Государственное бюджетное профессионального образовательное учреждение

**«Магаданский политехнический техникум»**

 **Учебное пособие**

**по дисциплине «Английский язык»**

для специальности 23.02.03

«Техническое обслуживание и ремонт автомобильного транспорта»

**Английский язык для студентов очного и заочного отделения.** Учебно - методическое пособие для студентов специальности 23.02.03

 Техническое обслуживание и ремонт автомобильного транспорта. Магаданский политехникум. 2018. -37с.

 Учебно-методическое пособие содержит лексический, грамматический материал, тексты и задания к ним, контрольные вопросы и тренировочные упражнения.

 Учебно-методическое пособие предназначено для студентов заочного отделения специальности 23.02.03

 Техническое обслуживание и ремонт автомобильного транспорта.

 Учебно-методическое пособие содержит лексический, грамматический материал, тексты и задания к ним, контрольные вопросы и тренировочные упражнения. Тексты и задания способствуют развитию диалогической и монологической речи, а также развивают речевые навыки и умения перевода и говорения. Предназначены для использования на практических занятиях по английскому языку. Тематический отбор материала позволяет ознакомить студентов с терминологией по темам. Методическое пособие состоит из 4 разделов, включающих основные тексты для изучающего чтения, упражнения для развития навыков устной и письменной речи. Разделы содержат грамматические упражнения, построенные на примерах из текстов, контрольные вопросы по грамматическому материалу, список рекомендуемой литературы.

 Методические указания и контрольные задания по дисциплине « Английский язык» составлены в соответствии с Рабочей программой дисциплины «Английский язык» для специальности 23.02.03

 Техническое обслуживание и ремонт автомобильного транспорта, Государственным образовательным стандартом базового и профессионального образования.

 В результате освоения учебной дисциплины обучающийся

должен **уметь:**

 - общаться устно и письменно на иностранном языке на профессиональные темы;

 - переводить со словарем иностранные тексты профессиональной направленности;

- самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас;

 должен **знать:**

- лексический (1200-1400 лексических единиц) и грамматический минимум,

необходимый для чтения и перевода (со словарем) иностранных текстов профессиональной направленности.

**Оглавление. Стр.**

**I курс \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_5**

**II** **курс\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_10**

**III** **курс\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_16**

**VI** **курс\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_25**

 **I** **курс**

**Урок 1. Английский - язык международного общения. Множественное число существительных.**

**Text: English is the Language of Communication**

 «Do you speak English?» — with this phrase begins the conversation between two people, that speak different languages and want to find a common language.

It's very good when you hear: «Yes, I do», and start talking. People of different countries and nations have to get along well with the progress in world trade and technology as well as with each other.

 So it is very useful to learn foreign languages. Knowledge of foreign languages helps us to develop friendship and understanding among people.

 English is very popular now. It's the language of computers, science, business, sport and politics. It's spoken all over the world. It is the official language of the United Kingdom, Ireland, the United States of America, Canada, Australia. There are more than 750 million speakers of English in the world.

 Speaking a foreign language you can read papers, magazines and original books by great writers, watch satellite TV programs.

 If you like travelling you can go anywhere without being afraid that other people will not understand you. English is very important to find a good job.

 **Vocabulary:**

conversation — разговор

common — общий

world trade — мировая торговля

to get along with — ладить, уживаться

foreign — иностранный

to develop — развивать(ся)

science — наука

satellite — спутник

to be afraid — бояться

  **Ответьте на вопросы:**

1. Do you like to speak English?

2. How many years did you study English?

3. Is it useful to learn a foreign language?

4. Is English the official language in the U.S.A.?

5. Does English help you to make friends?

**Грамматические упражнения.**

**Упражнение 1**.Образуйте множественное число существительных.

Man, pen, wife, money, goods, box, boy, city

**Упражнение 2.** Задайте вопрос к предложению.

1.Her name is Mary.

 2.She is a sales manager.

 3.I am a student.

 4.He is nineteen.

**Упражнение** **3.**Употребите глагол to be в нужной форме, а во второй части предложения употребите нужное притяжательное местоимение.

 1.He (be) a student. ... name is Henry Brown.

 2.I (be) a teacher and ... brother is a doctor.

 3. Nick and Andrew (be) twenty. ... friends are twenty-one.

 4.This girl (be) from Great Britain. ... boy-friend is from Germany.

**Контрольные вопросы по теме «Множественное число существительных».**

1.Дайте определение существительного.

2.Назовите способы образования множественного числа существительного.

3.Объясните особенности произношения окончания множественного числа существительного.

4. Приведите примеры образования множественного числа существительных не по правилам.

5. Назовите особые случаи образования множественного числа существительных.

6. Исключения из общего правила: существительные только единственного числа или только множественного числа.

**Урок 2. Москва - столица Российской Федерации. Числительные.**

**Text: Moscow**

 Moscow is the capital and the largest city of Russia. It lies on the Moskva River. Moscow is the economic, political and cultural centre of the country. Railway and numerous airlines connect the city with all parts of Russia. Navigable waterways including the Moscow Canal, Moskva River and Volga-Don Canal make the port areas of the city accessible to shipping from the Baltic, White, Black and Caspian seas and the Sea of Azov.

 Moscow covers an area of about 880 square kilometres. Concentric boulevards divide the city into several sections. At the centre of the concentric circles and semicircles are the Kremlin, the former governmental seat of Russia and Red Square, which form the centre of a radial strect system.

 There are many places of interest in Moscow. The city is famous for its historic monuments, art galleries and theatres. The Historical Museum, the Pushkin Museum of Fine Arts, The Tretyakov State Picture Gallery are world famous. Moscow is proud of the Bolshoi, Maly and Art Theatres.

 Moscow is an industrial centre with highly developed engineering, electric, light, heavy and chemical industries. It is a scientific centre too. The Russian Academy of Sciences, the oldest University, many schools of higher learning, colleges and scientific institutions are located here.

 Moscow is the country’s largest sport centre. It often becomes a scene of international sports festivals. Moscow has a modern underground system famous for its marble-walled stations. The Metro was opened in 1935. Since then, building work of the Metro has continued for one day. It is developing permanently. Each day the Metro transports about 5 million passengers

 The history of Moscow dates back to 1147. It was founded by Yuri Dolgoruki. There is a monument to him in Moscow. Since then Moscow’s name has not left the pages of history.

 **Ответьте на вопросы:**

1) Where is Moscow situated?

2) What is the role of Moscow in Russia?

3) When was Moscow founded?

4) Who founded our capital?

5) What are the most interesting places of interest in the capital?

6) Have you even been to Moscow?

7) Why was our northern capital renamed three times?

**Упражнение 1.**  **Исправьте неверные утверждения.**

1) Moscow was founded more than 8 centuries ago by Peter the Great.

2) Railways, waterways and airlines connect Moscow with all towns and cities of Russia.

3) Moscow is a port of five seas.

4) The Kremlin is the place where the Russian Federation government is situated.

5) In Moscow there is the oldest Metro in the world.

6) St. Petersburg is much older than Moscow.

7) It stands on the swampy lands.

8) Many architects from all over the world were brought to St. Petersburg to build this beautiful city.

9) During the Great Patriotic war the city was renamed to Leningrad.

**Грамматические упражнения.**

**Упражнение 1.**  **Напишите словами количественные числительные и образуйте от них порядковые числительные.**

1, 2, 3, 4, 5, 11, 12, 14, 15, 21, 25, 28, 30

**Упражнение 2. Напишите словами количественные числительные и образуйте от них порядковые числительные.**

52, 48, 67, 74, 83, 99, 100.

**Упражнение 3. Напишите это по-английски.**

1) 245, 533; 816. 2) 3562; 7324. 3) сто книг; сотня страниц; сотни людей. 4) тысяча машин; тысячи людей; миллион книг. 5) 2+3=5; 7-4=3; 3x5=15; 10:2=5. 6) 1 Января; 8 Марта. 7) глава 5; автобус 6.

**Упражнение 4. Напишите словами следующие числительные:**

а. количественные: 57; 92; 108; 1005.

в. дробные 9 ½; 5 3/8; 6 1/4; 73.106; 0.004.

c. номера телефонов 64-02-98, 58-78-99.

d. порядковые: 73-й, 602-й, 1000-й.

