**ТЕХНИЧЕСКИЙ АНГЛИЙСКИЙ ЯЗЫК.**

**Тема «Контрольный перевод технического текста с зарисовкой прибора по описанию и ответами на вопросы. На базе текста «Вакуумная трубка».**

**Тип урока: комбинированный.**

**Цели урока.**

* Пополнение словарного запаса из области «Техническая терминология»
* Совершенствование навыков технического перевода.
* Развитие умения логически верно, аргументированно строить устную речь, связанную с тематикой технической направленности.

**Оснащение.** Карточки с раздаточным материалом

**Ход урока.**

**I.Повторение выражений из инструкции.**

1. Continues to define the state of the art in this field
2. Related products for every amateur need
3. Congratulations on selecting
4. The IT-100 provides
5. It will match the amazing range of antennas
6. Including…
7. The IT-100 is similar to previous…
8. But is specially engineered to integrate with…
9. Takes advantage of…
10. To simplify
11. Is powered by…
12. Are used…
13. Latching
14. Instantaneous
15. Controlled from…
16. Works with…
17. Is rated at 125 maximum power
18. Power level that significantly exceed specifications will definitely damage or destroy your device
19. If your tuner fails during overload, it could also damage your transmitter or transreceiver
20. Never install…
21. Always follow this antenna safety rule
22. It is a quality precision instrument that will give you many years of outstanding service
23. Take a few minutes to get to know it
24. The device is designed specifically for the use with…
25. The operation is performed when…
26. Is powered directly from the radio interface cable

Составление предложений с этими выражениями.

**II.Работа с текстом « Описание вакуумной трубки».**

1. In [electronics](https://en.wikipedia.org/wiki/Electronics), a **vacuum tube**, an **electron tube**, or just a **tube** , or **valve**  is a device that controls [electric current](https://en.wikipedia.org/wiki/Electric_current) between [electrodes](https://en.wikipedia.org/wiki/Electrode) in an [evacuated](https://en.wikipedia.org/wiki/Vacuum) container.
2. Vacuum tubes mostly rely on [thermionic emission](https://en.wikipedia.org/wiki/Thermionic_emission) of electrons from a hot [filament](https://en.wikipedia.org/wiki/Electrical_filament) or a [cathode](https://en.wikipedia.org/wiki/Hot_cathode) heated by the filament.
3. The simplest vacuum tube, the [diode](https://en.wikipedia.org/wiki/Diode), contains only a heater, a heated electron-emitting cathode, and a plate (anode).
4. Adding one or more [control grids](https://en.wikipedia.org/wiki/Control_grid) within the tube allows the current between the cathode and anode to be controlled by the voltage on the grid or grids.
5. Tubes with grids can be used for many purposes, including [amplification](https://en.wikipedia.org/wiki/Amplifier), [rectification](https://en.wikipedia.org/wiki/Rectifier), [switching](https://en.wikipedia.org/wiki/Electronic_switch), [oscillation](https://en.wikipedia.org/wiki/Electronic_oscillator), and [display](https://en.wikipedia.org/wiki/Cathode_ray_tube).
6. Invented in 1904 by [John Ambrose Fleming](https://en.wikipedia.org/wiki/John_Ambrose_Fleming), vacuum tubes were a basic component for electronics throughout the first half of the twentieth century, which saw the diffusion of radio, television, radar, [sound reinforcement](https://en.wikipedia.org/wiki/Sound_reinforcement_system), [sound recording and reproduction](https://en.wikipedia.org/wiki/Sound_recording_and_reproduction), large [telephone](https://en.wikipedia.org/wiki/Telephone) networks, analog and digital [computers](https://en.wikipedia.org/wiki/Computers), and industrial [process control](https://en.wikipedia.org/wiki/Process_control).

Tubes have different functions, such as [cathode ray tubes](https://en.wikipedia.org/wiki/Cathode_ray_tube) which create a beam of electrons for display purposes (such as the television picture tube) in addition to more specialized functions such as [electron microscopy](https://en.wikipedia.org/wiki/Electron_microscopy) and [electron beam lithography](https://en.wikipedia.org/wiki/Electron_beam_lithography). [X-ray tubes](https://en.wikipedia.org/wiki/X-ray_tube) are also vacuum tubes. [Phototubes](https://en.wikipedia.org/wiki/Phototube) and [photomultipliers](https://en.wikipedia.org/wiki/Photomultiplier) rely on electron flow through a vacuum, though in those cases electron emission from the cathode depends on energy from [photons](https://en.wikipedia.org/wiki/Photon) rather than [thermionic emission](https://en.wikipedia.org/wiki/Thermionic_emission).

 

*Diode: electrons from the hot cathode Triode: voltage applied to the grid controls plate current current .*

*flow towards the positive anode,*

 *but not vice versa*

A vacuum tube consists of two or more [electrodes](https://en.wikipedia.org/wiki/Electrode) in a vacuum inside an airtight enclosure. Most tubes have glass envelopes with a [glass-to-metal seal](https://en.wikipedia.org/wiki/Glass-to-metal_seal) based on [kovar](https://en.wikipedia.org/wiki/Kovar%22%20%5Co%20%22Kovar) sealable [borosilicate glasses](https://en.wikipedia.org/wiki/Borosilicate_glass), though ceramic and metal envelopes (atop insulating bases) have been used. The electrodes are attached to leads which pass through the envelope via an airtight seal.

Most modern tubes are "indirectly heated" by a "heater" element inside a metal tube that is the cathode. The heater is electrically isolated from the surrounding cathode and simply serves to heat the cathode sufficiently for [thermionic emission](https://en.wikipedia.org/wiki/Thermionic_emission) of electrons. The electrical isolation allows all the tubes' heaters to be supplied from a common circuit (which can be AC without inducing hum) while allowing the cathodes in different tubes to operate at different voltages.



*Triode symbol. From top to bottom: plate (anode), control grid, cathode, heater (filament)*

*Tetrode symbol. From top to bottom: plate (anode), screen grid, control grid, cathode, heater (filament)*

*General Electric Company Pliotron,*[*Chemical Heritage Foundation*](http://www.chemheritage.org/)

To combat the stability problems and limited voltage gain due to the [Miller effect](https://en.wikipedia.org/wiki/Miller_effect), the physicist [Walter H. Schottky](https://en.wikipedia.org/wiki/Walter_H._Schottky) invented the tetrode tube in 1919. He showed that the addition of a second grid, located between the control grid and the plate (anode), known as the [*screen grid*](https://en.wikipedia.org/wiki/Screen_grid), could solve these problems. ("Screen" in this case refers to electrical "screening" or shielding, not physical construction: all "grid" electrodes in between the cathode and plate are "screens" of some sort rather than solid electrodes since they must allow for the passage of electrons directly from the cathode to the plate). A positive voltage slightly lower than the plate (anode) voltage was applied to it, and was bypassed (for high frequencies) to ground with a capacitor. This arrangement decoupled the anode and the [control grid](https://en.wikipedia.org/wiki/Control_grid), essentially eliminating the Miller capacitance and its associated problems. Consequently, higher voltage gains from a single tube became possible, reducing the number of tubes required in many circuits. This two-grid tube is called a *[tetrode](https://en.wikipedia.org/wiki/Tetrode%22%20%5Co%20%22Tetrode)*, meaning four active electrodes, and was common by 1926.

