МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ
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МЕТОДИЧЕСКИЕ УКАЗАНИЯ ДЛЯ ПРОВЕДЕНИЯ ПРАКТИЧЕСКИХ ЗАНЯТИЙ

ОГСЭ.03 Иностранный язык в профессиональной деятельности

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Методические указания для практических занятий по дисциплине «Иностранный язык в профессиональной деятельности» составлены в соответствии с ФГОС СПО. Предназначены для студентов, обучающихся по специальности 23.02.07 Техническое обслуживание и ремонт двигателей, систем и агрегатов автомобилей.

Пояснительная записка

Методические указания предназначены для студентов групп СПО 23.02.07 «Техническое обслуживание и ремонт двигателей, систем и агрегатов автомобилей».

В результате освоения учебной дисциплины обучающийся должен **уметь:**

- общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы;
- переводить (со словарём) иностранные тексты профессиональной направленности;
- самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас.

В результате освоения учебной дисциплины обучающийся должен **знать:**

- лексический (1200-1400 лексических единиц) и грамматический минимум, необходимый для чтения и перевода (со словарём) иностранных текстов профессиональной направленности.

Дисциплина входит в общий гуманитарный и социально-экономический цикл профессиональной подготовки.

Раздел 1. История автомобилестроения

Тема 1.1 История автомобилестроения

Практическое занятие 1.
History of Cars

The history of cars involved people from different countries who, in ways large and small, contributed to its development. The automobile as we know it started from crude but machines that by degrees underwent transformation due to dedicated work by several people. It is estimated that over 100,000 patents created the modern automobile. However, we can point to the many firsts that occurred along the way. Starting with the first theoretical plans for a motor vehicle that had been drawn up by both Leonardo da Vinci and Isaac Newton.

The first recorded use of a self-powered vehicle was in 1769 when Nicolas Cugnot, a French military engineer, designed and built an awkward but workable three-wheeled vehicle powered by a steam engine. The vehicle was intended as a tractor for hauling heavy cannons.

A second unit was built in 1770 which weighed 8000 pounds and had a top speed of 2 miles per hour and which ran on the cobble stone streets of Paris. The vehicle was intended as a tractor for hauling heavy cannons. It had a short career, 'tho. It went out of control during a trial run and crashed adding a colorful chapter in the history of cars. It's been alleged that Cugnot was also the first person to be involved in an auto accident, an interesting trivia in the history of cars.

Steam engines powered cars by burning fuel that heated water in a boiler, creating steam that expanded and pushed pistons that turned the crankshaft, which then turned the wheels. During the early history of cars - both road and railroad vehicles were being developed with steam engines. (Cugnot also designed two steam locomotives with engines that never worked well.) Steam engines added so much weight to a vehicle that they proved a poor design for road vehicles; however, steam engines were very successfully used in locomotives. Historians, who accept that early steam-powered road vehicles were automobiles, feel that Nicolas Cugnot was the inventor of the first automobile.

The history of cars continued on Christmas Eve, 1801, when frightened British farmers rushed to their windows to witness the first practical use of mechanical power to move a vehicle. What they saw was a smoke-belching, steam-powered carriage moving without being pulled by a man or an animaIt was driven by their neighbor Richard Trevithick and he was driving the world's first true "automobile". An automobile is a self-propelled land vehicle that can carry passengers or freight. Trevithick's self-propelled carriage could carry passengers over land at a speed of nearly 10 miles per hour. And only if those neighbors knew at that time - a page in the history of cars had been unfolding.

Neither his neighbors nor even Trevithick himself appreciated the importance of his achievement. He considered his noisy carriage little more than a toy. He finally took it apart and sold the engine to a mill owner.

The early steam powered vehicles were so heavy that they were only practical on a perfectly flat surface as strong as iron. A road thus made out of iron rails became the norm for the next hundred and twenty five years. The vehicles got bigger and heavier and more powerful and as such they were eventually capable of pulling a train of many cars filled with freight and passengers.

However impractical as these cars may have been, the design for these vehicles were the basis for the subsequent self-propelled vehicles, enriching the history of cars, and ultimately became the basis for the design of the car we know today.

The next step towards the development of the car was the invention of the internal combustion engine. Francois Isaac de Rivaz of Switzerland designed the first internal combustion engine in 1807, using a mixture of hydrogen and oxygen to generate energy. However, his was a very unsuccessful design.

An internal combustion engine is any engine that uses the explosive combustion of fuel to push a piston within a cylinder - the piston's movement turns a crankshaft that then turns the car wheels via a chain or a drive shaft. The different types of fuel commonly used for car combustion engines are gasoline (or petrol), diesel, and kerosene.

Several designs were developed for a car to run on the internal combustion engine during the early 19th century, but with little to no degree of commercial success due to the fact that there was no known fuel that could be safely internally combusted.

A few years after Trevithick's steam engine, American inventor Oliver Evans built a steam-powered dredge, equipped with wheels so that it could move on land. He drove it around Philadelphia's Center Square to convince wealthy people to provide capital in manufacturing steam vehicles. But most people thought his invention was not practical.

The history of cars is fortunate to have people like Trevithick and Evans because steam-powered vehicles gained rapid popularity in England. But these early steam coaches soon ran into opposition. Stagecoach and railroad operators resented and feared their competition.

Early Electric Cars

Early electric cars contributed to the development of self-propelled vehicles. The history of cars wouldn't be complete without mentioning them.

Steam engines were not the only engines used in early automobiles. Vehicles with electrical engines were also invented. Between 1832 and 1839 (the exact year is

uncertain), Robert Anderson of Scotland figured favorably in the history of cars when he invented the first electric carriage. Electric cars used rechargeable batteries that powered a small electric motor. The vehicles were heavy, slow, expensive, and needed to stop for recharging frequently. Both steam and electric road vehicles were abandoned in favor of gas-powered vehicles. Electricity found greater success in tram ways and streetcars, where a constant supply of electricity was possible.

From 1831 to 1865, the British Parliament passed a series of strict laws that hampered the development of the automobile. The strictest of those was the Red Flag Act of 1865 which was so named because one of the provisions of the law required a person to walk ahead of all "road locomotives" to warn of their approach proving that the history of cars could be a colorful one. The various laws unfortunately imposed so many limitations and such high taxes that steam coaches could not operate without losing money. This hurt automobile development in England until the Red Flag Act was repealed in 1896.

Early 1900s Cars

Contributions to the manufacture of early 1900 cars were made possible by several men. Two brothers, Charles E. and James F Duryea, were the first to manufacture and market a successful gasoline-powered automobile.

James Duryea completed the first Duryea automobile in 1893, in Springfield, Massachusetts, working with his brother's design. In 1895, the Duryeas established the first American automobile manufacturing company. On Thanksgiving Day, 1895, in what was dubbed the "Race of the Century," Frank Duryea won a 54-mile race from Jackson Park in Chicago to Evanston and back again. It was a race sponsored by Herman H. Kohlsaat, publisher of the Chicago Times_herald. The prize money was $2,000 but in addition to the prize money, the Duryea brothers also became celebrities.

The sudden rush of fame allowed the brothers to form the Duryea Motor Wagon Company and produce early 1900s cars. Orders began arriving soon and unofficially, the American automobile industry was born as the brothers manufactured the first of 13 vehicles in 1896. By 1900, at least 100 different brands of horseless carriages were being marketed in the United States. Since they were all virtually handmade, the cars were outrageously expensive. Cars were perceived as no more than a high-priced toy for the rich. The early 1900s cars were, to many, a despicable symbol of arrogance and power. Nevertheless, the horseless carriage was finding buyers, hence a niche in the marketplace, and demand for this new toy was growing. In many metropolitan areas - New York, Boston, and Philadelphia, electric cabs, delivery trucks, and ambulances became more and more familiar sights.

It was a blacksmith's son from Lansing, Michigan who put the automobile on the main streets of America. His name was Ransom E. Olds who was only 18 when he hooked a steam engine to a three-wheeled vehicle and took off for a ride around his neighborhood. Despite his youth, he perceived that steam engines had a tendency to explode. He was ahead of his time when he had the intuition that gasoline, which was then abundant and cheap, would fuel fuel the early 1900s cars as well asfuture cars. He began to work of an internal combustion engine of his own. He also was among the first of the American investors to recognize the need for an automobile that was functional and reliable, a car for everyone.

Over the course of the next year, Olds produced eleven different models priced differently. He was trying to decide which car would need priority in production but fate intervened. A fire made the decision for him when all models except the Runabout - a small buggy with lightwheels and a curved dashboard. Powered by a one-cylinder engine not unlike the present day's lawnmowers, the Runabout had speeds of three to twenty miles.

In the case of the Runabout, necessity was indeed the mother of invention. In order to survive the competition of 100 different brands of horseless carriages, his early 1900 cars had to be manufactured in a different way. Olds came up with the idea of outsourcing the parts to small manufacturers. Of course, that word "outsourcing" was not yet known at that time but that idea was a major breakthrough in automobile manufacturing. He contracted with other companies to make some of the parts for his cars. The final product would then be assembled in his factory. This method was indeed revolutionary during that time. Each individual part would then be interchangeable - exactly as all other parts of the same car. As a result, Olds' assembly line was able to produce a great number of cars in a relatively short period of time.

It is therefore noteworthy to make reference to the astounding results of this partnerships. Several subcontractors hired by Olds later became famous for their own accomplishments. The Dodge brothers who supplied transmissions to Olds were big players in the history of the automobile. Olds' engines were supplied by Henry Leland who would later found Cadillac and Lincoln. Fred J. Fisher would later be bodymaker for General Motors.

Henry M. Leland, who founded the Cadillac Company built on Ransom Olds' idea by coming up with standardized parts that could be interchanged among several models.

Although Olds and Cadillac developed the idea of standardized and interchangeable parts, it was Henry Ford who developed mass production and made possible rapid production of the early 1900s cars. In 1908 the Ford Motor Companyproduced the famous Model T Ford. His idea was to produce and motor car that the average person could afford, operate, and maintain. The first Model T Ford sold for $850.00.

Ford's ideas truly revolutionized car manufacturing by developing the first assembly line in 1914. The basic idea of the assembly line was to move the car on a moving conveyor belt while workers on each side added parts as the car moved along. Often the parts were brought to the workers on another conveyor belt. Each worker had a specific relatively simple task to perform as compared with assembling an entire engine. The use of standardized interchangeable parts also produced a better product that could be easily repaired at lower cost. Before the assembly line, it had taken more than twelve hours to assembly a Model T. New Model T's now come off the assembly line at the rate of one car every 24 seconds. By 1915 the price of a Model T had dropped to $440.00, and by 1925 a Model T could be bought for $290.00. The early 1900's cars now are within reach of the average car buyer.

The early 1900s cars also benefited from major advances in automotive technology. In 1912, the electric starter, an electric motor that starts the gasoline engine, was invented. It made the operation of the 1910s cars a lot easier. Before its invention, the gasoline

engine had to be started by cranking it by hand. This took considerable strength and was also dangerous. If the car were not cranked properly, the crank could kick back and cause a fractured thumb or arm.
World War I proved the value of the gasoline automobile. Trucks and ambulances were used in great numbers during the war, and the war proved to be a testing ground for automotive design.
The early 1900s cars underwent many changes from 1900 through 1920. During this time, closed cars that protected the drivers and passengers from sun and rain became more common.
Innovations

Most 1930s cars had four-wheel hydraulic brakes. Low-pressure balloon tires took the place of hard-riding high-pressure tires. During the 1930's most cars were also equipped with heaters and radios. At this time cars also began to take on a smoother shape, more aerodynamic in design, hence offering less wind resistance.The 1930 Cadillac "V-16" is the industry's first production car to offer sixteen-cylinder engine and immediately sets a new standard for power, performance, and luxury.

Pre War 1940s cars

US car production was dealt a setback because of World War II. In 1940 pre World War II the US produced 4,680,000 cars. Although each decade in history is different the decade of the 1940's is by far the most unusual in U.S. automobile history. This was the only period of time when automobile production stopped for a period of 3-4 years. No cars were manufactured after 1942 due to the advent of World War II. Production for civilians did not resume until 1946 . Early 1940's saw the first time luxury cars started rolling off a production line. A car showed the wealth and status of its owner. Cars like the Delahaye 135 convertible whose top speeds reached 95 mph, the Delahaye was the ultimate 1940luxury car.

The department of war came up with a one-quarter ton four wheel drive military vehicle called the Jeep. WWII saw the conversion of many U.S. automotive plants to military production. Chrysler meanwhile introduced a safety rim wheel that kept the tire on the rim in case of a blowout. Chrysler also offered two-speed electric windshield wipers.
The new 1940s cars had a lower, longer, broader, and more massive look. Hudson offered a combination automatic clutch with a semi-automatic transmission. The driver could select either the manual or semi-automatic shift with buttons on the dash.The 1941-42 Packard Clipper was another luxury car produced before the war.
The 1950s cars became lower, longer, and wider. The early 1950s saw the rise of chrome on cars , as an increasingly opulent society flourished in the United States. Many of the automobiles of the time were designed by stylists who took their influence from the transport industry in general and therefore used ideas from both planes and trains prevailing during that time.
The 1950s saw U.S. auto production exceeded that of Great Britain, France, Japan, Sweden and all other nations *put together several times over*, and Ford and GM - both of which produced their 50 millionth vehicle in the 1950s - posted healthy profits.

The long pent up demand for cars caused by the Depression and World War II exploded into an irrational excess in the decade of the '50's. Tailpins and chromes was the norm and that design was the brainchild of Harley Earl. The "fabulous fifties" also saw some of the most beautiful and some of the most outlandish cars ever made.
With the advent of the jet age in the 1950's came technological and design breakthroughs in the automobile. One of those was the speed with which the automobile, despite complicated compound curves and forms, could be manufactured. The jet set lifestyle had captured the hearts of the American public and car designers of the time exploited this fascination to turn out ordinarily plain-looking family cars to come out with wings, turbines and after-burner tail lights.
The 1960's automobiles belonged to a distinct decade of automobile history with the advent of economy, muscle and pony cars.
The 1960's saw the American automobile industry consolidating into the Big Three: (General Motors, Ford, and Chrysler) and American Motors. These firms not only dominated the domestic market with the sales of the 1960s cars, but the global market as well. In 1960 American companies built 93 percent of the autos sold in the United States and 48 percent of world sales .
muscle cars are a product of the Classic Car Era. They evolved from the pent-up consumerism that exploded after World War II. Overnight, it seemed American consumers opted for bigger and faster cars. Muscle Cars appeared at a time when Detroit was trying to stop the invasion of imported cars led by Volkswagen and included Fiat, Renault ,Datsun (now Nissan), with new, light-weight models like the Corvair, Falcon and Valiant.
The term muscle car generally describes a mid-size car with a large, powerful engine (typically, although not universally, a V8 engine) and special trim, intended for maximum acceleration on the street or in drag racing competition. It is distinguishable from sports cars, which were customarily considered smaller, two-seat cars, or GTs, two-seat or 2+2 cars intended for high-speed touring and possibly road racing.
Muscle cars are high-performance automobiles, principally referring to American models produced between 1964 to 1971. During the period these vehicles were interchangeably (and more commonly) described as supercars. The term "Muscle Car" was spawned by the horsepower race. Most give credit toJohn Z. DeLorean and the Pontiac GTO. The 1964 Pontiac Tempest GTO ignited the muscle car boom by giving the small-car, big-engine make an identity of its own.
Pony cars are American cars that took its name from the Ford Mustang Classic built from the middle of 1964 through 1973, one of the most successful cars in automotive history . With their sporty, long front ends and short rear decks, many auto builders attempted to duplicate the style of the original Mustang but none could come close to capturing the spirit that those fable cars brought to the American car buyers.
Pony automobiles were made as affordable alternatives to muscle cars. By American standards, these cars were high performance cars built on compact passenger car chassis. In terms of size, they are are small to mid sized cars emphasizing sportiness and frequently performance. Although pony cars were not necessarily high performance, the ones equipped with the more powerful V-8s are generally classified as muscle cars, and equaled or exceeded the performance of the mid-sized muscle cars.
Some of the most famous high performance pony cars include the the Mustang 428 Super Cobra Jets, theYenko Camaros, the Hemi Cudas, and the AMC Javelin.

Дайте ответы на вопросы:

Approximately how many cars can General Motors make on a good day?
2. How long does it take to build one Rolls-Royce automobile?
3. Which US city leads the nation in the number of car thefts?
4. In the last 100 years, how many different makes of automobile have been manufactured in the U.S. in numbers of one or more?
5. How many parts are there in a modern automobile?
6. What is the real name of the chubby Michelin Man?
7. How many cars are there in the world today?
8. How did the diesel engine get its name?
9. The first woman to receive her driver's license in the U.S. did so in what year?
10. How many cars and trucks are junked each year in the U.S.?
11. Henry Ford paid the highest daily wage in the auto industry in 1914. How much was that?
12. How much profit did Rosette Cousins eventually make on her 1903 investment of $100 in the new Ford Motor Company?
13. Before he built cars, how did David Dunbar Buick make his money?
14. Why do the British drive on he left side of the road and the French on the right?
15. How long did it take to put together a Model T Ford on the 1914 assembly line?
16. What was unusual about he French automobile that set a new world's speed record of 65 mph in 1899?
17. A bailing press can crush a car in two minutes. What size is the car after the press has finished its work?
18.What percentage of new cars are purchased by women?
19. Which company sold the first production diesel car?
20. How many 1999 cars would it take to pollute as much as one 1927 car?
21. How many miles does the average new York taxi rack up before it is retired?
22. Of these three safety devices--air bags, seat belts and ABS brakes--which has had little effect in saving lives?
23. In what year was the first speeding ticket issued in the US?
24. What kind of car did the disheveled detective drive on the TV series Columbo?
25. What was the price of a barrel of crude oil in 1901?
26. When and where was the world's first racetrack built?
27. Which car was noted by automotive journalists to be the most innovative production automobile manufactured since 1945?
28. When and where was the worst racing crash?
29. How man vehicles did the Ford Motor Company make from 1903 to 1959?
30. What was the first production road car to exceed 200 miles per hour?
31. In how many states do female driver outnumber male drivers?
32. When was the first airbag offered by a major manufacturer?
33. What was the first production rotary engine car?
34. Who is the only American mentioned in Adolph Hitler's political manifesto Mein Kampf?
35. Who invented the T-Top?
36.. From 1947 to 1964, how many times did Offenhauser engines win the Indy 500?

37. When Oldsmobile introduced the 4-4-2 option on certain models of its 1964 cars, what did the numbers stand for?
38.. When was the first car driven under its own power from England to France?
39. . Ray Harroun was paid $14,250 for winning the first Indy 500 race in 1911. How much did the 1992 winning driver earn?
40. In what year did the Italian government ban the famous Mille Miglia race?

Тема 1.2 Генри Форд

Практическое занятие 2.

Henry Ford (30.07.1863 - 07.04.1947) - American industrialist, the founder of the Ford Motor Company.
Early Life
Henry Ford was born on 30 July 1863 near Detroit. His father, William, was born in Ireland and his mother, Mary, was born in Michigan. Her parents were Belgian immigrants. Mary had adoptive parents because her birth parents died. She was adopted by the O'Herns family. They were the neighbors of Mary. There were five children in the family of William and Mary: Henry, Margaret, Robert, William and Jane.
When Henry was young he received a pocket watch from his father. At the age of fifteen he took to pieces and reassembled the timepieces of his pals many times and they knew him as a watch repairman.
In 1876 Henry's mother died and he felt low. His father wanted him to go round the farm but Henry abhorred farm work.
Three years later Henry Ford began to work as an apprentice machinist in Detroit. In 1882 he arrived in Dearborn and began to work for Westinghouse company where he maintained steam engines.
In 1888 Ford married Clara Ala Bryant. They had their only son: Edsel Ford.
Career
Three years after marriage Henry became an engineer in the Edison Illuminating Company. In 1893 he became Chief Engineer. Since then Henry Ford started to work on gasoline engine. Consequently in 1896 he developed a self-propelled vehicle which was called the Ford Quadricycle. Afterwards Ford created different improvements for his invention.
In 1896 Henry Ford made the acquaintance of Thomas Edison who endorsed the experiments of Ford. With the assistance of Edison Henry Ford created a new vehicle in 1898. Later he left his job and established the Detroit Automobile Company in 1899. But Henry Ford was not satisfied because the vehicles produced there were of a lower quality and expensive. Eventually the enterprise was not successful and it was abolished in 1901.
Ten months later encouraged by C. Harold Wills Henry Ford developed a 26-horsepower automobile which was successfully tested. As a result stockholders of the Detroit Automobile Company founded the Henry Ford Company in 1901 where Henry Ford was a chief engineer. In 1902 he left the company because a new consultant was hired there. Afterwards the company was renamed. It was called the Cadillac Automobile Company.

Cooperating with Tom Cooper, who was a racing cyclist, Henry Ford created the 80+ horsepower racer “999”. Consequently Henry established contact with his old friend Alexander Y. Malcomson with whom he founded a company “Ford & Malcomson, Ltd.” to produce automobiles.
In 1908 Henry Ford designed a new automobile called Model T. The vehicle was inexpensive and simple to drive. Moreover the steering wheel was on the left. This car was a great success.
In 1926 Henry Ford decided to create a new model because the sales of Model T were slow. He worked on technical improvements and his son designed the body. This model was introduced in 1927. As the Model T, Model A was a great success. From 1918 to 1943 his son, Edsel, was a president of Ford Motor Company. In 1943 he died of cancer and his father became a president again but his health left much to be desired. Henry Ford was a president of Ford Motor Company until the end of war.
Death Henry Ford died in 1947 at the age of 83. He was interred in the Ford Cemetery in Detroit.
Прочтите текст ответьте на вопросы, приведенные ниже.

The automobile is made up of three basic parts: the engine, the body and the chassis. The engine is the source of power and makes the car move.
The chassis consists of the transmission and running gear (frame, springs and wheels). The transmission carries the power from the en¬gine to the wheels. It consists of the clutch, gearbox, propeller shaft, rear axle, final drive and differential. The transmission also includes the steering system and brakes.
The body has the hood, fenders, the heater and so on.

1.What main components is the automobile made up of?
2.What is the source of power?
3.What units does the chassis include?
4.What duty is performed by the frame?
5.What does the transmission do?
6.What mechanisms does the transmission consist of?
7.What is the function of the steering system?
8.Why are brakes necessary?
9.What is the function of the clutch?
10.What is the function of the gearbox?
11.What types of gearboxes do you know?
12.What is the function of a differential?
13.What purposes do brakes serve?
14.What parts has the body?

Тема 1.3 Производители автомобилей

Практическое занятие 3.

Exercise 1. Read the text and find in it the words which mean the same:
to get into the fi rst place; a range of cars; to satisfy the needs; the main producer; to fall behind; using little fuel.

Nowadays Japan and the United States are the largest car producers. Japan replaced the United States as the top passenger car manufacturer from 1980 to 1983. It regained the top spot in 1987 and still holds the fi rst place. Other major producers include France, Germany, Great Britain, Italy and Spain. In general, the largest automating countries also have the largest markets for cars. The United States has the biggest car market by far. Such countries as Japan, Italy, and France follow well behind.
The largest U.S. automakers, called the Big Three, are General Motors Corporation, Ford Motor Company, and Chrysler Corporation. Each of the Big Three produces, under different trade names, a variety of cars and light trucks designed to meet the needs, preferences, and incomes of different consumers. Japan's major producers include Toyota Motor Corporation, Nissan Motor Company, Honda Motor Company, Mitsubishi Motor Company, and Mazda Motor Corporation. Historically, Japanese cars made for use in Japan have tended to be small, fuel effi cient, and of limited power. This is because Japan depends completely on imported oil and many of its streets are too narrow and crowded for big cars. For export, Japan produces a range of models to satisfy a variety of buyers. Many European companies make far fewer vehicles than do Japanese or American fi rms because they target their output to the smaller luxury and sports car markets. Such European producers include Jaguar of Great Britain; Mercedes-Benz, Audi, BMW, and Porsche of Germany; and Saab and Volvo of Sweden. Other European manufacturers produce millions of cars each year. These major producers include Volkswagen of Germany; Peugeot and Renault of France; and Fiat of Italy.

Exercise 2. Fill in the table with the information from the text.
The country The main car manufacturers
Japan
The USA
France
Germany
Great Britain
Italy
Sweden

Exercise 3. Correct the wrong information in the sentences given below and write down the correct sentences.
1. Nowadays Japan and the USA are the largest car producers.
2. The UK has the biggest car market.
3. The largest U.S. automakers are Jaguar, Audi and BMW.
4. Historically, Japanese cars made for use in Japan have tended to be large and powerful.
5. Germany depends completely on imported oil.
6. Japan holds the second place as a passenger car manufacturer.

Exercise 4. Speak about the role of the largest car producers in the world in the car

industry development.

Тема 1.4 Глагол to be

Практическое занятие 4.

Глагол to be в английском языке

Значение глагола to be - "быть, находиться". В отличие от других английских глаголов, глагол to be спрягается (т.е. изменяется по лицам и числам).

В отличие от русского языка, в английском языке глагол-связка никогда не опускается, поскольку английское предложение имеет строго фиксированный порядок слов: подлежащее (subject) + сказуемое (verb) + дополнение (object)

I am a doctor. Я врач. (Я есть врач.)

The weather is bad. Погода плохая.

They are from Paris. Они из Парижа.

Глагол to be не требует вспомогательного глагола для образования вопросительной или отрицательной формы.

Чтобы задать вопрос нужно поставить глагол to be перед подлежащим:

Am I happy? Is the book interesting? Is he our teacher?

Для образования отрицательной формы достаточно поставить отрицательную частицу not после глагола to be:

I am not happy. The book is not interesting. He is not our teacher.

Спряжение глагола to be в настоящем времени Present Simple:

I am	I am not	Am I?
He is	He is not (he isn't)	Is he?
She is	She is not (she isn't)	Is she?
It is	It is not (it isn’t)	Is it?
We are	We are not (we aren't)	Are we?
You are	You are not (you aren't)	Are you?

Спряжение глагола to be в прошедшем времени Past Simple:

I was	I was not (I wasn't)	Was I?
He was	He was not (he wasn't)	Was he?
She was	She was not (she wasn't)	Was she?
It was	It was not (it wasn't)	Was it?
We were	We were not (we weren't)	Were we?
You were	You were not (you weren't)	Were you?

Спряжение глагола to be в будущем времени Future Simple:

Утвердительное предложение	Отрицательное предложение	Вопросительное предложение
I will be	I will not be (I won't be)	Will I be?
He will be	He will not be (he won't be)	Will he be?
She will be	She will not be (she won't be)	Will she be?
It will be	It will not be (it won't be)	Will it be?
We will be	We will not be (we won't be)	Will we be?
You will be	You will not be (you won't be)	Will you be?
They will be	They will not be (they won't be)	Will they be?

Оборот there is / there are в английском языке

Оборот there is/there are в английском языке употребляется, когда нужно указать на наличие какого-либо лица или явления в определенном месте. После оборота there is/there are ставится подлежащее.

There is a lamp on the table. На столе (находится) лампа.

There was a storm last night. Прошлой ночью была буря.

Перевод предложений с этим оборотом начинается обычно с обстоятельства места.

Если подлежащее выражено существительным во множественном числе, то глагол to be после there ставится также во множественном числе.

There are two lamps on the table. На столе (находятся) дне лампы.

При изменении времени изменяется форма глагола to be:

There was a lamp on this table. На этом столе была лампа.

There were three cars in the yard. Во дворе было три машины.

There will be a crystal chandelier over this table. Над этим столом будет хрустальная люстра.

Отрицательная форма образуется при помощи отрицания no, которое ставится после глагола to be перед существительным.

There is no lamp on the table. На столе нет лампы.

Если перед существительным стоит определение, выраженное местоимениями any, much и др., то после глагола to be ставится частица not.

There is not any lamp on the table. На столе нет (никакой) лампы.

There is not much snow in the street. На улице не много снега.

Вопросительная форма при употреблении глагола to be в Present Simple или Past Simple (или Present и Past Indefinite) образуется путем постановки глагола to be на первое место — перед there.

Is there a lamp on the table? На столе есть лампа?

При наличии сложной формы глагола (т.е. при наличии вспомогательных или модальных глаголов) вспомогательный или модальный глагол ставится перед there, а глагол to be — после there.

Will there be an English lesson at 3 o'clock? Будет ли урок английского языка в три часа?

При постановке вопроса к подлежащему с оборотом there is/there are употребляется вопросительное слово what, которое является подлежащим предложения. Глагол to be в этих случаях всегда употребляется в единственном числе, даже если вопрос ставится в отношении наличия нескольких предметов или явлений.

What is there on the table? Что на столе?

НО: В ответе на такой вопрос глагол to be употребляется во множественном числе, если констатируется факт наличия нескольких предметов или явлений.

What is there on the table? Что на столе? There are some books. Несколько книг.

Вопросы к другим членам предложения с этой конструкцией строятся по общему правилу.

Краткие ответы на вопрос, содержащий оборот there is/ there are, также строятся по общему правилу.

Are there any books on the table? — На столе есть какие-либо книги? —

Yes, there are (some). Да, есть. (No, there aren't.) (Нет.)

Exercises.

1. Переведите на английский язык, употребляя глагол to be в *Present* или *Past Simple,*

1. Я ученик. 2. Он летчик. 3. Она доктор. 4. Мы школьники. 5. Вы рабочие. 6. Ты рабочий. 7. Они ученики. 8. Я дома. 9. Он в школе. 10. Она в кино? 11. Мы в парке. 12. Они в театре? 13.Она молодая? 14. Он старый. 15. Она не старая. 16. Они сильные. 17. Она больна. 18. Вы больны? 19. Он болен? 20. Я не болен. 21. Я был болен вчера. 22. Она не была больна. 23. Мы были в кино. 24. Они не были в кино. 25. Они не в школе. 26. Они дома. 27. Вы были в парке вчера? 28. Он был в школе вчера? 29. Он был рабочим. 30. Она была учительницей.

2. Вставьте глагол *to be в Present, Past* или *Future Simple.*

1, My father ... a teacher. 2. He ... a pupil twenty years ago. 3.1... a doctor when I grow up. 4. My sister ... not ... at home tomorrow. 5. She ... at school tomorrow. 6. ... you ... at home tomorrow? 7,... your father at work yesterday? 8. My sister ... ill last week. 9. She ... not ill now. 10. Yesterday we... at the theatre. 11. Where ... your mother now? — She ... in the kitchen. 12. Where ... you yesterday? — I ... at the cinema. 13. When I come home tomorrow, all my family ... at home. 14. ... your little sister in bed now? — Yes, she ... 15. ... you... at school tomorrow? — Yes I ... . 16. When my granny... young, she ... an actress. 17. My friend K,,. in Moscow now. 18. He ... in St. Petersburg tomorrow. 19. Where ... your books now? -- They ... in my bag.

3. Переведите на английский язык, употребляя глагол *to be* в *Present, Past* или *Future Simple.*

1. Мой брат сейчас в школе. 2. Мой брат был вчера в кино. 3. Мой брат будет завтра дома. 4. Ты будешь дома завтра? 5. Она была вчера в парке? 6 Он сейчас во дворе? 7. Где папа? 8. Где выбыли вчера? 9. Где он будет завтра? 10. Мои книги были на столе. Где они сейчас? 11. Моя мама вчера не была на работе. Она была дома. 12, Мой друг не в парке. Он в школе. 13. Завтра в три часа Коля и Миша будут во дворе. 14. Мы не были на юге прошлым летом. Мы были в Москве. 15. Завтра мой дедушка будет в деревне. 16. Когда твоя сестра будет дома? 17. Ты будешь летчиком? — Нет, я буду моряком. 18. Моя
сестра была студенткой в прошлом году, а eel час она врач. — Ты тоже будешь врачом? — Нет, я не буду врачом. Я буду инженером.

4. Вставьте is или are.

There _____ two cups of tea on the table.

There _____ some milk in the cup.

There _____ an orange in the salad.

There _____ six balls in the box.

There _____ some cheese on the plate.

There _____ a blue chair at the door.

There _____ five chicks and a hen on the farm.

There _____ a table and nine desks in the classroom.

There _____ a big window to the left of the door.

There _____ three rooms in our country house.

_____ there three cups on the coffee-table?

____ there a carpet on the floor?

There _____ no cats in the sitting room.

There_____ a cat on the table.
There_____ 3 dogs in the box
There _____4 hens in the house.
There _____ a pot on the table.
_____ there a bathroom near the kitchen?
_____ there four rooms in the house?
_____ there a kitchen under your bedroom?

5. Составь и запиши предложения.

1. pears / there / ten / in the / are / bag / .
2. aren't / pupils / there / classroom / in the / .
3. an egg / on the / there / plate / is / ?
4. on the / there / a / cat / chair / is / white / .
5. a turtle / on / there / isn't / farm / this / .
6. at the / two / bikes / door / are / there / ?

6. Вставьте is/are, was/were.

There _____ two banks in our street.
There _____ a cafe behind the supermarket last year. Now there _____ a museum there.
There _____ a cinema and a sports centre to the right of the park.
Five years ago there_____two shops in Central Square. Now there_____ two cafes, a theatre and a cinema.

7. Переведите предложения.

1. Рядом с отелем есть чистый пляж.
2. На диване три кошки.
3. В холодильнике есть бутылка молока.
4. В корзине нет клубники.
5. На автобусной остановке есть люди?
6. В твоей сумке есть зеркало?
7. В этом парке нет туалета.
8. В нашем саду много цветов.
9. Под столом зеленый мяч.
10. За дверью никого нет.

8. Задайте к предложениям вопросы, начиная с предлагаемых слов.

1. There are four elephants in the zoo. (How many …?)
2. There is a lot of snow in February. (Is …?)
3. There is some fish on the plate. (What … ?)
4. There are no cars in the car park. (Are … ?)
5. There are ancient walls around the city. (What … ?)

9. Переведите пословицы и поговорки.

1. There is no place like home.

2. Where there is love there is life.
3. There is no bad weather, there are bad clothes.
4. There are plenty of other fish in the sea.
5. There are two sides to every question.

Раздел 2. Профессия автомеханика

Тема 2.1. Моя будущая профессия

Практическое занятие 5.

Exercise 1. Read the text and try to understand the meaning of the underlined words and word combinations.

Car mechanics repair and maintain cars. Some mechanics work on all parts of any car, while others specialise in one area or on one type of car. The most challenging aspect of car repair is often the mechanic's favourite part: diagnosing the problem. Speed and accuracy in diagnosis and quoting prices to the customer are crucial if the mechanic intends to keep long-term clients. The mechanic examines the engine while it is running (if possible) to see if his initial assumptions are correct.

Electronic diagnostic equipment is useful but the good mechanic can tell a lot by using eyes, ears, a nose as he searches for problems. Sometimes he repairs parts, but if the part is worn or damaged, he replaces it. Some mechanics compare their fi eld to that of the physician, because most people come to them only when their car is in dire straits. When people come in for an automotive check-up, mechanics often replace worn parts before they become hazardous to the driver, even though drivers can be suspicious of mechanics who recommend the replacement of parts that haven't stopped functioning.

The best mechanics have mastery of a wide variety of integrated skills: electrical systems (a car's wiring is more complicated than an average home's); computerised electronics (a television set seems simple by comparison); fuel system (a car's "plumbing" is a Byzantine maze of tubes). Car mechanics proudly compare themselves to doctors, since they mainly see people with complaints; but whereas the human body and its problems have remained essentially unchanged for millennia, the designs of cars change every year. As a result, the job requires more preparation than ever before. More and more, cars are controlled by electronic instruments, so mechanics are using computers constantly. "Computers have become as much a part of the tool box as wrenches," said one mechanic.

Most car mechanics start in an automotive repair school, then work full time at the same dealerships. They read trade papers daily to know about of changes and trends in their industry. As they gain experience they can move into higher-paying, specialised positions. They can also rise to the ranks of supervisor or manager, particularly if they have strong interpersonal skills to

calm cranky customers who are displeased by high service bills and inconvenience.

Exercise 2. Match a–l with 1–12.
a) diagnosis 1) топливная система
b) long-term clients 2) изношенные детали
c) examine 3) диагностика
d) electronic diagnostic equipment 4) постоянные клиенты
e) worn parts 5) осматривать
f) replace 6) электронное оборудование для диагностики
g) mastery 7) заменить
h) maintain 8) мастерство
i) fuel system 9) обслуживать
j) wrench 10) гаечный ключ
k) interpersonal skills 11) коробка с инструментами
l) tool box 12) умения межличностного взаимодействия

Exercise 3. Using the information from the text, make up the list of operations which car mechanics must perform. Write them down into your exercise-books.

Exercise 4. Make the following sentences negative.
1. Teachers repair and maintain cars.
2. If the part is worn, a car mechanic replaces it.
3. The easiest aspect of car repair is diagnosing the problem.
4. Car mechanics compare themselves to painters.
5. Mechanics are using chalk constantly.

Exercise 5. Answer the following questions.
1. Which of the operations (exercise 4) can you manage?
2. Do you agree that “electronic diagnostic equipment is useful but the good mechanic can tell a lot by using eyes, ears, a nose as he searches for problems”. Explain your point of view.
3. Why do car mechanics compare themselves to doctors? What is similar and what is different in their work?
4. What is the way car mechanics can move into higher-paying positions?

Тема 2.1. Моя будущая профессия

Практическое занятие 6.

Прочитайте и переведите текст:

TEXT: CAR REPAIR SPECIALIST

Many consider their cars as their prized possessions. If the car sustains any malfunctioning or disfiguring, they immediately seek the expertise of a car mechanic.

This has increased the scope and demand for a car repairer's position. A Car repair specialist works for several car servicing centers. His main responsibility is to communicate with the clients and comprehend the malfunctioning of the car. He inspects the main engine of the car and finds out the reason for the defect. He examines the main components of the car engine that includes spark plug, piston, valves, crankshaft, cylinders, etc. Based on the nature and degree of the defect, the car repair mechanic repairs, removes or replaces the defective components. In addition to repairing of the engine, a car repair technicians performs repair to the auto body and removes the dents, paints the exteriors, fixes the windows or windshields and mends the upholstery. Thus, the car repair mechanic helps to provide thorough servicing to cars.

Exercise 1. Fill in the missing letters in the words.
Rep .. r, me .. anic, diagnos .. , repl .. e, maste .. , t .. l, experien .. ,
ma . nta . n, cl .. nt, e . am . ne, en .. ne, dr . v . r.

Exercise 2. Choose from the list below characteristics, which you consider necessary in your profession, add others if necessary.
Accurate, tolerant, patient, sociable, good-mannered, exact, cautious, attentive, hardworking, scrupulous, sharp, widely-read, competent, organised, impulsive, impatient, balanced.

Тема 2.2 Необходимые умения и навыки

Практическое занятие 7.

Образовательная цель: добиться прочного усвоения знаний по теме.
Развивающая цель: научить анализировать, правильно употреблять термины

Прочитайте и переведите текст:

Text: What Automotive Service Technicians and Mechanics Do

An auto mechanic performs an oil change on a vehicle.

Automotive service technicians and mechanics, often called service technicians or service techs, inspect, maintain, and repair cars and light trucks.

Duties

Automotive service technicians and mechanics typically do the following:
Identify mechanical problems, often by using computerized diagnostic equipment
Test parts and systems to ensure that they are working properly
Follow checklists to ensure that all critical parts are examined
Perform basic care and maintenance, including changing oil, giving tuneups, checking fluid levels, and rotating tires

Repair or replace worn parts, such as brake pads and wheel bearings
Disassemble and reassemble parts
Use testing equipment to ensure that repairs and maintenance are effective
Explain to clients their automotive problems and the repairs done on their vehicles
Service technicians work on traditional mechanical components, such as engines, transmissions, and drive belts. However, they also must be familiar with a growing number of electronic systems. Braking, transmission, and steering systems, for example, are controlled primarily by computers and electronic components.
Other integrated electronic systems, such as accident-avoidance sensors, are becoming common as well. In addition, a growing number of technicians are required to work on vehicles that run on alternative fuels, such as ethanol and electricity.
Service technicians use many different tools, including computerized diagnostic tools and power tools such as pneumatic wrenches, lathes, welding torches, and jacks and hoists. These tools usually are owned by their employers.