е. даты: 21.12. 1968г; 18.11.1989.

**Упражнение5.** **Напиши цифрами следующие числительные:**

the three thousand six hundred and thirty fifth;

nineteen thousand;

three million;

one thousand and fifty;

a quarter;

three quarters.

**Контрольные вопросы по теме «Числительные».**

1. Дайте определения числительного.

2. Назовите разряды числительных.

3. Дайте характеристику количественных числительных. Приведите примеры.

4. Сосчитайте от 10 до 20.

5.Сосчитайте до 100 десятками.

6.Охарактеризуйте порядковые числительные

7.Назовите суффиксы, с помощью которых происходит образование порядковых числительных.

8. Произнесите по-английски 18-й, 25-й, 31-й,53-й, 62-й.

**Урок 3 Экология и человек. Определенный и неопределенный артикль.**

**Text: Ecological Problems.**

 The most horrible ecological disaster befell Ukraine and its people after the Chernobyl tragedy in April 1986. About 18 percent of the territory of Byelarus were also polluted with radioactive substances. A great damage has been done to the agriculture, forests and people's health. The consequences of this explosion at the atomic power-station are tragic for the Ukrainian, Byelorussian and other nations.

 Environmental protection is of a universal concern. That is why serious measures to create a system of ecological security should be taken. Some progress has been already made in this direction. As many as 159 countries — members of the UNO — have set up environmental protection agencies. Numerous conferences have been held by these agencies to discuss problems facing ecologically poor regions including the Aral Sea, the South Urals, Kuzbass, Donbass, Semipalatinsk and Chernobyl.

 An international environmental research center has been set up on Lake Baikal. The international organization Greenpeace is also doing much to preserve the environment. But these are only the initial steps Since ancient times Nature has served Man, being the source of his life. For thousands of years people lived in harmony with environment and it seemed to them that natural riches were unlimited. But with the development of civilization man's interference in nature began to increase.

 Large cities with thousands of smoky industrial enterprises appear all over the world today. The by-products of their activity pollute the air we breathe, the water we drink, the land we grow grain and vegetables on. Every year world industry pollutes the atmosphere with about 1000 million tons of dust and other harmful substances. Many cities suffer from smog. Vast forests are cut and burn in fire. Their disappearance upsets the oxygen balance. As a result some rare species of animals, birds, fish and plants disappear forever, a number of rivers and lakes dry up. The pollution of air and the world's ocean, destruction of the ozone layer is the result of man's careless interaction and they must be carried onward to protect nature, to save life on the planet not only for the sake of the present but also for the future generations.

**Ответьте на вопросы:**

1. How did people live for thousands of years?

2. What cities appear all over the world today?

3. What pollutes the air we breathe?

4. What is the result of the pollution the atmosphere?

5. Why is environmental protection of a universal concern?

6. What are the initial steps in this direction?

**Vocabulary:**

ancient — древний

harmony — гармония

environment — окружающая среда

riches — богатства

unlimited — неограниченный

to interfere — вмешиваться

to increase — увеличиваться, возрастать

smoky — дымный

enterprises — предприятия

by-product — побочный продукт

activity — деятельность

to pollute — загрязнять

substances — вещества

oxigen — кислород

rare — редкий

destruction — разрушение

ozone — озон

layer — слой

interaction — взаимодействие

horrible — ужасный

disaster — катастрофа

to befall — пасть (на что-то)

**Грамматические упражнения.**

**Упражнение 1.** **Исправьте ошибки в предложениях.**

1. James always has a lunch at 1 o'clock.

2. My sister is the doctor in India.

3. We go to a bed late at weekends.

4. My boss is the happiest person in our office.

5. My brother was so ill he was in hospital for two weeks.

**Упражнение 2. Употребите следующие артикли *a***, ***an***, ***the*  (–).**

1. My sister lives in …………. big flat.

2. 'Where's …………. phone?' 'In ……………….. kitchen.'

3. My brother is ………………. doctor.

4. My brother has got ……………. loud voice.

5. Andy works at Apollo Theatre.

6. Most people like …………………… animals.

7. ………… River Rhone runs into ………… Mediterranean Sea.

8. Do you play ……………. tennis?

9. ………………music's too loud – please turn it down.

10. All our furniture is made of ………………wood.

**Упражнение 3. Употребите следующие артикли *a***, ***an***, ***the*  (-).**

A TRUE STORY

In 1) …… 1969, in 2) ……… Portland, 3) ……… Oregon, 4) ……… man went to rob 5) …… bank. He didn't want 6) ………

people in 7) ……… bank to know what was happening, so he walked up to one of 8) ……… cashiers, wrote on 9) ……… piece of

10) …… paper 'This is 11) ……… robbery and I've got 12) ……… gun', and showed 13) ……… paper to 14) ……… cashier. Then

he wrote 'Take all 15) ……… money out of your drawer and put it in 16) ……… paper bag.' 17) ….……...… cashier read 18)

……..……… message, wrote at 19) ……… bottom of 20) ……… paper 'I haven't got 21) ……… paper bag' and gave 22) ………

paper back to 23) ……… robber. 24) ……… robber ran out of 25) ……… bank.

**II курс**

**Урок 1. Outstanding scientists. Группа настоящих времен.**

**Text: Isaac Newton.**

 Newton, one of the greatest scientists of all times was born in 1642 in the little village in Lincolnshire, England. His father was a farmer and died before Newton was born. His mother was a clever woman whom he always loved.

 After the school, Newton studied mathematics at Cambridge university and received his degree in 1665. Then the university was closed because of the danger of plague and Newton went home for eighteen months. It was most important period in his life when he made his three great discoveries — the discoveries of the differential calculuses, of the nature of white light, and of the law of gravitation.

 These discoveries are still important for the modern science. Newton had always been interested in the problems of light. Many people saw colours of a rainbow but only Newton showed, by his experiments, that white light consists of these colours.

 It is interesting how he discovered the law gravitation. Once, as he sat at the garden, his attention was drawn by the fall of an apple. Many people saw such an usual thing before.

 But it was Newton who asked himself a question: "Why does that apple fall perpendicularly to the ground? Why doesn't it go sidewards or upwards?" The answer to this question was the theory of gravitation, discovered by Newton.

 Newton died at the age of 84, and was buried in Westminster Abbey, where his monument stands today.

  **Ответьте на вопросы:**

1. When and where was Newton born?

2. Where did he study?

3. What three major discoveries did Newton make?

4. When did Newton make these discoveries?

5. How did the idea which led to the discovery of the law of gravitation first come to him?

6. When did Newton die and where is he buried?

**Vocabulary:**

 degree — ученая степень

 plague — чума

 discovery — открытие

 differential calculuses — дифференциальное исчисление

 law of gravitation — закон всемирного тяготения

 rainbow — радуга

 to draw — привлекать

 perpendicularly — перпендикулярно

 sidewards — в сторону

 upwards — вверх

 abbey — аббатство

**Грамматические упражнения.**

**Настоящее простое и настоящее длительное время.**

**Упражнение 1. Составьте предложения в настоящем простом времени.**

Пример: This clock (work -) This clock doesn't work.

1. You (drive?) to school.

2. Granny (drink -) coffee.

3. I (travel +) a lot in Europe.

4. Alex (want +) to be a doctor.

5. The fast train (stop -) at this station.

2. Make present continuous sentences with expressions from the box.

cook not listen sell snow not work

**Упражнение 2.Составьте отрицательные предложения в настоящем простом или длительном времени.**

Пример: 'Why aren't you at the office?' 'I' m not working today.'

1. I'm sorry, John can't come to the phone for the moment. He……… lunch.

2. 'It's raining.' 'No, it's not. It…………………………….'

3. You………………………………..to me.

4. There's a man at the door. He……………………………….vegetables.

**Упражнение 3. Выберите правильный вариант ответа.**

1. 'Where's Susan?' 'She comes / She's coming now.'

2. 'Do you smoke?' / 'Are you smoking?' 'No, never.'