  

*6L6 tubes in glass envelopes Metal-cased tubes with octal bases High power GS-9B triode transmitting tube with heat sink at bottom.*

Most modern tubes have glass envelopes, but metal, fused quartz ([silica](https://en.wikipedia.org/wiki/Silica)) and [ceramic](https://en.wikipedia.org/wiki/Ceramic) have also been used. Metal and ceramic are used almost exclusively for power tubes above 2 kW dissipation. The [nuvistor](https://en.wikipedia.org/wiki/Nuvistor%22%20%5Co%20%22Nuvistor) was a modern receiving tube using a very small metal and ceramic package.

The internal elements of tubes have always been connected to external circuitry via pins at their base which plug into a socket. Subminiature tubes were produced using wire leads rather than sockets, however these were restricted to rather specialized applications. In addition to the connections at the base of the tube, many early triodes connected the grid using a metal cap at the top of the tube; this reduces stray [capacitance](https://en.wikipedia.org/wiki/Capacitance) between the grid and the plate leads. Tube caps were also used for the plate (anode) connection, particularly in transmitting tubes and tubes using a very high plate voltage.

Some special-purpose tubes are constructed with particular gases in the envelope. For instance, [voltage-regulator tubes](https://en.wikipedia.org/wiki/Voltage-regulator_tube) contain various [inert gases](https://en.wikipedia.org/wiki/Inert_gas) such as [argon](https://en.wikipedia.org/wiki/Argon), [helium](https://en.wikipedia.org/wiki/Helium) or [neon](https://en.wikipedia.org/wiki/Neon), which will [ionize](https://en.wikipedia.org/wiki/Ionization) at predictable voltages. The [thyratron](https://en.wikipedia.org/wiki/Thyratron%22%20%5Co%20%22Thyratron) is a special-purpose tube filled with low-pressure gas or mercury vapor. Like vacuum tubes, it contains a hot cathode and an anode, but also a control electrode which behaves somewhat like the grid of a triode. When the control electrode starts conduction, the gas ionizes, after which the control electrode can no longer stop the current; the tube "latches" into conduction. Removing anode (plate) voltage lets the gas de-ionize, restoring its non-conductive state.

Some thyratrons can carry large currents for their physical size. A cold-cathode version of the thyratron, which uses a pool of mercury for its cathode, is called an [ignitron](https://en.wikipedia.org/wiki/Ignitron); some can switch thousands of amperes. Thyratrons containing hydrogen have a very consistent time delay between their turn-on pulse and full conduction; they behave much like modern [silicon-controlled rectifiers](https://en.wikipedia.org/wiki/Silicon-controlled_rectifier), also called [thyristors](https://en.wikipedia.org/wiki/Thyristor%22%20%5Co%20%22Thyristor) due to their functional similarity to thyratrons. Hydrogen thyratrons have long been used in radar transmitters.

An extremely specialized tube is the [krytron](https://en.wikipedia.org/wiki/Krytron%22%20%5Co%20%22Krytron), which is used for extremely precise and rapid high-voltage switching. Krytrons with certain specifications are suitable to initiate the precise sequence of detonations used to set off a [nuclear weapon](https://en.wikipedia.org/wiki/Nuclear_weapon), and are heavily controlled at an international level.

[X-ray tubes](https://en.wikipedia.org/wiki/X-ray_tube) are used in medical imaging among other uses. X-ray tubes used for continuous-duty operation in fluoroscopy and [CT imaging](https://en.wikipedia.org/wiki/X-ray_computed_tomography) equipment may use a focused cathode and a rotating anode to dissipate the large amounts of heat thereby generated. These are housed in an oil-filled aluminium housing to provide cooling.

The [photomultiplier](https://en.wikipedia.org/wiki/Photomultiplier) tube is an extremely sensitive detector of light, which uses the [photoelectric effect](https://en.wikipedia.org/wiki/Photoelectric_effect) and [secondary emission](https://en.wikipedia.org/wiki/Secondary_emission), rather than thermionic emission, to generate and amplify electrical signals. Nuclear medicine imaging equipment and [liquid scintillation counters](https://en.wikipedia.org/wiki/Liquid_scintillation_counting) use photomultiplier tube arrays to detect low-intensity [scintillation](https://en.wikipedia.org/wiki/Scintillation_counter) due to [ionizing radiation](https://en.wikipedia.org/wiki/Ionizing_radiation).

**Выполнение заданий по тексту.**

1.Выписать выражения, соответствующие следующим…

1. Tubes with grids can be used for many purposes, including
2. which create a beam of electrons for display purposes
3. [filament](https://en.wikipedia.org/wiki/Electrical_filament)
4. [sound reinforcement](https://en.wikipedia.org/wiki/Sound_reinforcement_system),
5. [amplification](https://en.wikipedia.org/wiki/Amplifier), [rectification](https://en.wikipedia.org/wiki/Rectifier), [switching](https://en.wikipedia.org/wiki/Electronic_switch), [oscillation](https://en.wikipedia.org/wiki/Electronic_oscillator),
6. external circuitry
7. special-purpose tubes
8. [voltage-regulator tubes](https://en.wikipedia.org/wiki/Voltage-regulator_tube) contain
9. which behaves somewhat like the grid of a triode.
10. Thyratrons containing hydrogen have a very consistent time delay
11. An extremely specialized tube is
12. are suitable to initiate the precise sequence of detonations
13. and are heavily controlled at an international level.
14. to dissipate the large amounts of heat thereby generated.
15. to generate and amplify electrical signals.
16. Трубки с решетками могут быть использованы в различных целях, включая
17. Что создает луч электронов выполняющих функции показа
18. нить волокно волосок
19. усиление звука
20. усиление, выпрямление, переключение, колебание,
21. внешняя схема
22. трубки специального назначения
23. трубки для контроля напряжения включают
24. который работает по тому же принципу что и триод
25. Тиратроны, содержащие водород, имеют очень последовательную временную задержку
26. Чрезвычайно специализированная трубка
27. подходят для запуска точной последовательности детонаций
28. строго контролируются на международном уровне
29. для рассеивания большого количества созданного при этом тепла
30. для создания и усиления электрических сигналов