Service technicians also use many common handtools, such as sockets and ratchets, wrenches, and pliers. These tools generally are owned by service technicians. In fact, experienced workers often have thousands of dollars invested in their personal tool collection. For example, some invest in their own set of pneumatic tools—tools, such as impact wrenches—powered by compressed air. Service technicians sometimes specialize in a particular type of repair that may be subject to specific regulations or procedures. For instance, those focused on repairing air-conditioning system must follow federal and state regulations governing the handling, recycling, and disposal of refrigerants.

In some shops, technicians may specialize. The following are examples of types of service technicians:

Automotive air-conditioning repairers install and repair air conditioners and parts, such as compressors, condensers, and controls. They are trained in government regulations related to their work.
Brake repairers adjust brakes, replace brake rotors and pads, and make other repairs on brake systems. Some technicians specialize in both brake and front-end work.
Front-end mechanics align and balance wheels and repair steering mechanisms and suspension systems. They frequently use special alignment equipment and wheel-balancing machines.
Transmission technicians and rebuilders work on gear trains, couplings, hydraulic pumps, and other parts of transmissions. Extensive knowledge of computer controls, the ability to diagnose electrical and hydraulic problems, and other specialized skills are needed to work on these complex components.

Drivability technicians use their extensive knowledge of engine management, emission, fuel, electrical, and ignition systems to diagnose issues that prevent engines from performing efficiently. They often use the onboard diagnostic system of a car and electronic testing equipment such as a multimeter to find where the malfunction may be.

For information about technicians who work on large trucks and buses, see the profile on diesel service technicians and mechanics.

For information about technicians who work on farm equipment, construction vehicles, and railcars, see the profile on heavy vehicle and mobile equipment service technicians.

For information about technicians who repair and service motorcycles, motorboats, and small all-terrain vehicles, see the profile on small engine mechanics.

Тема 2.3. Времена Present Simple и Present Continuous

Практическое занятие 8

Present Simple - простое настоящее время

Время Present Simple обозначает действие в настоящем в широком смысле слова. Оно употребляется для обозначения обычных, регулярно повторяющихся или постоянных действий, например, когда мы говорим о чьих-либо привычках, режиме дня, расписании и т. д., т. е. Present Simple обозначает действия, которые происходят в настоящее время, но не привязаны именно к моменту речи.

Образование Present Simple

Утвердительные предложения:

I play

He / she / it plays

You play

We play

They play

Вопросительные предложения:

Do I play?

Does he / she / it play?

Do you play?

Do we play?

Do they play?

Отрицательные предложения:

I do not play

He / she / it does not play

You do not play

We do not play

They do not play

Английский глагол во временной форме Present Simple почти всегда совпадает со своей начальной, то есть указанной в словаре, формой без частицы to. Лишь в 3-ем лице единственного числа к ней нужно прибавить окончание -s:

I work – he works

Если глагол оканчивается на -s, -ss, -sh, -ch, -x, -o, то к нему прибавляется окончание -es:

I wish – he wishes

К глаголам на -y с предшествующей согласной тоже прибавляется окончание -es, а -y заменяется на -i-:

I try – he tries

Если же глагол оканчивается на -y с предшествующей гласной, то -y сохраняется и добавляется только окончание -s:

I play – he plays

Для того, чтобы построить вопросительное предложение, перед подлежащим нужно поставить вспомогательный глагол. Время Present Simple используется без него, поэтому в этом случае добавляется вспомогательный глагол do (или does в 3 л. ед. ч.):

Do you like rock? Тебе нравится рок?

Does he speak English? Он говорит по-английски?

В отрицательных предложениях тоже используется вспомогательный глагол do/does, но не перед подлежащим, а перед глаголом. После него прибавляется отрицательная частица not. Do/does и not часто сокращаются до don’t и doesn’t соответственно:

I do not like black coffee. Я не люблю черный кофе.

She doesn't smoke. Она не курит.

Случаи употребления Present Simple

- Регулярные, повторяющиеся действия:

I often go to the park. Я часто хожу в парк.

They play tennis every weekend. Каждые выходные они играют в теннис.

- Действие в настоящем в широком смысле слова:

Jim studies French. Джим изучает французский.

We live in Boston. Мы живем в Бостоне.

- Общеизвестные факты:

The Earth goes round the Sun. Земля вращается вокруг солнца.

The Volga is the longest river in Europe. Волга – самая длинная река в Европе.

- Перечисление последовательности действий:

We analyse what our clients may need, develop a new product, produce a sample, improve it and sell it. Мы анализируем, что может понадобиться нашим клиентам, разрабатываем новый продукт, изготавливаем образец, дорабатываем его и продаем.

- Некоторые случаи указания на будущее время (если имеется в виду некое расписание или план действий, а также в придаточных предложениях времени и условия):

The airplane takes off at 2.30 p.m. Самолет взлетает в 14:30.

When you see a big green house, turn left. Когда вы увидите большой зеленый дом, поверните налево.

Exercises

1. Раскройте скобки, употребляя глаголы в *Present Simple.*

(USUALLY) 1. My sister (to get) up at eight o'clock. 2. She (to be) a school-girl. She (to go) to school in the afternoon. 3. Jane (to be) fond of sports. She (to do) her morning exercises every day. 4. For breakfast she (to have) two eggs, a sandwich and a cup of tea. 5. After breakfast she (to go) to school. 6. It (to take) him two hours to do his homework. 7. She (to speak) French well. 8, My working day (to begin) at seven o'clock. I (to get) up, (to switch) on the radio and (to do) my morning exercises. It (to take) me fifteen minutes, At half past seven we (to have) breakfast. My father and I (to leave) home at eight o'clock. He (to take) a bus to his factory. My mother (to be) a doctor, she (to leave) home at nine o'clock. In the evening we (to gather) in the living-room. We (to watch) TV and (to talk).

2. Дополните предложения, используя следующие глаголы:

cause(s) connect(s) drink(s) live***(s) open(s) speak(s) take(s)***

1 Tanya .. .... German very well.
2 I don't often .... coffee.
3 The swimming pool . . .. at 7.30 every morning.
4 Bad driving ... . many accidents.
5 My parents .... in a very small flat.
6 The Olympic Games .. .. place every four years.
7 The Panama Canal .... the Atlantic and Pacific Oceans.

3. Поставьте глллаголы в правильную форму:

1 Julie .... (not *I* drink) tea very often.
2 What time .... (the banks *I* close) here?
3 I've got a car, but I .... (not *I* use) it much.
4 'Where ... . (Ricardo *I* come) from?' 'From Cuba.'
5 'What . ... (you *I* do)? I'm an electrician.'
6 lt ..... (take) me an hour to get to work.
How long..... .... (it *I* take) you?
7 Look at this sentence. What .... (this word *I* mean)?
8 David isn't very fit. He .... (not *I* do) any sport.

4. Задайте специальные вопросы, используя слова в скобках:

1. Paul plays tennis very well. (How)
2. Many birds fly south every summer. (How often)
3. Jack usually goes to work on Saturdays. (When)
4. France has a lot of high mountains. (What)

5. You always wear glasses. (What)
6. Most of the students study well. (How many)
7. He thinks that school is boring.(Who)
8. The Volga flows into the Caspian Sea. (Where)
9. We drink coffee vey often. (Who)
10. My children usually skate on the skating ring in our yard. (Whose)

5. Раскройте скобки, употребляя глаголы в Present Simple:

1) They_____ hockey at school. (to play)
2) She _____e-mails. (not/to write)
3) _____you_____ English? (to speak)
4) My parents_____ fish. (not/to like)
5) _____Anne_____ any hobbies? (to have)
6) Andy's brother_____ in an office. (to work)
7) Leroy_____ very fast. (can/not/to read)
8) _____Jim and Joe _____the flowers every week? (to water)
9) Yvonne's mother_____ a motorbike. (not/to ride)
10) _____Elisabeth_____ cola? (to drink)

Сравнение времен *Present Continuous* и в *Present Simple.*

1. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Simple.*

I (to read) now. He (to sleep) now. We (to drink) tea now. They (to go) to school now. I (not to sleep) now. She (not to drink) coffee now. I (to read) every day. He (to sleep) every night. We (to drink) tea every morning. They (to go) to school every morning. I (not to sleep) in the daytime. She (not to drink) coffee after lunch. We (not to watch) TV now. They (not to eat) now. My mother (not to work) now. You (to work) now? He (to play) now? They (to eat) now? Your sister (to rest) now? What you (to do) now? What you (to read) now? What they (to eat) now? What your brother (to drink) now? We (not to watch) TV in the morning. They (not to eat) at the lesson. My mother (not to work) at an office. You (to work) every day? He (to play) in the afternoon? They (to eat) at school? Your sister (to rest) after school? What you (to do) every morning? What you (to read) after dinner? What they (to eat) at breakfast? What your brother (to drink) in the evening?

2. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Simple.*

1. I (not to drink) coffee now. I (to write) an English exercise. 2. I (not to drink) coffee in the evening. I (to drink) coffee in the morning. 3. Your friend (to do) his homework now? 4. Your friend (to go) to school in the morning? 5. Look! The baby (to sleep). 6. The baby always (to sleep) after dinner. 7. My grandmother (not to work). She is on pension. 8. My father (not to sleep) now. He (to work) in the garden. 9. I usually (to get) up at seven o'clock in the morning. 10. What your sister (to do) now? - - She (to wash) her face and hands. 11. When you usually (to come) home from school? — I (to come) at three o'clock. 12. Where your cousin (to work)? -- He (to work) at a hospi-taJ. 13. Your *sister (to study) at an institute?* -No, she (to study) at school. 14. My cousin (to go) to school

every day. 15. My mother (not to play) the piano now. She (to play) the piano in the morning.

3. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Simple.*

1. I (to read) books in the evening. 2. I (not to read) books in the morning. 3. I (to write) an exercise now. 4. I (not to write) a letter now. 5. They (to play) in the yard now. 6. They (not to play) in the street now. 7. They (to play) in the room now? 8. He (to help) his mother every day. 9. He (to help) his mother every day? 10. He (not to help) his mother every day. 11. You (to go) to school on Sunday? 12. My friend (not to like) to play football. 13.1 (not to read) now. 14. He (to sleep) now? 15.We (not to go) to the country in winter. 16.My sister (to eat) sweets every day. 17. She (not to eat) sweets now. 18. They (to do) their homework in the afternoon. 19. They (not to go) for a walk in the evening. 20. My father (not to work) on Sunday. 21. He (to work) every day.

4. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Simple.*

1. They (to read) many books. 2. They (to read) many books? 3. They (not to read) many books. 4. The children (to eat) soup now. 5. The children (to eat) soup now? 6. The children (not to eat) soup now. 7. You (to play) volley-ball well? 8. When you (to play) volley-ball? 9. What Nick (to do) in the evening? 10. He (to go) to the cinema in the evening? 11. We (not to dance) every day. 12. Look! Kate (to dance). 13. Kate (to sing) well? 14. Where he (to go) in the morning? 15. He (not to sleep) after dinner. 16. My granny (to sleep) after dinner. 17. When you (to sleep)? 16. Nina (not to sleep) now. 19. Where John (to live)? - - He (to live) in England.

5. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Simple.*

1. I (to write) a composition now. 2. I (not to drink) milk now. 3. I (to go) for a walk after dinner. 4. I (not to go) to the theatre every Sunday. 5. He (not to read) now. 6. He (to play) now. 7 He (to play) now? 8. My mother (to work) at a factory. 9. My aunt {not to work) at a shop. 10. You (to work) at an office? 11. My friend (to live) in St. Petersburg. 12. My cousin (not to live) in Moscow. 13. The children (not to sleep) now. 14. The children (to play) in the yard every day. 15. They (not to go) to the stadium on Monday. 16. She (to read) in the evening. 17. She (not to read) in the morning. 18. She (not to read) now. 19. Your father (to work) at this factory? 20. You (to play) chess now? 21. Look at the sky: the clouds (to move) slowly, the sun (to appear) from behind the clouds, it (to get) warmer. 22. How is your brother? - - He is not well yet, but his health (to improve) day after day. 23. Listen! Who (to play) the piano in the next room?

6. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Simple.*

I. What you (to do) here now? - - We (to listen) to tape-recordings. 2. You (to want) to see my father? - Yes, I ... 3. Michael (to know) German rather well. He (to want) to know English, too, but he (to have) little time for it now. 4. What magazine you (to read)? - - It (to be) a French magazine. There (to be) good articles on sports here. You (to be) interested in sports? - - Yes, I .... But I (not to know) French. 5. We (to have) an English

lesson now. 6. Lena usually (to prepare) her homework at the institute? - - No, she ... . As a rule, she (to work) at home. — And what she (to write) now? -Oh, she (to write) an article for our wall newspaper. 7. Who that man (to be) who (to stand) in the doorway? - - You (not to recognize) him? It (to be) John, my cousin. 8. I (to have) no time now, I (to have) dinner. 9. Your family (to leave) St. Petersburg in summer? - Yes, we always (to go) to the sea-side. We all (to like) the sea. Mother (to stay) with us to the end of August, but father (to return) much earlier. 10. Where Tom and Nick (to be) now? — They (to have) a smoke in the garden.

7. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Simple.*

1. It (to take) me forty minutes to get to school. 2. Hello, Pete, where you (to go)? — I (to hurry) to school. 3. When your lessons (to begin) on Monday? — They (to begin) at nine o'clock. 4. Where your sister (to be)? — She (to do) her homework in the next room. 5. It usually (to take) me an hour to do my written exercises. 6. Where Boris (to be)? I (to look) for him. - - He (to have) dinner. 7. In the evening I often (to go) to see my friends. 8. On Sunday we sometimes (to go) to the cinema or to a disco club. 9. Andrew (to get) up very early as he (to live) far from school, He (to be) never late. 10. It (to be) six o'clock in the evening now. Victor (to do) his homework. His sister (to read) a book. His mother and grandmother (to talk). 11. I (to write) a letter to my grandmother who (to live) in Novgorod. I (to write) to her very often.

8. Раскройте скобки, употребляя глаголы в *Present Continuous* или в *Present Simple.*

One Sunday Agnes and her mother went to the zoo. Agnes was very excited. She was interested in everything she saw. "Mother, look," she said. "There (to be) a monkey in this cage. It (to eat) an apple. Now it (to give) a bite to another monkey. I (to think) monkeys (to like) apples very much." "Yes, dear," said her mother. "Now I (to want) to go and see the lions and tigers. Where they (to live), mother?" "In that big house over there. Come along." Agnes enjoyed herself very much in the lion house. "Mother," she said, "the tiger (to want) a drink: it (to go) to the dish of water there in the corner. And the lion (to look) right at me. You (to think) it (to want) to eat me up? When the lions and tigers (to have) their dinner, mother?" "The keepers (to bring) them great pieces of meat every day at four o'clock. And they (to make) a big noise before their dinner time, so everybody (to know) they (to be) hungry."

9. Переведите на английский:

1. Позвони ему сейчас. Мы думаем, он еще не спит. 2. Она сейчас много учит. Она сдает экзамены завтра. 3. Мэри не видит, что мы на нее смотрим. Она читает газету с большим интересом. 4. Где Ника и Джон? — У них урок французского языка. У них всегда французский язык по вторникам. 5. Давайте покатаемся на велосипедах. Дождя нет. 6. Мои братья работают инженерами на фирме. Они говорят, им очень нравится их работа. 7. Ваш сын ходит в садик? — Да, она в старшей группе. — Вы помогаете ей? — Постоянно. 8. Моя мама хорошо знает математику. Она помогает студентам решить контрольные работы. 9. Послушай. Звонит телефон. 10. Мой сын хорошо успевает в университете. Он тратит слишком мало времени на спорт и слишком много времени на уроки. 11. Где ты обычно проводишь отпуск? — В Белоруссии. Мои родители живут там. — Там есть река или озеро? — Там есть

большое и красивое озеро. Я хорошо провожу там время. 12. Мой брат живет далеко от меня. Я не часто его вижу. 13. Куда ты торопишься? — В кино. Мой друг ждет меня около кинотеатра. 14. Кому принадлежит этот' дом? — Это дом моего дяди. 15. Сколько стоит этот смартфон? — 200 долларов. 16. С кем она разговаривает? — Со своим начальником. 17 Мой брат дипломат. Он часто ездит за границу. 18. Мужчина так пристально смотрит на вас. Вы его знаете? 19. Что ты слушаешь? — Я слушаю народные песни, я очень люблю их 20. У моего брата есть автомобиль, но я никогда им не пользуюсь. Я хочу купить свой автомобиль. 21. Позвони на вокзал и узнай, когда приходит поезд из Берлина. 22. Я не люблю ее. Она постоянно ворчит. 23. Ты часто пишешь своим родителям? — Каждую неделю. 24. Не бери эту книгу. Мой брат читает ее, 25. Темнеет. Включи свет 26. Я никогда не езжу на работу. Я всегда хожу пешком 27. Ты идешь в университет? — Нет. Я иду в библиотеку. 28. Она очень рассеянная. Она постоянно теряет вещи. 29. Моя сестра живет сейчас в Москве. Она там учится в Московском университете. 30. Дождь все еще идет? — Да.

10. Переведите на английский:

1. Мы уезжаем в среду в 9 часов утра. Мы встречаемся на вокзале в 8.30 2. За что он ей так нравится? — Она говорит, что он добрый и умный. 3. Вы помните меня? Мы вместе учились в университете. 4. Почему бы нам не поехать на велосипеде за город в Субботу? — Хорошая идея. 5. Джон сейчас очень занят. Он строит гараж. 6. Когда приезжает твой отец? — Через неделю. 7. Что ты думаешь об этом фильме? — Он скучноват. 8. О чем ты думаешь? — Я думаю о своем детстве. 9. В котором часу закрывается магазин? — В восемь. 10. Когда начинается спектакль? — В семь часов вечера. 11. Какие товары экспортирует ваша страна? 12. Над чем вы смеетесь? — Том рассказал нам смешную историю. 13. Он никогда не пропускает занятия без уважительных причин. 14. Мои родители сейчас на море. Они хорошо проводят время. 15. Что ты ищешь? — Ключи от машины. 16. По - чему ты меня не слушаешь? Это очень важно. 17. Неужели ты не любишь футбол? Это такая захватывающая игра. 18. Я завтра встречаюсь с Аней. Мы играем в теннис. 19. Что ты здесь делаешь? — Просматриваю новые журналы. Я делаю это каждую неделю. 20. Почему вы изучаете английский? — Собираюсь поехать за границу на несколько месяцев. Кроме того, английский мне нужен для научной работы. 21. О чем они говорят? — Думаю, они обсуждают итоги конференции. 22. Ты мажешь выключить телевизор. Я не смотрю его. 23. Кто присматривает за твоими детьми, когда ты на работе? — Как правило, моя мать. Она сейчас не работает. 24. Почему ты так сердит? Почему ты кричишь на меня? 25. Она не любит мясо, она предпочитает рыбу. 26. В ее диктанте много ошибок, хотя обычно она делает мало ошибок. 27. Конференция начинается 8 июня и заканчивается 14 июня. 28. Где Аня? — Она принимает душ. 29. Почему ты не пишешь ей? — Я не знаю ее адреса. 30. Она не знает, когда приедет ее брат.

Раздел 3. Устройство на работу

Тема 3.1. Резюме

Практическое занятие 9

Alex *Malfoy*
16N, Wellington Street,
Dallas, TX 87745
988 - 020 - 4547
alexmalfoy@example.com

Career Objective

I aspire to work as a car repair mechanic and provide quality repairing services that will allow my clients to maintain their cars free of trouble for long and contribute to the goodwill of the organization

Key Skills

- Expertise in functioning of the mechanical and electrical components
- Profound competence in identifying the type and degree of malfunctioning
- Proficient with the different varieties of car engines and mechanism
- A well built physic that helps undertake strenuous repairing work
- Skilled at communicating with customers and guiding them on basics of car maintenance

Work Experience

Car Repair Mechanic
Aviator Automobile Repair Stores, Dallas
June 2009 - till date
Responsibilities:

- Inspect the engine of the car and figure out the reason of malfunctioning
- Ensure the spark plug is functioning accurately and provides the ignition at the right time
- Analyze the opening and closing action of the valves to make certain they let the fuel in and release the exhaust on precise time
- Repair the broken windows and windshields and replace them with new glass
- Replace the worn out wheels and remove puncture

Guide the customers in maintaining the efficiency of their cars and ensuring its optimum performance

Car Repair Mechanic
Jackson's Automobile Services, Dallas
October 2007 - May 2009
Responsibilities:
Responsible to perform repairs to the internal and external car components
Ensure the engine cylinders are well fixed and function smoothly
Make repairs to the crank shaft and ensure it accurately converts the up and down movement of the piston into circular motion
Verify the competence of the piston rings in providing a seal that separates the movement of fuel and exhaust of flowing into the sump
Remove dents, fill-up cracks and paint the car exteriors to restore the elegance of the car
Draft a bill and forward it to the customers for payments
Educational Qualifications
High School Diploma
Ritter's High School
Dallas (2006)
Certifications
Certified Automotive Servicing Technician
Robinson Automobile Servicing Training School
Dallas (2007)
Reference
Allan Stanley
Professional Details: Stores Manager
Aviator Automobile Repair Stores, Dallas
Contact Details: 988 - 525 - 1213
allanstanley@example.com

Письменная работа
Напишите резюме по образцу

Situational Dialogues Ситуативные диалоги

1.
-Could you book me in for a full service, please?
-Certainly, madam. I just need to know the year and model.
-I can’t remember the year but it’s a D registration.
-I think I can fit you in first thing tomorrow morning.
-That would suit me fine. And while you’ve got it, could you have a look at the brakes as well?.
-Yes, we always check everything thoroughly.

2.
-My car needs servicing. Can I get it done here?
-Yes, I think we can help you. Which year and model, please?

-It’s last years model, the estate version.
-How about next Wednesday morning?
-That’s fine. And at the same time, could you do something about the sunroof? It lets the rain in.

-Yes, we’ll do that for you

Тема 3.2. Собеседование

Практическое занятие 10

The Interview
Exercise 1. Read the words with the letter “s” as [s], [z], [Σ] or [].
[s] [z] [Σ] [ʒ]
consider resume impression occasion
most position sure measure
university congratulations profession decision
writes rules passion usually
Exercise 2. Make the list of rules how to make a good impression during the job interview.
Exercise 3. Learn some rules of a successful job interview and say what the most important part of the job interview is.
Congratulations! Your resume have made a good impression and the employer has called you in for an interview. Now it’s time to make sure that you also have the right type of English for that job interview.
There are some very important rules to consider when taking a job interview.
Work Experience
Work experience is the most important part of any job interview. It is true that education is also important, however, most employers are more impressed by extensive work experience than by university degrees. Employers want to know exactly what you did and how well you accomplished your tasks. This is the part of the interview during which you can make the best impression. It’s important to give full, detailed answers. Be confi dent, and emphasise your accomplishments in past positions.
Qualifi cations
Qualifi cations include any education, as well as any special training you may have had (such as computer courses). Mention your English studies. This is very important as English is not your fi rst language and the employer may be concerned about this fact. Assure the employer that you are continuing to improve your English skills by saying that you study a certain number of hours a week to improve your skills.
Talking about Responsibilities
You will need to demonstrate your qualifi cations and skills which are directly applicable to the job you are applying for. If past job skills were not exactly the same as what you will need on the new job, make sure to detail how they are similar to job skills you will need for the new position.
Exercise 4. Read about the specifi c kind of vocabulary which is used in the interview and say how to make a good impression on the interviewer.

The job interview in English requires a very specifi c kind of vocabulary. It also requires good tense usage as you need to make a clear distinction between past and present responsibilities. Here is a quick overview of the appropriate tenses to use:

1) Use the present simple to describe your daily responsibilities. This is the most common tense to use when speaking about your current position.
Example Sentence: I repair car engines.

2) Use the past simple to describe your daily responsibilities in a former position. This is the most common tense to use when speaking about past jobs.
Example Sentence: I worked as a vehicle diagnostician.

3) Use the present continuous to speak about current projects that are happening at that moment in time. These projects are limited in time and should not be confused with daily responsibilities.
Example Sentence: Currently, I am repairing lorries.

4) Use the present perfect to describe projects or accomplishments that you have made up to the present moment in time. Remember not to include specifi c past time references which should be used with the past simple.
Example Sentence: I've got experience in body repair operations.

5) Use the future simple to discuss your plans for the future. This tense is only used when the interviewer asks you what you plan to do in the future.
Example Sentence: I will be the consultant of the team of auto body technicians.

There are a number of other tenses that you can use to speak about experience that you have had. However, if you do not feel comfortable using more advanced tenses, these tenses should serve you well in the interview.

Common Interview Questions

The fi rst impression you make on the interviewer can decide the rest of the interview. It is important to introduce yourself, shake hands, and be friendly and polite. The fi rst question is often a "breaking the ice" type of question. Don't be surprised if the interviewer asks you something like:

• How are you today?
• Did you have any trouble fi nding us?
• Isn't this great weather we're having?

This type of question is common because the interviewer wants to put you at ease (help you relax). The best way to respond is in a short, friendly manner.

Exercise 5. Which responses are correct in these dialogues?

1. Interviewer: How are you today?
You: I'm fi ne, thank you. And you?

2. Interviewer: How are you today?
You: So, so. I'm rather nervous actually.

3. Interviewer: Did you have any trouble fi nding us?
You: No, the offi ce isn't too diffi cult to fi nd.

4. Interviewer: Did you have any trouble fi nding us?
You: As a matter of fact it was very diffi cult. I missed the exit and had to return via the highway. I was afraid I was going to be late for the interview.

5. Interviewer: Isn't this great weather we're having?
You: Yes, it's wonderful. I can remember this time last year. Wasn't it

awful! I thought it would never stop raining!
6. Interviewer: Isn't this great weather we're having?
You: Yes, it's wonderful. I love this time of year.
Exercise 6. Imagine that you are a car mechanic. Use the list of verbs below to express your responsibilities and tasks performed.
Example: I improved dealership relations with manufacturers, repaired fuel systems, replaced worn parts, carried out general maintenance.
Advised, analysed, assisted, carried out, changed, classifi ed, consulted, controlled, cooperated, created, dealt, decided, estimated, examined, improved, inspected, installed, made, managed, negotiated, operated, organized, performed, planned, prepared, purchased, recommended, repaired, replaced, selected, serviced, supervised, tested, upgraded.
Exercise 7. You only have a few minutes to show how good you really are. Using the adjectives below describe your skills and try to make the best impression possible.
Example: I am experienced in engine repair and preventive maintenance. I'm self-disciplined and enthusiastic in work. Besides, I'm tactful and diplomatic with other people.
Accurate, active, adaptable, broad-minded, competent, creative, diplomatic, energetic, enthusiastic, experienced, fi rm, honest, logical, loyal, mature, motivated, objective, outgoing, pleasant, positive, practical, productive, reliable, self-disciplined, sincere, tactful, trustworthy.
Exercise 8. Make up a dialogue between an employer and a car mechanic looking for a job. Use the phrases from the exercises above.

Тема 3.3. Устройство на работу

Практическое занятие 11

Applying for a job
Exercise 1. Try to explain to your classmates what the purpose of writing application letters is.
Exercise 2. Read the following application letter and say what parts the letter consists of. In your exercise books draw the scheme of the letter.
Alex Smith
204-40 34 th Rd.
Forest Hills, N.Y. 12426
Tel. (718) 345-2749
April 16, 2011
The secretary
Motor Dobson Inc.
1342 Moris. Avenue
N.Y. 08314
Dear Sir,
Your advertisement for an engine mechanic in today's Boston Globe interests me much because many years of experience have qualifi ed me to work for a company like yours. Please, consider me an applicant.
You will fi nd additional information about my qualifi cations in the

enclosed resume. I would appreciate your granting me an interview.
Sincerely yours,
Alex Smith.
Exercise 3. Fill in the missing letters in the words given below.
Adv..ti.ement, me..anic , exper..n.e, a..li.ant, q..lifi ca…n, r.s.me, int..v..w.
Exercise 4. You have read the advertisement (given below) in a newspaper. Write the application letter in which try to persuade the employer that you have all the necessary experience and knowledge.
JOB VACANCIES
car electronics installer • car mechanic • engine mechanic • lorry mechanic • vechicle diagnostician
Language knowledge (basic): English
Preferences: experience in car diagnostic
Employment form: full time
Location:
City/town: London
Region: Wrexham
Country: United Kingdom
Description:
HORIZONS INTERNATIONAL RECRUITMENT Leader Admis sions www.horizonsrecruitment.co.uk ASO, England Tel: 00447761637664
Exercise 5. Fill in the application form below with the information about yourself.
Application for employment
Surname ... Name ...
Address ...
Telephone numbers
private ... business ...
Nationality ...
Date of birth ...
Age ... Marital status ...
Date of marriage ...
Number of dependants ...
Number of children ...
Their ages – ... male female
Do you own your home? YES/NO.
Rent? YES/NO.
Live with relatives? YES/NO.
Do you have a current driving licence? YES/NO.
Is it clean? YES/NO.
National insurance number ...
Height ... Weight ...
Do you have any physical disabilities? YES/NO.

Тема 3.4. Деловой этикет

Практическое занятие 12

Business etiquette
Exercise 1. Transcribe and pronounce correctly the words.
Who, why, would, what, welcome, which, when, where, well.
Exercise 2. When you fi rst meet someone it can be diffi cult to know how to start a conversation, especially if your fi rst language is not English. Defi ne which of the topics in
the list below are safe for small talk and which of them are best avoided.
Introductions, eg “Hello. May I introduce myself? My name is Mark.”
Travel, eg “Did you manage to fi nd here OK?” or “Did you have a good journey?”
The weather, eg “It’s a lovely day today, isn’t it?”
Age, eg “How old are you?”
General news, eg “What do you think about the recent fl oods?”
Appearance or weight, eg “You seem to have put on some weight.”
Business, eg “How’s your business going?”
Work, eg “What sort of work do you do?”
Money, eg “How much do you earn?”
Politics, eg “Who did you vote for at the last election?”
Religion, eg “Do you believe in God?”
Criticisms or complaints, eg “Why is British food so bad?”
Exercise 3. Read the direct phrases, then write them in a more polite way. Choose from the box.
Could you… Shall I… I’m afraid… Would you like to …
May I suggest… Would you mind… Would you like me…
There’s been a slight misunderstanding… Can you wait a minute…
Would you like… Actually…
Direct More polite
Wait a minute! … , please.
We haven’t got any left. … , we haven’t got any left.
You are wrong. I’m not a …. … , I’m not a … .
Confi rm that tomorrow, please. … confi rm that tomorrow, please?
You’ve got the wrong date. … about the date.
Do you want my help? … help you?
Exercise 4. Read the questions, then write them in a more polite way using the tag questions.
Example: How many employees are there in all?
There are 300 employees in your fi rm, aren’t there?
1. Does your fi rm have any branch plants?
2. Who is your main supplier?
3. What is the percent defective?
4. Are you paid by the hour (почасовая оплата)?
5. Do you ever work overtime?
Exercise 5. Which of the groups (greeting and farewell; apologies; sympathy; agreement, disagreement, refusal; invitations; requests; thanks) do the following phrases belong to?
1. Excuse me, I must be going. 2. Don’t mention it. 3. Good luck! 4. Glad

to meet you. 5. How do you do? 6. It's nice to meet you. 7. Fine, thank you. And you? 8. May I ask a favour of you? 9. Good-bye. 10. I am very grateful to you. 11. How are you? 12. I would like to invite you to … . 13. That suits me. 14. You are welcome. 15. I am very sad to hear that. 16. Could you help me, please? 17. Thank you for your help. 18. Please pardon the disturbance. 19. Please don't be angry. 20. Thank you, but I will be busy then. 21. I have no objection. 22. Sorry, I caused you so much trouble. 23. You are right. 24. Excuse me, but I have things to do. 25. I very much regret what happened. 26. Too bad. 27. On the contrary!

Exercise 6. Complete the sentences with the words from the box.

1. I am … to you. 2. It's nice to … you. 3. I'm afraid I'll be … then. 4. Don' t … it. 5. How do you … ? 6. … are you? 7. You are … . 8. Let's discuss the terms of … .

meet busy do welcome
delivery mention grateful how

Exercise 7. Complete the dialogue with the phrases below and role-play it.

Mr. Ivanov: … , Mr. Smith. How do you do?
Mr. Smith: … , Mr. Ivanov?
Mr. Ivanov: We're here today … .
Mr. Smith: If you don't mind, … . What's your idea of the price?
Mr. Ivanov: We propose 50 pounds per item.
Mr. Smith: We're not satisfi ed with the terms you offered. …. ? I propose 45 pounds per item.
Mr. Ivanov: We'll think your proposal over. I suppose … .
Mr. Smith: Now we come to the question of the term.
Mr. Ivanov: In a month, I suppose. … ?
Mr. Smith: Agreed.
Mr. Ivanov: Right, it looks as though … . We are looking forward to … .

to discuss the terms of the delivery; how do you do; could you lower the price; let's start with the price; will that do; we've covered the main items; continuing our cooperation; we could come to agreement; nice to meet you.

Exercise 8. Make up your dialogues by analogy.

Раздел 4. Станция техобслуживания

Тема 4.1. Единицы измерения

Практическое занятие 13

Measurements

Exercise 1. Give the adjectives following the example. Read the words. Pay attention to the pronunciation.

Example: length – long
width – youth –
height – strength –
depth – weight –
thickness –

Exercise 2. Fill in the missing letters in the following words.
Len..h, wi.th, d..th, w..ght, stre..th, hi.., d..p, wei.. , w.de.
Exercise 3. Choose one word in each group.
1. This car is (long, longer, length) than that one.
2. Its (weigh, weight, width) is more than 50 kilograms.
3. This ladder is as (high, height, higher) as that one.
4. The pool is very (depth, deeper, deep).
5. It's a very thick wall. Its (thick, thicker, thickness) is 38 cm.
Exercise 4. Say what units of measurement you know.
Exercise 5. Read the text below and say if you have learnt some units of measurement in it you didn't know before.
The metric system is adopted as the common system of weights and measures by the majority of countries, and by all countries as the system used in scientifi c work.
Weights and measurements. In the English-speaking world, the everyday units of linear measurement were traditionally the inch, foot, yard and mile. In Britain units of weight (ounces, pounds and tons) are now also derived from the metric standard – kilogram.
Length. The meter was defi ned in 1983 as the length of the path travelled by light in a vacuum during the time interval of 1/299,792,458 of a second.
Time. For centuries, time has been universally measured in terms of the rotation of the earth. The second, the basic unit of time, was defi ned as 1/86,400 of one complete rotation of the earth on its axis in relation to the sun.
Some units are too large for ordinary use and others are too small. To compensate, the prefi xes developed for the metric system have been borrowed and expanded. Examples are millimeter (mm), kilometer/hour (km/h), megawatt (MW). The prefi xes hector, deka, deci and centi are usually used with meter to express areas and volumes.
Exercise 6. Correct the wrong information in the following statements:
a) The metric system is adopted as the system used in scientifi c work by the majority of countries.
b) In the English-speaking world, the everyday units of linear measurement were traditionally a meter and a kilometer.
c) For centuries, time has been universally measured in terms of the rotation of the moon.
d) To make the metric system more convenient some suffi xes were developed.
Exercise 7. Learn the following units and fi ll in the gaps in the sentences below.
Units of time
60 seconds = 1 minute
60 minutes = 1 hour
24 hours = 1 day
7 days = 1 week
52 weeks = 1 year
365 days = 1 year
Units of length
12 inches = 1 foot = 30.5 cm

3 feet = 1 yard = 91 cm
1760 yards = 1 mile = 1609 meters
1 inch = 2.54 cm
1 meter = 39.37 inches
Units of weight
16 ounces (oz.) = 1 pound (lb.)
1 kilogram = 2.2 lbs
1. The speed of the car is 120 km per hour which is equal to … meters per second.
2. The length of the wrench is 20 centimeters which is equal to …meters.
3. The weight of the wheel is 15 kilograms which is equal to … pounds.
4. The volume of the engine is 2,000 cubic centimeters which is equal to … cubic meters.
5. The length of the car is 3.2 meters which is equal to … inches.
6. The warranty for this equipment is 2 years which is equal to …weeks.
7. The load capacity of the dump truck is 8 tons which is equal to ... kilograms.

Тема 4.2. Инструменты и материалы

Практическое занятие 14

Образовательная цель: научить применять знания в решении практических задач.
Развивающая цель: прививать уменья и навыки учебной работы.

Инструменты для ремонта автомобиля

flashlight – карманный фонарик
fuse – предохранитель
jack – домкрат
oil - масло
pliers – клещи
screwdriver – отвертка
spare part – запчасть
spark plug / sparking plug (BrE) – свеча зажигания
tool – инструмент
water – охлаждающая жидкость
wrench – гаечный ключ
Места обслуживания автомобилей

car park (BrE) / parking lot (AmE) – парковка, стоянка
car wash – автомойка
filling station (BrE) / gas station (AmE) – заправочная станция
garage [gə'rɑːʒ] – крытая парковка, парковка в здании
repair shop - мастерская
toll road – платная дорога
turnpike – место взимания дорожного сбора на платной дороге
Прочие автомобильные термины

break down – сломаться
breakdown ['breikdaun] - поломка
buckle up (разговорная форма) – пристегнуться
car phone – автомобильный телефон (телефон, который установлен в автомобиле)
car pool – небольшая группа автомобилистов, которые едут на одном автомобиле, поочередно садясь за руль
car theft – автомобильная кража
diesel ['di:zəl] – дизельное топливо
driving licence (BrE) / driver's license (AmE) – водительские права
fasten one's seat belt – застегнуть ремень
fix (something) – починить (что-либо)
fuel – топливо
mph (= miles per hour) – миль в час (скорость движения)
petrol (BrE) / gasoline, gas (AmE) – бензин
speed limit – ограничение скорости

Переведите диалог на станции техобслуживания:

Good morning, sir, I have come for a 15 thousand kilometers servicing. I have an appointment for 10 a m.
- OK. Please, drive your car into the garage... Let me check the car and diagnose all possible problems... Right.
I will have to replace the tyres, change the brake disk and check the oil level.
- Fine. Please check why my wipers get stuck in the middle of the windshield. And I've got some other problems as well. I've noticed that the clutch is very noisy when I change gears.
-1 see. The plate must be worn out. But it's a normal thing at this mileage. And I can see you have some minor problem with the radiator.
- Can I get it repaired today too?
- I'm afraid it will take a couple of days to fix it. You can leave the car some other day. I'm sorry for the inconvenience.
- Ok then. Another problem is that my car won't start in the mornings. I usually call my neighbour to jump-start it.
- Let me open the hood and check all the hoses and belts. So... I'm glad to say they are all in working order. Did you check the battery? If you need to jump-start your car, you probably have to change the weak battery. When did you buy the last one?
- Oh, I guess it was ages ago. You're right. I have to replace it.
- Right. There it is. Everything is in order in your car. The oil level was below the full mark, so I've filled it up. Take our 30-day warranty card, please.
- Greatl How much is it?
- It's 300 $ in total,
- Here you are. Thanks for your help. See you for a 30 thousand servicing

Переведите на русский язык:
shinomontazhnye machine tools for automobile wheels;

balancing machines;
two lifts with upper and lower synchronization;
four-post lifts;
plunger lifts; ,
scissor lifts;
she was pneumatic lifts for a quality tire;
Jack;
tire mounting machines for wheels of trucks;
machinery for cleaning wheels and water treatment;
spray equipment;
different types of compressors (reciprocating, movable, stationary, screw);
diagnostic equipment;
tools for auto service in collections and lodgments;
stands for filling and maintenance of air conditioning and more.