3. John cooks dinner now / every Sunday.

4. I'm reading a lot of magazines these days / when I go on holiday.

5. I work late all this week / most Tuesdays.

**Упражнение 4. Составьте вопросы.**

1. Why / all those people / look at me /?

2. The 7.15 train to London / run / on Saturdays /?

3. Where / you and Ann / have lunch / today /?

4. That man in the dark coat at the bus-stop / work / in your office /?

**Упражнение 5.Выберите правильные предложения и исправьте ошибки в неверных предложениях.**

1. You're driving too fast. 2. What is this word meaning?

3. I'm not wanting a drink just now.

4. Where are you living now?

5. I'm thinking you're wrong.

6. Sorry, I'm not understanding.

**Упражнение 6.Поставьте глаголы в настоящем простом и длительном времени.**

1. Look! He (leave) ……………………… the house.

2. Quiet, please! I (write) ………………… a test.

3. She usually (walk)…………………… to school.

4. But look! Today she (go) ……………… by bike.

5. Every Sunday we (go) ………………… to see my grandparents.

6. He often (go) ………………………… to the cinema.

**Урок М.В. Ломоносов - выдающийся русский ученый. Группа прошедших времен.**

**Text: Mikhail Vasilyevich Lomonosov.**

Innovator- новатор

to reject- отвергать

to anticipate -предвидеть, опережать

conservation of matter -сохранение материи

freezing of mercury- точка замерзания ртути

solar transit -солнечное излучение

Old Church Slavonic- староцерковный славянский

to revive- выживать

to display- показать

to prove -доказывать

to investigate- исследовать

solution- раствор

thermal expansion of liquids- тепловое расширение жидкостей

the Bureau of Weights and Measures- Палата Мер и Весов

to respect- уважать

to honour- чтить, почитать

to influence the world outlook- влиять на мировоззрение

to dedicate- посвящать

plant nutrition- питание растений

existence of life- существование жизни

to strengthen -укреплять

public figure -общественный деятель

to depend the thesis- защищать диссертацию

to elect- избирать

to play a decisive role (in)- играть решающую роль

hydrogen bomb- водородная бомба

to bar atomic and nuclear weapons- запрещать атомное и ядерное оружие

to take part (in)- принимать участие

human rights- права человека

to deprive- лишать

to exile -ссылать

to foresee -предвидеть

to take place- происходить

to have much in common- иметь много общего

 Mikhail Vasilyevich Lomonosov was a famous Russian writer, chemist and astronomer who made a lot in literature and science.

Lomonosov was born on November 19, 1711 in Denisovka (now Lomonosov) near Archangilsk and studied at the University of the Imperial Academy of Sciences in St. Petersburg . After studying in Germany at the Universities of Marburg and Freiberg, Lomonosov returned to St. Petersburg in 1745 to teach chemistry and build a teaching and research laboratory there four years later.

 Lomonosov is often called the founder of Russian science. He was an innovator in many fields. As a scientist he rejected the phlogiston theory of matter commonly accepted at the time and he anticipated the kinetic theory of gases. He regarded heat as a form of motion, suggested the wave theory of light, and stated the idea of conservation of matter.

 Lomonosov was the first person to record the freezing of mercury and to observe the atmosphere of Venus during a solar transit. Interested in the development of Russia education, Lomonosov helped to found Moscow State University in 1755 and in the same year wrote a grammar that reformed the Russian literary language by combining Old Church Slavonic with modern language. In 1760 he published the first history of Russia. He also revived the art of Russian mosaic and built a mosaic and coloured-glass factory. Most of his achievements, however, were unknown outside Russia. He died in St. Petersburg on April 15, 1765.

 **Ответьте на вопросы:**

1) Russia is rich in great scientists, isn't it?

2) What great Russian scientists expert mentioned in the text do you know?

3) What researches is Lomonosov famous for?

4) What researches is Mendeleyev famous for?

5) What sciences did Lomonosov deal with?

6) What was the main science Mendeleyev did his researches in?

7) Why can these great scientists be spoken about in one text? What is your opinion?

**Упражнение 1. Соотнесите части предложений и составьте рассказ о М.В.Ломоносове.**

1) There is hardly any other person …

2) He was …

3) Since childhood Lomonosov liked …

4) His thirst for knowledge was so great …

5) Then he continued …

6) In Germany he became acquainted with …

6) … enriched this branch of physics

7) On his return to Russia (1741) he began toteach …

7) … linquist of his time

8) On his initiative the first chemical laboratory was …

9) To spread education in Russia Lomonosov …

1) … delivered public lectures on physics

2) … his education in St. Petersburg University and abroad

14) In 1755 he …

3) … chemistry in the Academy

4) … the achievements of science in Europe

5) … more gifted than M. V. Lomonosov

8) … a historian, a chemist, a physicist, a poet, etc

10) He studied electricity and …

11) Lomonosov was the founder of …

12) He was also a brilliant …

13) He did a lot for the development of …

9) … Russian language and literature

10) … to observe nature, the life andcustoms of the people

13) … Russian scientific terminology

11) … built in Russia

12) … that he went on foot to Moscow and entered the Slavonic Greek-Latin Academy in 1730

14) … founded Moscow University.

**Грамматические упражнения.**

**Прошедшее простое и прошедшее длительное время.**

**Упражнение 1. Составьте предложения в прошедшем простом времени.**

 When / my letter / arrive**?** *When did my letter arrive*?

1. What / all those people / want?

2. All your brothers / send / birthday cards?

3. The baby / eat / some toothpaste this morning **+**

4. The teacher / answer / my question **–**

**Упражнение 2. Составьте предложения в прошедшем длительном времени.**

When I walked in (*children fight* ***+***) *the children were fighting*.

1. At 9.00 on Sunday (*we watch TV* **+**).

2. When I saw him he was holding a paper, but (*read* -).

3. When you heard them, (*they speak English*?).

**Упражнение 3. Употребите прошедшее простое или прошедшее длительное время.**

1. At 6.15, when you phoned, I *had* / *was having* a shower.

2. We *watched* / *were watching* TV all evening.

3. Bill *watched* / *was watching* TV when Ann came in.

4. My father *worked* / *was working* hard all his life.

5. They got married while they *studied* / *were studying* at London University.

6. Yesterday we *drove* / *were driving* from Oxford to Edinburgh and back.

7. It was a nice evening, so she *walked* / *was walking* home from work.

**Упражнение 4. Употребите прошедшее простое или прошедшее длительное время.**

While I *was walking* down the road, I *saw* Bill (*walk*; *see*).

1. While I ……... the newspaper, the cat ……on to the table (*read*; *jump*).

2. Alan …………… Helen while he ………… in Morocco (*meet*; *travel*).

3. Sally………………her leg while she ……………………..(*break*; *ski*).

4. While I …………., somebody …………………... my car (*shop*; *steal*).

**Упражнение 5. Употребите прошедшее простое или прошедшее длительное время выделинных глаголов и расставьте их в тексте по смыслу.**

 **drive open pass pull run shine sing start turn wait**

It was a beautiful morning. The sun *was shining* and birds 1) …… About five thousand people 2)

……………………………….. in front of the Palace. At 10.00, the guards 3) ……………………………. the Palace gates, and the

President's car 4) ……………………………. out and 5) ……………. left into Democracy Street. The crowds 6)

………………………………to sing the National Anthem. Then suddenly, just as the President's car 7) ……….. the Ritz Hotel, a

man 8) ……………………………………………..out in front of it and 9) ………………………………….. a gun from his pocket.

**Урок 3. Дмитрий Иванович Менделеев. Группа будущих времен.**

**Text: Dmitry Ivanovich Mendeleyev.**

 Dmitry Ivanovich Mendeleyev is a famous Russian chemist. He is best known for his development of the periodic table of the properties of the chemical elements. This table displays that element’ properties are changed periodically, when they are arranged according to their atomic weights.

 Mendeleyev was born in 1834 in Tobolsk, Siberia. He studied chemistry at the University of St. Petersburg, and in 1859 he was sent to study at the University of Heidelberg. He returned to St. Petersburg and became Professor of Chemistry at the Technical Institute in 1863. He became Professor of General Chemistry at the University of St. Petersburg in 1866. Mendeleyev was a well-known teacher, and because there was no good textbook in chemistry at that time he wrote the two-volume “Principles of Chemistry” which became a classic textbook in chemistry. In this book Mendeleyev tried to classify the elements according to their chemical properties. In 1869 he published his first version of his periodic table of elements.

 In 1871 he published an improved version of the periodic table, in which he left gaps for elements that were not known at that time. His table and theories were proved later when three predicted elements: gallium, germanium and scandium were discovered.