2.Найдите окончания следующим выражениям…

1. Vacuum tubes mostly rely on [thermionic emission](https://en.wikipedia.org/wiki/Thermionic_emission) of electrons from a hot [filament](https://en.wikipedia.org/wiki/Electrical_filament) or a [cathode](https://en.wikipedia.org/wiki/Hot_cathode) heated by the filament.
2. as [cathode ray tubes](https://en.wikipedia.org/wiki/Cathode_ray_tube) which create a beam of electrons for display purposes
3. A vacuum tube consists of two or more [electrodes](https://en.wikipedia.org/wiki/Electrode) in a vacuum inside an airtight enclosure.
4. The electrodes are attached to leads which pass through the envelope via an airtight seal.
5. The heater is electrically isolated from the surrounding cathode and simply serves to heat the cathode sufficiently for [thermionic emission](https://en.wikipedia.org/wiki/Thermionic_emission) of electrons.
6. The electrical isolation allows all the tubes' heaters to be supplied from a common circuit
7. electron emission from the cathode depends on energy from [photons](https://en.wikipedia.org/wiki/Photon) rather than [thermionic emission](https://en.wikipedia.org/wiki/Thermionic_emission)
8. A positive voltage slightly lower than the plate (anode) voltage was applied to it, and was bypassed (for high frequencies) to ground with a capacitor.
9. The internal elements of tubes have always been connected to external circuitry via pins at their base which plug into a socket.
10. High-power tubes such as transmitting tubes have packages designed more to enhance heat transfer
11. . When the control electrode starts conduction, the gas ionizes, after which the control electrode can no longer stop the current;
12. The [thyratron](https://en.wikipedia.org/wiki/Thyratron%22%20%5Co%20%22Thyratron) is a special-purpose tube filled with low-pressure gas or mercury vapor.
13. the [krytron](https://en.wikipedia.org/wiki/Krytron%22%20%5Co%20%22Krytron), which is used for extremely precise and rapid high-voltage switching.
14. X-ray tubes used for continuous-duty operation in fluoroscopy and [CT imaging](https://en.wikipedia.org/wiki/X-ray_computed_tomography)equipment
15. Vacuum tubes mostly rely on …….
16. [cathode ray tubes](https://en.wikipedia.org/wiki/Cathode_ray_tube)  create ….
17. A vacuum tube consists of ….
18. The electrodes are attached to …
19. The heater is electrically isolated from …..
20. The electrical isolation allows all the tubes' heaters ….
21. electron emission from the cathode depends …
22. A positive voltage slightly lower than …
23. The internal elements of tubes have always been connected to ….
24. High-power tubes such as transmitting tubes have packages designed more …
25. When the control electrode starts conduction…..
26. The [thyratron](https://en.wikipedia.org/wiki/Thyratron%22%20%5Co%20%22Thyratron) is a special-purpose tube …
27. .[krytron](https://en.wikipedia.org/wiki/Krytron%22%20%5Co%20%22Krytron) is used for …
28. X-ray tubes are used for…

3. Напишите что сказано в тексте о…

1. Vacuum tube
2. Diode
3. Cathode ray tube
4. Coverage of a vacuum tube
5. Tetrode tube
6. The internal elements of tube
7. Thyratron
8. Krytron
9. x-ray tube
10. photomultiplier
11. In [electronics](https://en.wikipedia.org/wiki/Electronics), a **vacuum tube**, an **electron tube**, or just a **tube** , or **valve**  is a device that controls [electric current](https://en.wikipedia.org/wiki/Electric_current) between [electrodes](https://en.wikipedia.org/wiki/Electrode) in an [evacuated](https://en.wikipedia.org/wiki/Vacuum) container.
12. The simplest vacuum tube, the [diode](https://en.wikipedia.org/wiki/Diode), contains only a heater, a heated electron-emitting cathode, and a plate (anode).
13. [cathode ray tubes](https://en.wikipedia.org/wiki/Cathode_ray_tube) which create a beam of electrons for display purposes (such as the television picture tube) in addition to more specialized functions such as [electron microscopy](https://en.wikipedia.org/wiki/Electron_microscopy) and [electron beam lithography](https://en.wikipedia.org/wiki/Electron_beam_lithography). [X-ray tubes](https://en.wikipedia.org/wiki/X-ray_tube) are also vacuum
14. Most tubes have glass envelopes with a [glass-to-metal seal](https://en.wikipedia.org/wiki/Glass-to-metal_seal) based on [kovar](https://en.wikipedia.org/wiki/Kovar%22%20%5Co%20%22Kovar) sealable [borosilicate glasses](https://en.wikipedia.org/wiki/Borosilicate_glass), though ceramic and metal envelopes (atop insulating bases) have been used.
15. This two-grid tube is called a *[tetrode](https://en.wikipedia.org/wiki/Tetrode%22%20%5Co%20%22Tetrode)*, meaning four active electrodes, and was common by 1926.
16. Subminiature tubes were produced using wire leads rather than sockets, however these were restricted to rather specialized applications. In addition to the connections at the base of the tube, many early triodes connected the grid using a metal cap at the top of the tube; this reduces stray [capacitance](https://en.wikipedia.org/wiki/Capacitance) between the grid and the plate leads.
17. The [thyratron](https://en.wikipedia.org/wiki/Thyratron%22%20%5Co%20%22Thyratron) is a special-purpose tube filled with low-pressure gas or mercury vapor. Like vacuum tubes, it contains a hot cathode and an anode, but also a control electrode which behaves somewhat like the grid of a triode.
18. An extremely specialized tube is the [krytron](https://en.wikipedia.org/wiki/Krytron%22%20%5Co%20%22Krytron), which is used for extremely precise and rapid high-voltage switching. Krytrons with certain specifications are suitable to initiate the precise sequence of detonations used to set off a [nuclear weapon](https://en.wikipedia.org/wiki/Nuclear_weapon), and are heavily controlled at an international level.
19. [X-ray tubes](https://en.wikipedia.org/wiki/X-ray_tube) are used in medical imaging among other uses. X-ray tubes used for continuous-duty operation in fluoroscopy and [CT imaging](https://en.wikipedia.org/wiki/X-ray_computed_tomography)
20. The [photomultiplier](https://en.wikipedia.org/wiki/Photomultiplier) tube is an extremely sensitive detector of light, which uses the [photoelectric effect](https://en.wikipedia.org/wiki/Photoelectric_effect) and [secondary emission](https://en.wikipedia.org/wiki/Secondary_emission), rather than thermionic emission, to generate and amplify electrical signals.

**III.Подведение итогов урока и задание на дом.** Подготовить сообщение об электронном приборе.

**Тема «Полупроводники».**

**Тип урока: комбинированный.**

**Цели урока.**

* Пополнение словарного запаса, связанного с терминологией по специальности.
* Совершенствование навыков технического перевода.
* Развитие умения логически верно, аргументированно строить устную речь, связанную с тематикой технической направленности.
* Развитие умения чтения про себя с целью поиска необходимой информации.