Переведите на английский язык

шиномонтажные станки для легковых колёс;
балансировочные станки;
двухстоечные подъемники с верхней и нижней синхронизацией; четырёхстоечные подъемники;
плунжерные подъемники; ,
ножничные подъемники;
пневматичные подъемники для качественного шиномонтажа; домкраты;
шиномонтажные станки для колес грузового типа; оборудование для мойки колес и очистки воды; окрасочное оборудование;
различные виды компрессоров (поршневые, передвижные, стационарные, винтовые);
диагностическое оборудование;
инструменты для автосервиса в наборах и ложементах;
стенды для заправки и обслуживания кондиционеров и многое другое.

Тема 4.3. Оборудование станции техобслуживания

Практическое занятие 15

Образовательная цель: добиться прочного усвоения знаний по теме.
Развивающая цель: научить анализировать, правильно употреблять термины

Прочитайте и переведите текст:

An automobile repair shop (also known as a garage) is a repair shop where automobiles are repaired by auto mechanics and electricians.
Automotive garages and repair shops can be divided into following categories:

The auto parts stores or motor factors who also maintain service operations. This is not common in the United Kingdom but more common in the US.

Automobile repair workshops that are independently owned and operated businesses. These may also include regional or national chains and franchises including OEM car dealership sites. In the United States, these sites are commonly certified by their respective manufacturer to perform warranty and recall repairs by that manufacturer or distributor. Independent automobile repair shops in the US may also achieve certification through manufacturer sponsored programs.[1] In the European Union a recent law (The EC Block Exemption Regulation 1400/2002 (October 2003[2])) allows motorists more flexibility in selecting where they can get their car serviced. Due to this legislation, maintenance and service work does not have to be done by the main dealer as long as the garage uses Original Equipment 'Matching Quality' parts, and are recorded as such, and the garage follow the manufacturer's service schedules. The Block Exemption Regulation (BER) covers service and maintenance during the warranty period and prohibits vehicle manufacturers' warranties from including conditions that require normal maintenance to be provided within the vehicle manufacturer's network or that all parts used must be the manufacturer's original spare parts. This means that motorists benefit from open market competition in aftermarket parts, repairs and services thus reducing the cost of servicing through better labor rates and competitively priced parts. Also, some auto repair shops provide additional towning services.

Specialty automobile repair shops are shops specializing in certain parts such as brakes, mufflers and exhaust systems, transmissions, body parts, tires, automobile electrification, automotive air conditioner repairs, automotive glass repairs and installation, and wheel alignment or those who only work on certain brands of vehicle or vehicles from certain continents of the world. There are also automotive repair shops that specialize in vehicle modifications and customization. Oftentimes, various specialized auto repair shops will have varied infrastructure and facilities (for specific jobs or vehicles), as well as technicians and mechanics with different qualifications.

Online automobile repair shops providing doorstep repair services and home delivery of new and used auto parts of different late model and classic cars whose parts are not widely available in the market. Such kind of organizations are predominant in US with wide acceptance and high growth in UK also.The developing countries are still adapting to the e-commerce marketplace and it is expected that with its success in the US this will also prove to be revolutionary there also.

Auto body repair[edit]

Automotive repair shops also offer paintwork repairs to scratches, scuffs and dents to vehicle damage as well as damage caused by collisions and major accidents. Many body shops now offer paintless dent repair, which is done by pushing the dents out from inside. OEM Certified Collision Centers have the highest standards.

Закончите предложения, используя необходимые слова или словосочетания, данные ниже.

A.: What three functions does the clutch ... ?
B.: It is used for ....
A.: Where is it... ?
B.: It is ... between the flywheel of the engine and the ....
A.: By what is the clutch ... ?

B.: It is ...by the....
A.: What takes place when the pedal is ... ?
B.: The clutch is ....
A.: And when the driver pushes down on the pedal?
B.: The clutch is ....

Прочтите диалог и выполните следующие за ним упражнения.
DIALOGUE
A.: What is the function of the clutch?
B.: You see, it serves three functions. It is used for freeing the engine from the gearbox, for starting the car and for freeing the engine from car wheels.
A.: Is it a friction device?
B.: Yes, of course. It is fixed between the flywheel of the engine and
the gearbox and usually consists of two discs.
A.: What discs?
B.: The friction disc (driven disc) and the pressure disc.
A.: I suppose the principle of operation of clutches is a frictional
force between discs. Am I right?
B.: Yes, you are. When the clutch is fully engaged the frictional force makes discs rotate at the same speed.
A.: And by what is the clutch controlled?
B:.By the clutch pedal. When it is at rest the clutch is engaged and when it is pressed down the clutch is disengaged and the engine is disconnected from the car wheels.
A.: Thank you. And what types of clutches do you know?
B.: Positive clutches and gradual engagement clutches.
A.: Thank you very much for your information.
B.: Not at all. Glad to help you.

Тема 4.3. Оборудование станции техобслуживания

Практическое занятие 16

Переведите текст:

An automobile repair shop (also known as a garage) is a repair shop where automobiles are repaired by auto mechanics and electricians.

Automotive garages and repair shops can be divided into following categories:

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EC Block Exemption Regulation 1400/2002 (October 2003[2])) allows motorists more flexibility in selecting where they can get their car serviced. Due to this legislation, maintenance and service work does not have to be done by the main dealer as long as the garage uses Original Equipment 'Matching Quality' parts, and are recorded as such, and the garage follow the manufacturer's service schedules. The Block Exemption Regulation (BER) covers service and maintenance during the warranty period and prohibits vehicle manufacturers' warranties from including conditions that require normal maintenance to be provided within the vehicle manufacturer's network or that all parts used must be the manufacturer's original spare parts. This means that motorists benefit from open market competition in aftermarket parts, repairs and services thus reducing the cost of servicing through better labor rates and competitively priced parts. Also, some auto repair shops provide additional towning services.
Specialty automobile repair shops are shops specializing in certain parts such as brakes, mufflers and exhaust systems, transmissions, body parts, tires, automobile electrification, automotive air conditioner repairs, automotive glass repairs and installation, and wheel alignment or those who only work on certain brands of vehicle or vehicles from certain continents of the world. There are also automotive repair shops that specialize in vehicle modifications and customization. Oftentimes, various specialized auto repair shops will have varied infrastructure and facilities (for specific jobs or vehicles), as well as technicians and mechanics with different qualifications.
Online automobile repair shops providing doorstep repair services and home delivery of new and used auto parts of different late model and classic cars whose parts are not widely available in the market. Such kind of organizations are predominant in US with wide acceptance and high growth in UK also.The developing countries are still adapting to the e-commerce marketplace and it is expected that with its success in the US this will also prove to be revolutionary there also.

Переведите и составьте вопросы к тексту:

Auto body repair
Automotive repair shops also offer paintwork repairs to scratches, scuffs and dents to vehicle damage as well as damage caused by collisions and major accidents. Many body shops now offer paintless dent repair, which is done by pushing the dents out from inside. OEM Certified Collision Centers have the highest standards. Auto body repair
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Составьте диалог с выражениями:

service center — автосервис
food service center — центр продовольственного снабжения
vehicle service center — автоцентр
computer service center — центр обслуживания электронно-вычислительной техники

automated service center — автоматизированный центр обслуживания
automatic data service center — автоматический центр информационного обеспечения
motion-picture service center — центр кинообслуживания
management data service center — центр обеспечения сбора и обработки управленческой информации
forward electrical/electronic service center — передовой центр технического обслуживания и ремонта электрического и электронного оборудования
family services center — центр по обслуживанию семей военнослужащих
community services center — центр бытового обслуживания военнослужащих
service operations center — центр управления службы тыла
self-service supply center — центр снабжения методом самообслуживания
serviced amplification center — обслуживаемый усилительный пункт
military service propaganda center — центр пропаганды военной службы

Переведите диалог на станции техобслуживания:

Good morning, sir, I have come for a 15 thousand kilometers servicing. I have an appointment for 10 a m.
- OK. Please, drive your car into the garage... Let me check the car and diagnose all possible problems... Right.
I will have to replace the tyres, change the brake disk and check the oil level.
- Fine. Please check why my wipers get stuck in the middle of the windshield. And I've got some other problems as well. I've noticed that the clutch is very noisy when I change gears.
-1 see. The plate must be worn out. But it's a normal thing at this mileage. And I can see you have some minor problem with the radiator.
- Can I get it repaired today too?
- I'm afraid it will take a couple of days to fix it. You can leave the car some other day. I'm sorry for the inconvenience.
- Ok then. Another problem is that my car won't start in the mornings. I usually call my neighbour to jump-start it.
- Let me open the hood and check all the hoses and belts. So... I'm glad to say they are all in working order. Did you check the battery? If you need to jump-start your car, you probably have to change the weak battery. When did you buy the last one?
- Oh, I guess it was ages ago. You're right. I have to replace it.
- Right. There it is. Everything is in order in your car. The oil level was below the full mark, so I've filled it up. Take our 30-day warranty card, please.
- Greatl How much is it?
- It's 300 $ in total,
- Here you are. Thanks for your help. See you for a 30 thousand servicing.
Перевод
- Доброе утро, сэр. Я приехал на техосмотр с пробегом 15 тыс. км. У меня запись на 10 утра.
- ОК. Пожалуйста, заезжайте на машине в гараж... Давайте я проверю авто и проведу диагностику всех возможных проблем... Что ж. Мне придется поставить новые шины, заменить тормозной диск и проверить уровень масла.

- Прекрасно. Пожалуйста, проверьте, почему дворники застревают посередине лобового стекла. У меня имеются еще и другие проблемы. Я заметил, что сцепление очень шумит при переключении передач.
- Понятно. Должно быть, диск стерт. Но это нормально при таком пробеге. И, как я вижу, у вас незначительная проблема с радиатором.

- Его можно отремонтировать сегодня?
- Боюсь, что потребуется пара дней для того, чтобы его починить. Вы можете оставить машину в какой- нибудь другой день. Прошу прощение за неудобство.
- Хорошо тогда. Другая проблема - моя машина не заводится по утрам. Я обычно прошу своего соседа, чтобы завести ее от постороннего источника.
- Давайте я открою капот и проверю все рукава и ремни. Итак... Я рад сообщить, что все в рабочем состоянии. Вы проверяли аккумулятор? Если вам приходится заводиться от постороннего источника, возможно, вам нужно заменить слабый аккумулятор. Когда вы покупали его в последний раз?
- О, думаю, прошла целая вечность. Вы правы. Мне надо его заменить.
- Что ж. Вот и все. В вашей машине все в порядке. Уровень масла был ниже отметки, поэтому я его заправил. Возьмите наш гарантийный талон на 30 дней.
- Здорово! Сколько с меня?
- В общей сложности, 300 $.
- Вот, возьмите. Спасибо за помощь. Увидимся на техосмотре с 30-тысячным пробегом.

Переведите на английский язык

Станция технического обслуживания (СТО) — организация, предоставляющая услуги населению и/или организациям по плановому техническому обслуживанию, текущему и капитальному ремонтам, устранению автополомок, установке дополнительного оборудования (тюнингу), восстановительному (кузовному) ремонту автотранспорта. СТО станция технического обслуживания-представляет собой комплекс сооружений и механизмов (подъёмники, рихтовочные стенды, шиномонтаж, балансировка, стенд развал-схождения, установка для замены масла, промывки топливной системы, рихтовочное и покрасочно-сушильное оборудование, стенды и тестеры для диагностики эл. цепи автомобиля), а также ручной и пневматический инструмент, собранные в одном месте для полноценного комплексного ремонта и обслуживания автомобилей.
Современные сервисные центры
Имеют также собственные склады запчастей, расходных материалов и комплектующих. Для удобства клиентов часто оборудуется отдельное помещение, в котором, как правило, имеются телевизор, торговый автомат, набор печатных изданий, кресла или диваны для сидения. Клиентские зоны сервисных центров, запрещающих нахождение клиента в цехе во время ремонта автомобиля, представляют возможность наблюдения за процессом ремонта через окно либо путем трансляции изображения с видеокамер, установленных в цеху.

Раздел 5. Части автомобиля

Тема 5.1. Типы автомобилей

Практическое занятие 17.

Exercise 1. Match the words on the left with their transcriptions.
saloon [kən∪vɜ:tIb(ə)l]
hatchback [∪lIməzi:n]
estate [sə∪lu:n]
convertible [væn]
van (фургон) [∪hætΣbək]
limousine [I∪steIt]
Exercise 2. Read the descriptions of different types of cars. Are they True or False? Correct the false ones.
Mind: (BrE) estate car – (AmE) station wagon (автомобиль с грузопассажирским кузовом)
(BrE) saloon – (AmE) sedan
Off-road cars are also called four-by-fours.
1. The saloon car is a car that has a separate enclosed space for bags, cases.
2. The van car (фургон) is a car with a roof which you can fold back or remove.
3. The hatchback car is a car with a door at the back that opens upwards.
4. The limousine car is a vehicle made for travelling over rough ground.
5. The estate car is a car with a lot of space for boxes.
6. The off-road car is a big expensive car, usually driven by a chauffeur.
7. The convertible car is a vehicle used for carrying goods which is covered and has metal sides, and is smaller than a truck.
Exercise 3. Match the words a–g with the pictures 1–7.
a) Saloon, b) estate, c) hatchback, d) convertible, e) off-road, f) sports car, g) limousine.
Exercise 4. Put in prepositions where necessary.
1. Vans have enough room … bags.
2. Off-road cars are especially good … rough roads.
3. Sports cars are very popular … young people.
4. In the limousine you have a lot … space.
5. Expensive cars are usually driven … chauffeurs.
6. Convertible cars are good … travelling in warm weather.
Exercise 5. Study the picture and then match a–l with 1–12.
a) windscreen wipers 1) зеркало заднего вида
b) steering wheel 2) багажник
c) speedometer 3) бампер
d) turn signal 4) рулевое колесо
e) windscreen 5) указатель поворота
f) wing mirror 6) кузов
g) number plate 7) капот
h) tyre 8) спидометр
i) bonnet 9) номерной знак
j) bumper 10) шина
k) boot 11) ветровое стекло
l) body 12) стеклоочиститель

Тема 5.2. Части автомобиля

Практическое занятие 18.

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.

Переведите текст:

Components of the Automobile

Automobiles are trackless, self-propelled vehicles for land transportation of people or goods, or for moving materials. There are three main types of automobiles. They are passenger cars, buses and lorries (trucks).The automobile consists of the following components: a)the engine; b)the framework: c)the mechanism that transmits the power-engine to the wheels; d)the body.

Passenger cars are, as a rule, propelled by an internal combustion engine. They are distinguished by the horse-power of the engine, the number of cylinders on the engine and the type of the body, the type of tpansmission, wheeelbase, weight and overall length.

There are engines of various designs. They differ in the number of cylinders, their position, their operating cycle, valve mechanism, ignition and cooling system.

Most automobile engines have six or eight cylinders, although some four-, twelve-, and sixteen-cylinder engines, are used. The activities that take place in the engine cylinder can be divided into four stages which are called strokes. The four strokes are: intake, compression, power and exhaust. «Stroke» refers to the piston movement. The upper limit of piston movement is called top dead centre, TDC. The lower limit of piston movement is called bottom dead centre, BDC.A stroke constitutes piston movement from TDC to BDC or from BDC to TDC. In other words, the piston completes a stroke each time it changes the direction of motion.

Teacher: Can you tell me English equivalents to: двигатель, сцепление, коробка передач, тормоза и ручное управление?

Student: Yes, I can. They are the engine, clutch, gearbox, brakes and steering system.

T.: Do you know what main units the automobile consists of?

S.: Yes, I do. They are the chassis, the body and the engine.

T.: What is the source of power?

S.: The engine is. It makes the car wheels rotate and the car move.
T.: What unit of the car carries the power to the wheels?
S.: The transmission does.
T.: What mechanisms does the transmission consist of?
S.: It consists of the clutch, gearbox, propeller shaft, rear axle, final drive and differential. It also includes brakes and steering system.
T.: And what is the clutch used for?
S.: It is used for disengaging the engine from the car wheels.
T.: What is the function of the brakes?
S.: They are necessary to slow or stop the car.
T.: And what about the steering system?
S.: It is used to turn the car in the direction the driver wants to go.
T.: That is right. You know the subject very well.

Подберите английские эквиваленты запасных частей автомобиля:

фара, сблокированная с указателем поворота;
радиатор системы охлаждения;
аккумуляторная батарея;
распределитель зажигания;
воздушный фильтр;
двигатель;
вакуумный усилитель с главным цилиндром гидропривода тормозов;
главный цилиндр гидропривода выключения сцепления;
рулевое колесо;
внутреннее зеркало заднего вида;
заднее сиденье;
запасное колесо;
задний тормоз;
пружина задней подвески амортизатор задней подвески;
задний мост;
карданная передача;
переднее сиденье;
наружное зеркало заднего вида;
рычаг стояночного тормоза;
рычаг переключения передач;
коробка передач;
педаль гидропривода сцепления;
педаль гидропривода тормозов;
педаль акселератора;
рулевой механизм;
передний тормоз;
пружина передней подвески с амортизатором;
топливный насос;
масляный фильтр

1. cornering lamp; 2. cooling system radiator; 3. accumulator battery;
4. ignition distributor; 5. air filter; 6. engine; 7. vacuum-power with master cylinder of hydraulic drive brakes; 8. master cylinder of hydraulic drive of clutch disengagement; 9. steering wheel; 10. inside (interior) mirror; 11. back seat;
12. spare wheel; 13. rear wheel brakes; 14. rear suspension spring;
15. rear suspension shock absorber; 16. rear axle; 17. cardan shaft;
18. front seat; 19. outside mirror; 20. parking brake lever; 21.gear change lever;
22. gearbox; 23. clutch pedal; 24. brake pedal; 25. accelerator pedal;
26. steering mechanism; 27. front wheel brake; 28. front suspension spring with shock absorber; 29. fuel pump; 30. oil filter.

Тема 5.2. Части автомобиля

Практическое занятие 19

Прочтите и переведите текст:

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

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.

Найдите в тексте ответы 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?

Закончите предложения, выбрав соответствующее по смыслу окончание.

1. The automobile is made up of...	1. a power transmission, running gear, steering and braking systems.
2. The engine is ...	2. the clutch, gearbox, propeller shaft, final drive, differential and axle shafts.
3. The engine includes ...	3. a hood, fenders and accessories.
4. The chassis consists of...	4. the engine, the chassis and the body.
5. The power transmission comprises ...	5. a frame with axles, wheels and springs.
6. The running gear consists of.. .	6. the source of power.
7. The body has ...	7. fuel, cooling, electric and lubricating systems.

Найдите в тексте английские эквиваленты предложений и запишите их.

1.Автомобиль состоит из трех основных частей: двигателя, шасси и кузова.

2.Двигатель — это источник энергии.
3.Двигатель включает в себя топливную, охлаждающую, смазывающую и электрическую системы.
4.Шасси включает в себя силовую передачу, ходовую часть, рулевую и тормозную системы.
5.Силовая передача (трансмиссия), в свою очередь, состоит из сцепления, коробки передач, карданного вала, главной передачи, дифференциала, заднего моста и полуосей.
6.Ходовая часть включает в себя раму с осями, колеса и рессоры.
7.Кузов включает в себя капот, крылья и вспомогательные аксессуары: отопитель, стеклоочистители, магнитолу, кондиционер и т. п.

Тема 5.3. Past Simple

Практическое занятие 20

Past Simple - простое прошедшее время

Время Past Simple используется для обозначения действия, которое произошло в определенное время в прошлом и время совершения которого уже истекло. Для уточнения момента совершения действия в прошлом при использовании времени Past Simple обычно используются такие слова, как ***five days ago*** (пять дней назад), ***last year*** (в прошлом году), ***yesterday*** (вчера), ***in 1980*** (в 1980 году) и т.п.

Образование Past Simple

Утвердительные предложения:

I played

He / she / it played

You played

We played

They played

Вопросительные предложения:

Did I play?

Did he / she / it play?

Did you play?

Did we play?

Did they play?

Отрицательные предложения:

I did not play

He / she / it did not play

You did not play

We did not play

They did not play

Для того, чтобы поставить английский глагол во время Past Simple, нужно использовать его «вторую форму». Для большинства глаголов она образуется прибавлением окончания **-ed:**

examine – examined, enjoy – enjoyed, close – closed

Однако есть также достаточно большая группа неправильных английских глаголов, которые образуют форму прошедшего времени не по общим правилам, для них форму прошедшего времени нужно просто запомнить.

*We **saw** your dog two blocks from here.*

Мы видели вашу собаку в двух кварталах отсюда.

В вопросительном предложении перед подлежащим нужно использовать вспомогательный глагол do в прошедшем времени – **did**, а после подлежащего поставить основной, значимый глагол **в начальной форме**:

Did you wash your hands? Ты помыл руки?

Did they sign the contract? Они подписали контракт?

В отрицательных предложениях перед глаголом нужно поставить вспомогательный глагол **did** и отрицательную частицу **not:**

We did not find our car. Мы не нашли свою машину.

I did not understand this question. Я не понял этот вопрос.

Случаи употребления Past Simple:

- Указание на простое действие в прошлом:

I saw Jeremy in the bank. Я видел Джереми в банке.

- Регулярные, повторяющиеся действия в прошлом:

The old man often visited me. Старик часто меня навещал.

I noticed this charming shop girl each time I went to buy something.

Я замечал эту очаровательную продавщицу каждый раз, когда шел за покупками.

- Перечисление последовательности действий в прошлом:

I heard a strange sound, looked back, and saw a huge cat sitting on the table.

Я услышал странный звук, обернулся и увидел здоровенного кота, сидящего на столе.

Exercises

1. Образуйте отрицательные и вопросительные предложения, исходя из данных.

Образец: She wrote this letter two days ago. – She **didn't write** this letter two days ago. – **Did** she **write** this letter two days ago?

1. It was very cold yesterday. 2. I arrived home late last night. 3. My boss left for London two weeks ago. 4. We had a good time at that party. 5. He got an excellent mark for his test. 6. Everybody laughed at him when he was at school. 7. It was very difficult for her to study two foreign languages. 8. My brother bought a new car yesterday. 9. My parents were at home last night. 10. We passed our last exam two days ago. 11. There were many

students at the lecture of this famous professor. 12. She brought a lot of souvenirs from her trip.

2. Задайте вопросы к подчёркнутым частям предложений.
1. They came to visit his friend yesterday. 2. Robert took his driving test last week. 3. Last year he didn't go to the South because of the exams. 4. These students were usually late for their lectures last term because they had transport problems. 5. Yesterday we went to the concert together. It was great! 6. My friends stayed at this hotel for two weeks last year. 7. I passed five exams last term and I got excellent marks.

3. Поставьте глагол в скобках либо в *Present Indefinite (Simple)*, либо в *Past Indefinite (Simple)*.
1. I often (*see*) my friend at the university. Yesterday I (*see*) him in the dean's office. 2. We always (*meet*) on Sundays. Last month we (*meet*) not only on Sundays, but also on Saturdays. 3. Dan usually (*walk*) to his office. Yesterday he (*take*) a taxi, because he (*be*) late for his work. 4. My sister usually (*have*) English lesson twice a week. Last week she (*have*) three English lessons.
5. They always (*watch*) TV in the evening. Yesterday evening they (*watch*) a football match. 6. She often (*lose*) things. Yesterday she (*lose*) her purse.
7. Our teacher of English always (*give*) us a lot of homework. At the last lesson she (*not* / *give*) us any task to be done at home. 8. I usually (*go*) to the club with my friends. Last night I (*go*) there alone, because my friends (*be*) out of town.

Тема 5.4. Комфорт и удобство

Практическое занятие 21

Comfort and convenience system
Exercise 1. Say if comfort and convenience of the car is important for the driver and why.
Exercise 2. Read the text and try to understand the meanings of the underlined words and word combinations.
Comfort and convenience system
Dashboard instruments provide the driver with certain information.
A speedometer measures a car’s speed. A fuel level gauge tells how full the gas tank is. Many cars have gauges that record oil (масло) pressure, battery voltage and the temperature of the engine coolant. Other cars have warning lights to alert the driver to problems with oil pressure, battery voltage, and engine temperature.
Virtually all cars come with a heater, which blows air warmed by engine heat into the passenger compartment. Some cars also have an air conditioner, an option that draws on engine power to produce cool air. Many other comfort and convenience devices are also optional. They incline audio equipment, power window regulator (электропривод стеклоподъемника), power door locks, power seat adjuster and power mirrors. A computer operated mechanism called cruise control makes it possible for a driver to cruise at a desired set speed without stepping on the gas pedal.
Exercise 3. Give the English equivalents to the following words and word combinations.

Спидометр; датчик указателя уровня топлива; давление масла;
салон; отопитель; кондиционер; аудиооборудование; электрозамок
двери; электропривод стеклоподъемника; электропривод регулировки
положения сиденья; электропривод зеркал; круиз-контроль; педаль
газа.

Exercise 4. Match the names of the devices on the left with their functions on the right. Then explain the functions of the devices.

Example: On-board computer provides information about average speed, average fuel consumption, range and outside temperature.

a) on-board computer 1) provides brilliant sound

b) CD-changer 2) holds up to six CDs

c) Hi Fi loud speaker system 3) allows adaptive transmission manage ent

d) the centre lock switch 4) provides information about average speed, average fuel consumption, range and outside temperature

5) 5-speed automatic gearbox e) ensures comfortable climatic conditions in the vehicle interior at any time of the year with manual adjustment of air volume and distribution

6) air conditioning system f) allows operation of the central locking system from within the passenger compartment

Тема 5.5. Дизайн автомобиля

Практическое занятие 22

Переведите текст.

HOW THE AUTOMOBILE LEARNED TO RUN

The automobile and the locomotive are cousins. They have the same grandmother, who lives in a museum in Paris. It has a long body on three wheels, a seat in the middle and a steam-boiler in front. It was built by a Frenchman, Nicholas Cugnot, in 1769.

Other engineers continued his work, producing various strange-looking cars. One had its steampipe in front, another at the back. One had three wheels, another had six. These queer machines were the parents of the locomotive and the automobile. They were just learning to go by themselves. Some could go as fast as six or seven miles an hour. People looked in amazement. To put a stove on wheels and expect it to take you somewhere!

In those days people traveled from one city to another in big stage-coaches. Each of them carried twenty passengers. The coachman sat on the top, driving a team of six horses. The postman sat beside him and blew a horn.

Then the first steam coaches began to roll along the same dusty roads. The steam coach had many enemies, first of all the owners of horse-drawn stage-coaches. In Britain they got the government to help them in their war against the steam coaches. Very strict rules for steam coaches were introduced. The war between the two kinds of vehicles lasted thirty years. The stage-coach won.

Введение и закрепление новой лексики:

accelerator	[ək'seləreıtə]	педаль "газа", акселератор
aerial	['eərıəl]	антенна
air conditioner	[eə][kən’dıʃənər]	кондиционер
air-bag	[eə][bæg]	подушка безопасности
alloy wheels	['ælɔı][wi:ls]	легкосплавные диски
alternator	['ɔ:ltəneıtə]	генератор
automatic shift	[,ɔ:tə'mætık][ʃıft]	автоматическая кп
axle	['æksl]	ось
axle-pin	['æksl][pın]	чека
back-up lights	[bæk][ʌp][laıts]	фонари заднего хода
battery	['bætərı]	аккумулятор
bearing	['beərıŋ]	подшипник
belt	[belt]	ремень
blinker	['blıŋkə]	индикатор
body	['bɔdı]	кузов
bonnet	['bɔnıt]	капот
brake	[breık]	тормоз
brake lights	[breık][laıts]	стоп-сигналы
brake master cylinder	[breık]['mɑ:stə]['sılı də]	главный тормозной цилиндр
brake rotor/ disc	[breık]['rəutə]	тормозной диск
brakes	[breıks]	тормоза
breakdown	[’breık,daʊn]	поломка, сломаться
bumper	['bʌmpə]	бампер
caliper	['kælıpəz]	тормозной суппорт
camber	['kæmbə]	угол развала

camshaf	['kæmʃɑːft]	распредвал
cap	['kæp]	крышка
carburetor	['kɑ:bjuretə]	карбюратор
caster	['kɑ:stə]	угол продольного наклона оси поворота колеса
choke	[ʧəuk]	воздушная заслонка
clutch	[klʌʧ]	сцепление
clutch plate	[klʌʧ][pleɪt]	ведомый диск сцепления
cl tch release bearing	[klʌʧ][rɪ'li:s]['beərɪŋ]	выжимной подшипник сцепления
column shift	['kɔləm][ʃift]	подрулевой рычаг переключения передач
combustion chamber	[kəm'bʌsʧən] ['ʧeɪmbə]	камера сгорания
compartment	[kəm'pɑ:tmənt]	отсек
connecting rod	[kə'nektɪŋ][rɔd]	шатун
coolant	['ku:lənt]	охлаждающая жидкость
coolant tank	['ku:lənt][tæŋk]	расширительный бачек системы охлаждения
cowl	[kaul]	капот
crankshaft	['kræŋkʃɑ:ft]	коленвал
cylinder	['sɪlɪndə]	цилиндр
cylinder block	['sɪlɪndə][blɔk]	блок цилиндров
cylinder head	['sɪlɪndə][hed]	головка блока цилиндров
diesel	['di:zəl]	дизельное топливо
differential	[,dɪfə'renʃəl]	дифференциал
distributor	[dɪs'trɪbjutə]	распределитель
door	[dɔ:]	дверь
door handle	[dɔ:]['hændl]	дверная ручка

door lock	[dɔ:][lɔk]	дверной замок
drum	[drʌm]	тормозной барабан
engine	['enʤın]	двигатель
engine block	['enʤın][blɔk]	блок цилиндров
exhaust	[ıg'zɔ:st]	выхлопная труба, выпуск, выхлоп
exhaust manifold	[ıg'zɔ:st]['mænıfəuld]	выпускной коллектор
exhaust system	[ıg'zɔ:st]['sıstım]	выпускная система
fan	[fæn]	вентилятор
fan clutch	[fæn][klʌʧ]	термомуфта вентилятора
fan cover	[fæn]['kʌvə]	кожух вентилятора
fast idle	[fɑ:st]['aıdl]	обороты холостого хода
fasteners	['fɑ:snəs]	крепеж
fender	['fendə]	крыло
filter	['fıltə]	фильтр
fix	[fıks]	починить
floor shift	[flɔ:][ʃıft]	напольный рычаг переключения передач
flywheel	['flaıwi:l]	маховик
fog lights	[fɔg][laıts]	противотуманные фары
frame	[freım]	рама
fuel door	[fjuəl][dɔ:]	дверца топливного бака
fuel lines	[fjuəl][laı s]	топливопроводы
fuse	[fju:z]	предохранитель
gap	[gæp]	зазор
gas gauge	[gæs][geıʤ]	указатель уровня топлива
gas pedal	[gæs]['pedl]	акселератор, педаль газа
gas tank door	[gæs][tæŋk][dɔ:]	люк бензобака

gasket	['gæskɪt]	прокладка
gauge	[geɪʤ]	и мерительный прибор - указатель
gear	[gɪə]	передача
gear lever	[gɪə]['li:və]	рычаг переключения передач
gear shift	[gɪə][ʃɪft]	коробка передач, рычаг переключения передач
gear stick	[gɪə][stɪk]	рычаг переключения передач
gearbox	['gɪəbɔks]	коробка передач
gearcase	['gɪəkeɪs]	коробка передач
grease	[gri:s]	смазка
guide	[gaɪd]	направляющая планка
handbrake	['hæn(d)breɪk]	ручной тормоз
head light	[hed][laɪt]	передние фары
header tank	['hedə][tæŋk]	расширительный бачек системы охлаждения
headliner	['hedˌlaɪnə]	обшивка потолка в салоне
heater	['hi:tə]	отопитель
high beam	[haɪ][bi:m]	дальний свет
hinge	[hɪnʤ]	дверная петля
hitch	[hɪʧ]	сцепное устройство
hood	[hud]	капот
horn	[hɔ:n]	звуковой сигнал - клаксон
hose	[həuz]	шланг
hub	[hʌb]	ступица
idle jet	['aɪdl][ʤet]	жиклер холостого хода
jet	[ʤet]	жиклер
lamp	[læmp]	фара в сборе
lens	[lenz]	стекло фары

lever	['li:və]	рычаг
license plate	['laısəns][pleıt]	номерной знак
license plate number	['laısəns][pleıt] ['nʌmbə]	номерной знак
lock	[lɔk]	замок, фиксатор, блокировка
master cylinder	['mɑ:stə]['sılındə]	главный цилиндр
motor	['məutə]	мотор
mount	[maunt]	опора
mud flap	[mʌd][flæp]	брызговик
mudflap	['mʌdflæp]	брызговик
muffler	['mʌflə]	выхлопная труба
neutral	['nju:trəl]	нейтральная скорость
oil pan	[ɔıl][pæn]	поддон картера двигателя
outer rod	['autə][rɔd]	внешняя тяга
outside mirror	['aut'saıd]['mırə]	боковые зеркала заднего вида
overlap	[ˌəuvə'læp]	перекрытие (клапанов)
oxygen sensor	['ɔksıʤən]['sensə]	датчик кислорода
parking ight	['pɑ:kıŋ][laıt]	габариты
petrol cap	['petrəl]['kæp]	люк бензобака
petrol gauge	['petrəl][geıʤ]	указатель уровня топлива
pipe	[paıp]	труба
piston	['pıstən]	поршень
piston ring	['pıstən][rıŋ]	поршневое кольцо
pliers	['plaıəz]	клещи
power locks	['pauə][lɔks]	замки с электроприводом
power steering	['pauə][stıəıŋ]	усилитель рулевого управления
quarter window	['kwɔ:tə]['wındəu]	треугольное окошко

radiator	['reɪdɪeɪtə]	радиатор
rear axle	[rɪə]['æksl]	задний мост
rear light	[rɪə][laɪt]	задний габаритный фонар
rear window	[rɪə]['wɪndəu]	заднее стекло
rear-view mirror	[rɪə][vju:]['mɪrə]	зеркало заднего вида
relay	[rɪ'leɪ]	реле
reservoir	['rezəvwɑ:]	бачек
reverse	[rɪ'və:s]	задний ход
reversing lights	[ʀ(ə)vɛʀɪŋ][laɪts]	фонари заднего хода
rim	[rɪm]	колесный диск
rod	[rɔd]	тяга
rod end	[rɔd][end]	наконечник тяги
roof	[ru:f]	крыша
rotor	['rəutə]	бегунок
screwdriver	['skru:,draɪvə]	отвертка
seal	[si:l]	сальник
shaft	[ʃɑ:ft]	вал
shift	[ʃift]	включать передачу, передача
shift stick	[ʃift][stɪk]	рычаг переключения передач
shock	[ʃɔk]	амортизатор
shock absorber	[ʃɔk][əb'sɔ:bə]	амортизатор
shoe	[ʃu:]	тормозная колодка
side mirror	[saɪd]['mɪrə]	боковое зеркало
silencer	['saɪlənsə]	выхлопная труба, глушитель
sliding sunroof	[slɪdɪŋ]['sʌnru:]	люк
spare part	[speə][pɑ:t]	запчасть
spark plug	[spɑ:k][plʌg]	свеча зажигания

sparking plug	[spɑ:kɪŋ][plʌg]	свеча зажигания
speedometer	[spɪ'dɔmɪtə]	спидометр
splash guard	[splæʃ][gɑ:d]	брызговик
spring	[sprɪŋ]	пружина
sprocket	['sprɔkɪt]	шестерня
stabilizer bar	['steɪbɪlaɪzə][bɑ:]	стабилизатор поперечной устойчивости
starter motor	['stɑ:tə]['məutə]	стартер
steering lock	[stɪəɪŋ][lɔk]	блокировка рулевого колеса
steering wheel	[stɪəɪŋ][wi:l]	рулевое колесо
stick shift	[stɪk][ʃɪft]	ручная кпп
top-lights	[stɔp][laɪts]	стоп-сигналы
strut	[strt]	амортизаторная стойка

Тема 5.6. Система безопасности

Практическое занятие 23

Safety system

Exercise 1. Form the comparatives and superlatives of the following adjectives.
Example: easy – easier – the easiest
Clean, safe, comfortable, high, sophisticated, good, extreme, predictable.

Exercise 2. Look through the text below and say what it is about.

Exercise 3. Read the text and fi ll in the gaps with the words from the box.

While car making is becoming cleaner, cars are becoming … . Safety … are also becoming more sophisticated. After many injuries to children and small women, car companies are trying to make the front-impact airbag safer. Using infra-red or video systems, suppliers are developing ways to detect the size of the … in the front seat and to measure how far back they are sitting. This will determine how rapidly the … infl ates (накачивается), or whether it infl ates at all.

There are other … devices. The anti-lock brake system ensures the highest degree of driving safety. Many of the … components are made of aluminium to ensure excellent ground contact. Bumpers (бамперы) with shock absorbers withstand impacts up to 4 km/h without … . The crash sensor overrides the centre lock function in the event of an accident (the doors can then be opened), and the interior lights are … . Safety restraint system for driver and front passenger is a … seatbelt (ремень безопасности) which provides

the best possible restraint in the event of a collision.
damage devices airbag passenger safer
chassis switched on safety 3-point
Exercise 4. Give the English equivalents to the following words and word combinations.
Переднее сиденье, подушка безопасности, гарантирует высочайшую степень безопасности, выдерживает удар до …, без повреждений, датчик удара, блокирует функцию, в случае столкновения, ремень безопасности.
Exercise 5. Put questions to the underlined words.
1. Car companies are trying to make car driving safer.
2. Suppliers are developing ways to detect the size of the passenger.
3. The size of the passenger will determine how rapidly the airbag infl ates.
4. The crash sensor overrides the centre lock function in the event of an accident.
5. Seatbelts provide the best possible restraint in the event of a collision.

Тема 5.7. Безопасность на дороге

Практическое занятие 24

Road Safety
Every year several thousand people are lolled on the roads. Every year hundred thousand people are injured. These people are killed and injured in road accidents.
Accidents are often caused by carelessness of the people. There are rules that help to make the roads safe, but people do not follow the rules.
In our country as in most other countries traffic keeps to the right, but in Great Britain traffic keeps to the left. While driving the car you can get into trouble. The data indicate that in road accidents the passengers who use different kinds of safety belts suffer from the impacts less than the passengers who don't use ones. It was shown that safety belts had reduced the risk of serious injuries.
Accidents can be divided into three types as follows:
1.Head-on impacts between cars;
2.Side impacts caused by accidents at intersections;
3.Rear impacts in which the car (often stationary) is struck from the rear by another car.
Head-on accidents are the most numerous in which the driver and the front seat passenger suffer head injuries. That is why the most important function of safety belts is to protect the driver and passenger from head injury.
In up-to-date cars various types of safety cushions are used to protect the lives of those sitting in the car. But the gold rule is to be careful on the road while driving the car.
As far as the pedestrians are concerned they should obey the following rules: before crossing the road, stop and look both ways. Look right, look left, and then look right again. If the road is clear, it is safe to cross it.

1.Прочтите текст с целью общего понимания содержания.
2.Найдите в тексте абзац, в котором идет речь о типах столкновений.
3.Какова основная функция ремней безопасности ?
4.Каковы основные правила поведения пешеходов при пересечении проезжей части улицы?

Тема 5.8. Present Perfect

Практическое занятие 25

Present Perfect.