 Mendeleyev investigated the chemical theory of solution. He also investigated the thermal expansion of liquids and the nature of petroleum.

In 1893 he became director of the Bureau of Weights and Measures in St. Petersburg and held this position until his death in 1907.

**Ответьте на вопросы:**

1) Russia is rich in great scientists, isn't it?

2) What great Russian scientists expert mentioned in the text do you know?

3) What researches is Lomonosov famous for?

4) What researches is Mendeleyev famous for?

5) What sciences did Lomonosov deal with?

6) What was the main science Mendeleyev did his researches in?

7) Why can these great scientists be spoken about in one text? What is your opinion?

**Упражнение1.** **Составьте предложения и опишите биографию Д.И.Менделеева.**

1834 – to be born

1859 – to be sent

1863 – to become Professor of Chemistry

1866 – Professor of General Chemistry, classic textbook “Principles of Chemistry”

1869 – to publish, the periodic table of elements

1871 – the improved table, to leave gaps for elements, to be unknown

1893 – the Bureau of Weights and Measures, to hold the position

1907 – to die

**Грамматические упражнения.**

**Упражнение 1. Ask questions with *Will you be*** -***ing***?

1. You want your friend to give Tom a message this afternoon (you / see / Tom this afternoon?).

2. You want to use your friend's typewriter tomorrow evening (you / use / your typewriter tomorrow evening?).

3. Your friend is going shopping. You want him/her to buy some stamps for you at the post office (you / pass / the post office

when you're in town?).

**Упражнение 2. Use *will have done***.

1. Jim always goes to bed at 11 o'clock. Tom is going to visit him at 11.30 this evening. When Tom arrives, (Jim / go / to bed)

………………

2. Tom is on holiday. He has very little money and he is spending too much too quickly. Before the end of his holiday, (he /spend / all

his money) …………..

3. Chuck came to Britain from the US nearly three years ago. Next Monday it will be exactly three years since he arrived. Next

Monday (he / be / here / exactly three years) ………………

**Упражнение 3. Complete the following dialogue using Future Simple or Future Continuous.**

Graham: Can I phone you tomorrow, Suzy?

Suzy: What time?

Graham: Well, I'm not working tomorrow so I 1) *'ll phone* (phone) you at 9 o'clock in the morning.

Suzy: Oh no! I 2) ……………… (sleep) then.

Graham: OK. I 3) ……………… (call) you at noon.

Suzy: Well, I 4) ……………… (wash) my hair.

Graham: Perhaps I 5) ……………… (come) and visit you in the afternoon, then. What 6) ……………… (you /do) around 3

o'clock?

Suzy: I 7) ……………… (get) ready for my aerobics class.

Graham: Well, if I phone you at 5, 8) ……………… (you /be) at home?

Suzy: No, I'm afraid not. I 9) ……………… (visit) my aunt in hospital. Graham: When can I see you, Suzy?

Suzy: Phone me tomorrow evening. I 10) ……… (not /do) anything then.

**Упражнение 4. Put the verbs in brackets into Future Perfect or Future Perfect Continuous.**

By 7.00 pm they *will have been playing* (play) cricket for eight hours.

1. I ……………… (finish) painting your room by the time you get home.

2. By the end of next month I ……………… (live) in London for exactly three years.

3. Tom ……………… (write) his third novel by the end of this year.

4. By the time he arrives in London, John ………… (drive) for five hours.

5. This film……………… (probably / not / finish) until midnight.

**III курс**

**Урок 1:**  **Некоторые свойства материи. Страдательный залог.**

**Упражнение** **1.** Check up the meaning of the following words:

Verbs: condense, prevail, boil, melt, exist, vary, emphasize, bind (bound, bound), liquefy,

solidify.

Nouns: solid, liquid, steam, spout, drop, pressure, vessel, clay, inch, treatment, crust.

Adjectives: invisible, tiny, minute, rare, noble, aerated (drink), troublesome, pure, crystalline.

Adverbs: naturally, relatively, rapidly, nearly, tightly, somewhat to and for.

**Упражнение** **2.** **Переведите следующие слова:**

Silicon, neon, argon, oxygen, zinc.

**Text:**  **Some properties of matter.**

 Matter can exist in three forms, solid, liquid, and gas. However, these are not different classes of matter, but different states – that is, whether a particular substance, say the metal zinc or water or nitrogen, exists as a solid, a liquid, or a gas depends upon the temperature, and especially, in the case of gases, the pressure.

 Water is the simplest example. At the low temperature which prevails in many parts of the world, especially on the mountain-tops, water exists naturally in the solid form. When water boils it turns into an invisible gas, steam. You must not be misled by the cloud that forms near the spout of a boiling kettle, for this consists of tiny drops of hot water formed by the steam condensing in the relatively cold air.

 Consider the metal zinc, which we call a solid, for such it is at ordinary temperatures. It melts to a liquid at 419o C., and this liquid boils to an invisible gas at 907 o C.

 Now take the gas nitrogen, which is the main part of our atmosphere. At a very low temperature of – 196o C. and ordinary atmospheric pressure, it turns to a liquid, at a lower temperature, - 210 o C., it becomes a solid. All gases have now been liquefied and solidified, although some require a high pressure and low temperature to condense them. Liquid air, nitrogen, and oxygen are much used in some branches of industry and can be bought like any other liquid. Of course they require special vessels to prevent them boiling away rapidly at ordinary room temperature.

 Whether, then, a substance exists as solid, liquid, or gas is a question of pressure and temperature, not of constitution.

**Ответьте на вопросы.**

a) What are the states of the matter? Give the examples.

b) Which substances are much used in different parts of industry?

c) Complete the statement: constitution, gas, pressure, solid, temperature, liquid.

Whether a substance exists as: .........., ........., or .......... is a question of .......... , and ........., not

of ...... .

**Грамматические упражнения.**

**Упражнение 1. Употребите прошедшее простое время в пассивном залоге.**

 A lot of olive oil *is used* in Greek cooking. (*use*)

1. Arabic …………………………….. from right to left (*write*).

2. Those programmes …………… by millions of people every week (*watch*).

3. Stamps …………………………. in most newsagents in Britain (*sell*).

4. The police say that nothing ……………. about the child's family (*know*).

5. In English, 'ought' ……………… in a lot of different ways (*pronounce*).

**Упражнение 2. Составьте вопросительное и отрицательное предложение.**

 'Jaguar cars *are not made* in America' (*not make*).

'Where *are they made*?' 'In the UK.'

1. 'My name …………………………………….. with a Y' (*not spell*).

'How ………………………………… 'L, E, S, L, I, E.'

2. 'That kind of bird……………………… around here' (*not usually see*).

'Where ………………………………….' 'In warmer countries.'

3. *'Where* ……………………………like *were'* (*not pronounce*).

'How ……………………………………' 'Like *wear*.*'*

4. 'Diamonds ……………………………in Scotland' (*not find*).

'Where ……………………………………' 'In South Africa, for example.'

5. 'My sister …………………………………. very well' (*not pay*).

'How much ……………………………………..' 'I don't remember.'

**Упражнение 3. Употребите прошедшее простое время в пассивном залоге.**

1. Our passports ……………… by a tall woman in a uniform (*take*).

2. These books ……………… in the classroom yesterday (*leave*).

3. I don't think this room ……………… yesterday (*clean*).

4. We ……………… at the airport by a driver from the university (*meet*).

5. Nobody ……………… what was happening (*tell*).

**Упражнение 4. Составьте вопросительное и отрицательное предложение.**

 'We *weren’t paid* when we finished the work' (*not pay*).

'When *were you paid*?' 'Two months later.'

1. 'My father ……………… in England' (*not educate*).

'Where ………………' 'In Germany.'

2. 'The letters ……………… on Tuesday' (*not post*).

'When ………………' 'On Thursday.'

3. 'This ……………… in butter' (*not cook*).

'How ………………' 'In margarine.'

4. 'My suit ……………… in England' (*not make*).

'Where ………………' 'In Hong Kong.'

5. 'The restaurant bill ……………… in cash' (*not pay*).

'How ………………' 'With a credit card.'

**Урок 2:**  **Моя будущая профессия. Модальные глаголы.**

 **Упражнение 1.** Переведите предложения на русский язык, обращая внимание на термины.

1.After graduating from the college I shall become a technician.