**Оснащение.** Карточки с раздаточным материалом

**Ход урока.**

**I.Повторение материала предыдущего урока.**

**Назовите и о пишите приборы, созданные на основе нано технологий.**

* Pacemaker-a device imbedded in the body.
* Nanosensor-a device which can interact with single cells for use in basic biological research.
* Nanoradio-structured around carbon nanotubes.
* Bionanogenerators-a nanoscale electrochemical device drawing power from blood glucose in a living body-the device operates in vivo.
* Field effect transistor-have been made using both semiconducting carbon nanotubes and with heterostructured semiconducting nanowires.
* Nantero—has developed a carbon nanotube based crossbar memory called Nano-Ram.
* Hewlett-Packard-has proposed the use of memristor material as a future replacement of Flash memory.
* Photoionyc cristals-materials with a periodic variation in the refractive index with a lattice constant that is half the wavelength of the light used.
* Quantum dots are nanoscaled objects. can be used for the construction of lasers.
* Carbon nanotubes and silicon nanowires are electrically conductive and due to their small diameter [daɪˈæmɪtə] of several nanometers, they can be used as field emitters with extremely high efficiency for field emission displays.
* Quantum computers-enable the use of fast quantum algorythms. Has quantum bit memory space.
* Nanofabrication-single electron transistors which involve transistor operation based on a single electron. Can be used to construct ultrsadense parallel arrays of nanowires.
* Molecular electronics-make heavy use of molecular self-assembly, designing the device components to construct a larger structure or even a complete system of their own. Can be very useful for reconfigurable computing.
* Nanoionics studies the transport of ions rather than electrons in nanoscale systems.
* Nanophotonivc studies the behavior of light on the nanoscale, and has the goal of developing devices that take advantage of this behavior.
* Carbon nanotubes/ silicon nanowires are electrically conductive and due to the small diameter [daɪˈæmɪtə] of several nanometers they can be used as field emitters with extremely high efficiency for field emission displays.

**II.Работа с текстом «Полупроводники».**

Задание. Прочитать первую часть текста, написать вопросы по содержанию текста в правильном порядке. Ответить на вопросы.

1. Can we say that resistance in semiconductors is inversely proportional to the temperature?
2. When is a semiconductor junction formed?
3. How can the conducting properties of semiconductors be changed?
4. What is the basis of a diode?
5. What does electrical conductivity value depend on?
6. When did the transistor and the integrated circuit appear?
7. What laws help us understand the properties of a semiconductor?
8. For what purpose do we use semiconductors?
9. When were people introduced to the first semiconductor device?
10. What materials are used for producing semiconductor devices?

1.What does electrical conductivity value depend on?

*A semiconductor material has an*[*electrical conductivity*](https://en.wikipedia.org/wiki/Electrical_conductivity)*value falling between that of a*[*conductor*](https://en.wikipedia.org/wiki/Electrical_resistivity_and_conductivity)*, such as copper, and an*[*insulator*](https://en.wikipedia.org/wiki/Insulator_%28electrical%29)*, such as glass.*

2.Can we say that conductivity in semiconductors is inversely proportional to the temperature?

*No, their*[*resistance*](https://en.wikipedia.org/wiki/Electrical_resistance)*decreases as their temperature increases.*

3.How can the conducting properties of semiconductors be changed?

*Their conducting properties may be altered in useful ways by the deliberate, controlled introduction of impurities ("*[*doping*](https://en.wikipedia.org/wiki/Doping_%28semiconductor%29)*") into the*[*crystal structure*](https://en.wikipedia.org/wiki/Crystal_structure)*.*

4.Where is a semiconductor junction formed?

*Where two differently-doped regions exist in the same crystal, a*[*semiconductor junction*](https://en.wikipedia.org/wiki/Semiconductor_junction)*is created.*

5.What is the basis of a diode?

*The behavior of*[*charge carriers*](https://en.wikipedia.org/wiki/Charge_carrier) *which include*[*electrons*](https://en.wikipedia.org/wiki/Electron)*,*[*ions*](https://en.wikipedia.org/wiki/Ion)*and*[*electron holes*](https://en.wikipedia.org/wiki/Electron_hole)*at these junctions is the basis of*[*diodes*](https://en.wikipedia.org/wiki/Diode)*,*[*transistors*](https://en.wikipedia.org/wiki/Transistor)*and all modern electronics.*

6.For what purpose do we use semiconductors?

*Devices made from semiconductors can be used for amplification, switching, and*[*energy conversion*](https://en.wikipedia.org/wiki/Energy_conversion)*.*

7.What laws help us understand the properties of a semiconductor?

*The modern understanding of the properties of a semiconductor relies on*[*quantum physics*](https://en.wikipedia.org/wiki/Quantum_physics)*to explain the movement of charge carriers in a*[*crystal lattice*](https://en.wikipedia.org/wiki/Crystal_structure)*.*

8.What materials are used for producing semiconductor devices?

[*Silicon*](https://en.wikipedia.org/wiki/Silicon)*,*[*germanium*](https://en.wikipedia.org/wiki/Germanium)*, and compounds of*[*gallium*](https://en.wikipedia.org/wiki/Gallium)*are the most widely used in electronic devices.*

9.When were people introduced to the first semiconductor device?

*The first practical application of semiconductors in electronics was the 1904 development of the*[*Cat's-whisker detector*](https://en.wikipedia.org/wiki/Cat%27s-whisker_detector), *a primitive semiconductor diode widely used in early radio receivers.*

10.When did the transistor and the integrated circuit appear?

*Developments in quantum physics in turn allowed the development of the*[*transistor*](https://en.wikipedia.org/wiki/Transistor)*in 1947 and the*[*integrated circuit*](https://en.wikipedia.org/wiki/Integrated_circuit)*in 1958.*

A **semiconductor** material has an [electrical conductivity](https://en.wikipedia.org/wiki/Electrical_conductivity) value falling between that of a [conductor](https://en.wikipedia.org/wiki/Electrical_resistivity_and_conductivity), such as copper, and an [insulator](https://en.wikipedia.org/wiki/Insulator_%28electrical%29), such as glass. Their [resistance](https://en.wikipedia.org/wiki/Electrical_resistance) decreases as their temperature increases, which is behavior opposite to that of a metal. Their conducting properties may be altered in useful ways by the deliberate, controlled introduction of impurities ("[doping](https://en.wikipedia.org/wiki/Doping_%28semiconductor%29)") into the [crystal structure](https://en.wikipedia.org/wiki/Crystal_structure). Where two differently-doped regions exist in the same crystal, a [semiconductor junction](https://en.wikipedia.org/wiki/Semiconductor_junction) is created. The behavior of [charge carriers](https://en.wikipedia.org/wiki/Charge_carrier) which include [electrons](https://en.wikipedia.org/wiki/Electron), [ions](https://en.wikipedia.org/wiki/Ion) and [electron holes](https://en.wikipedia.org/wiki/Electron_hole) at these junctions is the basis of [diodes](https://en.wikipedia.org/wiki/Diode), [transistors](https://en.wikipedia.org/wiki/Transistor) and all modern electronics.

[Semiconductor devices](https://en.wikipedia.org/wiki/Semiconductor_device) can display a range of useful properties such as passing current more easily in one direction than the other, showing variable resistance, and sensitivity to light or heat. Because the electrical properties of a semiconductor material can be modified by doping, or by the application of electrical fields or light, devices made from semiconductors can be used for amplification, switching, and [energy conversion](https://en.wikipedia.org/wiki/Energy_conversion).