Do some exercises:

Exercise 1. Раскройтескобки, употребляя глаголы в *Present Perfect* или Past Simple:

1. The sun (not to rise) yet, but the sky in the east is getting lighter every minute. 2. I (to see) you walking along the street the other day with a heavy bag. 3. I (not to read) the newspaper today. 4. It is very late, and trams (to stop) running: we must find a taxi to get home. 5. How many times you (to be) to St. Petersburg? 6. At last I (to translate) this article: now I shall have a little rest. 7. We (to go) to the country yesterday, but the rain (to spoil) all the pleasure. 8. My watch was going in the morning, but now it (to stop). 9. The lecture (not yet to begin) and the students are talking in the classroom. 10. She just (to go) out. 11. She (to leave) the room a moment ago. 12. We (not yet to solve) the problem. 13. When it all (to happen)? 14. The morning was cold and rainy, but since ten o'clock the weather (to change) and now the sun is shining brightly. 15. Show me the dress which you (to make). 16. Oh, how dark it is! A large black cloud (to cover) the sky. I think it will start raining in a few minutes. 17. Oh, close the window! Look, all my papers (to fall) on the floor because of the wind. 18. When you (to open) the window? — I (to open) it ten minutes ago.

Сравните употребление *Present Perfect, Present Continuous* и*Past Simple.*

Exercise 2. Раскройте скобки, употребляя глаголы в *Present Perfect, Present Continuous, Present Simple* илиPast *Simple.*

1. Please give me a pencil, I (to lose) mine. 2. I (not to meet) Peter since Monday. 3. Nina just (to finish) work. 4. Where Sergei (to be)? — He (to go) home. He (to leave) the room a minute ago. 5. What you (to read) now? — I (to read) "Jane Eyre" by Charlotte Bronte. 6. They (to read) "Ivanhoe" by Walter Scott a month ago. What about you? You (to read) "Ivanhoe"? 7. My watch (to stop). There (to be) something wrong with it. 8. You (to see) Jack today? — Yes, I (to see) him at the institute. 9. You (to hear) the new symphony by M.? — Yes, I... . — When you (to hear) it? — I (to hear) it last Sunday. 10. You (to change) so much. Anything (to happen)? 11. What you (to do) here at such a late hour? You (to write) your composition? — No, I (to write) it already. I (to work) at my report. — And when you (to write) yourcomposition? — I (to finish) it two days ago. 12. I say, Tom, let's have dinner. — No, thank you, I al-I ready (to have) dinner. 13. What the weather (to be) like? It still (to rain)? — No, it (to stop) raining.

Exercise 3. Раскройте скобки, употребляя глаголы в *Present Perfect, Present Simple, Present Continuous, Past Simple* или*Past Continuous:*

1. They (to go) to the Hermitage last week. 2. They (to be) to the Hermitage twice this week. 3. After school yesterday he (to come) home, (to have) dinner, (to read) an article from the latest magazine and (to begin) doing his homework. 4. When your friend (to

return) from the south? — She (to return) yesterday. — You (to go) to the station to meet her? — No, I..., I (to be) too busy. 5. With whom you (to discuss) this question yesterday? 6. I (to see) this film this week. I like it very much. 7. When I (to enter) the kitchen, I (to see) that my mother (to stand) at the table and (to cut) some cabbage. She (to cook) dinner. 8. As soon as I (to hear) a cry, I (to run) out of the room and (to see) that a child (to lie) on the ground and (to cry). "What (to happen)? Why you (to cry)? You (to hurt) yourself?" I asked. 9. As soon as I (to see) him, I (to understand) that he (to work) hard. He (to write) something and (not to notice) anything. 10. When I (to come) home yesterday, the children (to run) and (to sing) merrily. "We (to learn) a new song!" they cried. 11. When the young man (to enter) the room, she (to look) at him in surprise."What you (to want) to tell me?" she (to say). "Why you (to come)?" 12. It (to rain) hard when I (to leave) home yesterday, so I (to return), (to put) on my raincoat and (to start) again. 13. Your brother (to return) from the north? — Yes, he (to come) a few days ago. 14. You (to be) to the Crimea? When you (to be) there? — I (to be) there in 1993. 15. Where (to be) your brother? — He just (to come) home. He (to take) a shower in the bathroom now.

Раздел 6. Двигатель

Тема 6.1. Компоненты четырехтактного двигателя

Практическое занятие 26

Vocabulary.
to make – заставлять
to be referred to as – именоваться, называться
to term – называть
to cause – заставлять, вызывать, причинять
although – хотя
to create – создавать
shaft – вал
engine – двигатель
source – источник
wheel – колесо
internal combustion engine – двигатель внутреннего сгорания
combustion chamber – камера сгорания
to take place – происходить

Read and translate the text.

ENGINE
The engine is the source of power that makes the wheels go around and the car move. It is usually referred to as an internal combustion engine because gasoline is burned within its cylinders or combustion chambers.
This burning, or combustion, takes place an a high speed termed as an ”explosion”. The high pressure thus created causes a shaft to turn or rotate.

This rotary motion is transmitted to the car so the wheels rotate and the car moves. Most automobile engines have four or six cylinders, although some eight-, twelve- and sixteen cylinder engines are in use.

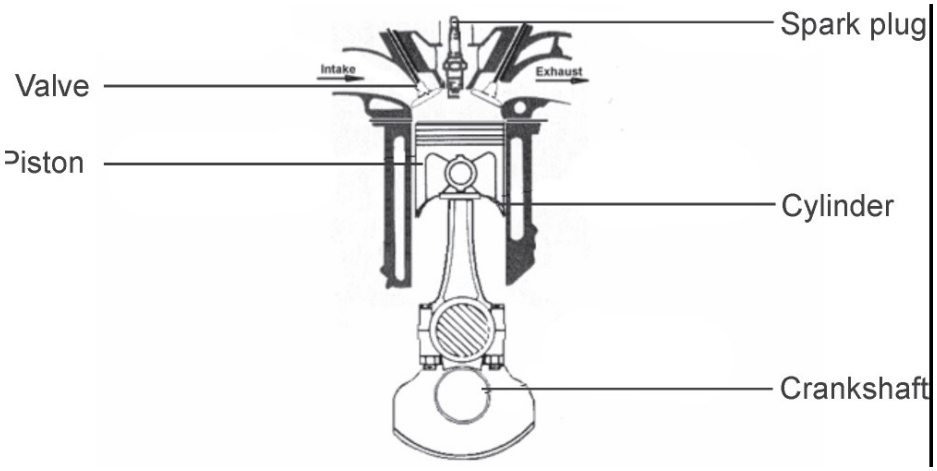
3. Answer the questions:
1. What is transmitted to the car so the wheels rotate?
2. How many cylinders have most automobile engines?
3. What is the source of power?
4. What can you say about internal combustion engine?
4. Fill in missing words:
1. This burning, or combustion, takes place an (большая скорость).
2. Gasoline is (сгорает внутри цилиндров) or combustion chambers.
3. Power that makes the (колёса вращаются) and the car move.
4. The high pressure thus created causes a (вал поворачивается) or rotate.
5. Most (автомобильные двигатели) have four or six cylinders.

5. Translate into Russian:
car moves
high pressure
internal combustion engine
wheels go around
source of power
rotary motion
sixteen cylinder engines
transmitted to the car
Most automobile engines
within its cylinders

Тема 6.1. Компоненты четырехтактного двигателя

Практическое занятие 27

Key components of a four-stroke engine
Exercise 1. Match the words and their transcription. Pronounce the words correctly and remember how they are pronounced.
piston [∪sIlIndə]
cylinder [∪pIst(ə)n]
valve [kəm∪b℘stΣ(ə)n]
fuel [vælv]
gas [∪tΣeImbə(r)]
pedal [∪fju:əl]
combustion [gæs]
chamber [∪ped(ə)l]
Exercise 2. Look at the picture, try to give the Russian equivalents to the following words: spark plug, valve, cylinder, crankshaft, piston.



Exercise 3. Match a–j with 1–10.
a) four-stroke engine 1) цилиндр
b) cylinder 2) клапан
c) piston 3) четырёхтактный двигатель
d) valve 4) поршень
e) four-cylinder engine 5) масло
f) crankshaft 6) распределительный вал
g) oil 7) ход, такт
h) camshaft 8) четырёхцилиндровый двигатель
i) stroke 9) коленчатый вал
j) spark plug 10) свеча зажигания

Exercise 4. Match a–i with 1–9 to make up word combinations.
a) petrol 1) stroke
b) motor 2) engines
c) spark 3) injector
d) fuel 4) engine
e) oil 5) plugs
f) exhaust 6) engine
g) power 7) vehicles
h) four-stroke 8) outlet
i) four-cylinder 9) sump

Тема 6.2. Блок цилиндров

Практическое занятие 28

Exercise 1. Correct mistakes in the following sentences.
1. There are not much vehicles with two-stroke engines.
2. I’d like to know how many spark plugs are there in the engine.
3. Are there some lorries with two-stroke engines?
4. I have few tools. Let’s repair the car.
5. There are a few nails left. We need to buy some more.
Exercise 2. Read the text and choose the word which belongs to the text (one in each

group).
The majority of cars have the engine in the front of the (vehicle, truck). Others have it mounted in the rear or the middle. The engine block, also called the (cylinder, piston) block, houses the engine's internal parts.
The number and arrangement of the cylinders (varies, changes) among the makes of cars. American cars have 4, 6 or 8 cylinders. Cars made in other countries also have 3, 2, 5 or even 12. In most cases, the cylinders are arranged either in a straight (line, circle) or in two equal rows set at an (angle, degree) to form a V-shape.
An in-line engine with, for example, 4 or 6 (cylinders, crankshafts) is called a straight 4 or a straight 6. A V-type engine with, for example, 4, 6 or 8 cylinders is called a V-4, V-6, V-8. Typically, the more cylinders an engine has, the (greater, less) its power.
Exercise 3. Match a–e with 1–5 to make up word combinations and translate them.
a) engine 1) line
b) internal 2) engine
c) straight 3) block
d) in-line 4) engine
e) V-type 5) parts
Exercise 4. Say whether the following sentences are True or False.
1. The majority of cars have the engine in the rear of the vehicle .
2. The engine block is also called the cylinder block.
3. In most cases, the cylinders are arranged either in a straight line or in three equal rows.
4. An in-line engine with 4 cylinders is called a straight 4.
5. The more cylinders an engine has, the more its power.
Exercise 5. Put questions to the underlined words and word combinations.
1. Some cars have the engine in the rear or the middle of the car.
2. The engine block houses the engine's internal parts.
3. The number of cylinders depends on the make of the car.
4. In a in-line engine the cylinders are arranged in a straight line.
5. A V-type engine with 6 cylinders is called a V-6.

Тема 6.3. Времена Past Continuous и Past Perfect

Практическое занятие 29

Упражнение 1. Раскройте скобки, употребляя глаголы в Past Simple, Past Continuous и Past Perfect.

1. By eight o'clock yesterday I (to finish) my work and at eight I (to play) the piano.
2. By six o'clock father (to come) home and at six he (to have) dinner.
3. By nine o'clock yesterday grandmother (to wash) the dishes and at nine she (to watch) TV.

4. When I (to meet) Tom, he (to eat) an ice-cream which he (to buy) at the corner of the street.
5. When father (to come) home, we (to cook) the mushrooms which we (to gather) in the wood.
6. When I (to see) Ann, she (to look) at the flowers which she (to pick) in the field.
7. When I (to come) home yesterday, I (to see) that my little brother (to break) my pen and (to play) with its pieces.
8. When I (to open) the door of the classroom, I (to see) that the teacher already (to come) and a student (to write) a test.
9. When I (to come) home my sister (to read) a book which she (to bring) from the library.
10. When mother (to come) home, the children (to eat) the soup which she (to cook) in the morning.
11. When I (to ring) up Mike, he still (to learn) the poem which he (to begin) learning at school.
12. When I (to look) out of the window, the children (to play) with a ball which Pete (to bring) from home.

Упражнение 2. Раскройте скобки, употребляя глаголы в Past Simple, Past Continuous u Past Perfect.

Last night we (to go) to a football match. We (to take) a bus. The bus (to be) overcrowded as many people (to want) to see the match. We (to get) off the bus and (to go) in the direction of the stadium. While we (to cross) the road, I (to see) Victor. He (to stand) at the corner. He said he (to wait) for his friend who (to come) to St. Petersburg the day before and (to wish) to see the new stadium. A man (to come) up to me and asked if I (to have) a spare ticket for the match. Victor told us that two boys just (to ask) him whether he (to have) a spare ticket. We (to enter) the stadium just as the football players (to come) out on to the field. At the entrance to the stadium we (to meet) Sergei. He (to show) us to our seats and (to ask) me if I (to play) football in my childhood. We (to agree) to meet in the snack bar during the interval.

Упражнение 3. Раскройте скобки, употребляя глаголы в Past Simple, Past Continuous u Past Perfect.

1. There (to be) two men in the room. One of them (to write) something while the other (to read) a newspaper.
2. He (not to tell) me that he (to receive) a telegram from her.
3. She (to say) that he (to give) her the wrong address.
5. I (to ask) him where he (to put) my hat.
6. He (to tell) us that they (to spend) all the money.
7. I (to sit) in an armchair and (to think) of my coming trip across the North Sea when the door suddenly (to open) and an old friend of mine whom I (not to see) for a very long time (to enter) the room.
8. She (to come) to see us just at the time when we (to have) dinner. It (to be) the first time I (to see) her.
9. I (to see) him when he (to leave) the hotel.

10. He (to leave) the house before I (to have) time to ask him anything.
11. I (to find) the old man in the garden. He (to talk) to some children who (to stand) around listening to him.
12. He (to tell) me that he (to learn) it from the newspaper.
13. He (to enter) the room, (to take) something from the desk and (to go) out.

Тема 6.4. Принцип работы двигателя

Практическое занятие 30

"WHAT IS AN INTERNAL COMBUSTION ENGINE?"
Vocabulary.
detachable - съемный
secure - укреплять, прикреплять
to exert – влиять, оказывать влияние
duration - продолжительность, длительность
succession – последовательность
to comprise - включать, заключать в себе
to succeed - следовать за чем-либо
admission – поступление, доступ, вход
motion – движение
to take place – происходить, случаться
to secure – охранять, предотвращать
internal combustion engine – двигатель внутреннего сгорания
mechanical energy – механическая энергия
to consist of – состоять из…..
inside – внутри
crankshaft – коленвал
rotary – вращающийся
flywheel – маховик
inlet valve – впускной клапан
exhaust valve – выпускной клапан
camshaft – распредвал
constantly – постоянно
majority – большинство
revolution – поворот

Read and translate the text.
WHAT IS AN INTERNAL COMBUSTION ENGINE?
The gasoline engine is that type of machine where power generated within the cylinders. The engine is set in motion by the explosions of a mixture of gasoline and air.
Combustion takes place above the pistons. The detachable head is secured to the top of the cylinder block. It encloses the cylinder block and forms the combustion chamber. When the fuel is burnt within the cylinders the expansion of gases is used for producing piston movement. Such a type of engine is called the internal combustion engine.
In any internal combustion engine the gas charge is drawn into the cylinder.

The internal combustion engine converts heat into mechanical energy by burning a mixture of oil fuel and air within its cylinder or cylinders. The internal combustion engine consists of the following: 1. A cylinder (there may be several). 2. A piston which moves up and down inside cylinder. 3. A crankshaft connected to the piston by a rod known as a connecting rod. The connecting rod turns the up-and-down motion of the piston into a rotary motion of the crankshaft. 4. A flywheel which keeps the crankshaft moving when the pressure is exerted upon the top of the piston. 5. Two valves known as the inlet valve and the exhaust valve. 6. A camshaft which is used to open and close the valves. 'Combustion engines may be divided into types according to the duration of the cycle on which they operate. By a cycle is meant the succession of operations in the engine cylinder which constantly repeats itself. The great majority of modern automobile engines operate on the four-stroke cycle.
It is completed in four strokes of the piston, or during two revolutions of the crankshaft. Engines are also being built to operate on a cycle which is completed in two piston strokes. The four-stroke cycle comprises the following four phases or operations, which succeed one another in the order in which they are given: Admission of the charge to the cylinder. Compression of the charge. Combustion of the charge. Expulsion of the products of combustion.

Answer the questions:
1. What are the operations in the four-stroke cycle?
2. What can you say about gasoline engine?
3.Discribe the internal combustion engine.
4. A camshaft which is used to open and close the valves, isn’t it?
5. Why is such a type of engine called the internal combustion engine?
6. What energy does the internal combustion engine convert?
7. How many valves are there in the internal combustion engine? What are they?

Fill in missing words:
1. It is completed in (четыре хода) of the piston, or during two revolutions of the crankshaft.
2. In any internal combustion engine the (топливо) charge is (всасывается) the cylinder.
3. The detachable head is secured to the top of the (блок цилиндров).
4. The (двигатель) is set in motion by the explosions of a (смесь) of gasoline and air.
5. A (маховик) which keeps the (коленвал) moving when the pressure is exerted upon the top of the piston.
6.It is completed in four strokes of the (поршень) or during two
(поворота) of the crankshaft.

Translate into Russian:
the inlet valve and the exhaust valve
gasoline engine
combustion chamber
air within its cylinder
close the valves
two revolutions of the crankshaft
in two piston strokes

connecting rod.
great majority
the inlet valve and the exhaust valve
duration of the cycle

Тема 6.4. Принцип работы двигателя

Практическое занятие 31

Engine operation

Exercise 1. Read the following words, pay attention to the way the letter “o” is read.

down [daYn]
four [f͡ɔ:]
stroke [strəYk]
open [∪əYpən]
piston [∪pIst(ə)n]
power [∪paYə(r)]
move [mu:v]
position [pə∪zIΣ(ə)n]

Exercise 2. Read the text and fi ll in the gaps with the words in the box.

down four-stroke stroke opens piston spark plug power mixture exhaust moves up

The gasoline engine operates on a … cycle in most cars.
On the intake stroke, the piston moves … the cylinder and draws in a fuel-air mixture as the intake valve … . The valve then closes, and the … moves back up the cylinder on the compression … , squeezing the fuel-air … . At the top of the stroke, the … ignites the compressed mixture. The burning causes the gases to expand, forcing the piston down in the … stroke. On the exhaust stroke, the piston … again and pushes the burned gases out the open … valve. The exhaust valve then closes, the intake valve opens, and the cycle starts again.

Exercise 3. Give the English equivalents to the following word combinations.
Поршень движется вверх, поджигать смесь, воздушно-топливная смесь, впускной клапан, такт сжатия, в верхней точке, двигая поршень вниз, выпускной клапан.

Exercise 4. Describe the complete cycle of operation for all the cylinders at any position of the crankshaft, fi lling in the gaps. Use the information from the table below.
The layout of a multi-cylinder engine is normally in-line and the fi ring order is generally 1342. Each cylinder is always on a different stroke from all the others. When cylinder 1 is on the … stroke, cylinder 2 is on the … , cylinder 3 is on the … , cylinder 4 is on the … . The main advantage of this engine is that the power … is once every 180°.

Crankshaft position Cylinder 1 Cylinder 2 Cylinder 3 Cylinder 4
0–180 degrees power exhaust compression
induction
180–360 degrees exhaust induction power compression
360–540 degrees induction compression
exhaust power
540–720 degrees compression
power induction exhaust

Exercise 5. Match a–f with 1–6 to make up word combinations.
a) multi-cylinder 1) position
b) crankshaft 2) mixture
c) exhaust 3) gases
d) intake 4) valve
e) compressed 5) stroke
f) burned 6) engine

Тема 6.5. Типы двигателей

Практическое занятие 32

Topic “STEAM ENGINE.”
Vocabulary.
steam chest – паросборник
the more...the more - чем больше….тем больше
mostly - главным образом, большей частью
to invent – изобретать
to boil - кипеть
pipe - труба
steam - пар
valves - клапана
piston - поршень
to reach - достигать
pressure - давление
stroke - ход
speed - скорость
opening – отверстие

Read and translate the text.
STEAM ENGINE.
The steam engine was the first high-speed engine ever invented. The principle of the steam engine is simple. When water is boiled, it changes in to steam. The more the steam is heated, the more pressure it has.
A steam engine has some important parts. One is a boiler where fire turns water into steam. The steam goes through a pipe to the other important part - the steam chest with a cylinder and a piston in it. There are valves, or openings, in the steam chest. As the piston moves in the cylinder, it opens and closes the valves automatically, so that fresh steam

enters just when the piston has reached the end of its stroke. A rod from the piston is connected to a wheel.
Now steam engines are mostly used in locomotives.

Answer the questions:
1. What is connected to a wheel?
2. What are some important parts of a steam engine?
3. What can you say about the principle of the steam engine?
4. Are there are valves, or openings, in the steam chest?
5. How now steam engines are mostly used?

Fill in missing words:
1. One is a boiler where _____water into steam.
2. A rod from the piston _____to a wheel.
3. The steam engine was the first _____ever invented.
4. As the _____in the cylinder, it opens and closes the_____, so that fresh steam enters just when the piston has reached the end of its stroke.
Missing words: fire turns, valves automatically, high-speed engine, is connected, piston moves.
Translate into English:
пар нагревается
поршень движется
важные части
огонь превращает воду
высокоскоростной двигатель
паросборник с цилиндром
окончание хода
соединяется с колесом
большее давление

Тема 6.5. Типы двигателей

Практическое занятие 33

Topic “DIESEL ENGINE”
Vocabulary.
gallon - галлон - англ. (4,54 л); амер. (3,78 л).
besides – помимо, кроме
to last - длиться, продолжаться, сохраняться
screw – винт
like - похожий, подобный
directly - прямо, непосредственно
alone - один, только
immediately - немедленно, тотчас же
spray - брызги, струя, разбрызгивать, распылять
fuel – топливо
spark plug – искра свечи

to connect - соединять
charging – загрузка
to inject – впрыскивать
to ignite – зажигать
to use – использовать

Read and translate the text
.
DIESEL ENGINE
A diesel engine is like a gasoline engine but simpler. Diesel engines are usually larger and can do more work. The fuel used in a diesel engine is oil. In diesel engines only air is blown into the cylinder. It does not need spark plugs. Diesel engines can be four - stroke ones and two - stroke ones.
Diesel engines use a cheaper kind of fuel and give more power for each gallon of fuel burned than gasoline engines. Besides they last much longer. In new trains and ships diesel engines run large generators which make electricity. The electricity runs motors which are connected to the wheels of the train or to the ship's screws.
The diesel engine is an internal combustion engine. It uses oil as a fuel. The fuel is introduced in the form of spray and the engine requires no special ignition device.
In the four-stroke cycle Diesel engine air alone is drawn into the cylinder on the charging stroke. This air is being compressed on the return stroke to a very high pressure. The result of the combustion is that the air is heated to a high temperature.
The heavy oil injected into the air at the end of the stroke will be immediately ignited by It. The oil burns rapidly, but without explosion. The compression pressure is much higher than that in any other oil or gas engine.

Answer the questions:
1. What happened at the end of the stroke?
2. Is in the four-stroke cycle Diesel engine air or petrol drawn into the cylinder on the charging stroke?
3. What is the result of the combustion?
4. What is fuel used in a diesel engine?
5. A diesel engine is like a gasoline engine but simpler, isn’t it?
6. How diesel engines are used in new trains and ships?

Fill in missing words:
1. The _____is an internal combustion engine.
2. This air is being _____on the return stroke.
3. The electricity _____which are connected to the wheels of the train or to the _____.
4. Diesel engines use a cheaper _____and give more power for each gallon of _____than gasoline engines.
5. In diesel engines only air _____into the cylinder.
Bank of words: compressed, fuel burned, diesel engine, ship's screws, runs motors, kind of fuel, is blown.

True or false:

In new trains and plane diesel engines run large generators which make electricity.
The fuel used in a diesel engine is petrol.
In the four-stroke cycle Diesel engine air alone is drawn into the cylinder on the charging stroke.
The oil burns slowly, but without explosion.
In new trains and ships diesel engines run large generators which make electricity.

Раздел 7. Системы автомобиля

Тема 7.1. Системы двигателя

Практическое занятие 34

Прочитайте и переведите текст

Engine
An engine produces power by burning air and fuel. The fuel is stored in a fuel. The fuel tank is connected to a fuel pipe. The fuel pipe carries the fuel to a fuel pump. The fuel pump is connected to the carburettor. The fuel pump pumps the fuel into the carburettor. In the carburettor the fuel is mixed with air. The fuel and air are drawn into the engine cylinder by the piston. Then the fuel and air are compressed by the piston and ignited by the spark plug. They burn and expand very quickly and push the piston down. Then the power is produced. The burned fuel and air are expelled from the cylinder by the piston.

The flow of gases into and out of the cylinder is controlled by two valves. There is an inet valve allowing fresh fuel mixture into the cylinder and an exhaust valve which which allows the burnt gases to escape.

There are two clasic engine operating cycles:
the four-stroke cycle;
the two-stroke cycle.

The complete four-stroke cycle comprises:
the induction stroke (the piston moves downwards):
the compression stroke(the piston moves upwards);
the power stroke (the piston moves downwards);
the exhaust stroke (the pistone moves upwards).

Principle of Operation of the Four-Stroke Petrol Engine
The internal combustion engine is called so because fuel is burned directly inside the engine itself. Most automobile engines work on a 4-stroke cycle. A cycle is one complete sequence of 4 strokes of the piston in the cylinder. The operating cycle of the four-stroke petrol engine includes: inlet stroke (intake valve opens), compression stroke (both valves closed), power stroke (both valves closed), exhaust stroke (exhaust valve is opened).
To describe the complete cycle, let's assume that the piston is at the top of the stroke (top dead center) and the inlet and the exhaust valves are closed. When the piston moves down the inlet valve opens to intake a charge of fuel into the cylinder. This is called the inlet (intake) stroke. On reaching the lowest position (bottom dead center) the pis¬ton begins to move upward into the closed upper part on the cylinder, (he inlet valve is closed and the mixture is compressed by the rising piston. This is called the compression

stroke. As the piston again reaches the top dead center the spark plugs ignite the mixture, both valves be¬ing closed during its combustion. As a result of burning mixtures the both valves be¬ing closed during its combustion. As a result of burning mixtures the gases expand and great pressure makes the piston move back down the cylinder. This stroke is called the power stroke. When the piston reaches the bottom of its stroke, the exhaust valve is opened, pressure is re¬leased, and the piston again rises. It lets the burnt gas flow through the exhaust valve into the atmosphere. This is called the exhaust stroke which completes the cycle. So the piston moves in the cylinder down (intake stroke), up (compression stroke), down (power stroke), up (ex-haust stroke).
The heat released by the fuel is transformed into work so that the reciprocating movement of the pistons is converted into rotary move¬ment of a crankshaft by means of connecting rods.

1. Why is the engine called the internal combustion engine?
2. What stroke is called the inlet one?
3. What is a compression stroke?
4. What takes place in the cylinder on power stroke?
5. What takes place on the exhaust stroke?
6. By means of what is the reciprocating movement of the pistons converted into rotary movement of a crankshaft?

1.It is called so because the fuel (the mixture) is burned…
a)directly inside the engine;
b)outside the engine.
2. The inlet stroke is called so because during moving down the piston…
a) the inlet valve opens to intake a charge of fuel into the cylin¬der;
b)the inlet valve is closed and the mixture is compressed.
3.The compression stroke is a stroke
a) when the inlet valve opens to intake a charge of fuel into the cylinder;
b) when the inlet valve is closed and the mixture is compressed.
4. On power stroke
a)the spark plugs ignite the mixture, both valves are closed dur¬ing its combustion;
b)the exhaust valve is opened and the residual gas flows through the exhaust valve into the atmosphere.
5.On the exhaust stroke
a)the spark plugs ignite the mixture, both valves are closed dur¬ing its combustion;
b)the exhaust valve is opened and the residual gas flows through the exhaust valve into the atmosphere.
6. It is done
a)by means of pistons;
b)by means of the connecting rods.

Закончите предложения, выбрав правильный по смыслу вариант окончания.

1.The internal combustion engine is called so because fuel is burned…
a)outside the engine;
b)inside the engine.
2.On the inlet stroke
a)the intake valve opens;
b)the intake valve is closed;

c)the intake and the exhaust valves are closed.

2. On the compression stroke
   a). the intake valve opens;
   b).the intake valve is closed;
   c).the intake and the exhaust valves are closed.
3. On the power stroke
   a).the intake valve opens;
   b)the intake valve is closed;
   c)the intake and the exhaust valves are closed.
4. On the exhaust stroke
   a).the exhaust valve opens;
   b).the intake valve is closed;
   c).the intake and the exhaust valves are closed.

Тема 7.1. Системы двигателя

Практическое занятие 35

Прочитайте и переведите текст

Four-stroke engine

The internal combustion engine is a machine that develops power from the combustion of fuel within a cylinder. The cycle of operation is as follows:

Suction Stroke- Just before the piston reaches the inner dead-centre, a valve, usually of the "poppet" type, is opened.

On its outward stroke, the piston draws into the cylinder an explosive mixture of air and fuel vapour.

Shortly before the piston reaches the outer dead-centre, the inlet valve is closed and the compression stroke begins.

Compression stroke- During this stroke, the whole of the gas in the cylinder is compressed into the free space at the head of the cylinder.

Explosion, or Working Stroke- When the compression stroke is almost complete, the explosive mixture is ignited by an electric spark or by other suitable means. The gases reach their maximum pressure almost immediately, and work is done until the piston has again reached a position just before the outer dead- centre, when a second exhaust valve is opened.

If the ignition takes place too late, the piston begins its outward journey before the maximum pressure is developed and power is lost.

If, on the other hand, the explosive mixture is ignited too early, the maximum pressure is reached before the piston has completed its inward journey, and engine is slowed down or even stopped.

Exhaust Stroke- The burnt gases are driven out in front of the and its return until the inlet valve again opens, when the cycle is repeated.

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?

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.

Тема 7.2. Типы вопросов

Практическое занятие 36

В английском языке существует пять основных типов вопросов: общие, специальные, альтернативные, разделительные и косвенные.

Общий вопрос
Общие вопросы помогают подтвердить известную вам информацию или опровергнуть ее. Как правило, на такого типа вопросы отвечают кратко — yes или no.

Is she married? — Она замужем?
Was John visited his grandparents? — Джон навещал своих бабушку и дедушку?

Специальный вопрос
Специальный вопрос предполагает развернутый ответ собеседника. Чтобы грамотно его построить, нужно использовать вопросительные слова в начале предложения.

Where was you yesterday? — Где вы были вчера?
When can we go to the teacher? — Когда мы можем подойти к учителю?

Альтернативный вопрос
Задавая альтернативный вопрос, вы предлагаете собеседнику выбор между несколькими вариантами ответа. Важно уметь грамотно задавать альтернативные вопросы в речи и на письме.

How many tennis racquets does the sportsman need, one or more? — Сколько теннисных ракеток нужно спортсмену — одна или больше?
How will he travel: by car or by train? — Как он будет путешествовать: на машине или на поезде?

Разделительный вопрос
Разделительный вопрос оканчивается на короткую фразу, которая подталкивает собеседника подтвердить или опровергнуть информацию. Аналоги такой фразы в русском — «не так ли», «ведь так», «не правда ли».

Emmy is an actress isn't she? — Эмми — актриса, не так ли?
You remember Andrew, don't you? — Ты же помнишь Эндрю, не правда ли?

5 types of questions exercises.
Упражнение 1. Fill in the words to form questions.

did, are, do, have, was, haven't, is, isn't

What types of books _____ you like to read?
_____ she reading love story or an adventure story?
_____ you seen «Titanic»?
Who _____ watching TV at eight o'clock last night?
It's an exciting book, _____ it?
_____ you going to watch a romantic film or a musical?
You have seen this film, _____ you.
_____ you go to the cinema last night?
Now group this question by their types.

Yes / No Questions: _____.

Alternative Questions: _____.

Special Questions: _____.

Tag Questions: _____.

Упражнение 2. Form questions.

birthday / is / when / your?
many / How / cards / did / get / you?
do / What / like / you / presents?
mum / What / make / did / cake / your?
at the party / you / did / what / do?
like / you / parties / do / Why?
summer / are / this / where / you / going?

there / going / How / you / are?
take / going / to / what / you / are?
with / are / you / Who / going?
do / going / to / you / there / What / are?
you / stay / going / to / are / Where?
what / playing / dad / sports / your / games / is / of / fond?
roller-skate / when / learn / you / to / did?
of / afraid / are / swimming / you?

Упражнение 3. Напишите вопросы к предложениям, начиная со слова в скобках.

My sister eats sweets every day. (Who)
He won't go to the country this summer (Will)
We were advised to come. (What?)
I haven't seen Peter since Saturday. (Since when?)
They are planning to have a holiday soon. (They)
She made a beautiful dress for herself last week. (What?)
Everybody was waiting at the door to the museum. (Was)
By the end of the year, he had read about twenty books. (How many)
He is followed by his friend everywhere. (By whom?)
He didn't know how he could help his friend. (Why?)

Упражнение 4. Write questions to the underlined parts of the text.

John is my cousin (1). He is only 18, but he is already a student (2). John is very intelligent (3) and he is a good-looking boy too. Many girls (4) admire his dark brown (5) eyes and curly hair. The only problem is that John hasn't got enough money (6). He likes books (7) but he often has no money to buy them.

Упражнение 5. Write special and alternative questions to the answers.

Example

He is from England.

What country is he from?

Is he from England or Scotland?

We went to the library.
He is a driver.
We were playing a game.
They came to this place a long time ago.

Упражнение 6. Write questions about driving in England. Use the prompts.

petrol expensive in England?

motorists have to wear front seat belts in England?
what minimum driving age?
many roads in England?
roads good in England?
what the national speed limits in England?
how all speed limits given on signs?
how signs indicate speed limits?

Тема 7.3. Карбюратор

Практическое занятие 37

Образовательная цель: добиться прочного усвоения знаний по теме.
Развивающая цель: научить анализировать, правильно употреблять термины

Прочитайте и переведите текст
TEXT: A CARBURETOR
A carburetor (American and Canadian spelling), carburator, carburettor, or carburetter (Commonwealth spelling) is a device that blends air and fuel for an internal combustion engine. It is sometimes colloquially shortened to carb in North America or carby in Australia
Carburetors have largely been supplanted in the automotive industry by fuel injection.
The carburetor was invented by an Italian, Luigi De Cristoforis, in 1876. A carburetor was developed by Enrico Bernardi at the University of Padua in 1882, for his "Motrice Pia", the first petrol combustion engine (one cylinder, 121.6 cc) prototyped on 5 August 1882.
A carburetor was among the early patents by Karl Benz as he developed internal combustion engines and their components. The world's first carburetor for the stationary engine was invented by the Hungarian engineers Jбnos Csonka and Donбt Bбnki in 1893
The carburetor works on Bernoulli's principle: the faster air moves, the lower its static pressure, and the higher its dynamic pressure. The throttle (accelerator) linkage does not directly control the flow of liquid fuel. Instead, it actuates carburetor mechanisms which meter the flow of air being pulled into the engine. The speed of this flow, and therefore its pressure, determines the amount of fuel drawn into the airstream.
Most production carbureted (as opposed to fuel-injected) engines have a single carburetor and a matching intake manifold that divides and transports the air fuel mixture to theintake valves, though some engines (like motorcycle engines) use multiple carburetors on split heads. Multiple carburetor engines were also common enhancements for modifying engines in the USA from the 1950s to mid-1960s, as well as during the following decade of high-performance muscle cars fueling different chambers of the engine's intake manifold.
Older engines used updraft carburetors, where the air enters from below the carburetor and exits through the top. This had the advantage of never "flooding" the engine, as any liquid fuel droplets would fall out of the carburetor instead of into the intake manifold; it also lent itself to use of an oil bath air cleaner, where a pool of oil below a mesh element below the carburetor is sucked up into the mesh and the air is drawn through the oil-covered mesh; this was an effective system in a time when paper air filters did not exist.

Beginning in the late 1930s, downdraft carburetors were the most popular type for automotive use in the United States. In Europe, the sidedraft carburetors replaced downdraft as free space in the engine bay decreased and the use of the SU-type carburetor (and similar units from other manufacturers) increased. Some small propeller-driven aircraft engines still use the updraft carburetor design.
Outboard motor carburetors are typically sidedraft, because they must be stacked one on top of the other in order to feed the cylinders in a vertically oriented cylinder block.
The main disadvantage of basing a carburetor's operation on Bernoulli's Principle is that, being a fluid dynamic device, the pressure reduction in a venturi tends to be proportional to the square of the intake air speed. The fuel jets are much smaller and limited mainly by viscosity, so that the fuel flow tends to be proportional to the pressure difference. So jets sized for full power tend to starve the engine at lower speed and part throttle. Most commonly this has been corrected by using multiple jets. In SU and other movable jet carburetors, it was corrected by varying the jet size. For cold starting, a different principle was used in multi-jet carburetors. A flow resisting valve called a choke, similar to the throttle valve, was placed upstream of the main jet to reduce the intake pressure and suck additional fuel out of the jets.
A carburetor basically consists of an open pipe through which the air passes into the inlet manifold of the engine. The pipe is in the form of a venturi: it narrows in section and then widens again, causing the airflow to increase in speed in the narrowest part. Below the venturi is abutterfly valve called the throttle valve — a rotating disc that can be turned end-on to the airflow, so as to hardly restrict the flow at all, or can be rotated so that it (almost) completely blocks the flow of air. This valve controls the flow of air through the carburetor throat and thus the quantity of air/fuel mixture the system will deliver, thereby regulating engine power and speed. The throttle is connected, usually through a cable or a mechanical linkage of rods and joints or rarely by pneumatic link, to the accelerator pedal on a car or the equivalent control on other vehicles or equipment.
Fuel is introduced into the air stream through small holes at the narrowest part of the venturi and at other places where pressure will be lowered when not running on full throttle. Fuel flow is adjusted by means of precisely calibrated orifices, referred to as jets, in the fuel path.
II. Дайте русские эквиваленты выделенным словам
III. Ответьте на вопросы:
What is a carburetor?
Where is it used?
Who invented the carburetor?
What are the main principles of its work?
What is the main disadvantage of basing a carburetor's operation on Bernoulli's Principle?
What does a carburetor consist of?

Тема 7.3. Карбюратор

Практическое занятие 38

Exercise 1. Say how many letters and how many sounds there are in the words.
Carburettor, mix, air, block, particle, fuel.

Exercise 2. Answer the questions.
1. What system does the carburettor belong to?
2. What is the function of the carburettor?

Exercise 3. Match the questions 1–6 with the answers a–f.
1. What system does the carburettor belong to?
2. Does the carburettor measure exact quantities of petrol to be mixed with air?
3. What other functions does the carburettor perform?
4. When does the carburettor get blocked?
5. Where is the air fi lter situated?
6. What is the function of the air fi lter?
a) It is above the carburettor.
b) It happens when petrol contains some dirty particles.
c) Its function is to clean petrol to be delivered to the carburettor.
d) Well, for example, it breaks up petrol into fi ne particles.
e) It belongs to the fuel system of the car.
f) Certainly.

Exercise 4. Correct mistakes in the following phrases.
1. The carburettor measure exact quantities of petrol to be mixed with air.
2. Petrol is breaked up into fi ne particles.
3. Does petrol contain some dirty particles?
4. Is the carburettor belong to the fuel system of the car?

Exercise 5. Rewrite the sentences in the passive.
1. The carburettor performs this function.
2. The carburettor measures exact quantities of petrol.
3. The carburettor breaks up petrol into the fi ne particles.
4. The mixture burns rapidly.
5. Dirty particles can block the carburettor.
6. The fi lter cleans the air.