2.I shall deal with manufacturing cars.

3.The production of the automobile comprises five phases, such as: designing, working out the technology of manufacturing processes, laboratory tests, road tests, mass production.

4. The automobile of today must have high efficiency, long service life, driving safety, ease of maintenance and be stable on the road.

5.The automobile must meet up-to-date demands, that is, it must have rapid acceleration, smooth-acting clutch, silent gearbox, dependable braking and steering systems, dependable ignition system.

6.Before the car is put into mass-production it must be subjected to laboratory and road tests.

7.Technicians should know the technology of manufacturing processes.

**Упражнение 2**. Прочтите и переведите интернациональные слова.

Specialist, automobile, industry, production, phase, technology, process, test, mass, fact, service, comfortable, ecological, method, type, corrosion, material, optimal, problem, mechanism, control, system.

**Упражнение 3**. Переведите слова, обращая внимание на значение суффиксов.

Industry — industrial; to produce — production — producer; to design — designer; technology — technological — technologically; to require — requirement; efficient — efficiency — efficiently; safe — safely — safety; to maintain — maintenance; comfort — comfortable; ecology — ecological; to resist — resistance — resistant; to operate — operation — operational; to accelerate — acceleration; to construct — construction.

**My future profession.**

Dialogue 1.

Nick: Hullo, Boris!

Boris: Hullo, Nick. How are things?

N.: Perfectly well, thank you. I entered the automobile construction college.

В.: That's nice, what will you become after graduating from the college?

N.: I'll become a technician and deal with manufacturing new cars.

В.: Why did you choose this profession?

N.: I enjoy learning about a car. I enjoy working with metal. And

most of all I enjoy being able to construct cars. В.: Do you enjoy the course? N.: Yes, of course.

В.: Tell me about your profession in detail, please?

N.: With great pleasure. As you know an automobile must be safe, have smooth acting clutch, silent gears, excellent brakes and steering system. And in order to achieve these qualities a lot of work must be done.

В.: Thank you very much for your information. I believe you like

your profession very much.

N.: Oh, yes, very much, indeed.

Dialogue 2.

 Anton: Where do you study?

Boris: I study at the automobile construction college.

A:Whom does the college train?

B:It trains specialists for the automobile industry.

A:Why did you decide to become a technician?

B:I enjoy working with machines. I enjoy learning about a car. I understand every part of it.

A:What can you tell me about the car?

B:Well, the car of today must be rapid in acceleration, it must have dependable clutch, brakes, and steering system, be stable on the road and have pleasant appearance.

A:Do you enjoy the course?

B:Yes, very much. I have learned a lot of things. For example, I know that the production of the car comprises five phases.

A:What are they?

B:They are designing, working out the technology, laboratory tests, road tests, mass production.

A:And why are laboratory and road tests needed?

B:The cars are subjected to tests in order to meet up-to-date demands.

A:And what are these demands?

B:They are high efficiency, long service life, driving safety, ease of maintenance and so on.

A:I think you will become an expert in automobile engineering.

B:I'll try. The cooperative plan of an academic program with practice at a plant will help me to become a good specialist.

**Упражнение 5.** Найдите в тексте диалога английские эквиваленты следующих русских слов и выражений и запишите их:

Учусь в автомобилестроительном колледже, техник, люблю работать с машинами, современный автомобиль, надежные тормоза, плавное сцепление, приятный внешний вид, массовое производство автомобилей, стендовые испытания, отвечать современным требованиям, долгий срок службы, легкость техобслуживания, надежность, быстро разгоняться (приёмистость), подвергаться жестким дорожным испытаниям.

**Грамматические упражнения.**

**Модальные глаголы.**

**Упражнение 1. Употребите модальные глаголы. *Mustn't* or *needn't*?**

**Пример:** We *mustn’t* hurry – we'll get too tired.

1. You …………… stay up late – you've got school tomorrow morning.

2. You ……... stay up late to wash the dishes – I'll wash them in the morning.

3. We …………………….. leave the door open – the rain will come in.

4. We …………………….. leave the door open – Peter has got a key.

5. You …………………… drive so fast – the police will stop you.

6. You …………………… drive so fast – we've got a lot of time.

**Упражнение 2. Употребите глагол *should* или *must*.**

 **Пример:**  'Do I look all right?' 'You *should* get a haircut.'

1. I can't leave; I …………………………. finish this work today.

2. I ……………… take more exercise, but I'm too busy.

3. You …………... n't smoke near babies.

4. The sign says we …………… n't smoke here.

5. What ………….. I do to get a visa?

6. You …………… be over 16 to buy cigarettes here.

7. 'What music …..……. I play?' 'I'd like Mozart.'

**Упражнение 3. *Might* или *might not*? Выберите правильный ответ.**

1. It's getting late. I *might finish* / *might not finish* this work on time.

2. If the traffic gets very bad we *might miss* / *might not miss* the train.

3. If he's had a good day, your dad *might give* / *might not give* you money for the cinema.

4. Andrew's story is so good that his teacher *might believe* / *might not believe* he wrote it.

5. Helen's not feeling well today – I'm afraid she *might pass* / *might not pass* her exam.

**Упражнение 4. Употребите правильную форму модального глагола *can* или *to be able to*.**

1. Tom ……………… (buy) a new house last month.

2. ……………… (they/play) tennis well?

3. She ……………… (not/understand) the question yesterday.

4. When ……………… (you/come) tomorrow?

5. Unfortunately, they ……………… (get) the bread this morning.

**Упражнение 5. Употребите модальные глаголы *must*(*n't*), (*not*) *have to*, *ought to*, *need*(*n't*) в правильной форме.**

Yesterday when I was at the museum a fire broke out. We 1) *had to* leave the building. We were told that we 2) ................ panic

as it was a small fire, but that we should all go outside. In the end, they were able to put out the fire and they 3) ...................... call the

fire brigade. Unfortunately, one of the rooms 4) .............. painting again as the smoke damaged it. The police said that the museum 5)

............... have better security and that all visitors 6)................. make sure they know

**Урок 3. Физические явления. Инфинитив.**

**Vocabulary:**

to interact - взаимодействовать

force - сила

particles - частицы

at rest - в состоянии покоя

internal - внутренний

conservation - сохранение

to convert - переходить

fission - расщепление

fusion – слияние

**Упражнение 1. Прочитайте и переведите на русский язык интернациональные слова.**

Physics, energy, magnetism, electricity, gravitation, orbits, planets, mechanics,

electromagnetic, spectrum, radiation, nuclear, accelerate, acceleration.

**Упражнение 2. Подберите синонимы.**

1. behave a) amount

2. form b) act

3. quantity c) shape

4. major d) separate

5.century e) main

 g) age

 f) subject

 **Упражнение 3. Подберите антонимы.**

|  |  |
| --- | --- |
| 1. begin2. external3. free of4. artificial5. divide6. completely7. necessary8. straight9. fission10. action | a) internalb) naturalc) endd) combinee) full off) unnecessaryg) partiallyh) fusioni) curvedj) reactionk) motionl) basic |

**Упражнение 4. Прочитайте и переведите следующие предложения.**

1. Mass is the internal quality of the object.

2. Energy is the kind and size of any change of the object.

3. Mechanics deals with the state of rest or motion of particles and rigid bodies and

with forces acting on bodies.

4. Optics investigates and studies the process of light emission, its propagating in various medium and its interaction with the substance.

5. Electricity and magnetism are the basic subdivisions of physics dealing with existence, moving and interaction of charged particles.

6. Atomic physics deals with atoms, elements, their properties, the nature of atomic spectra.

7. Nuclear physics includes the discovery of the neutron and other fundamental particles.

8. Cryogenics – study of properties of matter at very low temperatures, including superconductivity.

9. Plasma physics studies controlled thermonuclear fusion and the exploration of space.

10. Accelerators – devices for bombarding nuclei with particles possessing billions of electron volts of energy.

**Text: Some facts about physics.**

 Physics deals with matter and energy and how they interact. It begins by examining the information that people sense about the world around them.

Objects are seen to move from place to place, and when completely free of contact with other objects, they move in straight lines at a steady speed. Being at rest objects are said to move at a steady zero speed, whenever objects do not behave this way, they are said to be accelerated, and a “force” is said to act on them.