The modern understanding of the properties of a semiconductor relies on [quantum physics](https://en.wikipedia.org/wiki/Quantum_physics) to explain the movement of charge carriers in a [crystal lattice](https://en.wikipedia.org/wiki/Crystal_structure). Doping greatly increases the number of charge carriers within the crystal. When a doped semiconductor contains mostly free holes it is called "[p-type](https://en.wikipedia.org/wiki/Extrinsic_semiconductor#P-type_semiconductors)", and when it contains mostly free electrons it is known as "[n-type](https://en.wikipedia.org/wiki/Extrinsic_semiconductor#N-type_semiconductors)". The semiconductor materials used in electronic devices are doped under precise conditions to control the concentration and regions of p- and n-type dopants. A single semiconductor crystal can have many p- and n-type regions; the [p–n junctions](https://en.wikipedia.org/wiki/P%E2%80%93n_junction) between these regions are responsible for the useful electronic behavior.

Although some pure elements and many compounds display semiconductor properties, [silicon](https://en.wikipedia.org/wiki/Silicon), [germanium](https://en.wikipedia.org/wiki/Germanium), and compounds of [gallium](https://en.wikipedia.org/wiki/Gallium) are the most widely used in electronic devices. Elements near the so-called "[metalloid staircase](https://en.wikipedia.org/wiki/Metalloid_staircase)", where the metalloids are located on the periodic table, are usually used as semiconductors.

Some of the properties of semiconductor materials were observed throughout the mid 19th and first decades of the 20th century. The first practical application of semiconductors in electronics was the 1904 development of the [Cat's-whisker detector](https://en.wikipedia.org/wiki/Cat%27s-whisker_detector), a primitive semiconductor diode widely used in early radio receivers. Developments in quantum physics in turn allowed the development of the [transistor](https://en.wikipedia.org/wiki/Transistor) in 1947 and the [integrated circuit](https://en.wikipedia.org/wiki/Integrated_circuit) in 1958.

Задание. Прочитать и перевести вторую часть текста

Составить десять предложений по содержанию теста со следующими глаголами.

*To involve/ to be found/ to behave/ to be used/ to be required/ to interfere/ to achieve/ to be grown/ to prepare/ to be called/ to form/ to create/ to generate/ to be covered/ to be etched/ to be located/ to cause/ to be hit/ to be released/ to introduce/ to be injected/ to be completed/ to reach/ to be done*

**Preparation of semiconductor materials**

Almost all of today's electronic technology involves the use of semiconductors, with the most important aspect being the [integrated circuit](https://en.wikipedia.org/wiki/Integrated_circuit) (IC), which are found in [laptops](https://en.wikipedia.org/wiki/Laptop_computer), scanners, [cell-phones](https://en.wikipedia.org/wiki/Cell-phone), etc. Semiconductors for ICs are mass-produced. To create an ideal semiconducting material, chemical purity is paramount. Any small imperfection can have a drastic effect on how the semiconducting material behaves due to the scale at which the materials are used. A high degree of crystalline perfection is also required, since faults in crystal structure (such as [dislocations](https://en.wikipedia.org/wiki/Dislocation), [twins](https://en.wikipedia.org/wiki/Crystal_twinning), and [stacking faults](https://en.wikipedia.org/wiki/Crystallographic_defect#Planar_defects)) interfere with the semiconducting properties of the material. Crystalline faults are a major cause of defective semiconductor devices. The larger the crystal, the more difficult it is to achieve the necessary perfection. Current mass production processes use crystal [ingots](https://en.wikipedia.org/wiki/Ingot) between 100 and 300 mm (4 and 12 in) in diameter which are grown as cylinders and sliced into [wafers](https://en.wikipedia.org/wiki/Wafer_%28electronics%29).

There is a combination of processes that is used to prepare semiconducting materials for ICs. One process is called [thermal oxidation](https://en.wikipedia.org/wiki/Thermal_oxidation), which forms [silicon dioxide](https://en.wikipedia.org/wiki/Silicon_dioxide) on the surface of the [silicon](https://en.wikipedia.org/wiki/Silicon). This is used as a [gate insulator](https://en.wikipedia.org/wiki/Gate_dielectric) and [field oxide](https://en.wikipedia.org/wiki/LOCOS). Other processes are called [photomasks](https://en.wikipedia.org/wiki/Photomask%22%20%5Co%20%22Photomask) and [photolithography](https://en.wikipedia.org/wiki/Photolithography). This process is what creates the patterns on the circuity in the integrated circuit. [Ultraviolet light](https://en.wikipedia.org/wiki/Ultraviolet_light) is used along with a [photoresist](https://en.wikipedia.org/wiki/Photoresist) layer to create a chemical change that generates the patterns for the circuit. Etching is the next process that is required. The part of the silicon that was not covered by the [photoresist](https://en.wikipedia.org/wiki/Photoresist) layer from the previous step can now be etched. The main process typically used today is called [plasma etching](https://en.wikipedia.org/wiki/Plasma_etching). Plasma etching usually involves an [etch gas](https://en.wikipedia.org/wiki/Plasma_etching) pumped in a low-pressure chamber to create [plasma](https://en.wikipedia.org/wiki/Plasma_%28physics%29). A common etch gas is [chlorofluorocarbon](https://en.wikipedia.org/wiki/Chlorofluorocarbon), or more commonly known [Freon](https://en.wikipedia.org/wiki/Freon). A high [radio-frequency](https://en.wikipedia.org/wiki/Radio-frequency) [voltage](https://en.wikipedia.org/wiki/Voltage) between the [cathode](https://en.wikipedia.org/wiki/Cathode) and [anode](https://en.wikipedia.org/wiki/Anode) is what creates the plasma in the chamber. The [silicon wafer](https://en.wikipedia.org/wiki/Wafer_%28electronics%29) is located on the cathode, which causes it to be hit by the positively charged ions that are released from the plasma. The end result is silicon that is etched [anisotropically](https://en.wikipedia.org/wiki/Anisotropy%22%20%5Co%20%22Anisotropy). The last process is called [diffusion](https://en.wikipedia.org/wiki/Doping_%28semiconductor%29). This is the process that gives the semiconducting material its desired semiconducting properties. It is also known as [doping](https://en.wikipedia.org/wiki/Doping_%28semiconductor%29). The process introduces an impure atom to the system, which creates the [p-n junction](https://en.wikipedia.org/wiki/P-n_junction). In order to get the impure atoms embedded in the silicon wafer, the wafer is first put in a 1100 degree Celsius chamber. The atoms are injected in and eventually diffuse with the silicon. After the process is completed and the silicon has reached room temperature, the doping process is done and the semiconducting material is ready to be used in an integrated circuit.

**III.Подведение итогов урока и задание на дом.** Подготовить сообщение об электронном приборе.

**Тема «Проводник и изолятор».**

**Тип урока: комбинированный.**

**Цели урока.**

* Пополнение лексического запаса связанного с технической терминологией.
* Развитие умения переводить инструкцию к техническому прибору.
* Совершенствование навыков поискового чтения.

**Оснащение.** Карточки с раздаточным материалом.

**Ход урока.**

1. **Проверка домашнего задания.**

Описание вакуумной трубки.