Exercise 6. Complete the dialogue with the phrases below. Role-play the dialogue.
Pavel: Could you tell me what a carburettor is? What system does it belong to?
Teacher: Well, it belongs to … .
Pavel: And what functions does it perform?
Teacher: The two functions to be performed by the carburettor are very important. Its fi rst function is … .
Pavel: What is the second function, I wonder?
Teacher: Oh, it is … so that the mixture will burn rapidly, of course.
Pavel: And may the carburettor be blocked?
Teacher: Certainly, it may happen as petrol … .
Pavel: I see. What is there above the carburettor?
Teacher: That’s an … . Its function is to clean the air to be delivered to the carburettor.

Pavel: Does that mean that the carburettor can’t be blocked … ?
Teacher: Certainly.
to measure exact quantities of petrol to be mixed with air
if the fi lter works well
air fi lter
to break up petrol into the fi ne particles
the fuel system of the car
contains some dirty particles

Тема 7.4. Топливная система

Практическое занятие 39

Exercise 1. Look through the text, fi nd all the word combinations with the word “fuel” and translate them.

Exercise 2. Read the text and name the devices of the fuel system.
The function of the fuel system is to store and supply fuel to the cylinder chamber where it can be mixed with air, vaporized, and burned to produce energy. The fuel, which can be either gasoline or diesel is stored in a fuel tank. A fuel pump draws the fuel from the tank through fuel lines and delivers it through a fuel fi lter to either a carburettor or fuel injector, then to the cylinder chamber for combustion.
Tank location and design are always a compromise with available space. Most automobiles have a single tank located in the rear of the vehicle. All tanks have a fuel fi ller pipe, a fuel outlet line to the engine and a vent system. All fuel tanks must be vented.
Steel lines and fl exible hoses carry the fuel from the tank to the engine.
Two types of fuel pumps are used in automobiles: mechanical and electric. All fuel injected cars today use electric fuel pumps, while most cars with carburettors use mechanical fuel pumps.
Many cars today locate the fuel pump inside the fuel tank. While mechanical pumps operate on pressures of 4–6 psi (pounds per square inch), electric pumps can operate on pressures of 30–40 psi.
The fuel fi lter is the key to a properly functioning fuel delivery system. This is more true with fuel injection than with cars with carburettors. Fuel injectors are more susceptible to damage from dirt because of their close tolerances, but also fuel injected cars use electric fuel pumps. When the fi lter clogs, the electric fuel pump works so hard to push past the fi lter, that it burns itself up. Most cars use two fi lters. One inside the gas tank and one in a line to the fuel injectors or carburettor.

Exercise 3. Match a–e with 1–5 to make up the word combinations: механический насос, гибкие шланги, топливный фильтр, топливная смесь.
a) fuel 1) hoses
b) fl exible 2) mixture

c) fuel 3) pump
d) mechanical 4) fi lter

Exercise 4. Complete the table with the missing words.
Verb Noun
впрыскивать
to press
mixture
доставлять
to locate

Тема 7.4. Топливная система

Практическое занятие 40

Exercise 1. Put in prepositions where necessary.
1. A fuel pump draws the fuel … the tank … fuel lines … a carburettor.
2. Fuel tanks are usually located … the rear … the vehicle.
3. The fuel system supplies fuel … the cylinder chamber where it is mixed … air.
4. Tank location is a compromise … available space.

Exercise 2. Complete the sentences.
1. The function of the fuel system is … .
2. The fuel is stored in … .
3. All tanks have … .
4. Two types of fuel pumps are used in automobiles … .
5. Many cars today locate the fuel pump … .
Exercise 7. Speak about the principles of the fuel system operation.

Exercise 3. Correct mistakes in the following sentences.
1. The fuel pump deliver fuel to a fuel injector.
2. The function of the fi lter is to cleaning the fuel.
3. All tanks has a vent system.
4. The most cars use mechanical fuel pumps.
5. If the fi lter will clog, the pump will burn itself up.

Exercise 4. Restore the original sentences.
1. the carburettor, the function of, petrol, is, to break up, fi ne particles, into
2. should be, clean, to be delivered, the petrol, to the carburettor
3. to be performed, very important, the functions, are, by this device
4. is, the new fuel system, in this car, completely, of a new design, to be employed
5. the hydrometer, is, the condition, of the battery, the function of, to check

Тема 7.5. Будущие времена

Практическое занятие 41

1. Выберите верный вариант глагола и переведите предложения.

By the time Teddy comes home Pamela … (will eat/will have eaten/will be eating) all the apple jam.
It's still not clear if the weather … (will change/will have changed/changes) for the better.
When Sandra enters a Design College she … (will study/will be studying/will have been studying) Drawing for 5 years there.
We … (will travel/will have travelled/will have been travelling) to lake Baikal in 2 months.
She … (will be playing/will have played/will have been playing) tennis tomorrow afternoon.
My dear granny … (will become/will be becoming/will have become) a pensioner by 2018.
When you come to the station I … (will wait/will be waiting/will have waited) for you by the central entrance.
By the time he returns, we … (will starve/will have starved/will have been starving) here for 3 days!

2. Поставьте глагол в форму Future Simple, Future Continuous, Future Perfect или Future Perfect Continuous.

to work

I … in Brazil at this time next year.
Dad … in the garden next Sunday.
By next Monday she … here for one month already.
In May our Russian teacher … at our school for 30 years!
to read

He … the report by that time.
We … the letters when you come.
Pearson … the contract tomorrow.
Ann … this book for two weeks the day after tomorrow.

Тема 7.6. Система охлаждения

Практическое занятие 42

Car cooling system operation
The cooling system on modern liquid-cooled cars has a lot of plumbing.
First, the pump sends the fl uid into the engine block, where it makes its way through passages in the engine around the cylinders. Then it returns through

the cylinder head of the engine. The thermostat is located where the fl uid leaves the engine. The plumbing around the thermostat sends the fl uid back to the pump directly if the thermostat is closed. If it is open, the fl uid goes through the radiator fi rst and then back to the pump. There is also a separate circuit for the heating system. This circuit takes fl uid from the cylinder head and passes it through a heater core and then back to the pump. On cars with automatic transmission, there is normally also a separate circuit for cooling the transmission fl uid built into the radiator. The oil from the transmission is pumped by the transmission through a second heat exchanger inside the: radiator.

Радиатор, термостат, система охлаждения, насос, встроенный, автоматическая трансмиссия, система обогрева.

Exercise 1. Match a–g with 1–7 to make up word combinations.
a) liquid-cooled 1) exchanger
b) cooling 2) transmission
c) engine 3) cars
d) separate 4) circuit
e) heating 5) system
f) automatic 6) system
g) heat 7) block

Exercise 2. Put in prepositions where necessary.
1. The pump sends the fl uid … the engine.
2. The liquid goes … passages in the engine … the cylinders.
3. There is a separate circuit … the heating system.
4. A separate circuit for cooling the transmission is built … the radiator.
5. The oil is pumped ... the transmission ... a heat exchanger.

Тема 7.7. Радиатор

Практическое занятие 43

Exercise 1. Match a–f with 1–6 to make rhythms.
a) tank 1) fl ows
b) most 2) fan
c) thin 3) true
d) goes 4) cost
e) through 5) pin
f) pan 6) rank

Exercise 2. Read the text and choose the word which belongs to the text (one in each group).
A radiator is a type of heat exchanger. It is designed to (transfer, deliver, replace) heat from the hot coolant that fl ows through it to the air blown through it by the fan.

Most modern cars use aluminum radiators. These radiators are made by brazing thin aluminum fi ns to fl attened aluminum (tubes, columns, wires). The coolant fl ows from the inlet to the (outlet, exit, way out) through many tubes mounted in a parallel arrangement. The fi ns conduct the (heat, temperature, warm) from the tubes and transfer it to the air fl owing through the radiator.
The tubes sometimes have a type of fi n inserted into them called a turbulator, which increases the turbulence of the fl uid fl owing through the tubes.
If the fl uid fl owed very smoothly (through, across, over) the tubes, only the fl uid actually touching the tubes could be cooled directly. The amount of heat transferred to the tubes from the fl uid running through them depends on the difference in temperature (between, among, near) the tube and the fl uid touching it. By creating turbulence inside the tube, all of the fl uid mixes together, keeping the temperature of the fl uid touching the tubes up so that more heat can be extracted, and all of the fl uid inside the tube is used (effectively, effective, well).
Radiators usually have a (tank, piston, drum) on each side, and inside tank is a transmission cooler. The transmission cooler is like a radiator within a radiator, except instead of exchanging heat with the air, the (oil, petrol, air) exchanges heat with the coolant in the radiator.

Exercise 3. Answer the questions.
1. What materials are radiators made of?
2. What is a turbulator used for?
3. What does the amount of the heat transferred to the tubes from the fl uid running through them depend on?
4. How can you explain the work of transmission cooler?

Exercise 4. Correct mistakes in the following sentences.
1. Most modern cars are use aluminum radiators.
2. The coolant fl ows through much tubes.
3. The amount of heat depends on different in temperature.
4. Radiators usually have a tank on every side.

Тема 7.7. Радиатор

Практическое занятие 44

Pressure cap
The radiator cap actually increases the boiling point of your coolant by about 45 ºF (25 ºC). How does this simple cap do this? The same way a pressure cooker increases the boiling temperature of water. The cap is actually a pressure release valve, and on cars it is usually set to 15 psi. The boiling point of water increases when the water is placed under pressure.
When the fl uid in the cooling system heats up, it expands, causing the pressure to build up. The cap is the only place where this pressure can

escape, so the setting of the spring (пружины) on the cap determines the maximum pressure in the cooling system. When the pressure reaches 15 psi, the pressure pushes the valve open, allowing coolant to escape from the cooling system. This coolant fl ows through the overfl ow tube (сливная трубка) into the bottom of the overfl ow tank. This arrangement keeps air out of the system. When the radiator cools back down, a vacuum is created in the cooling system that pulls open another spring-loaded valve, sucking water back in from the bottom of the overfl ow tank to replace the water that was expelled.

Tasks for self-control

1. Match the words from the two columns to make up word combinations.

a) multi-cylinder 1) position
b) crankshaft 2) mixture
c) exhaust 3) gases
d) intake 4) valve
e) compressed 5) stroke
f) burned 6) engine
g) liquid-cooled 7) block
h) cooling 8) transmission
i) engine 9) cars
j) automatic 10) system

2. Choose one word from a–d to fi ll in the gaps.

1. The … belongs to the brake system.
a) shaft b) bonnet c) coolant d) caliper
2. The … belongs to the cooling system.
a) shaft b) wheel c) windshield d) coolant
3. The master cylinder consists of a … and a fl uid reservoir.
a) crankshaft b) piston c) drum d) pad
4. The pedal is a strong steel … which transmits the force from your foot to the master cylinder.
a) wheel b) lever c) disk d) pad
5. If you rotate the key in the ignition clockwise:
a) the car goes fast b) the engine switches on c) the lights go on
6. If you turn this steering wheel clockwise:
a) the engine switches on b) the lights go on c) the car turns to the right

Тема 7.8. Модальные глаголы

Практическое занятие 45

Упражнение 1. Вставьте подходящий модальный глагол (must / could / ought / may)

_____ Einstein speak English when he went to live in the USA?
Mary _____swim when she was three.
You _____be joking. No one buys two Rolls Royces.
They _____be tired. They’ve been travelling all night.
He _____to go to the dentist because he has toothache.

I _____ swim quite well when I was five years old.
_____ I ride your bicycle, please, Jane?
She _____be Scottish with a surname like McKenzie.
At your age you _____ to be earning your living.
You _____to feel some respect for your elders.

Упражнение 2. Вставьте подходящий модальный глагол (must / may / need)

_____ I invite Nick to our house?
It _____rain soon.
You _____not make notes in the books.
You _____pay your bills in restaurants.
The baby is sleeping. You _____not shout.
That diamond bracelet is very elegant but it _____have cost a fortune.
You _____not say anything if you don't want to.
I can hear you quite well. You _____not shout.
He has left the army and doesn't _____to wear a uniform any more.
I've bought everything, so you _____not go shopping.
Tim gave me a letter to post. I _____not forget to post it.

Упражнение 3. Complete the sentences with the positive or negative forms of must or have to.

Brilliant! I _____ study tonight because I've finished my exams.
You _____ use a mobile phone on a plane.
You can go out, but you _____ be home by midnight.
Jo _____ go to school by bus. She lives nearby.
We _____ cook tonight. We can get a pizza.
She _____ get up early. She's on holiday.
You _____ study harder or you are going to fail.
You _____drive faster than 120 km/h on the motorway.

Упражнение 4. Choose the correct modal verb in italics:

I can / can't / might go out tonight. I'm too busy.
I haven't studied enough. I may / may not / might pass my exams.
They say it must/ need / might snow tomorrow.
She can /might not / won't be able to help us. She's not available.
Can / May / Might you come to my party?
We should run or we can / might / might not miss the bus.

Упражнение 5. Complete the sentences with the correct modal verb in italics:

You couldn't / mustn't / shouldn't eat so many hamburgers. They're not good for you.
You can't have / don't have to /mustn't study at the weekends, except when you have exams.
You may not / might not /needn't Everything will be OK.

You don’t have to /might not/mustn’t use your mobile phone in class.
Diana looks happy. She can /can have /must have heard some good news.
I can’t /may not /might not have left my mobile phone at school on Friday afternoon – I had it on Friday night.
It can /could / couldn’t rain tomorrow.

Упражнение 6. Вставьте подходящий модальный глагол (must / can / should / may)

I have some free time. I _____ help her now.
I _____ drive Susan's car when she is out of town.
_____ I have a glass of water?
Anyone _____ become rich and famous if they know the right people.
You _____ go to this party. It's very important.
Bird _____ be known by its song.
He is coming here so that they _____ discuss it without delay.
It's late. You _____ go to bed.
He _____ have told me about it himself.

Раздел 8. Электрооборудование автомобиля

Тема 8.1. Система запуска двигателя

Практическое занятие 46

Starting system
Exercise 1. Learn to read these words properly.
alternator [∪ɜ:ltəˌneItə(r)] lead [led]
voltage [∪vəYltIdʒ] acid [∪æsId]
battery [∪bætərI] cell [sel]
ignition [IgnIʃ(ə)n] solenoid [∪seYlə∩nɜ:Id]
generator [∪dʒenə∩reItə(r)] locomotive [∩ləYkə∪məYtIv]
Exercise 2. Learn the meanings of the words and word combinations from the following descriptions.
1. Electrical system is equipment in a motor vehicle that provides electricity to start the engine, ignite the fuel; operate the lights, windshield wiper, heater and air conditioner.
2. Alternator is an old term for an electric generator that produces alternating current (переменный ток).
3. Voltage regulator is a transformer which voltage ratio of transformation can be adjusted.
4. Automobile battery, car battery is a lead-acid (свинцово-кислотного типа) storage battery in a motor vehicle; usually a 12-volt battery of six cells; the heart of the car's electrical system.
5. Headlamp, headlight is a powerful light with refl ector (отражатель); attached to the front of an automobile or locomotive.
6. Ignition is the mechanism that ignites the fuel in an internal-combustion engine.

Exercise 3. Read the text and prove that the starting system proper operation is very important for the vehicle's work.

When talking about vehicles, especially when it is about the vehicle's power and performance, we often hear only about the powerful engines, stiff suspensions, and capable transmissions. This is particularly true if the main topic of the conversation is a luxury performance vehicle. Seldom we talk about the vehicle's starting system. It is another very important system that every vehicle is equipped with.

The vehicle's starting system is composed basically of two components: the electric starter motor (or starter) and the starter solenoid. As you turn the ignition key to the start position, the starter solenoid gets activated, which in turn energizes the starter motor. The starter motor would then spin the engine a few revolutions, allowing the combustion process to begin and the vehicle to start moving.

The main function of the vehicle's engine starting system is to induce the engine to start moving. But starting a cold engine requires a large amount of power and a large amount of electricity. In order for the starter motor to induce the engine to start spinning, it must overcome all the internal friction caused by the piston rings (поршневые кольца), the compression pressure in the engine cylinders, the energy needed to open and close the valves with the camshaft, and the power needed to start all the other components attached to the engine, like the water pump, oil pump and others. And because such power can only be brought by a large amount of electricity, the starter solenoid must be able to handle enormous current fl ows.

High performance vehicles (высокоэффективные транспортные средства) are equipped with high quality and high performance engine starting system components that makes starting a cold engine smooth and easy. Eventually, though, these components may start to wear down with use and age. If this happens, you really would have to replace your starter motor and starter solenoid.

Exercise 4. Answer the questions.

1. What components is the vehicle's starting system composed of?
2. What is the main function of the vehicle's engine starting system?
3. Why does starting a cold engine require much power?
4. Why are high performance vehicles equipped with high quality engine starting system components?

Exercise 5. Complete the passage with the correct information.

The starter and starter solenoid are components of … . The starter solenoid must be able to handle enormous current fl ows because … . To make starting a cold system engine easy vehicles are equipped with … . If starting system components wear down, you have to … .

Exercise 6. Look at the picture and give the English equivalents to the words and word combinations.

Предохранитель, замок зажигания (выключатель зажигания), аккумулятор, соленоид стартера, реле стартера.

Тема 8.1. Система запуска двигателя

Практическое занятие 47

How the starting system works

When you turn the ignition key to the “Start” position, the battery voltage (напряжение) goes through the starter control circuit (цепь) and activates the starter solenoid, which in turn energizes the starter motor. The starter motor cranks the engine. A starter can only be operated when the automatic transmission shifter (рычаг) is in “Park” or “Neutral” position (or if the car has a manual transmission, when the clutch pedal is depressed). To accomplish this, there is a neutral safety switch installed at the transmission shifter or at the clutch pedal. When the automatic transmission is not in “Park” or “Neutral” (or when the clutch pedal is not depressed), the neutral safety switch is open and the starter relay disconnects the starter control circuit.

Exercise 8. Give the English equivalents from the words above to the following word combinations.

Напряжение аккумулятора, автоматическая трансмиссия, нейтраль ная позиция, механическая трансмиссия, педаль сцепления, размыкать цепь.

Exercise 9. Make up questions to which the following words will be answers.

1. The vehicle’s starting system.
2. The starter and the starter solenoid.
3. To induce the engine to start moving.
4. When the shifter is in “Neutral” position.
5. The starter relay disconnects the starter control circuit.

Exercise 10. Make up a dialogue between A and B.

A: You are a driving instructor at the driving school. Your task is to explain the principle of starting system work.

B: You are a student at the driving school. Your task is to learn as much as possible about the principle of starting system work.

Start as shown.

B: What components does the starting system consist of?

A: It consists of a starter and a starter solenoid.

B: Could you explain to me what happens when I turn the ignition key to the start position?

A: Sure. Look at this scheme …

Тема 8.2. Батарея

Практическое занятие 48

Battery

Exercise 1. Say what way the following words are formed.

Rechargeable, ignition, relatively, discharge, difference, grounding.

Exercise 2. Before reading the text, try to answer the questions.
1. What's the function of the vehicle's battery?
2. What components does a vehicle battery consist of?
Exercise 3. Read the text and try to understand the meanings of the underlined words.
An automotive battery is a type of rechargeable battery that supplies electric energy to an automobile. Usually this refers to an SLI battery (starting, lighting, ignition) to power the starter motor, the lights, and the ignition system of a vehicle's engine.
Batteries intended for starting, lighting and ignition (SLI) systems are intended to deliver a heavy current for a short time, and to have a relatively low degree of discharge on each use. Automotive batteries (usually of lead-acid type) provide a nominal 12-volt potential difference by connecting six galvanic cells in series. Each cell provides 2.1 volts for a total of 12.6 volts at full charge.
In modern automobiles, the grounding is provided by connecting the body of the car to the negative electrode of the battery, a system called 'negative ground'. In the past some cars had 'positive ground'.
Exercise 4. Give the English equivalents to the following word combinations.
Разность потенциалов (напряжение), перезаряжающаяся, батарея свинцово-кислотного типа, гальванический элемент, при полной зарядке, заземление, отрицательный электрод батареи, степень разрядки, система зажигания.
Exercise 5. Correct mistakes.
1. An automotive battery supplyes electric energy to the automobile.
2. Batteries intended for starting have a relative low degree of discharge.
3. In automotive batteries six galvanic elements connected in series.
4. Each cell provide 2.1 volts at full charge.
5. The grounding is provided by connected the body of the car to the battery.
Exercise 6. Before reading the text say what problems the discharged battery may cause.
Exercise 7. Read the car mechanic's recommendations below and make a list of car problems which are mentioned in the text.
Example: a) a car doesn't start; b) blinking instrument lights; c) clickclick noise when you try to start the car; etc.
The battery provides electric power to start the car. I get many questions like "My car doesn't start, it only makes a click-click noise when I'm trying to start it" – this is most likely the result of the battery having decided to quit. If your vehicle doesn't start and you suspect the battery, there is a simple way to check it. Try switching the wipers on – if they move very slowly, a lot slower than usually (too low voltage) the battery is probably discharged or dead.
Battery terminals shouldn't be loose or corroded (коррозированы).
Corroded battery terminals will cause all kind of problem: blinking instrument lights, no-start, etc. Also, if you see any acid leaks, cracks or any other damage – replace the battery. Acid leakage destroys everything underneath.
When changing the battery, battery manufacturers recommend disconnecting the ground connection fi rst to prevent accidental short-circuit

(короткое замыкание) between the battery terminal and the vehicle frame. The battery is fi lled with harmful acid solution and can produce explosive gases. Handling the battery be careful and always use protective glasses and gloves. Don't use open fi re, smoke, or create a spark near the battery.
Exercise 8. Match a–e with 1–5.
a) leakage 1) клеммы
b) low voltage 2) разряжена
c) battery terminals 3) низкое напряжение
d) discharged 4) заменить батарею
e) replace the battery 5) утечка
Exercise 9. Work in pairs, one of you is a car mechanic and the other – a client. Use the information from ex. 3 to complete the dialogue below. Role-play it.
Client: My car doesn't start, it only makes a click-click noise when I'm trying to start it.
Mechanic: This is most likely the result of the battery having decided to quit.
Client: Is there any simple way to check it?
Mechanic: If your vehicle doesn't start and you suspect the battery, there is a simple way to check it. … .
Client: … .
Mechanic: … .
Client: … .
Mechanic: … .
Client: … .
Mechanic: … .

Тема 8.3. Генератор

Практическое занятие 49

Generator
Exercise 1. Restore the original sentences.
a) power, to, electric, start, the, battery, the, car, provides.
b) your, start, if, try, vehicle, on, doesn't, switching, wipers, the.
c) terminal, battery, cause, corroded, problems, different.
d) use, near, open, don't, fi re, battery, the.
Exercise 2. Fill in the gaps with the words and word combinations below.
The … (generator) supplies the vehicle's electric systems with electric power and also recharges … when the engine is running. If it fails, the engine will continue to run using the battery … , but the car will eventually stop as soon as the battery will be completely … . When the alternator fails, there is … on the instrument panel that comes on with the engine running. Usually it's something like "+ -" or "charge" warning light. If you see that sign on your … while driving, have your … inspected.
Power, alternator, the battery, discharged, a warning light, instrument panel, vehicle.
Exercise 3. Mark the following sentences as True or False.

1. The generator supplies the vehicle's electric systems with electric power.
2. The generator recharges the battery when the engine isn't running.
3. If the generator fails, the engine will stop.
4. When the generator fails, there is a warning light on the instrument panel.

Exercise 4. Say what the difference between an ordinary and a hydrogen generator is.

Exercise 5. Read the text and say how a hydrogen generator for cars can save the planet.

We all should be concerned about the environment, and do what we can to take care of the world we have been given to enjoy. Emissions from car exhaust are some of the most dangerous environmental pollutants.

How does a hydrogen generator for cars work?

Hydrogen is the smallest known molecule in the universe, and when it is forced into the combustion chamber, its small size allows it to enter quickly. Also, the lightweight molecules move quickly, thus creating more molecular collisions than any other molecule.

Since the hydrogen molecules burn faster than gasoline alone, it actually decreases the time it takes for combustion. By having a more complete burn earlier in the stroke, more energy is converted into power and less leaves the engine during the exhaust stroke. As a result, more fuel is converted into usable energy, meaning fewer dangerous emissions and more power. As you can see, hydrogen or HHO powered cars (HHO gas is used as the short or slang term for oxyhydrogen among the online community) will help reduce the car's emissions and protect the environment so that both us and our children can live in a better, safer and cleaner world.

To actually use hydrogen as a fuel, we need to convert it from plain water. Fossil fuels are extremely dangerous to both humans and the atmosphere, and when they are not completely burned in the engine, they are released through the exhaust system of the vehicle to pollute the air.

It is a wise decision for our pockets, probably the most popular reason why people are turning to a hydrogen generator for cars, but it also ensures a greener world for our children to grow in.

Exercise 6. Answer the questions.

1. Is hydrogen as a fuel less dangerous than fossil fuels?
2. How do HHO powered cars help to reduce the car's emissions and protect the environment?
3. What is hydrogen converted from?
4. What types of fuel are less expensive – fossil fuels or hydrogen?

Exercise 7. Divide the text into 3–4 parts and entitle them.

Exercise 8. Reduce the text to 5–6 sentences so that it keeps the main information and reproduce them.

Тема 8.4. Пассивный залог

Практическое занятие 50

Глаголы в английском языке употребляются в активной форме залога — «the Active Voice» и в пассивной (страдательной) — «the Passive Voice». В активном залоге субъект выполняет действие, указанное глаголом, а в пассивном — на субъект действует сам глагол. She wrote a book (Active) – A book was written by her (Passive).

Что такое пассивный залог?

Пассивный залог широко употребляется как в устном так и в письменном современном английском. Зачастую пассивные конструкции используются, когда нет необходимости называть исполнителя какого-либо действия, а также, если нет разницы в том, кто именно это действие выполняет — важен лишь результат.

Страдательный залог используется, чтобы показать интерес к объекту, который испытывает действие, а не к объекту, который его выполняет.

The book was written last Monday. – Книга была написана в прошлый понедельник.

В этом предложении подлежащее «the book» испытывает на себе действие субьекта, то есть не сама книга себя написала, а была кем-то написана. При этом, скорее всего, известно, кто ее написал, но здесь важен сам факт совершения действия (книгу написали, и она готова), а не исполнитель. Поэтому предложение и употреблено в пассивном залоге.

Когда необходимо указать исполнителя действия в пассивном залоге, то добавляем предлог «**by**»**:**

The book was written **by** me. – Эта книга была написана мной.

Образование пассивного залога в разных временах

Пассивный залог образуется с помощью вспомогательного глагола «**be**» и формы **Past Participle** (смыслового глагола в 3 форме) и только переходные глаголы (обозначают действие, которое по своему смыслу переходит на некий предмет) могут образовывать формы пассивного залога.

Образование пассивного залога

Время	Формула	Пример
Present Simple	is/am/are + Ved (V3)	Mails are sent every day. – Посылки отправляют каждый день.
Past Simple	was/were + Ved (V3)	Mails were sent yesterday. – Посылки отправили вчера.
Future Simple	will/shall + be +	Mails will be sent tomorrow. – Посылки

	Ved(V3)	отправят завтра.
Present Continuous	is/am/are + being + Ved (V3)	Mails are being sent now. – Посылки отправляют сейчас.
Past Continuous	was/were + being + Ved (V3)	Mails were being sent at 5 yesterday. – Посылки вчера отправляли в 5 часов.
Future Continuous	—	—
Present Perfect	has/have + been + Ved (V3)	Letters have been already sent. – Письма уже отправили.
Past Perfect	had + been + Ved (V3)	Letters had been sent before he phoned. – Письма отправили до того, как он позвонил.
Future Perfect	will/shall + have/has+ been +Ved (V3)	Letters will have been sent by 5 tomorrow. – Письма отправят завтра до 5 часов.
Perfect Continuous	—	—

Attention: Perfect Continuous вообще не используется в страдательном залоге. А время Continuous не имеет будущего отрезка.

Кроме этого, еще можно образовывать пассивные предложения с двумя объектами. Так активное предложение в пассивной форме залога может выглядеть следующим образом:

Active Voice:
Linda gave an **apple** to **me.**

Passive Voice:
An apple was given to **me** by **Linda** or
I was given **an apple** by **Linda.**

Один из двух объектов становится субъектом, а другой остается объектом. Какой объект превратится в субъект зависит от того, на чем вы сосредоточитесь.

Отрицательные и вопросительные формы глагола в пассивном залоге

Отрицательная форма глагола образуется с помощью частицы «**not**», которая следует за вспомогательным глаголом (если вспомогательных глаголов несколько, то «not» ставится после первого):
The cat was **not** fed by him yesterday. – Кот не был накормлен им вчера.
The cat was **not** often left hungry. – Кота не часто оставляли голодным.

Ничего сложного и в **вопросительной** форме. Для образования такой в пассивном залоге **первый вспомогательный глагол**ставится **перед подлежащим**:
Are you often invited to the circus? – Тебя часто приглашают в цирк?
Has the book been written by her? – Книга была написана ею?

Exercises.

Exercise 1. Complete the sentences with the correct form of the verbs in bracket.
Butter is ***made*** of milk. (make)
Oranges are _____ into Britain. (import)
How often are these rooms _____? (clean)
I am never _____to parties. (invite)
This house was _____100 years ago. (build)
When was the telephone_____? (invent)
Two people were _____ to hospital. (take)

Exercise 2. Make up sentences in the Passive Voice.
a) in the Present Simple tense
0. (the office / clean / every day) ***The office is cleaned every day.***
0. (these rooms / clean / every day?) ***Are these rooms cleaned every day?***
(private letters / not / open / in the mail room) _____
(stamps / sell / in a post office) _____
(this room / not / use / very often) _____
(we / allow / to park here?) _____
(how / this word / pronounce?) _____
b) in the Past Simple tense
(the office / clean / yesterday). ***The office was cleaned yesterday***.
(the office / paint / last month) _____
(the letter / lose / a few days ago) _____
(when / this equipment / buy?)_____
(you / invite / to the party last week?)_____
(how / these letters / deliver?)_____

Тема 8.4. Пассивный залог

Практическое занятие 51

Упр. 1. Передайте следующие предложения в *Passive Voice.*
1. The students greeted the famous lecturer warmly. 2. They have recently built a huge

plant, in the town of N. 3. We must finish the work by tomorrow. 4. When I fell ill, my mother sent for the doctor. 5. They looked for the girl everywhere. 6. They did not listen to the boy. 7. She looks after the patients well. 8. They asked for our address. 9. My father looked through these papers this morning- Ю- He will give my brother English lessons. 1.1. A friend of his has shown me an interesting magazine. 12. His friend told him everything. 13. They showed Helen the nearest way to the theatre. 14. He gave his patient some good advice. 15. Mary has told me the news. 16. The people looked at the little boy with interest. 17. They examined the paper attentively.

Упр. 2. Передайте следующие предложения в Passive Voice.
1. We asked him about his holidays. 2. They have already discussed the novel. 3. He did not give me his address. 4. She showed him the way to the metro station. 5. He will introduce me to his friends. 6. They are building a bridge over the river. 7. I haven't yet translated the article. 8. We were looking at the man with great surprise. 9. You will speak about the film at the lesson. 10. The headmistress sent for the pupil's parents. 11. Has the secretary typed the letters? — No, she is typing them now.

Упр. 3. Передайте следующие предложения в *Passive Voice.*
1. We turn on the light when it is dark. 2. The students finished their translation in time. 3. Helen washed the dishes. 4. Betty often took her younger brother for a walk. 5. Mother has made some coffee. 6. Have you ironed your dress yet? 7. Nina mispronounced this word. 8. They have told her the truth. 9. She promised us an interesting entertainment. 10. One uses chalk for writing on the blackboard. 11. I shall finish my work about seven o'clock. 12. Somebody has opened the door. 1.3. The waitress brought in the coffee. 14. One of
my friends took me to the cinema last week. 15. We shall finish this work in time. 16. They built this house in 1960. 17. They were selling new children's books in that shop when I entered it yesterday. 18. A large group of young people joined us on our way to the station. 19. A young teacher started a school in this village. 20. They are translating this article now. 21. Galsworthy wrote "The Forsyte Saga." 21. Thousands of people attended this meeting. 22. He has just interrupted me. 23. The teacher has explained it to us.

Упр. 4. Переведите на английский язык, употребляя глаголы в Passive Voice.
1. Собор Святого Павла строил архитектор Рен. 2. Когда написали письмо? 3. Куда положили книги? 4. За доктором пошлют завтра. 5. В Санкт Петербурге строят много домов. 6. Произведения английских и американских писателей издают во всем мире. 7. Стихи Роберта Бернса знают во многих странах мира. 8. Когда Чарльз Диккенс был маленьким мальчиком, его отца посадили в долговую тюрьму. 9. Эта опера была написана сто лет назад. 10. Этот роман уже переведен на пять языков. 11. Обед варили, когда я пришел домой. 12. К тому времени, как он приехал, письмо было уже получено. 13. Наш дом сейчас ремонтируют. 14. Колю как раз спрашивают. 15. Книги уже принесли из библиотеки? 16. Этот кинотеатр был построен до того, как мы приехали сюда. 17. Где сейчас ваш брат?— Его послали во Францию. 18. О вас только что говорили. 19. Дома над ней посмеялись. 20. «Мне только что приказали ввести пленных», — сказал солдат. 21. Кто написал это письмо? 22. Эти цветы только что сорвали. 23. Тебя вчера просили прийти

пораньше? 24. В будущем году его пьеса будет поставлена в этом театре. 25. За этим профессором всегда посылают в трудных ситуациях.

Раздел 9. Трансмиссия
Тема 9.1. Трансмиссия

Практическое занятие 52

Transmission operation

Exercise 1. Learn to read these words properly. Do you know their Russian equivalents? If not, consult the dictionary.

torque [tɔ:k]
differential [∩dɪfə∪renΣ(ə)l]
axle [∪æks(ə)l]
shaft [Σɑ:ft]
gear [gɪə(r)]
ratio [∪reɪΣɪəY]
reverse [rɪ∪vɜ:s]

Exercise 2. Before reading the text, answer the questions.

1. What function does a transmission perform?
2. What's the difference between automatic and manual transmissions?

Exercise 3. Read the text and try to understand the meanings of the underlined words.

What a transmission does

The power train includes a manual or automatic transmission; a clutch, on cars with manual transmissions; a differential; wheel axles, and, in reardrive cars, a drive shaft. While cars with a front engine, rear-drive layout were the norm for many years, most cars today are front-engine, front-drive. Front drive creates more passenger space and offers better traction on snowy or wet roads. Some cars and light trucks designed to go off-road or through bad weather use all-wheel drive, where all four wheels are coupled to the engine.

The power of the engine consists of torque and speed. Torque is the twisting force of the engine's crankshaft. Speed refers to the rate of rotation of the crankshaft.

Because of the great difference in engine speed and load between a car that is accelerating from a stop and one that is cruising at a steady speed, different gear ratios are needed to match engine output with the inertia of the vehicle.

The transmission can adjust the proportions of torque and speed that it delivers from the engine to the drive shaft. When it increases the torque, it decreases the speed; and when it increases the speed, it decreases the torque. Most automobile transmissions have between two and six gear ratios, along with a reverse gear. When the vehicle is started from rest, a high gear ratio is needed. As speed increases, lower gear ratios are selected.

Almost all transmissions vary torque and speed by means of gears. A gear is a wheel with projections called teeth around the edge. The teeth fi t together with the teeth of another gear. Suppose that a small gear with 12 teeth drives a large gear with 24 teeth. The large gear rotates with half the speed, but twice the torque, of the small gear. The amount of reduction is expressed numerically by the gear ratio. The gear ratio above is 2 to 1 because the small gear rotates twice for each rotation of the large gear.
The gears can be combined in different ways to produce various gear ratios and thus various proportions of torque and speed. The gear ratios are often called simply gear or speeds. The process of changing from one gear ratio to another is called shifting gears.

Exercise 4. Match a–l with 1–12.
a) torque 1) уменьшать
b) the rate of rotation 2) переключение скоростей
c) speed 3) передаточное отношение
d) proportions of torque and speed 4) зубчатая передача, шестерня
e) increase 5) зубец
f) decrease 6) крутящий момент
g) gear 7) соотношение крутящего момента и скорости
h) teeth 8) увеличивать
i) gear ratio 9) скорость, передача
j) shifting gears 10) скорость вращения
k) drive shaft 11) привод на все колёса
l) all-wheel drive 12) ведущий (приводной) вал, первичный вал

Exercise 5. Translate the following word combinations and phrases into Russian.
Accelerating from a stop, at a steady speed, different gear ratios, to match engine output with the inertia of the vehicle, to adjust the proportions of torque and speed, expressed numerically.

Exercise 6. Transform the word combinations.
Example: the system of transport – the transport system
the fl ow of oil
the indicator of the car
the pressure of gas
models of transport
the component of the car
the pedal of accelerator
the increase of speed
the model of the car
the types of the car

Exercise 7. Correct the wrong information in the phrases.
1. A wheel with teeth around the edge is called a ring.
2. The transmission can adjust the proportions of fuel and air.

3. Most automobile transmissions have ten gear ratios.
4. When the transmission increases the torque, it increases the speed.
5. The process of cruising at a steady speed is called shifting gears.

Exercise 8. Complete the sentences.
1. The power train consists of … .
2. Front drive cars offer … on snowy or wet roads.
3. The transmission adjust the proportions of … .
4. Most automobile transmissions have … .
5. Transmissions vary torque and speed by … .
6. The process of changing from one gear to another is called … .

Тема 9.1. Трансмиссия

Практическое занятие 53

Переведите текст на русский язык, пользуясь словарем.

Basic Troubles of Transmission Mechanism
The transmission of the engine torque to the driving wheels of the mitomobile must be smooth. There should be no vibration in the op- c rat ion of transmission mechanism within the range of travelling speeds.
The indications of malfunctions in the transmission mechanism components are as follows:
1.incomplete disengagement of the clutch;
2.difficult engagement or self-demeshing of gears;
3.run out and vibration of the cardan-drive shaft.

What to do in these cases:
1.Check the free travel of the clutch pedal and adjust it.
2.Check the oil level in the gearbox housing and wash breather channel.
3.Check to see that all the fastening bolts are securely tightened and that the trunnion crosses fit properly the bearings, and the bearings, in turn, the universal-joint forks.

Переведите слова на русский язык, обращая внимание на суффиксы.
to transmit - transmission; to connect — connection;
to found — foundation; to move — movement.

Переведите на русский язык интернациональные слова.
Transmission, system, mechanism, radiator, friction, automobile, cardan, portion, final, accelerator, pedal, position.

Переведите предложения на русский язык, используя приведенные в упражнении 1 слова.
1. The chassis includes the running gear, the power transmission and the steering mechanism.

2. The power transmission consists of the clutch, gearbox, cardan shaft, rear axle, final drive, differential and axle shafts.
3. The clutch connects the engine with the driving wheels.
4. The gearbox changes the speed of the car movement.
5. The steering mechanism changes the direction of the car.

Тема 9.2. Типы трансмиссии

Практическое занятие 54

Types of transmission

Exercise 1. Fill in the missing letters in the words.

Transmi .. ion; gear .. ift; torq .. ; cl .. tch; man . al; n .. tral; r . verse; sp .. d.

Exercise 2. Before reading the text, try to answer the following questions.

1. What position does a driver put the transmission in to start the engine?
2. Which gear does a driver shift into to put the car into forward motion?
3. What does the clutch connect?

Exercise 3. Read the text and try to understand the meanings of the underlined words.

How a manual transmission works

The driver shifts the gears of a manual transmission by means of a handoperated lever called a gearshift. Most manual transmissions have a neutral position; three, four, or fi ve forward gears; and a reverse gear. The driver puts the transmission into neutral when the engine is being started.