The internal quality of the object is called “mass”. When forces act on objects the accelerations produce changes in such things as position, size, shape and chemical nature. The kind and size of any change is judged by use of a quantity called energy.

Therefore, energy forms include light, heat, sound, magnetism and electricity.

 Traditionally physics is divided into several major topics, namely, mechanics heat,

optics, electricity and magnetism, atomic physics and nuclear physics. Because of the remarkable unity of Nature this separation into topics is, to some extent, artificial and exists for convenience.

Newton’s second law, relating force to acceleration and his third law relating action and reaction, form the basis of mechanics. Maxwell’s equations which combine in mathematical form the laws discovered by Ampere, Faraday, form the basis of electricity, magnetism and optics.

 An understanding of statics is necessary to describe the behavior of bulk matte and, with the laws of mechanics, electricity and magnetism, forms the basis of heat and thermodynamics. All these subdivisions constitute classical physics of the end of

the 19th century. Modern physics began with the work of Plank and the theory of relativity.

Atomic physics made it possible for Mendeleyev to construct his Periodic Table

of Elements, to predict their properties and to understand the nature of atomic spectra.

 Nuclear physics has been rapidly developing since 1930 s. It includes the discovery

of the neutron and other fundamental particles; the creation of artificial radioactivity, the discovery of nuclear fission and fusion; the development of particle accelerators for bombarding nuclei with particles possessing billions of electron volts of energy.

Active research flourishes in many other fields such as:

-solid state physics and cryogenics -study of properties of matter at very low temperatures, including superconductivity;

-microwave and radio frequency spectroscopy.

Plasma physics is growing rapidly because of the current search for controlled thermonuclear fusion and because of the exploration of space.

**Notes:**

objects are seen to move – видно, как предметы движутся

free of contact – свободны от взаимодействия

they are said to be accelerated – говорят, что они ускоряются

a force is said to act on them – говорится, что на них действует сила

to be judged by – оцениваться

**Ответьте на вопросы:**

1. What does physics deal with?

2. When do objects move (from place to place) in straight lines at a steady speed?

3. Is mass an external or internal quality of the object?

4. Do accelerations produce changes in position, size, shape and chemical nature?

5. How is physics traditionally divided into?

 **Упражнение 2. Выберите предложения, соответствующие тексту.**

1. Physics begins by examining the information that people sense about the world

around them.

2. When objects move in straight lines at a steady speed they are said to be

accelerated.

3. The accelerations produce changes only in position of the object.

4. Separation of physics into several topics is to some extent artificial.

5. Nuclear physics began its rapid development in the XIX century.

 **Упражнение 3. Закончите следующие предложения.**

1. Physics deals with…and… how they…

2. When objects move from place to place and when they are completely free

of…with other objects, they move in …lines at a …speed.

3. When forces act on objects they produce…in such things as position, …,…, and

chemical nature.

4. Energy forms include …, …, …, …, and … .

5. Newton’s second law, relating force to acceleration, and his third law, relating

action and reaction form the basis of…

6. Maxwell’s equations form the basis of …, …, and … .

7. All these … constitute classical physics.

8. Quantum mechanics is the climax of Plank’s quantum theory and the theory of …of Einstein.

9. Atomic physics made Mendeleyev’s Periodic … of … possible.

10. … physics includes the discovery of the neutron and other fundamental particles.

(matter, contract, energy, steady, straight, size, changes, mechanics, light, shape heat, subdivisions, optics, electricity, magnetism, Table of Elements, relativity, nuclear).

**Грамматические упражнения.**

**Выполните грамматические упражнения, используя предложенные модели.**

**Упражнение 1:M o d e l**: We are glad **to see** you. — We are glad **to have seen** you.

1. She is happy to meet you.

2. We are sure to see him in the library.

3. She is sure to be accepted to the institute.

4. I’m glad to be invited to the party.

5. We are glad to hear the news.

6. She is sorry to keep you waiting.

7. He is happy to take part in the discussion.

8. I am sorry to trouble you.

**Упражнение 2.Измените предложения, согласно предложенной модели.**

**M o d e l:** We are glad **to meet** him. — We are glad **to be met** by him.

1. I don’t want to ask about it.

2. She wants to tell the story.

3. I am glad to invite them.

4. I don’t like to interrupt you.

5. She hopes to provide you with everything necessary for the work.

6. He is happy to paint you.

 **Упражнение 3. Прочитайте и переведите предложения на русский язык.**

1. She doesn’t want **to be caught** in the rain.

2. Then Mary arrived at the bus-stop, Herbert pretended **not to have seen** her.

3. He decided **to drive** his car deep enough into the brushwood **to be concealed**.

4. I was pleased **not to be feeling** afraid of him.

5. **To have seen** him was enough.

6. I saw at once that my daughter was thrilled **to be wearing** an evening dress.

7. She is happy **to have found** such a nice place to live in.

8. The child was afraid **to be going** past that house alone.

9. The walls were in good enough shape & didn’t need **to be painted**.

10. It has been a pleasure **to have been sharing** a room with you all these years.

11. The boy was delighted **to have been transferred** from that class to another one.

12. I’ll be glad **to be sent** up to Moscow.

13. Help yourself **to take care of it:** it is there **to be eaten**.

14. I’m very pleased **to have been** of help.

15. The questions **to be answered** are on page 40.

 **Упражнение 4.** **Прочитайте и переведите предложения на русский язык.**

1. It must be very nice to know a foreign language well.

2. It will take me half an hour to buy all these things at the super-market.

3. It was wise of them to book a room in advance.

4. It will be difficult to find this dictionary.

5. It was his habit to have a nap after dinner.

6. It surprised me to meet Vera in Moscow.

7. It won’t do you any harm to read the book again.

8. It cheered me up even to think of it.

9. It is never too late to learn.

**Упражнение 5. Прочитайте и переведите предложения на русский язык.**

1. To say such a thing to a child was simply thoughtless of you.

2. To tell him the truth at that moment meant nearly to kill him.

3. To know any language well means to be able to speak it and to read books in the original, I think.

4. To lie to a child is unpardonable.

5. To be in our town and not to drop at our place is simply a shame.

6. To deceive the lawyer was absolutely impossible.

7. To mend our TV set was no problem of Nick.

8. To miss the recital was a disappointment for us.

**Упражнение 6.** **Прочитайте и переведите предложения на русский язык.**

1. It was stupid of him not to have gone there.

2. It was clever of him to have given a talk of it.

3. It was foolish of her not to have accepted the offer.

4. It was stupid of you not to have joined the excursion.

5. It was kind of them to have offered their tickets to the concert to us.

6. It was nice of them to have visited their old school teacher.

7. It was wrong of you to have told the news to her.

8. It was wise of her to have taken some medicine with her on the trip.

9. It was good of you to have brought a pair of gloves for my mother-in-law.

**Контрольные вопросы по теме «Инфинитив»**

1.Назовите признаки инфинитива, место инфинитива в предложении.

2. Укажите признаки инфинитивного оборота и способ образование его от глаголов.

3. Назовите порядок слов в предложениях с инфинитивом и инфинитивным оборотом. 4. Определите способы перевода инфинитива и инфинитивных оборотов на русский язык.

**IV курс.**

**Урок 1 . Составные части автомобиля.**

**Упражнение 1***.*Прочтите и переведите интернациональные слова.

Automobile, chassis, electric, system, control, differential, venti­lator, cylinder.

**Components of the Automobile**

The automobile is made up of three basic parts: the power plant, or the engine, the chassis and the body.

The engine is the source of power that makes the wheels rotate and the car move. It includes fuel, cooling, lubricating and electric systems. Most automobile engines have six or eight cylinders

The chassis includes a power train (power transmission), a running gear, steering and braking systems as well.

The power train carries the power from the engine to the car wheels.

The power transmission, in turn, contains the clutch, gearbox, propeller or cardan shaft, final drive, differential, rear axle and axle shafts. The running gear consists of a frame with axles, wheels and springs.

The body has a hood, fenders and accessories: the heater, stereo tape recorder, windshield wipers, conditioner, speedometer and so on.

**Ответьте на вопросы:**

1.What main parts is the automobile made up of?

2.What is the function of the engine?

3.What systems does the engine include?

4.What does the chassis consist of?