1. **Работа с темой « Проводник».**
2. Знакомство с новой лексикой

To collide -сталкиваться

Fuel cell- топливный элемент

Cross-sectional area-площадь поперечного сечения

Reciprocal- взаимный · двусторонний · ответный · общий

Efficacy- эффективность

Lattice vibration- решетка, сетка

Pinball machine- игровой автомат

To disrupt - нарушитьthe

To scatter- разбрасывать

Annealed copper-обожженная медь

Grade of copper-ранг меди

Motor winding-обмотка двигателя

Busbar-шина

Tough-pitch copper-жесткая красная медь

ASTM-American Society for Testing and Materials

To weld-варить

To braze-спаивать

Oxygen-free high conductivity-бескислородная высокая проводимость

To solder-паять

Soldering-пайка

To clamp-зажимать

Clamping -зажим

Light-gauge wire-световой провод датчика

Thin plating-тонкое покрытие

To mitigate skin effect-уменьшать воздействие на кожу

To creep-ползти

To accelerate the loosening of connections-ускорять ослабление соединений

Buried cable-подземный кабель

Service drop-самонесущий изолированный провод низкого напряжения

Compatible connector-совместимый разъем

Circular mile-круговая миля

Allowable ampacity-допустимая токовая нагрузка

Fuse -предохранитель

PVC insulation-Polyvinil Cloride-поливинилохлоридный изолятор

Induced electric current- Индуцированный электрический ток

**2. Чтение и перевод текста.**

In [physics](https://en.wikipedia.org/wiki/Physics) and [electrical engineering](https://en.wikipedia.org/wiki/Electrical_engineering), a **conductor** is an object or type of material that allows the flow of an [electrical current](https://en.wikipedia.org/wiki/Electrical_current) in one or more directions. Materials made of metal are common electrical conductors. Electrical current is generated by the flow of negatively charged electrons, positively charged holes, and positive or negative ions in some cases.

Metal is an ideal choice for a conductor as metals, characteristically, possess a delocalized [sea of electrons](https://en.wikipedia.org/wiki/Sea_of_electrons) which gives the electrons enough mobility to collide and thus effect a momentum transfer.

As discussed above, electrons are the primary mover in metals; however, other devices such as the cationic [electrolyte](https://en.wikipedia.org/wiki/Electrolyte)(s) of a [battery](https://en.wikipedia.org/wiki/Battery_%28electricity%29), or the mobile protons of the [proton conductor](https://en.wikipedia.org/wiki/Proton_conductor) of a fuel cell rely on positive charge carriers.

The resistance of a given conductor depends on the material it is made of, and on its dimensions. For a given material, the resistance is inversely proportional to the cross-sectional area. For example, a thick copper wire has lower resistance than an otherwise-identical thin copper wire. Also, for a given material, the resistance is proportional to the length; for example, a long copper wire has higher resistance than an otherwise-identical short copper wire.

Aside from the geometry of the wire, temperature also has a significant effect on the efficacy of conductors. Temperature affects conductors in two main ways, the first is that materials may expand under the application of heat. The amount that the material will expand is governed by the [thermal expansion coefficient](https://en.wikipedia.org/wiki/Thermal_expansion_coefficient) specific to the material. Such an expansion (or contraction) will change the geometry of the conductor and therefore its characteristic resistance. However, this effect is generally small, on the order of 10−6. An increase in temperature will also increase the number of phonons generated within the material. A [phonon](https://en.wikipedia.org/wiki/Phonon) is essentially a lattice vibration, or rather a small, harmonic kinetic movement of the atoms of the material. Much like the shaking of a pinball machine, phonons serve to disrupt the path of electrons, causing them to scatter. This electron scattering will decrease the number of electron collisions and therefore will decrease the total amount of current transferred.

**Conduction materials** include [metals](https://en.wikipedia.org/wiki/Metal), [electrolytes](https://en.wikipedia.org/wiki/Electrolyte), [superconductors](https://en.wikipedia.org/wiki/Superconductor),[semiconductors](https://en.wikipedia.org/wiki/Semiconductor), [plasmas](https://en.wikipedia.org/wiki/Plasma_%28physics%29) and some nonmetallic conductors such as[graphite](https://en.wikipedia.org/wiki/Graphite) and [Conductive polymers](https://en.wikipedia.org/wiki/Conductive_polymer).

[Copper](https://en.wikipedia.org/wiki/Copper) has a high [conductivity](https://en.wikipedia.org/wiki/Electrical_conductivity). [Annealed](https://en.wikipedia.org/wiki/Annealing_%28metallurgy%29) copper is the international standard to which all other electrical conductors are compared. The main grade of copper used for electrical applications, such as building wire, [motor](https://en.wikipedia.org/wiki/Electric_motor) windings, cables and [busbars](https://en.wikipedia.org/wiki/Busbar%22%20%5Co%20%22Busbar), is [electrolytic-tough pitch (ETP) copper](https://en.wikipedia.org/wiki/Oxygen-free_copper#Specification) (CW004A or [ASTM](https://en.wikipedia.org/wiki/ASTM) designation C100140). This copper has an electrical conductivity of at least 100% IACS (International Annealed Copper Standard). If high conductivity copper must be [welded](https://en.wikipedia.org/wiki/Welding) or [brazed](https://en.wikipedia.org/wiki/Brazing) or used in a reducing atmosphere, then [oxygen-free high conductivity copper](https://en.wikipedia.org/wiki/Oxygen-free_copper) (CW008A or ASTM designation C10100) may be used.[]](https://en.wikipedia.org/wiki/Electrical_conductor#cite_note-2)Because of its ease of connection by [soldering](https://en.wikipedia.org/wiki/Soldering) or clamping, copper is still the most common choice for most light-gauge wires.

[Silver](https://en.wikipedia.org/wiki/Silver) is more 'conductive' than copper, but due to cost it is not practical in most cases. However, it is used in specialized equipment, such as [satellites](https://en.wikipedia.org/wiki/Satellite), and as a thin plating to mitigate [skin effect](https://en.wikipedia.org/wiki/Skin_effect) losses at high frequencies.

[Aluminum](https://en.wikipedia.org/wiki/Aluminum) wire, which has 61% of the conductivity of copper, has been used in building wiring for its lower cost. By weight, aluminum has higher conductivity than copper, but it has properties that cause problems when used for building wiring. It can form a resistive oxide within connections that makes wiring terminals heat. Aluminum can "creep", slowly deforming under load, eventually causing device connections to loosen, and also has a different [coefficient of thermal expansion](https://en.wikipedia.org/wiki/Coefficient_of_thermal_expansion) compared to materials used for connections. This accelerates the loosening of connections. These effects can be minimized by using wiring devices approved for use with aluminum.

Aluminum wires used for low voltage distribution, such as buried cables and service drops, require use of compatible connectors and installation methods to prevent heating at joints. Aluminum is also the most common metal used in high-voltage transmission lines, in combination with steel as structural reinforcement. [Anodized aluminum](https://en.wikipedia.org/wiki/Anodizing) surfaces are not conductive. This affects the design of electrical enclosures that require the enclosure to be electrically connected.