To put a car into forward motion, the driver shifts into fi rst, or low gear. This gear provides the highest torque and the lowest speed. As the car picks up speed, the driver shifts into second gear, then into third gear, and so on, until the transmission is in the highest gear desired. If extra torque is needed, the driver may downshift a higher gear to a lower one. This situation might occur when the car goes up a steep hill.

The clutch. The driver of a car with a manual transmission must operate the clutch along with the gearshift. The clutch, which is operated by a pedal, connects the engine to the transmission. When the driver presses the pedal, the clutch is disengaged (disconnected from the engine), and no power is sent to the transmission. When the driver releases the pedal, the clutch is engaged, sending power to the transmission. The driver must disengage the clutch when shifting gears.

The clutch consists basically of three disks: the fl ywheel, the pressure plate, and the clutch plate. The fl ywheel is connected to the crankshaft and turns whenever the engine is running. The clutch plate rests between the fl ywheel and the pressure plate.

Exercise 4. Give the appropriate translation for the underlined words (exercise 3) from the following list.

Рычаг переключения передач, нейтральное положение, задняя пе-

редача, передняя передача, сцепление, прижимная пластина, механическая трансмиссия.

Exercise 5. Match a–f with 1–6.
a) hand-operated 1) into forward motion
b) to downshift a higher gear 2) motion
c) to put a car 3) the engine
d) forward 4) to a lower one
e) to pick up 5) lever
f) disconnected from 6) speed

Exercise 6. Put the words into the right order to make up sentences according to the given translation:
1. a, fi ve-speed, automatic transmission, installed, in, is, this auto
В этом автомобиле установлена автоматическая пятиступенчатая трансмиссия.
2. consists, of, the mechanical transmission, of, auto, this, a, a, gearbox, clutch, front wheel drive, a
Механическая трансмиссия этого автомобиля состоит из сцепления, коробки передач, привода передних колёс.
3. is, there, noise, in, the, heard, release bearing (подшипник выключения)
Слышен шум в подшипнике выключения сцепления.
4. engages, with, the, clutch, jerks
Сцепление включается рывками.
5. gear, reverse, engagement, diffi cult, is
Включение задней передачи затруднено.

Exercise 7. Complete the dialogue between a driving instructor and his student. Role-play the dialogue.
A: To change the speed the driver … .
B: How many gears do manual transmissions have?
A: … .
B: … .
A: By clutch along with the gear-shift.
B: … ?
A: When the driver presses the pedal … .
B: … .
A: When the driver releases the pedal … .
B: The driver must disengage the clutch when … , mustn’t he?
A: … .

Тема 9.3. Местоимения Some, any, no every и их производные

Практическое занятие 55

Неопределенные местоимения some и any служат для обозначения неопределенного (небольшого) количества предметов или вещества.

МЕСТОИМЕНИЯ И НАРЕЧИЯ, ПРОИЗВОДНЫЕ ОТ SOME, ANY, NO, EVERY				
ОСНОВНЫЕ МЕСТОИМЕНИЯ	ПРОИЗВОДНЫЕ МЕСТОИМЕНИЯ			ПРОИЗВОДНЫЕ НАРЕЧИЯ
	+thing	+body	+one	+where
Some	**something** что-то, что-нибудь, что-либо, нечто	**somebody** кто-то, кто-нибудь, кто-либо, кое-кто, некто	**someone** кто-то, кто-нибудь, кто-либо, кое-кто, некто	**somewhere** где-то, где-нибудь, куда-то, куда-нибудь, куда-либо, куда угодно
Any	**anything** что-нибудь, все, что угодно	**anybody** кто-то, кто-либо, кто-нибудь, всякий, любой	**anyone** кто-то, кто-либо, кто-нибудь, всякий, любой	**anywhere** где-нибудь, куда-нибудь, где угодно, куда угодно
No	**nothing** ничто, ничего	**nobody** никто, никого	**no one** никто, никого	**nowhere** нигде, никуда
Every	**everything** всё	**everybody** все	**everyone** все, каждый	**everywhere** везде, повсюду, всюду

Some употребляется, как правило, в утвердительных предложениях перед исчисляемыми существительными во множественном числе и перед неисчисляемыми существительными, имея значение несколько, некоторые: I′ve got some interesting books to read. У меня есть интересные книги (=несколько интересных книг) для чтения.

Any употребляется, как правило, в вопросительных и отрицательных предложениях: Have you got any interesting books? У вас есть интересные книги?

Some и any часто не переводятся на русский язык (опускаются при переводе).

Exercises

Упр. 1. Вставьте *some, any* или *no.*

1. There are ... pictures in the book. 2. Are there ... new students in your group? 3. There are ... old houses in our street. 4. Are there ... English textbooks on the desks? - - Yes, there are ... . 5. Are there ... maps on the walls? —No, there aren't ... . 6. Are there ... pens on the desk? - - Yes, there are.... 8. Are there ... sweets in your bag? - - Yes, there are ... . 9. Have you got ... English books at home? -- Yes, I have ... . 10. There are ... beautiful pictures in the magazine. Look at them. 11. There is ... ink in my pen: I cannot write.

Упр. 2. Вставьте *something, anything, nothing* или *everything.*

1. Give me ... to read, please. - - With pleasure, 2. I don't know ... about your town. Tell me .., about it. 3. Please give me ... warm: it is cold here. 4. I understand ... now. Thank

you for your explanation. 5. There is ... white in the box. 'What is it? 6. Is there ... that you want to tell me? 7. Where is the book? — It is on the table. - No, there is . . there.

Упр. 3. Вставьте *somebody, anybody, nobody* или *everybody.*
1. Has ... in this group got a dictionary? 2. ... left a magazine in our classroom yesterday. 3. The question was so difficult that ... could answer it. 4. I am afraid I shan't be able to find ... in the office now: it is too late. 5. ... knows that water is necessary for life. 6. Is there ... here who knows French? 7. You must find ... who can help you. 8. ... knew anything about America before Columbus discovered it. 9. I saw ... in the train yesterday who looked like you. 10. There is ... in the next room. I don't know him. 11. Please tell us the story. ... knows it. 12. Is there ... in my group who lives in the dormitory? 13. Has ... here got a red pencil? 14. ... can answer this question. It is very easy.

Упр. 4. Вставьте *some, any, no* или их производные.
1. Here are ... books by English writers. Take ... book you like. 2. There are ... boys in the garden because they are at school. 3. I can see ... on the snow, but I don't know what it is. 4. Are there ... desks in the classroom? - Yes, there are many. 5. There are ... books on this desk, but there are...._ exercise-books. 6. Did he say ... about it? - - No, he said .... 7. What shall I do now, Mom? I, have done my homework. - You can do ... you* like.- 8. There was ... in the street because it was Very late. 9. ... wants to see him. 10 Is there ... heге who knows this man? 11. Have you ... books on Dickens? I want to read ... about him. I have read ... books by Dickens and I am interested in the life of the writer. 12. Can ... tell me how to get to the Public Library? - - Yes, take ... bus that goes from here towards the railway station and get off at the third stop. 13. Please bring me ... apples,
Mary. 14. That is a very easy question - - ... can answer it.

Упр. 5. Вставьте *somewhere, anywhere, nowhere* или *everywhere.*
1. I put my dictionary ... yesterday and now I can't find it ....-- Of course, that is because you leave your books ... . 2. You must go ... next summer. 3. Did you go ... on Sunday? 4. Let's go ... . The weather is fine. I don't want to stay at home in such weather. 5. I cannot find my glasses .... I always put them ... and then look for them for hours. 6. Today is a holiday. The streets are full of people. There are flags, banners and flowers ....

Упр. 6. Переведите на английский язык.
1. В столовой есть кто-нибудь? 2. В саду никого нет. 3. В нашей комнате есть кто-нибудь? 4. Там есть кто-то. 5. Там никого нет. 6. В библиотеке есть кто-нибудь? 7. За занавеской есть что-нибудь? - - Нет, там ничего нет. 8. В сумке что-то есть. 9. В доме есть кто-нибудь? - - Да, там есть кто-то. 10. Под столом есть что-нибудь? - Да, там что-то есть. 11. Там ничего нет. 12. В кабинете врача есть кто-нибудь? — Нет, там никого нет. 13. В нашей библиотеке есть кое-какие книги на английском языке. 14. В вашей библиотеке есть какие-нибудь книги Джека Лондона? 15. Мой дядя хочет мне что-то сказать. 16. На другой день мой брат знал всех. 17. Если вы захотите что-нибудь поесть, идите в вагон-ресторан. 18. Расскажите нам всё о вашем путешествии.

Упр. 7. Вставьте *somewhere, anywhere, nowhere* или *everywhere.*
1. I put my dictionary ... yesterday and now I can't find it ....-- Of course, that is because you leave your books ... . 2. You must go ... next summer. 3. Did you go ... on Sunday? 4. Let's go ... . The weather is fine. I don't want to stay at home in such weather. 5. I cannot find my glasses .... I always put them ... and then look for them for hours. 6. Today is a holiday. The streets are full of people. There are flags, banners and flowers ....

Упр. 8. Переведите на английский язык.
1. На столе лежит что-то круглое. Что это такое? 2. Никто об этом ничего не знает. 3. В городе много парков. Везде деревья и цветы. 4. В той комнате кто-то есть. 5. Анна живет где-то в этом районе. 6. Я никого не знаю в этом городе. 7. Дай мне, пожалуйста, что-нибудь поесть. 8. Кто-нибудь знает адрес нашего учителя? 9. Все в порядке. 10. Кто-нибудь хочет посмотреть телевизор? 11. Мы слышали эту песню повсюду. 12. Он где-то в саду.

Тема 9.4. Сцепление

Практическое занятие 56

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 gear¬box, 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 gear¬box 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.

Найдите в тексте данные ниже слова и напишите их русские эквиваленты.

Friction device, clutch, gearbox, to free, to start, to release, fly¬wheel, pressure plate, basic principle of operation, to fix, hard-wear¬ing material, to consist of, to be controlled by, running engine, to run idly, to engage, to disengage, to press down, to be at rest

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?

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.

Тема 9.4. Сцепление

Практическое занятие 57

Прочтите диалог и выполните следующие за ним упражнения.

DIALOGUE
A.: What is the function of the clutch?
B.: You see, it serves three functions. It is used for freeing the en¬gine from the gearbox, for starting the car and for freeing the engine from car wheels.
A.: Is it a friction device?
B.: Yes, of course. It is fixed between the flywheel of the engine and
the gearbox and usually consists of two discs.
A.: What discs?
B.: The friction disc (driven disc) and the pressure disc.
A.: I suppose the principle of operation of clutches is a frictional
force between discs. Am I right?
B.: Yes, you are. When the clutch is fully engaged the frictional force makes discs rotate at the same speed.
A.: And by what is the clutch controlled?
B:.By the clutch pedal. When it is at rest the clutch is engaged and when it is pressed down the clutch is disengaged and the engine is disconnected from the car wheels.
A.: Thank you. And what types of clutches do you know?
B.: Positive clutches and gradual engagement clutches.

A.: Thank you very much for your information.
B.: Not at all. Glad to help you.

Найдите в диалоге английские эквиваленты следующим русским терминам и выпишите их.

Функция сцепления, для отключения двигателя от коробки передач, крепится между маховиком и коробкой передач, фри¬кционный (ведомый) диск, нажимной диск, фрикционная сила, сцепление включено, педаль в исходном положении, педаль сцепления нажата.

Тема 9.5. Коробка передач

Практическое занятие 58

Gearbox
The gearbox is placed between the clutch and the propeller shaft. I lie principal function of the gearbox is to vary the speed of the car movement to meet the road conditions. The gearbox provides four for¬ward speeds and one reverse, as follows:
1. First or low gear;
2.Second gear;
3.Third gear;
4.Fourth or top gear;
5.Reverse gear.
There are many constructional arrangements of gearboxes, which can be classified as follows:
1.Sliding-mesh type;
2.Constant-mesh type;
3.Epicyclic (planetary) type.
The sliding-mesh type is the simplest one and is the oldest histori¬cally. The constant-mesh type is the most widely used type. They are termed "ordinary" gearing, the characteristic feature of which is that I lie axes of the various gears are fixed axes. The gears simply rotate about their own axes.
The characteristic feature of epicyclic (planetary) gearing is that one gear rotates about its own axis and also rotates bodily about some other axis.
To secure the several speeds of the car the clutch shaft is mounted In direct line with the gearbox shaft. The gearbox shaft carries on it the sliding gears which are used for shifting to secure the forward speeds and the reverse drive.
Послетекстовые упражнения
The exercises to be done after reading the text
Найдите в тексте ответы на вопросы.
1.Where is the gearbox situated?
2.What is the function of the gearbox?
3.What speeds does the gearbox provide?
4.What types of gearboxes do you know?
5.Why is the clutch shaft mouned in direct line with the gearbox shaft?

Переведите предложения на английский язык.
1.Коробка передач предназначена для изменения скорости движения автомобиля.
2.Коробка передач обеспечивает четыре передние скорости и задний ход.
3.Коробки передач могут быть: со скользящими шестерня¬ми, с постоянным зацеплением шестерен и планетарного типа.
4.Самыми простыми являются коробки передач со сколь¬зящими шестернями.
5.Коробки передач с постоянным зацеплением шестерен используются наиболее часто.
6.Скользящие шестерни на валу коробки передач ис¬пользуются для обеспечения передних скоростей и обратного хода.
Упражнение 7. Переведите текст, пользуясь словарем.
Gearboxes are assembled and disassembled on special stands us¬ing special mechanisms. In case of trouble in change-speed gearbox it can be repaired only in the workshop. But in order not to get into trou¬ble you should do the followings steps:
a).check the oil level in the gearbox casing;
b).wash the breather channel;
c).change the oil in accordance with the lubrication schedule;
d).wash the gearbox with a thin mineral oil;
e).drain the used oil through the drain hole.

Тема 9.5. Коробка передач

Практическое занятие 59

DRIVIHG SYSTEM
When the motor - car has to be sat in motion first of all it is necessary to start the engine. When the engine is running you start the car. By means of a pedal, the operator at his will, connects or disconnects the engine with the transmission. This device is called a clutch. Clutches are divided into two main groups: cone clutches and disc clutches. In the former group two cone surfaces are used to convey the drive. The cones are normally pressed into contact with one or another by means of a single powerful coil spring. This type of clutch is old and is now used only to a limited extent. There exist two types of disc clutches: the multiple disc type, and the single plate type.
There exist two types of disc clutches: the multiple disc type and the single plate type. The, multiple clutch is composed of a number of driving and driven discs. The driving discs have teeth on their outer diameter. They mesh with the internal teeth of: the internal teeth of the flywheel, sliding and turning it. When the flywheel revolves these discs revolve with it. The driven discs have teeth on their inner diameter. They are attached to the clutch shaft by means of splines. They can slide on the shaft. They are so fixed that they must rotate when the clutch shaft revolves. The driving discs continue to revolve with the flywheel while the driven discs rotate at the same speed as the clutch shaft.

3. Answer the questions:

1. Into what groups are clutch divided?
2. What is the cone clutch?
3. What is the disc clutches?

4. Does the flywheel revolve these discs?
5. Is multiple clutches composed of a number of driving and driven discs?
6. They mesh with the internal teeth of the internal teeth of the flywheel, sliding and turning it, don't they?

4. Fill in missing words:
When the motor - ___has to be sat in motion first of all it is _____to start the engine.
When the _____revolves these ____revolve with it.
This device is called a _____.
They are _____the clutch shaft by means of_____.
Clutches are _____two main groups: ____clutches and disc clutches.
The, multiple clutch _____of a number of _____and driven discs.
Bank of words: necessary , flywheel , divided into ,splines, is composed, driving, attached to, car, discs, cone, clutch.

Translate into Russian:
multiple disc type
two main groups
by means of splines
outer diameter
these discs revolve
start the car
at his will
the single plate type.

Тема 9.6. Much, many, little, few с исчисляемыми и неисчисляемыми существительными

Практическое занятие 60

В английском языке выделяют следующие местоименные прилагательные:

much, many - "много"

little, few - "мало"

Much, little определяют неисчисляемые существительные:

There is much snow in the street.На улице много снега

There is little sugar in my tea.В моём чае мало сахара.

Many, few - ставятся перед исчисляемыми существительными:

There are many spoons on the table, but there are few knives on it.

На столе много ложек, но мало ножей.

Little, few в сочетании с неопределённым артиклем образуют устойчивые сочетания со следующими значениями:

a few - "несколько"

a little - "немного"

A little - "немного" и a few - "несколько" употребляются в смысле "некоторое, хотя и небольшое количество", в то время как little и few - "мало" употребляются в смысле "недостаточно, почти нет".

I've got little time.У меня мало времени.

I've got a little time.У меня есть немного времени.

He has few friends. У него мало друзей.

He has a few friends. У него есть несколько друзей.

Наряду с местоименными прилагательными в значении "много" употребляются сочетания: a lot of, lots of, plenty of - как с исчисляемыми, так и с неисчисляемыми существительными, обозначающими явления природы (snow, rain), вещество (ink, water, salt), абстрактные понятия (love, beauty, inclination):

There are a lot of English books in my library. В моей библиотеке много английских книг.

There is a lot of rain this autumn. Этой осенью много дождей.

There are lots of roses in this garden. В этом саду много роз.

We have lots of snow this winter. Этой зимой много снега.

There are plenty of pictures in his studio.В его студии много картин.

We have plenty of time. У нас много времени.

Exercises.

1. Распределите следующие существительные на две группы.
paper – bottle – porridge – happiness - pencil - coffee – girl – work – job – plate – dog – meat - news – apricot – toothpaste – time - bedroom – money - magazine – information – honey - metal – child – yoghurt – rice – spaghetti – water – air – spoon – mustard - egg – chair – shampoo – raincoat – flower – flour – bread – soap – toy – food – knowledge – garden – oil – furniture - friend

Исчисляемые:

Неисчисляемые:

2. Поставьте How many? или How much?
1. … salt do you usually put in the soup?
2. … cups of tea shall I bring?
3. … films did you see?
4. … friends has he got?
5. … free time do we have?
6. … juice is there in the fridge?
7. … money did they spend?
8. … tomatoes are there in the bag?
9. … kilos of potatoes did you buy?
10. … slices of cheese are left on the plate?

3. Вставьте в предложения few/ little:

1. There are students who love you.
2. Where are my possessions?
3. musicians would deny his talent.
4. There's too snow.
5. rain falls at this time of year.
6. I have interests outside my work.
7. You'll have so time tomorrow!
8. There are like her in the group.
9. employees want low-paid jobs.
10. There's very milk in the bottle.

4. Вставьте в предложения few/a few/fewer/little/a little:

1. I suppose she has choice.
2. I will eat bread.
3. We should have used eggs.
4. recent films have been screened.
5. There were more important things I'd like to tell them.
6. I'm so sorry, I'm going to be minutes later.
7. There are elephants than there used to be.
8. There's always snow at this time of year.
9. children have read the article, and even understand it.
10. It was a village of than 500 inhabitants.

Тема 9.7. Дифференциал

Практическое занятие 61

Differential

Exercise 1. Learn to read these words properly. Do you know their Russian equivalents?

If not, consult the dictionary.

inner [∪Inə(r)]

resistance [rI∪zIst(ə)ns]

differential [∩dIfə∪renΣ(ə)l]

degree [dI∪gri:]

outer [∪aYtə(r)]

pinion [∪pInjən]

Exercise 2. Before reading the text, try to answer the questions.

1. What are differentials used for in vehicles?

2. How many differentials are necessary for the vehicle’s proper operation?

Exercise 3. Read the text and try to understand the meanings of the underlined words.

A differential is a device, usually consisting of gears, for supplying equal torque to the driving wheels, even as they rotate at different speeds. In some vehicles torque is simply applied evenly to all driving wheels using a simple driveshaft. This works well enough when travelling in a straight line, but when changing direction the outer wheel needs to travel farther than the inner wheel. The simple solution results in the inner wheel spinning. For general road use, such a method would result in too much damage to both the tyre and road surface. Differentials are typically composed of a gear mechanism in which a ring gear receives input power, which is transferred to two side gears by means of usually two opposing central pinion gears on a common shaft. The pinion gears are connected to the ring gear. When the ring gear rotates, the pinion gears drive the side gears; the pinion gears are free to rotate about their own axis when either of the side gears meets resistance. In a motor vehicle, the two side gears may be used to transfer power to the left and right wheels. When the vehicle turns a corner, or one of the wheels encounters resistance, the pinion gears rotate around the side with the most resistance; this rotation drives the other side gear with additional speed.

The most basic differential described above, known as an open differential, suffers from one important problem, however. In an automobile, if one wheel begins to slip while the other maintains traction, the slipping wheel will receive most of the power. This means that if one wheel is spinning on ice while the other is still in contact with the pavement, acceleration of the driveshaft will only cause the slipping wheel to spin faster and very little power will reach the wheel with good traction. Similarly, if one wheel is lifted off the ground, nearly all the power will go to the wheel that is off the ground; not a hopeful prospect for off-road vehicles.

Differential mechanisms possess two degrees of freedom (DOF), and the state of the mechanism depends on two constraints (ограничения). In a vehicle, the fi rst constraint is the motor, and the second is the frictional kinematic chain between the two wheels and the ground. When the two wheels

slip on the ground, the second constraint becomes weaker or disappears. The differential also becomes undetermined and transmits less or no power.
A four-wheel-drive vehicle will have at least two differentials (one for each pair of wheels) and possibly a center differential to apportion power between the front and rear axles.

Exercise 4. Match a–l with 1–12.

a) differential 1) внешнее колесо
b) driving wheels 2) ведущая шестерня
c) outer wheel 3) ведущие колёса
d) inner wheel 4) шина
e) tyre 5) внутреннее колесо
f) road surface 6) полуосевая шестерня
g) ring gear 7) степени свободы
h) side gear 8) встречать сопротивление
i) pinion gear 9) коронная шестерня
j) to encounter resistance 10) внедорожник
k) off-road vehicle 11) поверхность дороги
l) degrees of freedom 12) дифференциал

Тема 9.7. Дифференциал

Практическое занятие 62

Exercise 5. Read the statements and decide whether they are True or False.

1. A differential is a device for supplying equal torque to the front wheels.
2. When changing direction the inner wheel needs to travel farther than the outer wheel.
3. If one wheel is spinning on ice while the other is still in contact with the pavement, acceleration of the driveshaft will only cause the slipping wheel to spin faster and very little power will reach the wheel with good traction.
4. A four-wheel-drive vehicle will have at least one differential.

Exercise 6. Entitle the passages of the text.

Exercise 7. Make up questions to which the following words will be answers.

a) To supply equal torque to the driving wheels.

b) Of a gear mechanism.

c) Two degrees of freedom.

d) At least two differentials.

e) To apportion power between the front and rear axles.

Exercise 8. Complete the dialogue between a car mechanic and a client, act it out.

Client: Could you consult me about the work of transmission?

Mechanic: … .

Client: What is the function of transmission?

Mechanic: … .

Client: What are different gear ratios needed for?

Mechanic: … .

Client: What transmission used in a car – manual or automatic – gives a

driver more comfort?

Mechanic: … .

Client: What do we call an open differential?

Mechanic: … .

DIALOGUE

Transmission Mechanism

Teacher: Let's speak about the transmission mechanism. What main units does the transmission include?

Student:The transmission is the entire mechanism between the en¬gine and the rear wheels. It includes the clutch, gearbox, cardan shaft, rear axle, final drive and differential.

T.:What does the clutch connect?

S.:The clutch connects the engine with the gearbox.

T.:And what does the gearbox do?

S.:The gearbox changes the speed of the car.

T.:What does the differential enable?

S.:The differential enables the driving wheels to move at differ¬ent speeds when turning the car.

T.: For what purpose is the steering system used?

S.: The steering system is used for changing the direction of the
car movement.

T.: And what is the function of the brakes?

S.: Brakes are used to slow or stop the car.

T.: That's right. You know the subject very well.

Раздел 10. Шасси
Тема 10.1. Шасси

Практическое занятие 63

Chassis operation
Exercise 1. Before listening to the text “Chassis” look through the vocabulary.
chassis [∪ΣæsI] – шасси
mount [maYnt] – устанавливать
cabin [∪kæbIn] – кабина
brake [breIk] – тормоза
steel [sti:l] – сталь; стальной
brace [breIs] – подпорка, распорка
to weld [weld] – приваривать
Exercise 2. Translate the following word combinations into Russian.
Automobile chassis, brake system, steel brace, steering system, fourwheel steering.
 Exercise 3. Listen to the text “Chassis” and say yes or no.
1. The automobile chassis include a battery, an engine and a fan.
2. In modern cars the body combines the functions of the frame and the cabin.
3. The steering system controls the angle of the front wheels.
4. All cars have four-wheel steering.
Exercise 4. Put the word combinations into the order they are mentioned in the text.
a) drive system
b) steering system
c) steel body
 Exercise 5. Listen to the text again and match a–e with 1–5 to make up word combinations which are used in the text.
a) automobile 1) train
b) rear 2) steering
c) drive 3) chassis
d) power 4) drive
e) front-wheel 5) wheels
Exercise 6. Answer the questions.
1. What does an automobile chassis include?
2. What is the drive system’s function?
3. What’s the function of the steering system?
 Exercise 7. Listen to the text again and complete the sentences.
1. The car frame, drive train, suspension, wheels, steering, brake system are included into … .
2. Most cars today have a … drive.
3. The drive system carries the power from the transmission to the … that move the car.
4. The power steering uses power to reduce the effort of turning the … .

Exercise 8. Describe how the automobile chassis changed according to the text.
Exercise 9. Give your opinion on whether the automobile chassis are more improved nowadays.

Тема 10.1. Шасси

Практическое занятие 64

Прочитайте и переведите текст

Chassis

The main units of the chassis are: the power transmission, the run¬ning gear and the steering mechanism. The power transmission includes the whole mechanism between the engine and the rear wheels. This entire mechanism consists of the clutch, gearbox, propeller (cardan) shaft, rear axle, final drive, differential and axle shafts.

At the front end of the car is the engine. On the back of it is the flywheel. Behind the flywheel is the clutch. The clutch is a friction de¬vice connecting the engine with the gears of the gearbox. The main function of the gearbox is to change the speed of the car.

The power is always transmitted by the cardan shaft to the live back axle. The final drive reduces the high speed of the engine to the low speed of the driving wheels. The differential enables the driving wheels to turn at different speeds which is necessary when turning the car. The foundation of the automobile is the frame to which different chassis units are attached.

The rear axle is capable of moving up and down about the frame. The rear axle is an important part of the transmission. It carries the greater portion of the weight of the car.

The steering mechanism is designed for changing the direction of the car.

The brakes are used for stopping the car, for decreasing its speed and for holding the car position.

Найдите в тексте ответы на следующие вопросы.

1. What main units does the chassis consist of?
2. Where is the engine located?
3. Where is the flywheel fixed?
4. Where is the clutch placed?
5. What is the gearbox designed for?
6. By what shaft is the power transmitted to the back axle?
7. What does the rear axle do?
8. What is the function of the differential?
9. What purpose is the steering system designed for?
10. What is the function of the brakes?

Переведите предложения на русский язык, обращая внимание на Complex Subject.

1. Transmission, running gear and steering mechanism are known to be the main units of the chassis.
2. The clutch is known to connect the engine with the driving wheels of the car.
3. The gearbox is known to change the speed of the car.
4. The steering mechanism is known to change the direction of the car.
5. Brakes are considered to be one of the most important mecha¬nisms of the car.

Переведите на английский язык следующие предложения (при выполнении задания вы можете обращаться к тексту).

1.Основными узлами шасси являются: трансмиссия, ходо¬вая часть и рулевой механизм.
2.Радиатор расположен в передней части автомобиля.
3.Маховик крепится на задней части двигателя.
4.Сцепление соединяет двигатель с коробкой передач.
5.Коробка передач предназначена для изменения скорости движения автомобиля.
6.Усилие передается карданным валом.
7.Главная передача снижает высокие обороты двигателя до невысоких оборотов ведущих колес.
8.Дифференциал позволяет ведущим колесам вращаться с разной скоростью при повороте автомобиля.
9.Рулевой механизм предназначен для изменения на¬правления движения автомобиля.
10.Тормоза используются для остановки или снижения скорости автомобиля.

Тема 10.2. Рама и кузов

Практическое занятие 65

Упражнение 1. Прочтите слова и словосочетания и выучите их русские эквиваленты.
frame — рама
twist - кручение
support — опора
suspension - подвеска
body - кузов
channel section — полая секция
longitudinal members - лонжероны weld — сваривать
cross members — поперечины
rivet — заклепывать
reinforce — усиливать
insulate — изолировать
rigid — жесткий
rubber pad - резиновая прокладка
mining - прочный
unibody construction — конструкция
withstand strains —

выдерживать с
несущим кузовом
нагрузки
strengthen – укреплять
Упражнение 2. Переведите на русский язык
интернациональные слова.
Chassis, structure, system, integral, construction, steel, vibration, passenger, metal, contact.
Упражнение 3*. Переведите слова, обращая внимание на суффиксы.
To found - foundation; frame - frameless; to construct - construction; structure — structural — structurally; to attach — attachment; to vibrate — vibration; to insulate - insulation; usual — usually.
Прочтите и переведите текст, а затем выполните следующие за ним упражнения.
TEXT
Frame
The foundation of the automobile chassis is the frame which provides support for the engine, body and power-train members. Cross members reinforce the frame. The frame is rigid and strong so that it can withstand the shocks, vibrations, twists and other strains to which it is put on the road.
The frame provides a firm structure for the body, as well as a good point for the suspension system. There are two types of frames, namely: conventional frames and integral (unibody) frames (frameless constructions).
Conventional frames are usually made of heavy steel channel sections welded or riveted together. All other parts of the car are attached to the frame.
In order to prevent noise and vibrations from passing to the frame and from there to the passengers of the car, the frame is insulated from these parts by rubber pads.
It is also important to insulate the frame in order to prevent metal- to-metal contacts.
Frameless (unibody) constructions are called so because they are made integral with the body. The body parts are used to structurally strengthen the entire car. Some unibody frames have partial front and rear frames for attaching the engine and suspension members.
Послетекстовые упражнения The exercises to be done after reading the text
Упражнение 4. Найдите в тексте и выпишите английские эквиваленты русским терминам.
Лонжероны, поперечины, жесткий, прочный, выдерживать нагрузки, подвеска, обычная (общепринятая) рама, безрамная

конструкция, полые секции, сваренные или заклепанные, прикреплять к раме, резиновые прокладки, укреплять.
Упражнение 5. Найдите в тексте ответы на вопросы.
1.What does the frame provide?
2.Why is the frame rigid and strong?
3.What types of frames are there?
4.What is the conventional frame made of?
5.By what is the frame insulated from the other car parts? For what purpose?
6.What do you know about unibody frames?
Упражнение 6. Подберите из правой колонки соответствующие окончания для предложений из левой колонки.
1.The frame provides
support for....
a. channel sections welded together.
2.Conventional frames are
made of....
b. prevent noise and vibrations
from passing to the passengers.
3. Tameless constructions
are made....
c. cross members.
4.The frame is insulated
from other parts in order to
....
d.. the engine, body and power
train members.
5.The frame is reinforced
by....
e. integral with the body.

Тема 10.2. Рама и кузов

Практическое занятие 66

Упражнение 7*. Переведите предложения на русский язык. Обратите внимание на Complex Object.
1.We know the frame to be the structural centre of any car.
2.Car special ists consider the conventional frame to be extremely rigid and strong.
3.We know the frame to be insulated from the other parts by rubber pads to prevent metal-to-metal contacts.
4.Many specialists consider the body parts to be used to structurally strengthen the entire car.
5.The manufacturers beUeve the unibody constructions to be called so because they are made integral with the body.
Упражнение 8. Переведите текст, не пользуясь словарем.

The frame is a structural centre of any car as it provides support lor the engine, body, wheels and power-train members.
Cross members reinforce the frame and provide support for the engine and wheels. The frame is extremely rigid and strong. The engine is attached to the frame in three or four points and insulated in I liese points by some rubber pads to prevent vibration and noise from passing to the frame and thus to the passengers. There are two types of frames: conventional construction and unibody one.
Упражнение 9. Переведите предложения на английский язык.
1. Рама обеспечивает опору для кузова, двигателя и узлов силовой передачи.
2.Она состоит из лонжеронов и поперечин, которые усиливают раму.
3.Рама должна выдерживать вибрацию, кручения и другие нагрузки (напряжения).
4.Рамы бывают двух типов: обычные (стандартные) и выполненные воедино с кузовом.
5.Стандартные рамы изготовлены из стальных полых секций, сваренных или заклепанных вместе.
6.Безрамные конструкции выполнены воедино с кузовом.
7.Рама изолируется от кузова резиновыми прокладками, чтобы шумы и вибрации не проходили к пассажирам автомобиля.
Упражнение 10. Прочтите диалог, а затем разыграйте его в парах.
DIALOGUE
Stas: Hi! Seen you for ages! How are you?
Vlad: Hi! I'm perfectly well! I am working at a repairing shop. Very interesting I can tell you.
S.: What are you doing there?
V.: Now, we are testing the frame. You see, the driver has got into trouble. Something is wrong with his car. He thinks it is the frame.
S.: Has the car a conventional frame or a unibody frame?
V.: Unibody frame.
S.: I think you have to do a lot of work as body parts strengthen the entire car.
V.: Sure. We are testing all parts in order to find out the damage.
S.: I think you will cope with the problem.
Notes:
seen you for ages — не видел тебя сто лет;
perfectly well — прекрасно;
get into trouble — попасть в беду;
be wrong with — что-то не так;
sure — конечно (без сомнения);
find out the damage — отыскать повреждение;
cope with — справиться (с проблемой).

Тема 10.3. Инфинитив и герундий

Практическое занятие 67

Инфинитив

Инфинитив для носителей русского языка привычен. Это глагольная форма, которая не изменяется по лицам и числам. Он несет в себе общее значение ситуации, поэтому в словаре зафиксирована именно эта глагольная форма. Например, глагол to run — бежать. Узнать форму инфинитива можно по частице to, которая стоит перед глаголом.

Инфинитив в английском языке схож с русским и часто переводится идентичным образом.

I want to become *an* actor — *Я хочу стать актером.*

Герундий

С появлением герундия начинаются сложности. В русском языке эквивалента герундию не существует. В зависимости от предложения он может переводиться различными способами: отглагольным существительным, инфинитивом, деепричастием или подчиненным предложением.

I enjoy listening to music — *Мне нравится слушать музыку / Я получаю наслаждение, слушая музыку / Я получаю наслаждение от прослушивания музыки*

Образуется герундий от основы глагола с помощью добавления окончания -ing. Форма на -ing может обозначать также причастие: например, «a crying child» (плачущий ребенок). Однако причастие отличается от герундия по своему значению, кроме того, оно непосредственно связано с существительным и зависит от него.

Герундий занимает промежуточную позицию между существительным и глаголом и объединяет в себе черты этих частей речи. По значению он близок существительному, в котором заключена идея процесса действия (reading — чтение, walking — прогулка, хождение). Однако герундий не может употребляется с артиклем и не имеет формы множественного числа.

Swimming is good for your health — *Плавание полезно для твоего здоровья.*

Эта форма имеет также глагольные черты. Инфинитив и герундий в английском похожи тем, что оба являются безличными: они не изменяются по лицу и числу. С другой стороны, они могут изменяться по времени и, например, иметь формы перфекта (to have done — инфинитив / having done — герундий).

After having lived in one room for a year we can completely trust each other — После того, как мы прожили год в одной комнате, мы можем полностью друг другу доверять.

Сближает герундий и инфинитив в английском языке также то, что они могут занимать одну позицию в предложении. Тогда и возникает вопрос: какую из форм выбрать? Ситуация осложняется тем, что в английском языке нет конкретного правила, которое однозначно определяло бы, какая форма должна использоваться.

Выбор зависит от глагола, который предшествует форме инфинитива или герундия. К примеру, для глагола allow: инфинитив или герундий? Это

определяется самим глаголом allow (позволять), который здесь подчиняет себе следующее слово. Именно предшествующий глагол служит индикатором выбора, и чтобы знать, какую форму ставить, нужно помнить его требования. Так в английском выделяются две группы глаголов: те, которые употребляются с инфинитивом, и те, после которых следует герундий.

Глаголы с инфинитивом

Вначале разберем те глаголы, которые требуют после себя формы инфинитива. Для каждого глагола мы приведем пример употребления, чтобы лучше его запомнить и усвоить контекст.

expect (ожидать): This must be what people expect to hear — Должно быть, люди ожидают услышать именно это.
agree (соглашаться): They agreed to support this project — Они согласились поддержать этот проект.
claim (заявлять): The administration claims to act in a disinterested way — Администрация заявляет, что будет действовать беспристрастно.
threaten (угрожать): He threatened to end his career — Он угрожал уничтожить его карьеру.
offer (предлагать): She offered to coach him in the evenings — Она предложила тренировать его по вечерам.
arrange (уладить, организовать): I arranged to meet Steven at ten o'clock — Я договорился встретиться со Стивеном в 10.
refuse (отказываться): He refused to take responsibility for any problem — Он отказался брать ответственность за любую из проблем.
promise (обещать): He promised to cooperate with the investigation — Он обещал сотрудничать со следствием.
deserve (заслужить): She deserves to be happy — Она заслуживает быть счастливой.
afford (позволить себе): She cannot afford to pay for this — Она не может позволить себе заплатить за это.
hope (надеяться): My mother really hopes to see them again — Моя мама очень надеется увидеть их еще раз.
learn (учить): He has learned to live with it — Он научился жить с этим.
decide (решать): He decided not to waste any more time — Он решил больше не тратить времени.
pretend (притворяться): He pretended to believe her — Он притворился, что поверил ей.
plan (планировать): She loved animals and planned to be a vet — Она любила животных и планировала стать ветеринаром.
Инфинитиву может предшествовать союзное слово, которое вводит подчиненное предложение: how (как), where (где), what (что), when (когда), whether (разве). Некоторые из таких глаголов:

ask (спрашивать): Most visitors ask where to find unusual plants — Большинство посетителей спрашивают, где найти необычные растения.
decide (решать): I'm trying to decide whether to become a journalist or a politician — Я пытаюсь решить, становиться журналистом или политиком.

know (знать): I know when to stop — Я знаю, когда остановиться.
remember (помнить): I couldn't remember where to go — Я не могу вспомнить, куда идти.
explain (объяснять): The letter explains how to make the payments — Письмо объясняет, как совершить оплату.
understand (понимать): You should understand how to deal with problems — Ты должен понимать, как справляться с проблемами.
Добавление участника
Глаголы с to и ing могут вводить в предложение еще одного участника ситуации. Наиболее характерно это для конструкций с инфинитивом. Такой участник ситуации (в разобранных выше примерах этой ситуации еще не было) появляется, когда глагол и инфинитив относятся к разным действующим лицам. Тогда этот участник занимает позицию дополнения и ставится перед инфинитивом.

I want to improve — Я хочу развиваться.
I want you to improve — Я хочу, чтобы ты развивался.

В переводе на русский этот участник может часто оказываться подлежащим в подчиненном предложении:

I don't want you to make the same mistakes — Я не хочу, чтобы ты совершал те же ошибки.

Указание на другое лицо необходимо для глаголов make (заставить), let (позволить): само их значение вынуждает указывать, на кого направлено действие. При этом инфинитив в такой конструкции употребляется без частицы to.

He may let you do everything you ask — Он может позволить тебе делать все, о чем попросишь.
She always makes me laugh — Она всегда меня смешит.

Выражение участника также характерно в конструкциях с глаголами:

ask (просить): I ask you to help me — Я прошу тебя мне помочь.