5.What units does the power transmission comprise?

6.What assemblies does the running gear consist of?

7.What has the body?

**Упражнение 2**. Выберите и запишите термины, данные ниже, которые относятся к:

the engine (двигателю); the chassis (шасси); the body (кузову).

Fuel system, axle shaft, accessories, cooling system, frame with axles, running gear, lubricating system, steering system, heater, propeller shaft, power transmission, final drive, windshield wiper, clutch, wheels and axle shafts, gearbox, electric system, differential.

Дайте русские эквиваленты приведенных выше терминов.

 **Упражнение 3.** Прочтите диалог несколько раз, а затем выполните следующие за ним упражнения.

**Dialogue.**

A: Do you know what parts the automobile is made up of?

В.: Certainly. It is made up of the engine, the chassis and the body,

A: What is the source of power?

B:The source of power is the engine. It includes fuel, cooling, lubricating and electric systems.

A:And what does the chassis consist of?

B:It consists of a power transmission, running gear, steering and braking systems. By the way, the power transmission, in turn, comprises the clutch, gearbox, propeller shaft, final drive, differential, rear axle and axle shafts.

A:And what has the body?

B:The body has a hood, fenders and accessories, such as: the heater, stereo tape recorder, windshield wipers, conditioner and so on.

A:Thank you very much for your information.

B:Don't mention it. I am glad to help you.

**Упражнение 4.** Найдите в диалоге слова и словосочетания, эквивалентные русским словам и словосочетаниям, приведенным ниже.

 Сделан из; шасси; кузов; включать в себя; топливная, охлаждающая, смазывающая и электрическая системы; трансмиссия; ходовая часть; рулевая и тормозная системы; карданный вал; главная передача; дифференциал; задний мост; полуоси; капот; крылья; вспомогательные устройства; стеклоочистители.

 Engine, chassis, body, power train, running gear, steering system, brakes, clutch, gearbox, propeller shaft, final drive, differential, rear axle, axle shafts, hood and fenders, heater, windshield wipers, information, conditioner, consist(s) of, the source of power, include, fuel, cooling, lubricating, electric systems.

**Упражнение 5.** Выпишите из правой колонки русские слова и словосочетания, соответствующие английским из левой колонки.

1. power plant a. сцепление

2. chassis b. силовая передача

3. body c. главная передача

4. power train d. колеса

5. running gear e. система рулевого управления

6. steering system f. капот

7. brakes g. полуоси

8. clutch h. ходовая часть

9. gearbox i. топливная система

10. propeller shaft j. стеклоочистители

11. final drive k. коробка передач

12. rear axle l. система смазки

13. axle shafts m. силовая установка

14. frame n. рама

15. wheels o. в свою очередь

16. springs p. тормоза

17. hood q. рессоры

18. fenders r. также

19. windshield wipers s. шасси

20. fuel system t. карданный вал

21. cooling system u. задний мост

22. lubricating system v. источник энергии

23. in turn w. система охлаждения

24. as well x. крылья

25. source of power y. кузов

**Упражнение 6** Выберите и запишите соответствующий описанию механизм.

1.Mechanism which is used to stop the car.

a) clutch; b) brakes; c) gearbox; d) steering system.

2.Mechanism which is used to guide the car.

a) clutch; b) brakes; c) gearbox; d) steering system.

3.Mechanism which engages or disengages the engine and the car wheels.

a) clutch; b) brakes; c) gearbox; d) steering system.

4.Mechanism which is used to change the speed of the car.

a) clutch; b) brakes; c) gearbox; d) accelerator.

5.Mechanism which is used to guide the car in one or the other directions.

a) clutch; b) brakes; c) gearbox; d) steering system.

6.Device which is designed to measure the speed of the car.

a) heater; b) windscreen; c) speedometer; d) tachometer.

**Vocabulary.**

accessories — вспомогательные устройства

cooling — охлаждение

as well — также

axle shafts – полуоси

body — кузов

conditioner - кондиционер

consist of — состоять из

device — устройство

disengage — отключать, отсоединять

engage — включать, соединять

engine — двигатель

fenders — крылья

final drive — главная передача

fix — крепить

flywheel — маховик

frame — рама

fuel - топливо

gearbox — коробка передач

heater - отопитель

hood — капот

in turn - в свою очередь

include — включать в себя

lubricating (lubrication) — смазка

measure — измерять

pedal — педаль

power train (transmission) – силовая передача (трансмиссия)

power plant — силовая установка

propeller (cardan) shaft - карданный вал

rear axle - задний мост

release the engine — отсоединить двигатель

running gear — ходовая часть

source of power — источник энергии

speed — скорость

speedometer - спидометр

springs — рессоры

tachometer — тахометр

wheel — колесо

windshield wipers – стеклоочистители

**Урок 2. Устройство автомобиля сцепление.**

**Упражнение 1.** Прочтите слова и словосочетания и постарайтесь запомнить их русские эквиваленты.

friction device — фрикционное устройство -

connect — соединять

gearbox — коробка передач frictional force - сила трения

start the car - завести автомобиль clutch pedal — педаль сцепления

release the engine — отсоединить

at rest — в покое

hard-wearing material is engaged — включено(подсоединено)

flywheel - маховик is disengaged - отключено

friction disc (plate) — фрикционный

run idly - работать вхолостую диск

fix- крепить (устанавливать)

**Упражнение 2.** Переведите слова, обращая внимание на суффиксы и префиксы.

Connect — disconnect — connection — disconnection; operate — operation; friction — frictional; engage — engagement — disengagement.

**Упражнение 3.** Прочтите и переведите интернациональные слова.

Start, disc, friction, frictional, material, base, principal, control, pedal.

Прочтите и переведите текст, а затем выполните следующие за ним упражнения.

**Text: Clutch.**

The clutch is a friction device. It connects the engine to the gears in the gearbox. It is used for disconnecting the engine from the gearbox, for starting the car and for releasing the engine from the car wheels.

The clutch is fixed between the flywheel of the engine and the gearbox und consists of two plates (discs): the friction disc and the pressure disc. The friction disc is situated between the flywheel and the pressure plate and has a hard-wearing material on each side.

The basic principal operation of the clutch is a frictional force acting between two discs. The clutch is controlled by the clutch pedal. When the pedal is at rest the clutch is engaged and the running engine is connected to the gearbox. When the pedal is pressed down the clutch is disengaged and the engine runs idly.

 **Упражнение 4.** Найдите в тексте данные ниже слова и напишите их русские эквиваленты.Friction device, clutch, gearbox, to free, to start, to release, flywheel, pressure plate, basic principle of operation, to fix, hard-wearing material, to consist of, to be controlled by, running engine, to run idly, to engage, to disengage, to press down, to be at rest.

**Упражнение 5.** Найдите в тексте ответы на следующие вопросы:

1.What device is the clutch?

2.What units does it connect?

3.What is the clutch used for?

4.Where is the clutch placed?

5.What plates does the clutch consist of?

6.What is the basic principal operation of the clutch?

7.What is the clutch controlled by?

8.What takes place when the clutch pedal is at rest?

9.When does the engine run idly?

**Упражнение 6.** Закончите предложения, выбрав соответствующее логике окончание.

1. The clutch is a device connecting ....

a).the rear axle and axle shafts.

b).the gearbox and differential.

c).the engine and the gearbox.

2.The clutch is situated between ....

a).the gearbox and cardan shaft.

b).the flywheel and the gearbox.

c).the gearbox and rear axle.

3.The clutch is controlled by ....

a). the brake pedal

b). the clutch pedal.

c).the gearbox and rear axle.

4.The clutch is engaged ....

a).when the clutch pedal is pressed down.

b).when the clutch pedal is at rest.

5.The clutch is disengaged ....

a).when the clutch pedal is at rest.

b).when the clutch pedal is pressed down.

**Упражнение 7.** Подберите из правой колонки русские эквиваленты английским словам из левой колонки и проверьте себя по ключу.