While pure [water](https://en.wikipedia.org/wiki/Water) is not an electrical conductor, even a small portion of impurities, such as [salt](https://en.wikipedia.org/wiki/Salt), can rapidly transform it into a conductor.

**Wire size**

Wires are measured by their cross sectional area. In many countries, the size is expressed in square millimetres. In North America, conductors are measured by [American wire gauge](https://en.wikipedia.org/wiki/American_wire_gauge) for smaller ones, and [circular mils](https://en.wikipedia.org/wiki/Circular_mils) for larger ones. The size of a wire contributes to its ampacity. The [American wire gauge](https://en.wikipedia.org/wiki/American_wire_gauge) article contains a table showing allowable ampacities for a variety of copper wire sizes.

**Conductor ampacity**

The [ampacity](https://en.wikipedia.org/wiki/Ampacity%22%20%5Co%20%22Ampacity) of a conductor, that is, the amount of [current](https://en.wikipedia.org/wiki/Electric_current) it can carry, is related to its electrical resistance: a lower-resistance conductor can carry a larger value of current. The resistance, in turn, is determined by the material the conductor is made from (as described above) and the conductor's size. For a given material, conductors with a larger cross-sectional area have less resistance than conductors with a smaller cross-sectional area.

For bare conductors, the ultimate limit is the point at which power lost to resistance causes the conductor to melt. Aside from [fuses](https://en.wikipedia.org/wiki/Fuse_%28electrical%29), most conductors in the real world are operated far below this limit, however. For example, household wiring is usually insulated with [PVC](https://en.wikipedia.org/wiki/Polyvinyl_chloride) insulation that is only rated to operate to about 60 °C, therefore, the current in such wires must be limited so that it never heats the copper conductor above 60 °C, causing a risk of [fire](https://en.wikipedia.org/wiki/Fire). Other, more expensive insulation such as [Teflon](https://en.wikipedia.org/wiki/Teflon) or [fiberglass](https://en.wikipedia.org/wiki/Fiberglass) may allow operation at much higher temperatures.

**Isotropy**

If an [electric field](https://en.wikipedia.org/wiki/Electric_field) is applied to a material, and the resulting induced [electric current](https://en.wikipedia.org/wiki/Electric_current) is in the same direction, the material is said to be an *isotropic electrical conductor*. If the resulting electric current is in a different direction from the applied electric field, the material is said to be an *anisotropic electrical conductor*.

**3.Составление конспекта текста на английском языке (15 предложений)**

1. In [physics](https://en.wikipedia.org/wiki/Physics) and [electrical engineering](https://en.wikipedia.org/wiki/Electrical_engineering), a **conductor** is an object or type of material that allows the flow of an [electrical current](https://en.wikipedia.org/wiki/Electrical_current) in one or more directions.
2. Metal is an ideal choice for a conductor as it possesses a delocalized [sea of electrons](https://en.wikipedia.org/wiki/Sea_of_electrons) which gives the electrons enough mobility to collide and thus effect a momentum transfer.
3. The resistance of a given conductor depends on the material it is made of, and on its dimensions.
4. For a given material, the resistance is inversely proportional to the cross-sectional area.
5. Temperature also affects conductors in two main ways, the first is that materials may expand under the application of heat. An increase in temperature will also increase the number of phonons generated within the material.
6. Much like the shaking of a pinball machine, phonons serve to disrupt the path of electrons, causing them to scatter which decreases the number of electron collisions and therefore the total amount of current transferred.
7. **Conduction materials** include [metals](https://en.wikipedia.org/wiki/Metal), [electrolytes](https://en.wikipedia.org/wiki/Electrolyte), [superconductors](https://en.wikipedia.org/wiki/Superconductor),[semiconductors](https://en.wikipedia.org/wiki/Semiconductor), [plasmas](https://en.wikipedia.org/wiki/Plasma_%28physics%29) and some nonmetallic conductors such as[graphite](https://en.wikipedia.org/wiki/Graphite) and [Conductive polymers](https://en.wikipedia.org/wiki/Conductive_polymer).
8. Many types of [Copper](https://en.wikipedia.org/wiki/Copper) have a high [conductivity](https://en.wikipedia.org/wiki/Electrical_conductivity).
9. [Annealed](https://en.wikipedia.org/wiki/Annealing_%28metallurgy%29) copper is used in producing building wire, [motor](https://en.wikipedia.org/wiki/Electric_motor) windings, cables and [busbars](https://en.wikipedia.org/wiki/Busbar%22%20%5Co%20%22Busbar),
10. Because of its ease of connection by [soldering](https://en.wikipedia.org/wiki/Soldering) or clamping, copper is still the most common choice for most light-gauge wires.
11. [Aluminum](https://en.wikipedia.org/wiki/Aluminum) wire, which has 61% of the conductivity of copper, has been used in building wiring for its lower cost.
12. Aluminum wires used for low voltage distribution, such as buried cables and service drops.
13. Aluminum is also the most common metal used in high-voltage transmission lines, in combination with steel as structural reinforcement.
14. Wires are measured by their cross sectional area. In many countries, the size is expressed in square millimetres.
15. The [ampacity](https://en.wikipedia.org/wiki/Ampacity%22%20%5Co%20%22Ampacity) of a conductor, that is, the amount of [current](https://en.wikipedia.org/wiki/Electric_current) it can carry, is related to its electrical resistance: a lower-resistance conductor can carry a larger value of current.

**IV.Подведение итогов урока и задание на дом.**

1. Выучить лексику
2. Подготовить описание изолятора.

**Английский язык.**

**Тема «Театр. Повторение настоящего длительного и простого времени».**

**Тип урока: комбинированный.**

**Цели урока.**

* Совершенствование навыков чтения вслух и про себя.
* Развитие навыков монологической речи и диалогической речи.
* Совершенствование грамматических навыков.

**Оснащение.** Карточки с раздаточным материалом.

**Ход урока.**

**Проверка домашнего задания.**

Рассказ о музыканте . Учебник английского языка под редакцией А.П. Голубева стр.223

**Работа с темой «Театр».**

1. Предварительная беседа.
2. How often do you go to the theater?
3. When did you last go to the theater?
4. Did you like the performance?
5. Did the audience like the performance?
6. Did you like the scenery?
7. What was the play about?
8. Who played the leading parts?
9. Was the cast good?
10. What do you call a place where the performance takes place?
11. Where do you buy tickets?
12. What do you call a person who writes plays?
13. What do we call a person who directs the staging of a play?
14. What is your favorite theatre and why?
15. Which do you like more going to the cinema or going to the thatere?
16. Do you like operas?

2.Работа с текстом « Drama music and ballet in London» (Практический курс английского языка 2 курс Аракин стр.325

 The center of a theatrical activity in Britain is London. There are about 50 principal theatres in professional use in or near the West End and some 20 in the suburbs.