Узнать больше

forbid (запрещать): I forbid you to talk to them — Я запрещаю тебе разговаривать с ними.
help (помочь): Can you help me to find the book? — Ты можешь мне помочь найти книгу?
beg (умолять): I beg you to leave this place — Я умоляю тебя уехать.
expect (ожидать): He expected me to be happy — Он ожидал, что я буду счастливой.
teach (учить): They teach children to be kind and honest — Они учат детей быть добрыми и честными.
Глаголы с герундием

Класс глаголов, которые вынуждают использовать инфинитив, мы разобрали. К другому типу относятся слова, после которых требуется форма герундия, а не инфинитива:

finish (закончить): When you've finished writing, put it away for two or three days — Когда закончишь писать, отложи это на пару-тройку дней.
enjoy (любить, наслаждаться): I always enjoy walking the streets — Мне всегда нравится ходить по улицам.
suggest (предлагать): I suggested waiting — Я предложил подождать.

Узнать больше

avoid (избегать): You avoid seeing me — Ты избегаешь встреч со мной.
consider (рассматривать, обдумывать): You should consider building a new house — Тебе стоит подумать о постройке нового дома.
put off (откладывать): She wished she could put off telling him until tomorrow — Она хотела бы, чтобы она могла отложить разговор с ним до завтра.
delay (отсрочивать): We delayed sending the documents — Мы отложили отправку документов.
deny (отрицать): She denies attempting murder – Она отрицает покушение на убийство.
risk (рисковать): He risked losing everything — Он рисковал потерять все.
imagine (представлять): I can hardly imagine him marrying anyone — С трудом могу себе представить, чтобы он на ком-либо женился.
give up (бросать): She has recently given up smoking — Она недавно бросила курить.
Герундий и инфинитив в английском языке различаются по сфере употребления и имеют свои типичные контексты. Для герундия характерно использование после предлогов: instead of (вместо), without (без), before (до), after (после), besides (кроме) и другими.

Instead of criticising the others he is focused on his own success — Вместо того, чтобы критиковать других, он концентрируется на собственном успехе.

He has already made a decision without consulting any of us — Он уже принял решение, не спрашивая никого из нас.

Характерно употребление герундия и для глаголов с предлогами:

believe in (верить во что-то): I believe in providing the most natural conditions for animals — Я верю в обеспечение наиболее естественной среды для животных.
think of (подумывать, думать о): You wouldn't think of doing it years ago – Раньше ты бы не думал этого делать.
succeed in (преуспеть): He had succeeded in pleasing her in spite of everything that had happened — Ему удалось порадовать ее, несмотря на все то, что произошло.
dream of (мечтать о): I can only dream of living in Australia — Я могу только мечтать о жизни в Австралии.

persist in (упорно продолжать): That's why you persist in calling him? — Вот почему ты продолжаешь ему названивать?
complain about (жаловаться на): She always complains about working so hard — Она всегда жалуется, что много работает.
accuse of (обвинять в): Mark is accused of working for a terrorist organization — Марка обвиняют в работе на террористическую организацию.
Герундий используется после конструкций с глаголом to be, описывающих внутреннее состояние:

to be afraid of (бояться): I'm not afraid of falling — Я не боюсь упасть.
to be proud of (гордиться): You should be proud of being a father — Ты должен гордиться тем, что ты отец.
to be tired of (устать): I'm tired of living in this city — Я устал жить в этом городе.
to be good at (быть способным): Don't be surprised, she is good at remembering faces — Не удивляйся, она хорошо запоминает лица.
Многие устойчивые выражения с глаголом have требуют при себе герундия:

have fun (веселиться): I'm going to have fun pretending to be your husband — Я повеселюсь, притворяясь твоим мужем.
have a good time (хорошо проводить время): We had a good time watching movies — Мы хорошо провели время за просмотром фильмов.
have problems (иметь проблемы с чем-то): I have problems losing weight — У меня плохо получается сбрасывать вес.
have difficulty / a difficult time (иметь трудности): You see your aim but have difficulty getting there — Ты видишь цель, но у тебя не получается ее достичь.
Дополнительный участник в предложении с герундием встречается реже, чем с инфинитивом, но также возможен.

Do you accuse me of being conceited and arrogant? — Ты обвиняешь меня в самодовольстве и высокомерности?

I could imagine them looking at each other — Могу представить, как они смотрят друг на друга.

Exercises

1. Translate into Russian.
1 . The buyers want to know our terms of payment.
2 . This is for you to decide.
3 . The plan of our work will be discussed at the meeting to be held on May 25.
4 . To walk in the garden was a pleasure.
5 . Jane remembered to have been told a lot about Mr. Smith.
6 . I felt him put his hand on my shoulder.
7 . This writer is said to have written a new novel.
8 . She seems to be having a good time at the seaside.
9 . They watched the boy cross the street.
10 . To advertise in magazines is very expensive.

11 . He proved to be one of the cleverest students at our Institute.
12 . He knew himself to be strong enough to take part in the expedition.
13 . To see is to believe.
14 . He is sure to enjoy himself at the disco.
15 . To tell you the truth, this company has a very stable position in the market.

2. Put “to” before the infinitive where it is necessary.
1 . My son asked me … let him … go to the club.
2 . You must make him … practice an hour a day.
3 . She was made … repeat the song.
4 . He is not sure that it can … be done, but he is willing … try.
5 . Let me … help you with your work.
6 . She asked me … read the letter carefully and … write an answer.
7 . You ought … take care of your health.
8 . I looked for the book everywhere but could not … find it.
9 . He was seen … leave the house.
10 . We had … put on our overcoats because it was cold.
11 . The man told me not … walk on the grass.
12 . Have you heard him … play the piano?
13 . You had better … go there at once.
14 . I would rather not … tell them about it.
15 . We shall take a taxi so as not … miss the train.

3. Use the appropriate form of the infinitive.
1 . They want (to take) to the concert by their father.
2 . I am glad (to do) all the homework yesterday.
3 . This plant is known (to produce) tractors.
4 . He wants his son (to become) a lawyer.
5 . The enemy army was reported (to overthrow) the defense lines and (to advance) towards the suburbs of the city.
6 . He seems (to know) French very well: he is said (to spend) his youth in Paris.
7 . You had better (to call) our distributors at once.
8 . We are happy (to invite) to the party.
9 . That firm is reported (to conduct) negotiations for the purchase of sugar.
10 . It seemed (to snow) heavily since early morning: the ground was covered with a deep layer of snow.
11 . He didn’t hear me (to knock) at the door.
12 . I want (to inform) of her arrival.
13 . Our sportsmen are proud (to win) the cup.
14 . He is known (to work) on the problem for many years.
15 . The representative of the firm asked for the documents (to send) by air mail.

4. Put “to” where necessary.
1. I think you ought … apologize.
2. Make him … speak louder.
3. Help me … carry this bag.
4. My son asked me … let him … go to the theatre.

5. I must … go to the country.
6. It cannot … be done to-day.
7. She asked me … read the letter carefully and … write an answer.
8. The man told me not … walk on the grass.
9. Let me … help you with your work.
10. She ought … take care of her health.
11. We had better … stop to rest a little.
12. I don't know what … do.
13. He was seen … leave the house.
14. We have come … ask whether there is anything we can … do.
15. We heard the siren … sound and saw the ship … move.
16. I cannot … go there now, I have some work … do.
17. During the crossing the passengers felt the ship … toss.
18. You must make him … practice an hour a day.
19. He is not sure that it can … be done, but he is willing … try.
20. I looked for the book everywhere but could not … find it.
21. He said that she might … come in the evening.
22. She was made … repeat the song.
23. Would you rather … learn shorthand than typewriting?

5. Translate into Russian.
1. I called every morning to see if there was any news.
2. We stopped to have a smoke.
3. He came here to speak to me, not to you.
4. The car was waiting at the door to take them to the station.
5. To explain the problem he drew diagrams all over the blackboard.
6. The steamship "Minsk" was chartered to carry a cargo of timber from St.Petersburg to Hull.
7. Under clause 35 the charterers were to supply the steamer with icebreaker assistance to enable her to enter or to leave the port of loading.
8. To meet the increased demand for industrial goods, a great number of new shops have been opened in the towns.
9. The first lot is ready for shipment, but to economize on freight we have decided to ship it together with the second lot.
10. Please send us your instructions at once to enable us to ship the machines by the 20th of May.

Тема 10.4. Система рулевого управления

Практическое занятие 68

Предтекстовые упражнения
The exercises to be done before reading the text
Упражнение 1. Прочтите слова и словосочетания и
запомните их русские эквиваленты.
guide the car — управлять
автомобилем

means of turning — средство поворота
front wheels - передние колеса
steering wheel — рулевое колесо
steering column — рулевая колонка
for this purpose — для этой цели
pivot — шарнир
swing (swang, swung) - поворачиваться
steering knuckle arm - рычаг поворотного кулака
tie-rod — поперечная тяга
in turn — в свою очередь
pitman arm - рулевая сошка
rack and pinion assembly — рулевоймеханизм с рейкой и шестерней
ball joint — шаровой шарнир
leverage — рычажный механизм
hose — шланг, рукав
steering gear assembly – рулевой механизм
rack and pinion type - реечно-шестеренчатый тип (рулевого механизма)
recirculating ball steering - рулевой механизм с шариковой гайкой
worm and sector — червяк и сектор
injury - повреждение
steering box - картер рулевого механизма

Упражнение 2. Прочтите слова и сопоставьте их с русскими значениями.
column, spindle, system, hydraulic, pump, reservoir, popular, type, effective, effectiveness, effectively, energy, function, to deform, deformation.
Упражнение 3*. Переведите слова, обращая внимание на суффиксы и префиксы.
Rotate — rotation, apply — application, move — movement, develop

— development, drive — driver, form - reform - deform - deformation, guide — guidance.

Прочтите текст, а затем выполните следующие за ним упражнения.

TEXT

Steering System

To guide the car, it is necessary to have some means of turning the front wheels so that the car can be pointed in the direction the driver wants to go. The steering wheel in front of the driver is linked by gears and levers to the front wheels for this purpose. The front wheels are on pivots so they can be swung to the left or right. They are attached by steering knuckle arms to the rods. The tie-rods are, in turn, attached (o (he pitman arm.

When the steering wheel is turned, gearing in the steering gear assembly causes the pitman arm to turn to the left or right. This movement is carried by the tie-rods to the steering knucle arms, and wheels, musing them to turn to the left or right.

The steering system incorporates: the steering wheel and column, steering gear, pitman arm, steering knuckle arm, front axle, steering knuckle pivot, tie-rods.

There are several different manual steering gears in current use, such as the rack and pinion type and the recirculating ball type. The rack and pinion steering gear is widely used. Another manual steering gear which is popular in imported cars is the worm and sector type.

The steering wheel and column are the source of injury to the driver, air bags and other devices being developed now to safe the life of a driver.

Energy-absorbing columns must stop the steering wheel and column from being pushed to the rear as the front of the car is crushed in an impact.

Energy-absorbing columns must also provide the driver with a tolerable impact as he moves forward and strikes the wheel with his chest.

Послетекстовые упражнения

The exercises to be done after reading the text

Упражнение 4. Найдите в тексте ответы на вопросы.

1.What mechanism is necessary to guide the car?
2.How is the steering wheel connected to the front wheels?
3.Why can the front wheels be swung to the left or to the right?
4.What does the manual steering system incorporate?
5.What types of manual steering gears in use do you know?

Упражнение 5*. Переведите на русский язык, обращая особое внимание на герундий.

1.To guide the car it is necessary to have some means of turning the front wheels.
2.The steering wheel in front of the driver is linked by gears and

levers to the front wheels for turning the car in the direction the driver wants to go.
3.Without using the steering system the car moves only in the direct position.
4.Manufacturers can use rack and pinion type steering gear without choosing another type because "rack and pinion" type steering is very dependable.
5.Energy-absorbing columns must stop the steering wheel from being pushed to the rear when the front of the car is damaged in an impact.
Упражнение 6. Переведите текст, не пользуясь словарем.
To turn the car you must have some means of turning the front wheels. For this purpose the steering wheel and steering column are linked to the front wheels. The front wheels are on pivots and can be swung to the left or to the right.
When the driver turns the steering wheel and column the front wheels (being on pivots) attached by the steering knuckle arms to the lie rods are also turned.

Тема 10.4. Система рулевого управления

Практическое занятие 69

Упражнение 7. Переведите текст, пользуясь словарем.
Troubles of Steering Gear Components
Steering gear and linkage may have the following basic troubles: excessive steering-wheel free play, bending of steering rod, oil leakage from the steering-gear case, disadjustment of steering gear.
What to do
1.Check the steering-wheel free play and steering gear performance while the car is running.
2.Check the steering-gear case for oil leakage by visual inspection.
3.Adjust the steering gear. Steering gear of the worm and roller type is adjusted by end playing in the steering worm shaft bearings.
Упражнение 8. Закончите предложения, выбрав соответствующее окончание из правой колонки.
1.The front wheels are on pivots
so...
2.When the steering wheel is
turned...
3.The steering wheel is linked.
a. by the tie-rods.
b. rack and pinion type, recirculating
ball type, warm and
sector type.
4.Most manufacturers use...
5.Steering gear may be...
6.Steering knuckle arms and

wheels are turned...
d. gearing in the steering system
causes the pitman arm to turn.
e. rack and pinion type.
f. they can be swung to the left or
right.
g. by gears and levers to the front
wheels.
Упражнение 9. Переведите предложения на английский
язык.
1.Для управления автомобилем необходима система рулевого
управления.
2.Рулевое управление включает в себя: рулевое колесо и
рулевую колонку, зубчатое соединение, рулевую сошку,
рычаги поворотного кулака и шарнирные соединения, рычаги
и поперечные тяги.
3.Существуют различные типы рулевых механизмов, а
именно: реечно-шестеренчатый тип, механизм с шаровой
гайкой, механизм с червяком и сектором.
4.Когда водитель поворачивает руль влево или вправо, то
рулевой механизм заставляет рулевую сошку поворачиваться
влево или вправо.
Это движение передается поперечными тягами к рычагам
поворотных кулаков и к колесам, заставляя их поворачиваться
влево или вправо.
Упражнение 10. Прочтите диалог, а затем выполните
следующие за ним упражнения.
DIALOGUE
Stas: Look here. I have some troubles with the steering system.
Vlad: What troubles?
S.: The first is excessive free play of the steering wheel.
V.: You should check free play of the steering wheel and steering
gear performance.
S.: The second problem is oil leakage from the steering gear case.
V.: Check the steering gear case for oil leakage visually. Anything
else?
S.: Sure. It is disadjustment of the steering gear. And I don't know
what to do.
V.: You see, in this case it is better for you to go to a repairing shop.
Good specialists should do this job.
S.: Thank you very much.
V.: Not at all.
Notes:
look here — послушай;
troubles — неисправности, неполадки;
excessive free play — чрезмерный свободный ход;
check — проверять;

performance — работа, характеристики;
steering gear case — картер коробки передач,
anything else — что еще
in this case — в этом случае.__

Тема 10.5. Подвеска

Практическое занятие 70

Car suspension

Exercise 1. Write each verb in the *-ing* form.
Assure, feel, sit, skid, spin, set, accelerate, begin, try.

Exercise 2. Say what way the following words are formed. Translate the words into Russian.
Ensure, truly, immediately, slippery, powerful, acceleration, direction, management, intervention, superbly.

Exercise 3. Say what function the suspension performs in a car.

Exercise 4. Read the advertisement and try to understand the meanings of the underlined words.

Excellent handling begins with a car suspension. For this reason, our engineers distributed the axle load in our new BMW 3 Series compact in a way that ensures truly neutral handling: 50:50. And since the front and rear axles bear an equal part of the load, the engine's power is transmitted to the road in the best way possible.

Something you'll notice immediately, especially on slippery surfaces, or while cornering at speed. Traction remains stable, and the car is "glued" to the road. Whenever you brake or steer, you always have the reassuring feeling that you are sitting in a very safe car. The BMW 3 Series compact includes a sports suspension and direct as standard.

You also get powerful chassis and suspension control systems at no extra cost. Such as DSC Dynamic Stability Control. This control system monitors acceleration in any direction and, if required, performs an engine management intervention. The appropriate wheels are braked automatically in order to avoid skidding. In this way, the car is kept safely on track, for instance on slippery surfaces or when cornering. With the traction mode, spinning wheels when setting off or accelerating out of a bend are a thing of the past. The vehicle handles superbly at all times.

Also included as standard: CBC (Cornering Brake Control). This ensures that your car stays safely on track when you have to brake in a bend.

Exercise 5. Match *a–f* with *1–6*.
a) axle load 1) скользкая поверхность
b) front axle 2) передний мост
c) equal part of the load 3) безопасный автомобиль
d) safe car 4) нагрузка на ось
e) powerful chassis 5) равная часть нагрузки
f) slippery surface 6) мощные шасси

Exercise 6. Translate the following compound nouns into Russian.
Car suspension, suspension control system, traction mode, cornering brake control, fuel supply control.

Exercise 7. Choose the right option according to the text.
1. The front and rear … bear an equal part of the load.
a) axles b) suspension c) engine
2. The BMW 3 Series compact includes a sports … as standard.
a) wheel b) chassis c) suspension
3. The car stay safely on track even on … surfaces or when … .
a) hard; starting b) slippery; cornering c) slippery; corner
Exercise 8. Put the verbs into the Passive voice.
1. Truly neutral handling (to ensure) in our new BMW 3 Series compact.
2. A sports suspension and direct steering (to include) into the car.
3. An equal part of the load (to bear) by the front and rear axles.
4. That can (to notice) immediately on slippery surfaces.
Exercise 9. Say if you like the car described in the text above. What characteristics of the car seem especially attractive to you?

Тема 10.6. Тормозная система

Практическое занятие 71

Brake system
Exercise 1. Learn the reading of the following words.
master [∪mɑ:stə(r)] drum [drɸm]
plunger [∪plɸndʒə(r)] pad [pæd]
fl uid [∪fl u:Id] rotor [∪rəYtə(r)]
effciency [I∪flΣənsI] friction [∪frıkΣ(ə)n]
caliper [∪kælIpə(r)] spindle [∪spInd(ə)l]
disc [dIsk]
Exercise 2. Answer the following questions.
1. Why is the brake system so important for our safety?
2. What are the most important parts of the brake system?
Exercise 3. Read the text and learn the names of brake system components.
Your car brake system is a complex grouping of parts which serve a critical role in keeping you safe. No other system in the car is as important for your safety. Keeping your brake system in tip-top shape should be your top priority.
Let's start with the pedal and work our way down the braking system to better understand how it works. The pedal is a strong steel lever which transmits the force from your foot to the master cylinder (главный цилиндр). The pedal typically has a switch attached to it, to turn on your brake lights when you press the pedal down.
When you push down on the pedal, the master cylinder is pushed via a push rod. When you step on the brake pedal, you are actually pushing against a plunger in the master cylinder which forces hydraulic oil (brake fl uid) through a series of tubes and hoses to the braking unit at each wheel. Since hydraulic fl uid (or any fl uid for that matter) cannot be compressed, pushing fl uid through a pipe is just like pushing a steel bar through a pipe. Unlike a steel bar, however, fl uid can be directed through many twists and turns on its way to its destination, arriving with the exact same motion and pressure that

it started with. It is very important that the fl uid is pure liquid and that there are no air bubbles in it. Air can compress, which causes sponginess to the pedal and severely reduced braking effi ciency. If air is suspected, then the system must be bled to remove the air. There are “bleeder screws” at each wheel cylinder and caliper for this purpose.

The master cylinder consists of a piston and a fl uid reservoir. When the piston is moved, it pushes the brake fl uid through the brake lines and into the caliper (суппорт) or wheel cylinder. Most cars have disc brakes on the front wheels, and many have disc brakes on the rear also. When disc brakes are not used on the rear, drum brakes are used. The fl uid being pushed from the master cylinder through the brake lines pushes a piston in the brake caliper. This in turn applies force to the brake pads. The brake pads are typically made from a hard organic or metallic compound. The pads are made to survive under high heat and pressure. When the brake pads contact the disk rotor, there is friction and heat is created. This is how your car stops, by turning the rotating energy of your wheels into heat through friction. The last part of your braking system is the rotors. Typically made from cast iron and made heavy enough to dissipate heat and not warp over time. Unfortunately, in today’s cars, many of the rotors are not large enough, and can warp within a few 1,000 miles. The rotor is bolted between the wheel and the spindle, and rotates at the same speed as the wheels.

Exercise 4. Give the English equivalents to the following words and word combinations.

Стальной рычаг, педаль, стоп-сигнал, главный цилиндр, плунжер, тормозная жидкость, стальной стержень, дисковые тормоза, барабанные тормоза, тормозной диск.

Exercise 5. Find in the text above the words opposite in meaning to the following words and word combinations.

Dangerous, in neglect state, worse, weak, depress, dirty fl uid, front, soft compound, at a different speed.

Exercise 6. Complete the sentences.

1. The pedal transmits the force from the foot to … .
2. When you step on the brake pedal, you are pushing against a … which forces … .
3. The master cylinder consists of a piston and a … .
4. On the rear wheels either … brakes or … brakes can be used.
5. When the brake pads contact the disc rotor … .

Exercise 7. Answer the questions.

1. What kinds of brakes are used in cars?
2. What liquid qualities make it possible to use it in the brake system?
3. Why air can’t be used instead of liquid in the brake system?

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4. What should you do if air is suspected in the brake system?
5. What materials are brake pads made of? And rotors?

Exercise 8. Tell about the way of the brake fl uid in the brake system. Work your way down the brake system from the pedal to the rotor. Use the following words: *to transmit, to push, to force, to move, to contact*, etc.

Тема 10.7. Типы тормозов

Практическое занятие 72

Discussing brake system operation

Exercise 1. Restore the original sentences.

1. presses, the, foot, pedal, the.
2. pushes, the, fi rst, pedal, the, down, piston.
3. oil, the, squeezes, the, piston.
4. the, pushes, piston, shoe, the, brake, the against, wheel.

Exercise 2. Make up sentences with the following expressions: *a pair of, a set of, a box of…*

Use the nouns: nut, wheel, drum brake, spark plug, brake pad, lever, cylinder, nail.

***Example*:** I've bought a pair of wheels.

Exercise 3. Find and correct mistakes in the following sentences.

1. – What is it?
– This is drum brakes.
2. – Are the master cylinder full of brake liquid?
– Yes, its is.
3. This disk brake are new.
4. These are a pair of brake pads.
5. Is these a box of nuts?
6. These is a brake lights.
7. Are this wheel cylinders?
8. There are a pair of brake pads in each caliper.

Exercise 4. Make up questions to which the following words will be answers.

1. The brake fl uid.
2. They should be replaced.
3. The wheel stops.
4. The friction.

Exercise 5. You are asking your partner about advantages and disadvantages of the disk brakes and the drum brakes. Complete the dialogue and reproduce it with your groupmate.

– The disk brake is the best brake we have found so far.
– ... ?
– Disk brakes are used to stop everything from cars to locomotives.
– … ?
– Disk brakes wear longer, are less affected by water, are self adjusting, self cleaning and stop better than any other system around.
– …?
– There are two brake pads on each caliper.
– …?
– There are many types and qualities of pads available. The differences have to do with brake life (how long the new pads will last) and noise (how quiet they are when you step on the brake).
– …?

– If the lining wears down to the metal brake shoe, then you will have a “Metal-to-Metal” condition where the shoe rubs directly against the rotor causing severe damage and loss of braking effi ciency.
– … ?
– Some brake pads come with a “brake warning sensor” that will emit a noise when the pads are worn to a point where they should be changed. This noise will usually be heard when your foot is off the brake.
– …

Exercise 6. You work as a car mechanic. Give some recommendations to your client. The list of the possible recommendations is given below. Make up a dialogue, following the scheme.

Greetings
Question Answer
Asking for advice Recommendation
Disagreement Explanation
Agreement Further explanations
Expressing gratitude

• Avoid “riding” your brakes. It’s better to slow down with moderate pressure and then releasing the brake to cool, than riding the brakes and overheating them.
• On steep grades consider downshifting to save your brakes. Only do this when traction conditions are good. In ice, snow, or even rain, downshifting into too low gear may cause a skid. Downshifting lets your engine do some of the braking instead of your brakes.
• Keep your wheels and braking system clean. Clean brakes work better and keep temperatures down. Use a good wheel cleaner.

Тема 10.8. Придаточные предложения

Практическое занятие 73

ОТНОСИТЕЛЬНЫЕ ПРИДАТОЧНЫЕ ПРЕДЛОЖЕНИЯ RELATIVE CLAUSES

Как и в русском языке, в английском языке сложные предложения делятся на две группы: сложносочинённые и сложноподчинённые. Придаточные предложения присоединяются к главному при помощи различных сочинительных (and, but, or) и подчинительных союзов (that, after, before, while, as, if, и др.), а также наречий (when, where, how, why) и союзных слов (who, whose, what, which, that).

§ 1. Относительные придаточные предложения. Относительные придаточные предложения – это предложения, которые уточняют, какого человека или вещь мы имеем в виду. Когда мы говорим о людях, используем **who/that**. Когда мы говорим о вещах, используем **which/that**. На русский язык **who/which/that** переводятся союзом **который/что.**

The woman who/that lives next door is a doctor. – Женщина, которая живёт по соседству, врач.
I don't like stories which/that have unhappy endings. – Мне не нравятся

истории, которые имеют несчастливый конец.

Exercise 1. Join the two sentences using who/that/which.

e.g. A girl was injured in the accident. She is now in hospital. – The girl *who was injured in the accident* is in hospital now.

A man answered the phone. He told me you were away. – The man _____.

A waitress served us. She was very impolite and impatient. – The _____.

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A building was destroyed in the fire. It has now been rebuilt. – The _____.

Some people were arrested. They have now been released. – The _____.

A bus goes to the airport. It runs every half hour. – The _____.

Exercise 2. Complete the sentences. Choose the most suitable ending from a-j and make it into a relative clause using who/that/which.

(he) invented the telephone

(she) runs away from home

(they) are never on time

(they) were on the wall

(it) makes washing machines

(it) gives you the meaning of words

(it) won the race

(they) stole my car

(it) can support life

(it) cannot be explained

Barbara works for a company *that makes washing machines*.

The book is about a girl _____.

What was the name of the horse _____.

The police have caught the men _____.

Alexander Bell was the man _____.

What's happened to the pictures _____.

A mystery is something _____.

A dictionary is a book _____.

I don't like people _____.

It seems that Earth is the only planet _____.

§ 2. Бессоюзные относительные придаточные предложения (без who/that/which). Когда *who/that/which* не являются подлежащим придаточного предложения, их можно опустить. В русском языке такое опущение невозможно, поэтому при переводе предложения с отсутствующим who/that/which мы добавляем «*который*».

The woman who lives next door is a doctor. – Женщина, которая живёт по соседству, врач. (who lives = who – подлежащее, lives – сказуемое; who нельзя опустить в этом предложении)

The woman who I wanted to see was away on holiday. – Женщина, *которую* я хотел увидеть, была в отпуске. (I wanted = I – подлежащее, wanted – сказуемое; who можно опустить в этом предложении: The woman I wanted to see was away on holiday. При переводе на русский язык добавляем «*которая*».)

Ещё примеры:

Have you found the keys you lost? (=Have you found the keys which you lost?)

The dress Ann bought doesn't fit her very well. (= The dress that Ann bought...)
Is there anything I can do? (= ... anything that I can do?)

Exercise 3. Tick the sentences where who/that can be omitted.

The people who we met at the party were very friendly. ___
The people who work in the office are very friendly. ___
The people who I talked to were very friendly. ___
The woman who lives next door is a doctor. ___
Have you found the keys (that) you lost. ___
What have you done with the money that I gave you? ___
What happened to the money that was on the table? Did you take it? ___
It was an awful film. It was the worst film that I've ever seen. ___
It was the worst thing that has ever happened to me. ___

§ 3. Бессоюзные относительные придаточные предложения с предлогами (in, at, with и др.). В таких предложениях употребляется сказуемое с предлогом, например: talk to – разговаривать с, sleep in – спать на, fall in love with – влюбиться в, sit next to – сидеть рядом с, look for – искать (for не переводится). Who/that/which обычно опускается, а предлог стоит после глагола. При переводе на русский язык необходимо добавить «*который*», перед которым нужно поставить предлог.

Do you know the woman Tom is *talking to*? = …who/that Tom is talking to (Ты знаешь женщину, *с которой* разговаривает Том?)
The bed I *slept in* last night wasn't very comfortable. = …that/which I slept in last night… (Кровать, *на которой* я спал, была не очень удобной.)
Are these the keys you were *looking for*? = … that/which you were looking for. (Это те ключи, *которые* ты искал?)
The woman he *fell in love with* left him after a few weeks. = …who/that he fell in love with … (Женщина, *в которую* он влюбился, бросила его через несколько недель).
The man I was *sitting next to* on the plane talked all the time. = …who/that I was sitting next to… (Мужчина, *рядом с которым* я сидел в самолёте, всё время говорил.)

Exercise 4. Complete these sentences. Choose the most suitable ending from a-h and make it into a relative clause.

we went to a party last night
you can rely on George
we were invited to a wedding
I work with a number of people
I saw you with a man
I applied for a job
you told me about a hotel
you were looking for some keys

Are these the keys *you were looking for*?
Unfortunately we couldn't go to the wedding _____.
I enjoy my job. I like the people _____.
What's the name of that hotel _____?
The party _____ wasn't very enjoyable.
I didn't get the job _____.

George is a good person to know. He's somebody _____.
Who was that man _____ in the restaurant?

§ 4. Относительные придаточные предложения с whose / whom / where

Whose – чей, чья, чьё

We saw some people whose car had broken down. – Мы видели людей, чья машина сломалась

What's the name of the man whose car you borrowed? – Как зовут того человека, чью машину ты взял?

I met a man whose sister knows you. – Я встретил человека, чья сестра тебя знает.

Whom – который; чаще всего употребляется с предлогами вместо **who**, но обычно опускается.

The woman with whom he fell in love left him after a few weeks. = The woman he fell in love with left him after a few weeks.

Where – который, где; используется для описания места.

The hotel where we stayed wasn't very clean. – Отель, где мы останавливались, был не очень чистым.

I went back to the town where I was born. – Я вернулся в город, где я родился.

Exercise 5. Complete the sentences 2- 6 with endings b-f using *who* or *whose*:

My mother writes detective stories.

My wife is an English teacher.

I own a restaurant.

My ambition is to climb Everest.

We've just got married.

My parents work in a circus.

a) I met somebody *whose mother writes detective stories*.

b) I met a man _____.

c) I met a woman _____.

d) I met somebody _____.

e) I met a couple _____.

f) I met somebody _____.

Exercise 6. Complete the sentences 2- 6 with the proper endings a-f using *where*.

I can buy some postcards there

Ann bought a dress there

John is staying there

I was born there

we can have a really good meal there

we had the car repaired there

Last month I went back to the town *where I was born.*

Do you know a restaurant _____?

Is there a shop near here _____?

I can't remember the name of the garage _____.

Do you know the name of the hotel _____?

Ann bought a dress which didn't fit her, so she took it back to the shop _____.

Exercise 7. Complete the sentences with *who/whom/whose/where*.

What's the name of the man _____car you borrowed?

A cemetery is a place _____people are buried.

A pacifist is a person _____ believes that all wars are wrong.
An orphan is a child _____ parents are dead.
The place _____ we spent our holidays was really beautiful.
This school is only for children _____ first language is not English.
I don't know the name of the woman to _____ I spoke on the phone.

Тема 10.9. Условные предложения

Практическое занятие 74

Структура условных предложений

Условные предложения состоят из двух частей: самого условия (кондишен в английском) и следствия выполнения этого условия (основная часть предложения). В следствии сообщается действие, которое должно произойти, если будет выполнено условие. Определить, какое значение у каждой части, можно и по формальному признаку: условие чаще всего начинается со слова if — если.

Две части предложения могут следовать в любом порядке: вначале можно сказать условие, затем следствие или наоборот. На смысл сообщения порядок следования не влияет. Однако здесь проявляется синтаксическое правило: порядок влияет на постановку запятой в предложении. Если условие стоит на первом месте в предложении, то оно отделяется запятой. Если же вначале стоит следствие, то запятая не нужна.

If I see Gordon tomorrow, I will tell him about it — Если я увижу Гордона завтра, я расскажу ему об этом.

I will tell Gordon about it if I see him tomorrow — Я расскажу об этом Гордону, если увижу его завтра.

Часть с if condition является подчиненным предложением, поэтому вопросы в таких конструкциях задаются к основной части предложения, то есть к следствию.

Will you tell Gordon about it if you see him tomorrow? — Ты расскажешь об этом Гордону, если увидишь его завтра?

Типы условных предложений

В английском языке можно выделить 5 типов условных предложений. Они отличаются по характеру условий в предложении и соотнесенности события с действительностью и образуются с помощью разных грамматических правил.

English Conditionals :

- Zero Conditional — Нулевой тип условного предложения
- First Conditional — Первый тип
- Second Conditional — Второй тип
- Third Conditional — Третий тип
- Mixed Conditional — Смешанный тип

Выбор одного из этих типов определяется двумя параметрами. Во-первых, говорящему нужно определить, реально ли осуществление ситуации, или же выполнение условия возможно только в нереальном мире. Во-вторых, определить время для каждой части предложения. В условных предложениях время в условии и следствии не зависят друг от друга и каждое определяется по смыслу ситуации. Например, когда речь идет о реальном условии, о порядке вещей в мире, то для конструкций достаточно простых глагольных времен. Когда предложение

относится к нереальным ситуациям, которые не происходят в жизни, в конструкциях появляется сослагательное наклонение. При этом нереальное событие может относиться к настоящему и будущему или к прошлому.

Zero Conditional

Начнем обзор условных предложений с Zero Conditional. В таких конструкциях появление if минимально влияет на грамматическую форму глагола.
Конструкции нулевого типа условных предложений появляются в контекстах, когда сообщение указывает на общие истины или признанное положение вещей. Типичное употребление этих предложений — инструкции, руководства, описания законов.
Схема образования таких предложений наиболее проста. Чаще всего глагол здесь ставится в простое настоящее время в обеих частях
предложения. Примеры Zero Conditional :
If you take the ice out of the refrigerator, it melts — Если достать лед из холодильника, он тает.
If you click on this icon, the dialogue box appears — Если вы нажмете на этот значок, появляется диалоговое окно.
If I wake up at 6 o'clock, I feel awful — Если я просыпаюсь в 6 утра, то чувствую себя ужасно.
Типичная форма глагола для Zero Conditional — Present Conditional . Однако здесь может появляться не только Present Simple: для описания предписаний или установленного порядка вещей могут использоваться другие настоящие времена. Выбор конкретной формы глагола определяется тем, какую стадию события хочет выделить говорящий. Например, когда необходимо подчеркнуть процесс совершения действия, появляется форма Continuous:
If you are driving a car, you need to be very attentive — Если ведешь машину, нужно быть очень внимательным.
Когда речь идет о результате, появляется форма Perfect:
If you have heard an alarm, you should leave the place immediately — Если вы услышали сигнал тревоги, следует немедленно покинуть помещение.
В основной части Zero Conditional часто используются модальные
глаголы: can (мочь, иметь возможность) / may (мочь, иметь
разрешение) / should (следует) / must (должен). Модальные глаголы описывают действие, которое осуществляется с определенной долей вероятности.
Когда мы задаем вопрос к предложениям типа Conditional 0 , нужно обратить внимание, какой глагол используется в основной части. Если там стоит to be или модальные глаголы, то необходимо перенести его на первое место в предложении. Если же используются другие формы, то нужно добавить вспомогательный глагол do / does в начало вопроса, а смысловой поставить в инфинитив.
Does the ice melt if I take it out of the refrigerator? — Разве лед тает, если его достать из холодильника?
Should I leave the place immediately if I have heard an alarm? — Нужно ли мне немедленно покинуть помещение, если я услышу сигнал тревоги?
Поскольку нулевое условное часто используется как советы или руководства, глагол в основной части может стоять в повелительном наклонении.

Вышеуказанные примеры Conditional Zero можно переформулировать с использованием глагола в повелительном наклонении:
If you are driving a car, be very attentive — Если ведешь машину, будь очень внимательным.
If you have heard an alarm, leave the place immediately — Если вы услышали сигнал тревоги, немедленно покиньте помещение.

Обязательность Zero Conditional

В отличие от типов 1, 2, 3 conditionals, в нулевом типе условных предложений отсутствует элемент предположения. Они только констатируют факты, которые происходят и имеют обязательный характер. Союз if в таких конструкциях можно заменить на союз when (когда).
When you take the ice out of the refrigerator, it melts — Когда достаешь лед из холодильника, он тает.
When you have heard an alarm, you should leave the place immediately — Когда вы услышали сигнал тревоги, следует немедленно покинуть помещение.
When you are driving a car, you need to be very attentive — Когда ведешь машину, нужно быть очень внимательным.
When you click on this icon, the dialogue box appears — Когда вы нажимаете на этот значок, появляется диалоговое окно.
When I wake up at 6 o'clock, I feel awful — Когда я просыпаюсь в 6 утра, то чувствую себя ужасно.
При нулевом условии (zero condition) можно также
заменять if на every time (каждый раз), если предложения описывают привычки и подразумевают повторяющиеся действия:
Every time I wake up at 6 o'clock, I feel awful — Каждый раз, когда я просыпаюсь в 6 утра, я чувствую себя ужасно.

First Conditional

В предложениях с First Conditional роль условия оказывается более явной. В нем заключается предположение о ходе событий, и если оно выполняется, тогда возможно осуществление действия из основной части предложения.
Конструкция первого типа относится к будущему времени: если произойдет условие, тогда произойдет следствие. При этом вероятность осуществления события оказывается высокой. Именно к такому типу предложений относится пример:
If I see Gordon tomorrow, I will tell him about it — Если я увижу Гордона завтра, я расскажу ему об этом.
Образование First Conditional включает в себя настоящее и будущее время. После if ставится Present, а в части следствия — Future. Обратите внимание, что после if не используется глагол в будущем времени, несмотря на то, что по смыслу условие описывает событие, которое только может произойти. На русский язык обе части предложения чаще всего переводятся будущим временем, и это часто сбивает с толку изучающих английский. Нужно запомнить, что в английском Future ставится только в часть следствия.
I will pass the exam if I work hard — Я сдам экзамен, если буду трудиться.
Суть использования условных предложений первого типа — сообщить о вероятном ходе событий, однако оставляя неуверенность в том, что ситуация обязательно

произойдет. Этим и различает правило First and Zero Conditional . В предложениях первого типа союз if не может быть заменен на when без изменения смысла.
Если мы попробуем поставить союз when в знакомый нам пример, то изменится значение фразы. Со словом when предложение приобретает оттенок уверенности говорящего в том, что событие произойдет.
When I see Gordon, I will tell him about it — Когда я увижу Гордона, то расскажу ему об этом.
Несмотря на то, что Present Simple в условной части предложения — наиболее частое время для правила 1st Conditional , здесь возможны и другие формы настоящего времени. Например Present Continuous:
If she is sleeping, I will wake her up — Если она спит, я ее разбужу.
Во всех типах условных предложений часто используются модальные глаголы. Они заменяют will в основной части предложения. Примеры First Conditional с модальными глаголами:

- can — может (имеет возможность): If we hurry up, we can catch the last train — Если мы поторопимся, то сможем успеть на последний поезд.
- may — может (разрешено): If you finish all your work today, you may have a day off tomorrow — Если ты сегодня закончишь всю свою работу, то можешь взять завтра выходной.
- should — должен (следует): If she wants to get this job, she should be ready to work hard — Если она хочет получить эту работу, то должна быть готова много трудиться.
- must — должен: If it rains, you must stay at home — Если пойдет дождь, ты должен остаться дома.