1. a friction device a. завести автомобиль

2. gearbox b. фрикционный диск

3. to start the car c. маховик

4. to release the engine d. износостойкий материал

5. is fixed e. работать вхолостую

6. flywheel f. соединяться

7. the friction disc g. сила трения

8. the pressure disc h. разъединяться

9. hard-wearing material i. фрикционное устройство

10. frictional force j. находиться в покое

11. the clutch pedal k. закреплен

12. to be engaged l. педаль сцепления

13. to be at rest m. нажать на педаль

14. to be disengaged n. отсоединить двигатель

15. to press down on the pedal o. нажимной диск

16. to run idly p. коробка передач

 **Упражнение 8.** Переведите на английский язык следующие предложения.

1. Сцепление — это фрикционное устройство.

2. Сцепление соединяет двигатель и коробку передач.

3. Сцепление расположено между маховиком двигателя и коробкой передач.

4. Как правило, сцепление состоит из двух дисков: ведомого и нажимного.

5. Сцепление управляется педалью сцепления.

6. Когда педаль сцепления находится в покое, диски сцепления соединены и работающий двигатель соединен с коробкой передач и колесами.

7. Когда водитель нажимает на педаль сцепления, диски отходят, сцепление отсоединятся и двигатель работает вхолостую.

 **Vocabulary.**

 be at rest — быть в исходном положении (в покое)

car wheels - колеса автомобиля

clutch - сцепление

clutch pedal — педаль сцепления

connect — соединять

control — управлять

disconnect – отсоединять

disengage - отключать

engage — включать

fix — фиксировать, устанавливать

flywheel — маховик

friction plate (disc) - фрикционный (ведомый) диск (сцепления)

frictional force — сила трения

gear — шестерня; передача

gearbox — коробка передач

hard-wearing material — износостойкий материал

press down the pedal - нажимать на педаль

pressure plate (disc) - нажимной диск(сцепления)

principle of operation — принцип действия

release – отпускать

run idly- работать вхолостую

running engine — работающий двигатель

**Урок 3. Устройство автомобиля: тормозная система.**

 **Упражнение 1.** Прочтите слова и словосочетания и запомните их русские эквиваленты.

 brakes — тормоза

force the fluid — подавать жидкость

performance - работа

under pressure - под давлением

safety — безопасность

brakes are applied — тормоза срабатывают

depend — зависеть

slow – замедлять

braking effort - тормозное усилие

divide - разделять

push down on the brake pedal - нажать на тормозную педаль

namely - именно

drum brakes — барабанные тормоза

band brake — ленточный тормоз

disk brakes - дисковые тормоза

shoe brake — колодочный тормоз

hydraulic assisted brakes — тормоза с гидравлическим приводом

brake shoes — колодки тормоза

brake fluid — тормозная жидкость

brake pedal - тормозная педаль

master cylinder - главный цилиндр

**Упражнение 2.** Прочтите и переведите интернациональные слова.

Mechanism, passenger, type, hydraulic, cylinder, vacuum, function, classify, classification, mechanical, electric, electromagnet.

Упражнение 3. Переведите слова, обращая внимание на суффиксы.

Safe — safety; to improve — improvement; to move — movement; to drive - driver; to apply - application; to attach - attachment; to arrange - arrangement; to perform - performance; name - namely; to operate — operation; to equip — equipment.

Прочтите текст, а затем выполните следующие за ним упражнения.

**Text: Brakes**

Brakes are used to slow or stop the car where it is necessary. It is one of the most important mechanisms of the car as upon its proper

performance the safety of passengers depends. Car brakes can be divided into two types, namely: drum brakes and disc brakes. The drum type may be either a band brake or a shoe brake. Depending on their functions, the automobile has foot brakes and hand brakes (parking brakes). According to their mode of operation, the brakes are classified as: mechanical brakes, hydraulic brakes, airbrakes, electric brakes. Brakes are controlled by the brake pedal.

Most braking systems in use today are hydraulic. This system consists of a master cylinder mounted on the car frame and wheel cylinders. When the driver pushes down on the brake pedal, it forces the piston to move in the master cylinder and brake fluid is delivered from 11 to the wheel cylinders. The piston movement causes brake shoes to move and the brakes are applied (the brake shoes are pressed against the brake drums).

The air brake uses compressed air to apply the braking force to the brake shoes.

Electric brakes use electromagnets to provide the braking effort against the brake shoes.

Formerly brakes were applied only to the two rear wheels, but now all cars are equipped with all-wheels brakes. Today many improvements are being made in brakes.

 **Ответьте на вопросы:**

1. What is the function of the brakes?

2. What types are brakes divided into?

3. What brakes do you know according to their mode of operation?

4. What braking systems are used today?

5. By what are brakes controlled?

6. When are brakes applied?

**Упражнение 3.** Найдите в тексте английские эквиваленты следующих русских терминов и выпишите их.

Тормоза, безопасность пассажиров зависит от правильной работы тормозов, барабанные тормоза, дисковые тормоза, тормоза с усилителем, гидравлический привод тормозов, жидкость под давлением, тормоза срабатывают, тормозное усилие, нажать на тормозную педаль.

**Упражнение 4.** Подберите из правой колонки соответствующее окончание для предложений из левой колонки.

 1.Brakes are used for... a. disc brakes and drum brakes

 2.Brakes are one of ... b. the driver pushes down on the pedal

 3.Вrakes may be of 2 types:... c. the brake pedal

 4.Brakes are applied by d. stopping the car

 5.Brakes are applied when e. the most important mechanism of

 the car

**Упражнение 5.** Переведите следующие предложения на английский язык.

1.Тормоза являются наиболее важным механизмом автомобиля.

2.Они используются для замедления движения или остановки автомобиля.

3.Тормоза можно разделить на два типа, а именно: барабанные тормоза и дисковые тормоза.

4.На большинстве автомобилей используется гидравлический привод или пневматический привод.

5.Тормоза срабатывают, когда водитель нажимает на тормозную педаль.

**Упражнение 6.** Прочтите диалог, а затем выполните следующие за ним упражнения.

DIALOGUE

Alex: Why are brakes used?

Boris: They are used to stop or to slow the car.

A.: Well, it is one of the most important mechanisms of the car, isn't it?

B.:Of course, the safety of the passengers depends upon their proper performance.

A.:What types of brakes are used today?

B.:Drum brakes, disk brakes and others.

A.:And in what way are they applied?

B.:They are applied by the brake pedal. When the driver pushes down on the pedal they are applied.

A.:Thank you. It was very nice of you to tell me this information.

B.:Don't mention it. I was glad to serve you.

 **Упражнение 7.** Переведите текст, пользуясь словарем.

Troubles in Braking System

The basic troubles of the braking system are as follows:

1. poor braking action;

2. sticking brake shoes which would not return to the initial position after a brake pedal is released;

3. non-uniform braking of the left and the right wheels on a common axle;

4. leakage of brake fluid and air leakage in the hydraulic brake;

5. poor air tightness of the pneumatic brake control.

What to do:

1. Check the action of the foot and hand brakes and leak proofness of the brake hoses connections, components of the hydraulic and pneumatic controls of the brakes, as well as of the vacuum- power system.

2. Inspect the friction linings, wheel-brake springs, master and wheel cylinders of the hydraulic brake and the air compressor of the pneumatic brake using a test manometer to check it.

 **Vocabulary.**

air brakes - пневматические тормоза

bund brake - ленточный тормоз

brake drum — тормозной барабан

brake fluid — тормозная жидкость

brake pedal — тормозная педаль

brake shoe — тормозная колодка

brakes are applied - тормоза срабатывают

braking effort — тормозное усилие

common axle — общая ось

control - управление

disk brakes — дисковые тормоза

drum brakes — барабанные тормоза

electric brakes — электрические тормоза

fluid – жидкость

foot brake — ножной тормоз

force (cause) — заставлять

hand brake - ручной тормоз (стояночный)

hydraulic brakes – гидравлические тормоза

leakage — утечка

left wheel — левое колесо

master cylinder — главный цилиндр

mechanical brakes - механические тормоза

poor — плохой, слабый

proofhess – стойкость

release — отпускать, разъединять

right wheel - правое колесо

sticking - заедание, прилипание

tightness — герметичность

troubles — неисправности

wheel cylinder — колесный тормозной цилиндр

Заключение.

В предлагаемом учебно-методическом пособии подобран и систематизирован материал по дисциплине «Английский язык» для студентов заочного отделения. Данное пособие может быть использовано в работе со студентами с различным уровнем знаний английского языка, как для групповой, так и для индивидуальной работы с целью совершенствования устной и письменной речи студентов.