technical drawing and CAD

3) What is Paragraph B list of?

a. The problems of using computers in design

b. The advantages of using computers in design

4) What does paragraph C describe?

a. How CAD is used in designing machines

b. How CAD is used in designing homes.

Ex.5 Open the brackets using the right form of adjectives:

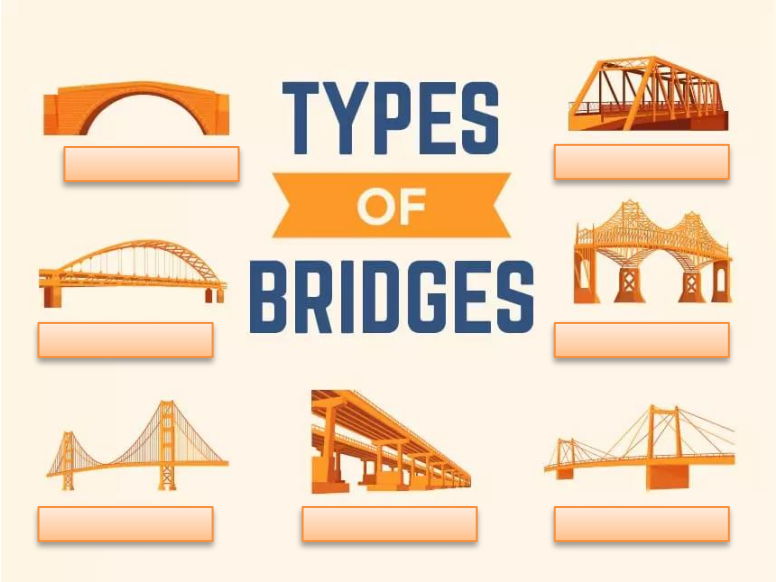
1. Winter is (cold) season of the year. 2. Moscow is (large) than St. Petersburg. 3. Which is (long) day of the year? 4. The Alps are (high) mountains in Europe. 5. Even (long) day has an end. 6. It is one of (important) questions of our conference.

Ex.6 **Open the brackets using Present Continuous или в Present Simple.**

1. We _____ (read) a book now.
2. We sometimes _____ (read) a book.
3. He _____ (not watch) TV at the moment.
4. He _____ (not watch) TV on Sunday.
5. I _____ (go) to school every day.
6. I _____ (go) to school now.

Ex 7. Подпишите к картинкам названия основных типов мостов.

Cantilever, Truss, Suspension, Cable-stayed, Arch, Beam, Tied Arch



Ex.8 Match the words and their definitions

unconscious		to lose blood from the body
bleed		a doctor who performs operations
bruise		an illness that is passed from person to person, like SARS or AidS

surgeon		knocked out; a state like sleep
virus		a blue and black mark on the skin caused by a hard knock

Ex.9 Answer the questions

1. What is your dream job?
2. Do you want to work indoors or outdoors?
3. What is your (future) profession?
4. What jobs are common in your country?
5. What is the most interesting job you've heard of?
6. Do you like working in a team or alone?
7. What skills do you think are important for your (future) job?
8. Do you have any hobbies or interests that could turn into a profession?

VARIANT 2

Ex.1 Fill the gaps with suitable words

1. These cables are very safe and _____
2. Terminator – is a kind of _____machines.
3. Sensors usually give _____to the computer.
4. Robots can not _____like people.
5. The Golden Gate is the huge _____.

Ex.2. Match the terms from the list below with the pictures

Lathe drilling machine milling machine planer

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Ex.5 Open the brackets using the right form of adjectives:

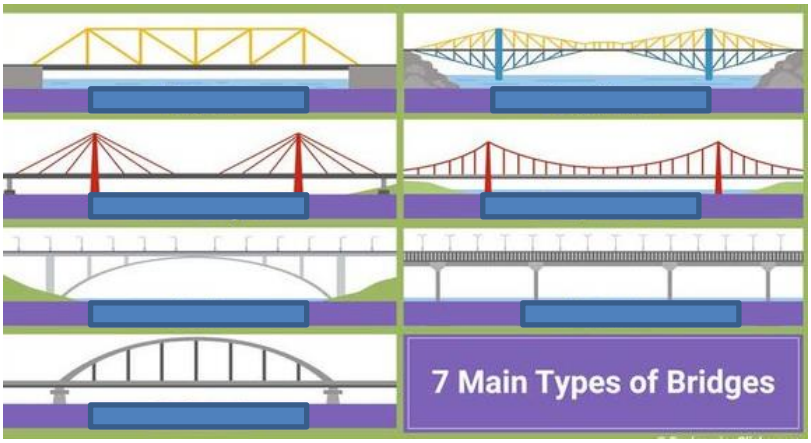
1. Your English is (good) now. 2. Who knows him (well) than you? 3. We have (little) interest in this work than you. 4. Health is (good) than wealth. 5. Your son worked (well) of all. 6. Today you worked (slowly) than usually.

Ex.6 Open the brackets using Present Continuous или в Present Simple.

7. Her mum always _____(listen) to music.
8. Her mum _____ (listen) to music now.
9._____you _____(do) homework every day?
10. _____ you_____ (do) homework now?
11. They_____(not play) football at the moment.
12. They_____(not play) football every day.

Ex 7. Подпишите к картинкам названия основных типов мостов.

Cantilever, Truss, Suspension, Cable-stayed, Arch, Beam, Tied Arch



Ex.8 Match the words and their definitions

cough		when the body reacts badly to certain foods or chemicals in the air
allergy		another word for damage to the skin caused by a knife or a bullet
hay fever		feeling bad the morning after having drunk too much alcohol
wound		the illness of sneezing and coughing caused by pollen in the air
hangover		to try and clear blocked

		lungs or a blocked throat

Ex.9 Answer the questions

1. What is your biggest dream in life?
2. Do you have any short-term goals that you want to achieve?
3. Have you ever accomplished a goal you set for yourself?
4. What is something you would like to learn or improve on?
5. Do you have any specific goals related to your health and fitness?
6. What do you imagine your life to be like in the future?
7. Are there any places you dream of visiting one day?
8. What is one thing you want to achieve before you turn 30 (or a specific age)?

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