Как и в нулевом типе условного предложения, здесь возможно употребление повелительного наклонения в основной части. В таких примерах правило First Conditional совпадает с типом Zero Conditional, и различие в смысле выводится из контекста.
If you see her, send my regards — Если увидишь ее, передавай от меня привет.

Second Conditional

Второй тип условных предложений в английском языке описывает нереальные ситуации в настоящем или будущем времени, вероятность которых очень мала. Для таких конструкций характерна специальная глагольная форма — сослагательное наклонение. Оно может относиться как к прошлому, так и к настоящему или будущему. В Second Conditional выражается значение настоящего и будущего времени.
В сослагательном наклонении речь идет о нереальных ситуациях, которые относятся к плану наших ожиданий, представлений, желаний.
Если правило Zero and First Conditional относилось к реальным событиям, то этот тип предложений характеризует нереальный мир. В русском языке такое значение выражается частицей «бы».
If I had a thousand years to live, I would become an expert in many spheres — Если бы я жил тысячу лет, я бы стал экспертом во множестве областей.
Этот пример — типичное условные предложение Conditional II с нереальной ситуацией. Она находится в плане наших мечтаний или ожиданий, но не в плане реальности: человек не может прожить тысячу лет.

Хотя по смыслу предложения второго типа условий относятся к плану настоящего или будущего времени, правило Conditional 2 предписывает ставить глагол в прошедшем времени. Употребление форм прошедшего характерно и для русского языка:

If I lived in Italy, I wouldn't try to spend every holiday at the seaside — Если бы я жил в Италии, я бы не пытался провести каждый отпуск на море.

Для Second Conditional правило образования совмещает прошедшее время в условии и сослагательное наклонение в следствии. В условной части глагол ставится в Past Simple, а в части следствия появляется глагол would, после которого следует смысловой глагол в инфинитиве без частицы to. Особенностью этих предложений является то, что прошедшее время глагола to be в условии ставится в форме were вне зависимости от числа и лица подлежащего.

If I were a king, I would live in this palace — Если бы я был королем, я бы жил в этом дворце (но я не король и вряд ли им стану).

We would be friends if Carol were a little more optimistic — Мы были бы друзьями, если бы Кэрол была немного оптимистичнее.

Часто условие описывает событие, которое равносильно и для будущего, и для прошедшего, поскольку речь идет о воображаемом мире. В русском языке в таких предложениях уместна форма «будь»: If I were a king — Будь я королем.

В отличие от типов Zero и First, второй кондишен в английском подразумевает, что осуществление условия маловероятно. Различие между такими ситуациями можно продемонстрировать на примере из первого типа условных предложений, если изменить глагольные формы в высказывании:

If I saw Gordon, I would tell him about it — Если я увижу Гордона, то расскажу ему об этом.

В таком примере говорящий утверждает, что ситуация очень маловероятна, и встреча относится, скорее, к нереальному плану.

If I saw mister President on the street, I wouldn't know what to think — Если бы я увидел президента на улице, я бы не знал, что и думать.

Типичная ситуация, в которой возникает второе условное — когда мы хотим передать, как поступили бы на месте другого человека. Стать другим человеком мы никак не можем, поэтому выбор нереального условного предложения однозначен. Часто такая формулировка используется в качестве совета:

If I were you, I wouldn't behave like this — Будь я на твоем месте, я бы так себя не вел.

В предложениях второго типа форму would могут заменять различные модальные глаголы, однако их формы несколько отличаются от ранее разобранных.

Посмотрим на примеры Second Conditional с модальными глаголами:

- could — может: I could become a star if I were more lucky — Я мог бы стать звездой, будь я более везучим.
- might — может: If we had more money, we might stop work — Будь у нас больше денег, мы бы могли перестать работать.
- should — следует: If I had time, I should go to the gym — Если бы у меня было время, мне бы стоило ходить в спортзал.
- must — должен: I must be in school at this time of day if I were a child — В это время дня я должен бы быть в школе, будь я ребенком.

Third Conditional

Конструкция третьего условного также относится к нереальному плану. Однако в отличие от второго типа, речь здесь идет о прошедшем времени. Часто такие предложения используются, чтобы передать сожаление о совершенных или несовершенных поступках или для критики произошедших событий.
If I had known it in advance, I wouldn't have said such things — Если бы я знал об этом заранее, я бы не сказал таких вещей.
Если в случае со вторым типом conditions в английском языке речь идет только о предполагаемых событиях, то из конструкции третьего условного предложения мы узнаем, что в реальности события развивались не так, как они подаются в предложении.
Основная часть предложения образуется с помощью конструкции would have и причастия прошедшего времени. Глагол в условии ставится в форму Past Perfect. В сокращенной форме глагол would выглядит как 'd, что совпадает с сокращенной формой глагола had.
If I had called him that day, we would have solved this problem = If I'd called him that d ay, we'd have solved this problem — Если бы я ему тогда позвонил, мы бы решили эту проблему.
Построить предложения третьего типа conditionals в английском можно в форме инверсии, то есть при помощи обратного порядка слов. Для этого в условии опускается союз if, а глагол had ставится на первую позицию в предложении:
Had I called him that day, we would have solved this problem — Если бы я ему тогда позвонил, мы бы решили эту проблему.
Модальные глаголы в Third Conditional имеют ту же форму, что и в предложениях второго типа и заменяют в основной части фразы глагол would. В качестве примеров можно рассмотреть уже знакомые нам предложения, поставленные в третий тип условий:

- could — может (имеет
возможность): If we had hurried up, we could have caught the last train — Если бы мы поторопились, то смогли бы успеть на последний поезд.
- might — может
(разрешено): If you had finished all your work, you may have had a day off today — Если бы ты закончил всю свою работу, то мог бы взять сегодня выходной.
- should — должен
(следует): If she had wanted to get this job, she should have been ready to work hard — Если бы она хотела получить эту работу, то должна была быть готова много трудиться.
- must — должен: If it had rained, you must have stayed at home — Если бы пошел дождь, ты бы должен был остаться дома.

Mixed Conditional
Смешанный тип совмещает в себе разные типы условных предложений. Однако в таких конструкциях участвуют не все типы conditionals 0 1 2 3 , а только второй и третий.
В Mixed Conditional одна из частей — условие или следствие — относится к прошлому. Смешанный тип условных предложений можно разбить на два вида:

1. сочетание Second Conditional в условии и Third Conditional в следствии.
2. сочетание Second Conditional в следствии и Third Conditional в условии.

Приведем примеры для каждого случая.

1. If + Second Conditional / Third Conditional
   If I were clever enough, I wouldn't have done this — Будь я достаточно умен, я бы этого не сделал.
   В Third Conditional стоит основная часть предложения, не соответствующая реальному прошлому (I wouldn't have done this — «Я бы этого не сделал»), а условие характеризуется ситуацией, справедливой и для настоящего (If I were clever enough — «Будь я умнее», Second Conditional).
2. If + Third Conditional / Second Conditional
   If I had won that lottery, I would now live in France — Если бы я выиграл в той лотерее, я бы сейчас жил во Франции.
   В этом предложении основная часть относится к настоящему времени (I would now live in France — «Я бы сейчас жил во Франции»), но условие его осуществления определяется несостоявшимся прошлым (If I had won that lottery — «Если бы я выиграл в той лотерее»).

Упражнение 1. *Поставьте глаголы, данные в скобках в нужную форму.*

1. If I see him, I (tell) him the news. 2. The table will break if you (stand) on it. 3. If he (eat) all the cakes, he will be ill. 4. If I find your book, I (let) you know. 5. The police (arrest) him if they catch him. 6. If he (read) late at night, he is sleepy in the morning. 7. If he (need) a pen, he can borrow mine. 8. Your car (be stolen) if you left it unlocked. 9. The teacher will get angry if you (make) many mistakes. 10. She will be furious if she (hear) this. 11. If you boil some water, I (make) tea. 12. If you leave your bag here, it (be lost). 13. You'll miss the bus if you (not/leave) at once. 14. If you come late, they (not/let) you in.

Упражнение 2. *Употребите глаголы, данные в скобках, так, чтобы предложения выражали реальное условие.*

1. He (be) very pleased if it (be) really true. 2. If you (go) to town on Monday, you (meet) my brother Tom. 3. If you (need) help, my father (help) you. 4. We (have) a picnic lunch if the day (be) fine. 5. If you (ask) a policeman, he (tell) you the way. 6. I (finish) the job tomorrow if I (can). 7. I (not/take) an umbrella if (not/rain). 8. If they (catch) the bus now, they (arrive) at half past nine. 9. He (find) the answers if he (look) in the keys. 10. If he (write) to her, she (answer) at once. 11. He (lose) weight if he (stop) eating too much. 12. If she (be) patient, I (try) to explain. 13. If we (leave) at once, we (catch) the early train. 14. If she (drink) this medicine, she (feel) much better.

Упражнение 3. *Раскройте скобки таким образом, чтобы предложения выражали: a) реальное условие; b) нереальное условие.*

1. If I (know), I (tell) you. 2. If she (want) to talk, she (ring up). 3. If he (have) enough money, he (buy) a large house. 4. She (feel) lonely if Peter (go) away. 5. We (be) pleased to see you if you (arrive). 6. If we (can) come on Sunday, we (come). 7. I (understand) Mr Smith if he (speak) slowly. 8. We (not/go) by ship unless there (be) no other way.

Упражнение 4. *Выберите наиболее подходящие типы условных предложений и раскройте скобки*.

1. If it (rain), I won't go out. 2. You would learn more if you (study) sometimes. 3. If he (ask) me, I would have told him the answer. 4. You would have done well if you (take) my advice. 5. I wouldn't phone you here unless it (be) urgent. 6. She'll catch cold, if her feet (get) wet in this weather. 7. Unless you apologize at once, I never (speak) to you again. 8. If we (have) nothing to do, life would be boring.

Упражнение 5. *Закончите предложения.*

1. If I had enough money ….
2. If it doesn't rain soon … .
3. I'll stay at home if … .
4. I wouldn't have come to the theatre on time if …
5. If I left home for work earlier ….
6. If I won a prize … .
7. If I were a king … .
8. If I told my parents the truth ….
9. If I were you ….
10. If I were rich ….

Упражнение 6. *Отметьте предложения, в которых допущены ошибки.*

I.
a) What would you study when you went to college next year?
b) What will you study if you go to the college next year?

II.
a) What will you be when you grow up?
b) What you be if you grow up?

III.
a) If she hadn't broken the window, she wouldn't have had to pay for it.
b) If she hasn't broken the window, she wouldn't have had to pay for it.

IV.
a) I wouldn't do that if I were you.
b) I wouldn't do that if I was you.

V.
a) My mother will blame me if she knew.
b) My mother will blame me if she knows.

Упражнение 7. *Поставьте глаголы, данные в скобках в нужную форму.*

1. If I tell you a secret, you (promise) to keep it? 2. If I had a player typewriter, I (listen) to music. 3. If I (know) her address, I'd write a letter to her. 4. If he had worked slowly, he (not/make) so many mistakes. 5. I could tell you the truth if I (know). 6. He might get fat if he (not/stop) eating much. 7. I (have) a car if I could afford it. 8. What would you do if you (get) stuck between two floors? 9. If he (know) that it was dangerous he wouldn't come. 10. If I (win) a big money prize, I'd give up my job.

Упражнение 8. *Поставьте глаголы, данные в скобках в нужную форму.*

1. If you (arrive) ten minutes earlier, you would have got a seat.
2. I shouldn't have believed it if I (not/see) it with my own eye.
3. If you had told me that beforehand, I (find) some money for you.
4. If he had asked you, you (answer)?
5. If I (have) a book, I wouldn't have been bored.
6. If you (speak) slowly, he might have understood you.
7. I (take) a taxi if I had understood that it was too late.
8. If I (be) ready when he called, he would have taken me with him.
9. She had a headache, otherwise she (come).
10. If my mother (know) about the party, she would have baked a cake.
11. If I (try) again, I think that I would have succeeded.
12. If I were you, I (not/buy) such expensive things.
13. If I (live) in the country, I would have a dog.
14. What you (do) if someone gave you a million pounds?
15. If I (be) you, I would look for another job.

Раздел 11. Ремонт и техобслуживание автомобиля

Тема 11.1. Плановое обслуживание

Практическое занятие 75

Preventive maintenance

Exercise 1. Divide the words into two groups: with the stress on the fi rst and on the second syllable.

Dictionary, preventive, maintenance, pollution, engine, corrosion, repair, produce, pressure, coolant.

Exercise 2. Say what the preventive maintenance includes. Make the list of tips how to help the car to last longer.

Exercise 3. Read the text below and complete your list of tips with the information from the text.

Few basic car maintenance tips

Preventive maintenance is important to keep your car safe. With proper care your car will last longer and some of the possible problems can be avoided. Well-maintained car is not only safer, it's also more economical and produces less pollutions. If the car is well-maintained, you can expect higher price when you decide to sell it.

Regular oil changes are very important to keep your engine in a good shape.

Wash your car regularly, wax it once in a while to keep the car body shiny and free from corrosion.

Take care of any minor concerns as soon as you can, so it won't cause serious problems and an expensive repair later.

Avoid overheating the engine.

Changing spark plugs, air fi lter, timing belt and other items according to maintenance schedule may save you from costly repairs.

Use only original parts.
Exercise 4. Give the English equivalents to the word combinations and phrases.
Профилактическое обслуживание, время от времени, уберечь кузов от коррозии, вызывать серьёзные проблемы, содержать двигатель в хорошем состоянии, машина прослужит дольше, можно избежать проблем.
Exercise 5. There are certain vehicle components that need periodical replacement. Маке up sentences to explain what damages the faulty device can cause, using the information from the table.
***Example*:** Dirty fuel fi lter may cause engine stalling and loss of engine power.

device	**damage the faulty device can cause**
dirty fuel fi lter	engine stalling and loss of engine power
dirty air fi lter	loss of engine power, increased fuel consumption,
air fl ow sensor	failure, etc.
old engine coolant	loses its anti-corrosive and other characteristics and may cause water pump to fail
spark plugs	spark plugs replacement can signifi cantly improve the engine performance
timing belt (зубчатый ремень привода)	cause serious engine damage, especially if it's a diesel engine
fuel injectors	a problem with fuel consumption

Exercise 6. Read the text and fi ll in the gaps with the words and word combinations: *pressure, plugs, fi lter, injectors, tune-up, oil, gas, warmed up.*

Few tips how to improve emission test results

– Change the engine … before testing. For old or high mileage car (автомобиль с большим пробегом) using thicker oil may help.
– Change the spark … and the air … if you changed them a long time ago.
– Complete … may be an option for older cars.
– Flushing (промывание) the fuel … usually helps.

Before the test:
– Check and adjust a tyre … .
– Fill the car with premium … .
– Make sure, the engine is fully … before test.

Exercise 7. Answer the following questions.
1. Preventive maintenance is important to keep the car safe, isn't it?
2. Why should we take care of any minor concerns as soon as possible?
3. What a driver or a car mechanic should do to keep the engine in a good shape?
4. Do we need to undertake anything if the fuel fi lter is dirty?
5. What fault device can cause loss of engine power and increased fuel consumption?

Exercise 8. Speak about the role of preventive maintenance in keeping the car in a good shape.

Тема 11.2. Устранение неисправностей

Практическое занятие 76

Finding fault in a car

Exercise 1. Learn to read the following words properly. Do you know their Russian equivalents? If not, consult the dictionary.

abnormal [æb∪n:m(ə)l]
consumption [kən∪smpΣ(ə)n]
manifold [∪mænI∩fəYld]
to dismantle [dIs∪mænt(ə)l]
to fl ush [fl Σ]
to bleed [bli:d]
to jam [dʒæm]

Exercise 2. Match *a–l* with *1–12*.

a) The fuel tank leaks. 1) Повышенный расход масла.
b) The engine gets overheated from time to time. 2) В приёмной трубе (приемном коллекторе) дыра.
c) Abnormal oil consumption. 3) Промойте радиатор струёй воды.
d) Intake manifold has a hole in it. 4) Протекает бензобак.
e) Jacket water has frozen. 5) Карбюратор нужно разобрать и почистить.
f) Flush the radiator. 6) Время от времени двигатель пере гревается.
g) The carburettor has to be dismant - led and cleaned. 7) Вода в охлаждающей рубашке замёрзла.
h) Blow through the fuel piping. 8) Тормозная педаль запала.
i) The brake pedal has fallen through. 9) Продуйте топливную магистраль.
j) Bleed the braking system. 10) Отрегулируйте ручной тормоз.
k) Adjust the hand brake. 11) Нет зажигания.
l) It doesn’t ignite. 12) Прокачайте тормозную систему.

Exercise 3. Give the English equivalents to the following words and word combinations.

Бак протекает, двигатель перегревается, расход масла, приемная труба (приемный коллектор), вода в охлаждающей рубашке, продуть, педаль западает, отрегулировать.

Exercise 4. Read the following text and fi ll in the gaps with the words below.

Finding a fault in a car

If your car doesn’t … in the morning, you should check three things fi rst: the battery, the fuel … and the spark … . It is easy to repair these … . If the battery is fl at, you should … it. If this doesn’t work, you should … it. If the petrol tank is empty, … it up. If the spark plugs are dirty, … them, and if the gap in a spark plug is too narrow or too wide, … it to the correct width.

If your car doesn’t start, the petrol pump may be …, or the fuel pipe may be blocked. If the pump is broken, it must be … or replaced. If the fuel pipe

is blocked, take it off and unblock it.
If there is a loud CLICK! When you turn the key, the starter motor may be jammed. If it is, you can try to release it by pushing the car … and backwards (in 2nd gear). If the car still doesn't start, the starter motor should be repaired or … .
Level, replace, plugs, adjust, forwards, faults, start, fi ll, clean, recharge, broken, repaired, replaced.
Exercise 5. Use the information from the text to complete the dialogue. Act it out.
Client: Could I ask you for advice? You see, my car doesn't start in the morning. What should I do?
You: … .
Client: But I checked the battery yesterday. It was fl at. I tried to recharge it, but it was still fl at. What do I do next?
You: … .
Client: If the gap in a spark plug is too narrow, how to adjust it?
You: … .
Client: How do you know that the starter motor might be jammed?
You: … .
Client: How can I repair this fault?
You: … .
Client: But I pushed the car forwards and backwards, the starter still didn't work.
You: … .
Client: Thank you. You were very helpful.

Тема 11.3. Основные работы при выполнении техобслуживания

Практическое занятие 77

Car maintenance: basic works
Exercise 1. Read the following text and fi nd the English equivalents to the word combinations
below.
How to check the oil level
Stop the engine. Wait for a while to let the engine oil pour down to the oil pan. Pull the engine oil dipstick, usually it has a bright handle saying "engine oil".
Wipe it off with a clean rag or tissue. Then insert it back all the way down into its place.
Now, pull the dipstick again and check the oil level. Normally it should be at "FULL" mark. You can see that it's a bit lower. It's not a big problem yet, but it's better to top it up.
Пополнить его, на отметке «Полный», дайте маслу стечь, щуп для измерения уровня моторного масла, вытрите его.

Exercise 2. Arrange the sentences in the correct order to consult your client how to top up the engine oil.
1. Wait for a minute to let the oil pour down.
2. Add a little amount of the oil.
3. It would be better to add the same type and brand of the engine oil as you already have in the engine.
4. Don't forget to install the dipstick back and close the oil fi ller cap when you fi nish.
5. Check the oil level again with the dipstick.
6. If it's still low, add some more. But don't overfi ll it.

Exercise 3. Depending on the colour of the oil it is necessary to undertake this or that action. Fill in the table, using the expressions below.

The colour of the oil Action needed

a) too black
b) white (coffee with milk colour)
c) slightly-brown
d) dark-brown, but still transparent

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1. it's O.K.
2. it's defi nitely time to change it
3. it's admissible but it's better to change it soon
4. it means the engine coolant mixes with the engine oil because of some internal engine problem

Тема 11.3. Основные работы при выполнении техобслуживания

Практическое занятие 78

Exercise 4. Read the text and restore the word order in the underlined word combinations.

How to check automatic transmission fl uid

Place your car at a level surface and parking engage the brake. Start the engine. Set transmission shifter in "P" (Park) position, and let the engine idle. On some cars this procedure may be different, check the manual owner's (руководство пользователя) for details.

Pull the transmission dipstick. Wipe off it with a clean lint free rag. Then insert it back carefully all the way down into its place.

Pull again and check level the fl uid. If the engine is cold, it should be within "COLD" marks. If the car was driven and is fully warmed up, the level should be at the upper end of mark the "HOT". If it's just a little bit lower I wouldn't worry about it. Otherwise I'd top it up. Check the fl uid condition also. If it's too black and dirty with burnt smell – your transmission is not going to last. Normally it clean should be and transparent. The new fl uid comes red. Over the time it becomes brownish. If it is brown, check your owner's manual, may be it's time change to it. Some manufacturers require to change the transmission fl uid at 30,000 or 50,000 miles. Others specify that you never have to change it – check what's your car owner's manual says.

Exercise 5. Arrange the sentences in the correct order to consult your client how to top

up the transmission fl uid.
1. Recheck the level again.
2. It’s very important to use only specifi ed transmission fl uid – check your owner’s manual or simply visit your local dealer, they always have proper transmission fl uid in stock.
3. Add a small amount of the fl uid through the dipstick pipe.
4. Do not overfi ll, it also may cause problems with your transmission.
5. Wait for a few minutes – let the fl uid fl ow down.

Exercise 6. Low coolant level will cause engine overheating, which may cause serious damage to the engine. Depending on the level of the engine coolant it is necessary to undertake this or that action. Look at the picture and fi ll in the table, using the expressions
below:

The level of the engine coolant Action needed

a) coolant level is lower than “LOW” mark
b) coolant level is between “LOW” and “FULL” marks in the coolant overfl ow tank
c) there is no coolant in overfl ow

1) it’s O.K.
2) top it up
3) have your car inspected in the garage, possibly there is a coolant leak

Exercise 7. Make up a dialogue in which a car mechanic consults a client on how to check the oil level.

Тема 11.4. Подготовка к зимнему сезону

Практическое занятие 79

Pre-winter maintenance

Exercise 1. Read the text and say which things in the car should be:
a) checked before winter;
b) changed or installed before winter.

A number of things in your car need to be checked before winter: the condition of the battery, battery terminals, the engine cooling system, the condition of the engine antifreeze, all the belts, the brakes, the tyres, the windshield wipers, the lights, etc.

All the fl uids need to be checked and topped up or changed if needed. It’s a good idea to change the engine oil before winter – the fresh oil will make the engine start easier in cold weather. Things like brakes, steering and suspension can only be inspected when the car is lifted on the hoist (подъёмник).

Check the freezing point and the condition of the engine coolant. A simple problem such as a bad thermostat or even a small leak will result in a long warm-up time and little heat from the heater on the highway.

Consider installing good-quality winter tyres. Winter tyres are specifi -

cally designed to improve traction on snow-covered or icy roads. Winter tyres need to be installed on all four wheels. While winter tyres have better traction on winter roads than all-season tyres, they are not foolproof; drive carefully in winter conditions. Winter tyres wear faster on dry roads in warm weather; don't forget to remove them when the winter season is over. Check tyre pressure regularly in winter.

A dead battery is one of the most common causes of a no-start in winter. Unfortunately, there is no way to tell when the battery will decide to quit – sometimes it happens unexpectedly with no prior signs. However, if you feel that cranking speed is slower than before, the battery is probably close to its end. Make sure the battery terminals are not corroded. Corroded terminals will cause troubles.

Windshield wipers are very critical to winter driving; consider installing winter wipers. Make sure you replace summer washer fl uid with special winter windshield washer fl uid that won't freeze. If the washer jets don't spray properly, clean and adjust them.

There are some other things to remember:

– synthetic oil will help your car to start easier in extreme cold;

– worn out spark plugs or bad ignition cables are more likely to cause problems with starting in cold weather;

– vehicles with a diesel engine need special attention – a simple thing like dirty fuel fi lter could cause a lot of troubles on a cold day;

– consider buying winter fl oor mats – they will help to keep the water from leaking under the car's carpet, which could cause corrosion to the wiring and electronic components.

Exercise 2. Find the correct English equivalents to the following word combinations.

Нуждается в проверке; необходимо пополнить; легче заводиться; может быть обследована; длительное время разогрева; позаботиться об установке; сконструирована таким образом, чтобы улучшить движение; необходимо установить; не забыть снять их; невозможно сказать.

Exercise 3. Find in the text the sentences with the Passive voice and translate them.

Exercise 4. Use the correct form of the verbs in brackets to complete the following sentences.

1. Before winter consider (to change) the engine oil.
2. The condition of the brakes need (to check).
3. Make sure that all the fl uids in the car (to top) up.
4. Don't forget (to inspect) the condition of the antifreeze.
5. Remember (to check) tyre pressure.

Exercise 5. Rewrite the following sentences in the Active voice. The following words and word combinations can be used:

It's a good idea to; check; consider; make sure; don't forget to.

***Example*:** Winter tyres need to be installed on all four wheels.

Consider installing winter tyres on all four wheels.

1. A number of things in your car need to be checked out before winter.
2. Any problems with your car need to be taken care of before winter.
3. All the fl uids need to be checked and topped up or changed if needed.
4. Things like brakes, steering and suspension can only be inspected when

the car is lifted on the hoist.
5. With proper care your car will last longer and some of the possible problems can be avoided.

Exercise 6. Complete the sentences according to the text.

1. The fresh oil will make the engine … .
2. Such a simple problem as a bad thermostat or even a small leak may cause … .
3. To improve traction on snow-covered or icy roads … are used.
4. Don't forget to remove winter tyres when … .
5. Replace summer washer fl uid with special … .
6. Clean and adjust the washer jets if they … .
7. Winter fl oor mats will help to … .

Exercise 7. Make up a list of instructions to help a driver to make the car ready for the winter.

***Example*:**

a) Check the freezing point and condition of the engine coolant.
b) Make sure you replace summer washer fl uid with special winter windshield washer fl uid.
c) …

Exercise 8. Compare the list with your neighbour's list. If there are any points which you haven't included in your list, add them.

Тема 11.5. Диагностика

Практическое занятие 80

Exercise 1. Before reading the text, look through the words. Read them out in pairs.

scratch [skræt∫] – царапина
cowl panel [∪kaYl ∩pæn(ə)l] – панель капота
wheel wells [∪wi:l ∩welz] – ниши колес
trunk lock [∪tr℘Nk ∩l((ᵒ))k] – замок багажника
hood lock [∪hYd ∩l((ᵒ))k] – замок капота
sliding doors [∪slaIdIN ∩d:(r)z] – раздвижные двери
rubber door seales [∪r℘bə(r) d: (r) ∩si:lz] – резиновые дверные изоляции
to stick [stIk] – застревать, заедать
weather strip lubricant [∪weðə(r) strIp ∪lu:brIkənt] – смазка уплотнителя

Exercise 2. Read the text. Fill in the gaps with the words below.

Winter is harsh on your car's body: moisture, sand and road salt damage the exterior paint and speed up the corrosion process. If road salt is common on the roads in your area during the winter, consider rust proofi ng. It's a good idea to … your car before winter – wax will help to preserve the paint. Scratches are more likely to be corroded after winter, so … any damages to your car's paint before winter.

… the leaves and other debris are accumulated during the fall under the cowl panel (панель капота), below the windshield and in other areas. The leaves block water drains and collect moisture. This will cause … and extra humidity inside the car, as the air intake for the cabin heater is usually located

under the cowl panel.
… your car more often during winter. Moisture, salt and dirt get accumulated inside the wheel wells (ниши колёс), under the doors and other areas, which can cause corrosion.
Lubricate the door and the trunk locks (замки багажника), as well as the hood locking … so they won't freeze. It's also a good idea to … the doors.
Clean and lubricate the door rails if your vehicle has sliding doors.
To prevent rubber door seals (изоляции) from sticking (заедания) in freezing weather lubricate them with special … for rubber door seals. Usually it's called 'weather strip lubricant' (смазка уплотнителя).
Wax, remove, lubricate, mechanism, repair, lubricant, wash, corrosion.

Exercise 3. Read the following statements and say whether they are True or False. Correct the false sentences.

1. Sand and road salt improve the exterior paint of the car.
2. Moisture speeds up the corrosion process.
3. Scratches are less likely to be corroded after winter.
4. Wax will help to preserve the paint of the car.
5. If you lubricate the door and trunk, they won't freeze.
6. Petrol is used to lubricate rubber door seals (to prevent them from sticking in freezing weather).

Exercise 4. Answer the questions.

1. What substances speed up the corrosion process in the car?
2. What can help the driver to preserve the car's paint during winter?
3. Should a driver wash the car more often during winter?
4. What car's parts need to be lubricated before winter so they won't freeze?
5. Is there a special lubricant to prevent rubber door seals from sticking in winter? What is it called?

Exercise 5. Make up questions to which the following words will be answers.

1. Regular oil changes.
2. Road salt.
3. Scratches.
4. Wax the car.
5. Weather strip lubricant.

Exercise 6. Complete the dialogue between a car mechanic and a client. Role-play the dialogue.

Client: … .
You: Moisture, sand and road salt speed up the corrosion process during winter.
Client: … .
You: It's a good idea to wax a car. Wax … .
Client: … .
You: Scratches are more likely to … , so … .
Client: … .
You: Clean the car from leaves accumulated under the cowl panel, … .
Client: What parts should be lubricated before winter?
You: … .

Further reading

►Read the text and say:

a) in what case a driver should add a coolant into the overfl ow tank;

b) whether the maximum pressure listed on tyres is the proper pressure.

How to check the engine coolant level

The coolant level should be between “LOW” and “FULL” marks in the coolant overfl ow tank. If it’s lower, top it up. If there is no coolant in overfl ow tank or you have to top it up quite often, have your car inspected in the garage, possibly there is a coolant leak. Never open the radiator or coolant overfl ow tank when the engine is hot!

When engine temperature is reduced (few minutes after the engine has been turned off), simply add a coolant into the overfl ow tank to “FULL” mark.

How to check tyres

Check the tyre pressure regularly – at least once a month. If you don’t have the tyre pressure gauge, it’s really worth to get one. You can fi nd the recommended tyre pressure in the owner’s manual or on the tyre pressure placard, which might be located somewhere on the car (e.g. on the driver’s door opening, inside the gas tank, inside the glove box). The maximum pressure listed on tyres is NOT the proper pressure! Feel vibration at cruising speed? – Have your tyres balanced. There is a safe limit of the tread wear. If the tyre is worn below this limit, it’s unsafe to drive. Uneven tyre wear indicates alignment problem. Improper alignment causes increased tyre and suspension components wear and poor handling. In the worst case, improper alignment may throw your car into a skid, especially on a wet or slippery road. If a car pulls aside, wanders or feels unstable on the road, have the alignment checked. Properly done alignment will make your car’s ride a lot more enjoyable.

Раздел 12. Автомобили и окружающая среда

Тема 12.1. Экологические проблемы

Практическое занятие 81

1.Прочтите текст с целью общего понимания содержания.

2.Напишите, что делается для того, чтобы сократить потери отработанного газа.

TEXT

The Car and the Environment

Most of us know that cars cause air pollution. Scientists tell us that if we don't do something soon, we will be unable to repair the damage that we are causing to our planet. What are some of the things we can do to help?

1.Buy a fuel-efficient car and keep it that way

Good gas is a way to stop pollution. Choose a car that is friendly to the environment when you buy one.

2.Keep your car tuned up

A car that badly tuned releases more pollutants into the air. If you keep track of your gas mileage, you'll know when something is wrong. A badly tuned car uses almost 10% more gas than a well-tuned car. Other ways to waste gas are:

Idling your car unnecessarily. If you are stopped for longer than a minute, it is more fuel efficient to turn off your engine.

Using dirty fuel filters. Dirty fuel filters waste gas.

Air Conditioner Maintenance. Of course, this causes a big problem for both us and our mechanics. Our mechanics will have to make sure that there are no leaks, and fix them if there are, before they can add any R-12 (freon) to our air conditioning systems. Naturally, this cost will be passed along to us.

1.Прочтите текст с целью общего понимания содержания.
2.Найдите в тексте предложения, в которых говорится о том, чего не следует делать.
3. Кратко перечислите, что необходимо предпринять для улучшения экологических условий.

TEXT

Gas Ecology

There are many ways that we can reduce pollution by observing good gas ecology — that is using our cars in fuel efficient ways.

Don't move the car unless you are going somewhere. Plan ahead. Starting the car up just to move it a short distance produces more pollutants than hours of driving on the freeway.

Don't use your heater until the car is warmed up. The engine will start more quickly, because it won't be losing heat to warm you.

Try to drive within 35-45 miles per hour when possible. Driving at slower speeds reduces engine efficiency and causes more pollutants.

Don't make fast starts or stops. Fast starts can burn more than 50% gas than regular acceleration (as well as cause 50% more emissions). When a big burst of gas enters the engine, much of catalytic converter's job is bypassed and the unburned gas comes out the tailpipe or is sent into the converter. Rapid acceleration is only called for in emergency or passing situations. Stopping rapidly also leaves the engine with a lot of unburned gas to deal with. This results in damage to the converter and pollution.

Try not to idle. At bank lines and fast food places with over thirty second waits, turn the engine off, and restart it. It is more fuel efficient, and causes less pollution. The only time that idling is a good thing is after a long, fast run. Idling the engine for a minute or so after one of these helps get rid of any hot spots and fuel vapors.

Keep to steady speeds on the highway. Changing speeds produces more pollution and uses more gas. Don't use the air conditioner unless you have to. It makes your engine work harder, uses more gas, and causes more pollution. Most evaporative emissions get into the atmosphere when we put gas in our cars. Make sure your gas cap is the right one, and in good working order. Gas caps don't cost that much, but are very important in

anti-pollution.
Since gasoline expands, never overfill your tank. It will wind up leaking out.
Use known brands of gas. Poor quality gas will not save you money. Instead, it will foul your engine and cause it to function badly. Try several different brands and octane ratings to find out which makes you car the happiest, and stay with it.

Тема 12.2. Электромобили и гибридные автомобили

Практическое занятие 82

Задание 1 Выпишите слова и переведите их на русский язык
1. energize
2. recharge
3. battery
4. display
5. gasoline
6. distinguish
7. promote
8. electrify
9. rear
10. ordinary
11. attain
12. properly

Задание 2 Чтение и перевод текста: Электромобили

THE ELECTRIC

The electric automobile energized by rechargeable batteries appeared to have a great future nearly a century ago.

In 1888, *Scientific American* described an English electric carriage. An ordinary four-passenger "dog cart", the vehicle was electrified by Immisch & Company of London for the Sultan of Turkey, ft had a 1 -hp motor connected by chain to a rear wheel. The makers claimed that the twenty-four-cell battery (stored under the seats) could "propel the vehicle at a speed of about ten miles an hour for five hours."

In a trial run at a skating rink in Camden Town, "no great speed could be attained**,** on account of the confined space and the consequent necessity for frequent sharp turns." One assumes that ordinary Turks were properly impressed by their Sultan's electric dog cart.

In 1847, Werner von Siemens publicly said he would build an electric-powered carriage. He did so with the 1897 Viktoria.

Twenty-eight percent of the 4,192 American automobiles produced in 1900 were electric. In the New York automobile show of that year more electrics were on display than gasoline or steam vehicles.

Some of America's most distinguished inventors, including Thomas Edison, were promoting electrics or taking part in their development. And the first American firm to manufacture cars by hundreds was churning out well-designed electrics.

Задание 3 Заполните пропуски в предложениях, в соответствии с содержанием текста и переведите предложения.

The electric automobile energized by _____ appeared to have_____ nearly a century ago.

Some of America's most _____, including Thomas Edison, were _____electrics or _____ in their development.

The makers _____ that the twenty-four-cell battery (stored under the seats) could "_____ the vehicle at a speed of about ten miles an hour for five hours."

Задание 4 Переведите вопросы. На основе ответов на вопросы кратко перескажите основное содержание текста на английском языке.

Did the electric automobile appear to have a great future nearly a century ago? Were most distinguished inventors, including Thomas Edison, promoting electrics or taking part in their development?

What electric car was described by *Scientific American* in 1888?

Задание 5 На основе вопросов и ответов на вопросы по Заданию 4 подготовьте диалог.

Один из участников диалога — инженер-автомобилист. Он отвечает на вопросы другого участника диалога — студента, который старается получить как можно больше интересующей его информации. При составлении диалога используйте текст и материал, представленный в предыдущих заданиях.

Тема 12.2. Электромобили и гибридные автомобили

Практическое занятие 83

Прочитайте и переведите текст:

Electronics-электроника
Security innovation systems- инновационные системы безопасности
Vehicle-транспортное средство
ABS- антиблокировочная система
To keep the vehicle trajectory under control-держать траекторию транспортного средства под контролем

Pressure- давление
Braking-торможение
Airbags- воздушные подушки
Seat bealts- ремни безопасности
Injury- травма
Headlights- передние фары
ESP- электронная программа стабилизации
ASR- противобуксовочная система

Today's innovations in cars

Today, electronics are very important and available in most of the cars. We will see here some of the most prevalent security innovation systems that you can found in your vehicle.

ABS (Anti blocking System) : It's a system which prevents wheels blocking in case of sudden braking. This allow the tire to maintain their guiding power and the driver to keep the vehicle trajectory under control. For that, the ABS detects that the wheel will be blocked. It then reduces the pressure in the brake circuit so that the tire still grip. It restores the pressure immediately so that braking continues.

Airbags: Airbags support the final damping of a shock, after that seat belts have absorbed most of the energy of the occupant of the vehicle. A gas generator, controlled by a computer, ensures their inflation. Air bags inflate in 30 milliseconds to in complement of the seat belt during the final phase of the shock damping. They reduce of 75% the risk of serious head injuries. During a shock, accelerator sensors send to the computer information about abnormal acceleration. The computer determine the direction and the intensity and launch inflation of airbags

Headlights and Wipers Automated Start : The wipers automated initiation works with an active infrared sensor that detects the presence of water drops on the windscreen by the modification of the reflection that they cause. The ignition of headlights is controlled by a light sensor passive. The measurement of the brightness is based on a set of photoelectric cells.

ESP (Electronic Stability Program) : This stability program assists the driver to maintain control of his vehicle in case of loss of handling. The ASR (traction control) complete the action of this device. Using data from seven sensors, the computer of the ESP acts selectively on the wheels for the car to find the expected trajectory. For this, it works closely with the ABS

ASR (Active traction control) : To insure a perfect start on the surface with the handling deteriorated, as sleet or snow, the ASR plays on the torque distribution between the drive wheels. It reduces the torque applied to a wheel which begins to slip and apply it to another .

Improved Structure : By its progressive deformation, the structure of the car absorbs impact energy. The programmed deformation structure protects the cockpit. This should dissipate as much as possible the impact energy to preserve the cabin which is, by contrast, very rigid. Automakers takes many years of extensive studies on the programmed structure deformation of vehicles.

Additional cornering lights: On winding roads, the inside of bends does not benefit of lightning of the headlights and remains in the dark. A problem eliminated by

the additional cornering lights. Oriented at 40 ° compared to the axis of the car, they light up the inside of the turn. They are automatically disabled at high-speed or in reverse.

УЧЕБНО-МЕТОДИЧЕСКОЕ И ИНФОРМАЦИОННОЕ ОБЕСПЕЧЕНИЕ ДИСЦИПЛИНЫ

Основная литература:

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3. Малецкая, О. П. Английский язык / О. П. Малецкая, И. М. Селевина. — 3-е изд., стер. — Санкт-Петербург : Лань, 2023. — 136 с. — ISBN 978-5-507-45432-7. — Текст : электронный // Лань : электронно-библиотечная система. — URL: https://e.lanbook.com/book/269894. — Режим доступа: для авториз. пользователей.

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3. http://english-club.tv – клуб изучения английского языка.