 Most of these are let to producing managements on a commercial basis, but some of them are permanently occupied by subsidized companies, such as the National Theatre which stages classical and modern plays in its complex of three theaters on the South Bank of the River Thames. The former Old Vic Company, which was Britain’s major theatrical touring company, has now taken up residence in the National Theatre. In addition, the Royal Shakespeare Company presents Shakespearian plays at Stratford upon Avon and a mixed repertoire in London.

 Outside London there are many non- repertory theatres which present all kinds of drama and also put on variety shows and other entertainments. Recently there has been a growth in the activity of repertory companies which receive financial support from the Arts Council and the local authoritrties.these companies employ leading producers, designers and actors, and the standard of productions is generally high. Some companies have their own theaters, while others rent from the local authorities.

Music of all kinds- pop music, folk music, jazz, light music and brass bands-is an important part of British cultural life. The large audiences at orchestral concerts and at performances of opera, ballet and chamber music reflect the widespread interest in classical music.

 financial assistance from the Arts Council, gives regular seasons of opera and ballet. It has its own orchestra which plays for the Royal Opera and the Royal Ballet. Both companies have a high international reputation. The English National Opera which performs in the London Coliseum gives seasons of opera and operetta in English. It also tours the provinces.

 There are several thousand amateur dramatic societies in Britain. Most universities have thriving amateur drama clubs and societies.

Answer the questions.

1. What is the center of theatrical activity in Great Britain?
2. Which theatrical companies receive financial support from the Art Council?
3. What is meant by a repertory [ˈrepətərɪ] theatre? форма организации [театрaльного](https://ru.wikipedia.org/wiki/%D0%A2%D0%B5%D0%B0%D1%82%D1%80) дела, при которой театр имеет постоянный (или медленно обновляемый) [репертуар](https://ru.wikipedia.org/wiki/%D0%A0%D0%B5%D0%BF%D0%B5%D1%80%D1%82%D1%83%D0%B0%D1%80). Для репертуарных театров характерно наличие постоянной [труппы](https://ru.wikipedia.org/wiki/%D0%A2%D1%80%D1%83%D0%BF%D0%BF%D0%B0), хотя, как и другие театры, они иногда нанимают актёров на конкретные спектакли.
4. What do you know about Royal Shakespeare Company?
5. What kinds of performances are staged in the Royal Opera House and the English National Opera?
6. Do these theatres have their own orchestras?
7. Are there many theatres in or near the West End of London?
8. What kind of music is popular in England?
9. Are there any amateur theatres in Great Britain?
10. What leading actors of the British theater do you know? (Laurence Olivier, Ralph Richardson & John Gielgud)

**3. Describe your impressions of a play (opera, ballet) you have seen. Follow the plan below:**

1. Going to the theatre. (How did you get the tickets? Where were your seats? Was the house full?)

2. The play. (Was it interesting? What was interesting? What didn't you like about it?)

3. The acting. (Was the cast good? Whose acting im­pressed the audience? In what scenes?)

4. The production. (Did the production help the audience to catch the main idea of the play?)

5. Designing. (Did you like the scenery? How were the light and sound effects used?)

6. The audience. (What kind of people did it consist of? How did they receive the performance?)

R e m i *n* d e r:  *is surprising to meet a play about ordi­nary people caught up in ordinary events, the author shows a remarkable talent for writing dialogue which is entertaining and witty, the characters are pleasant (humorous, ordinary); one brief scene forms the climax of the play, the characters act out a fantasy, the audience is made to think: until almost the final curtain; splendid direction; it was one of the finest ren­derings of this part I've ever heard; I hear the scenery was planned and designed by*...; *his musical talent is quite excep­tional, his playing sometimes reminds me of...; the highlight of the evening was*...

4.Learn the dialogue by heart. Act out this dialogue.

– I want four seats for Sunday, please.

– Matinee or evening performance?

– Evening, please.

– Well, you can have very good seats in the stalls, Row F.

– Oh, no! It's near the orchestra-pit. My wife can't stand loud music.

– Then I could find you some seats in the pit.

– I'm afraid that won't do either. My father-in-law is terribly short-sighted. He wouldn't see much from the pit, would he?

–Perhaps, you'd care to take a box?

– Certainly not! It's too expensive. I can't afford it.

– Dress-circle then?

– I don't like to sit in the dress-circle.

– I'm afraid the only thing that remains is the gallery.

– How can you suggest such a thing! My mother-in-law is a stout woman with a weak heart. We couldn’t dream of letting her walk up four flights of stairs, could we?

– I find, sir, that there isn't a single seat in the house that would suit you.

– There isn't, is there? Well, I think we'd much better go to the movies. As for me, I don’t care much for this theatre-going business. Good day!

5. Insert articles where necessary.

Chekhov's play "... Sea-gull «was first staged in ... Alexandrinsky Theatre in ... Petersburg. It was ... complete failure. ...

play was ruined by ... dull and ... clumsy production. It was staged in ... “good old traditions” whereas ... Chekhov's plays were quite unlike any other plays written before and demand­ed ... new forms and devices. ... Petersburg audience did not understand "... Sea-gull. «There was ... laughter in most poeti­cal scenes and many of ... audience left long before ... end of play. It was ... cruel blow to Chekhov. However, in ... Mos­cow

Art Theatre, which was not ... year old then

(it was in 1898), ... same play directed by K. S. Stanislavsky was ... tremendous success. ... Stanislavsky's production of "...

Sea-gull’ opened ... new epoch in ... history of ... theatre and symbolized ... triumph of ... new and ... progressive forms over ... old ones.

In ... memory of that event ... white sea-gull spreads its wings on ... curtain of ... Moscow Art Theatre.

Answer the following questions:

1. When and where was Chekhov's ‘Sea-gull ‘first staged ? 2. Why did it fail? 3. Why was it that the same play was a tremendous success in the Art Theatre? 4. Why did the Art Theatre choose the sea-gull for its emblem?

**Повторение настоящего длительного и простого времени .**

**Настоящее простое время.Present Simple Tense.**

I.Настоящее неопределенное время употребляется в следующих случаях:

1. Для выражения обычного действия, совершающегося постоянно, регулярно.*Every day I go to school.*

2. Для выражения общеизвестных положений.*The earth goes round the sun.*

3. Вместо будущего времени в придаточных предложениях условия и времени (после союзов when, if, after, before, as soon as, till).If the weather is fine they will stay in the wood.
2) Будущее действие в соответствии с расписанием. *The train to London leaves at 5 p.m.*

II. Утвердительная форма настоящего неопределенного времени образуется от инфинитива смыслового глагола без частицы to. В третьем лице единственного числа глаголы принимают окончание -s или -es: *study-studies/ play-plays /lose-loses /dress – dresses /wash-washes*

2. В вопросительной форме вспомогательный глагол do /doesстоит перед подлежащим, а смысловой - после него.*Do you study physics? Does he play football? Where do you live?*
3. Отрицательная форма настоящего неопределенного времени образуется также при помощи вспомогательного глагола do/does и отрицательной частицы not. This year we do not (don't) study physics. *Не does not play (doesn't) football.*

Слова-сигналы: *every day(week,month,year,season),usually, always,sometimes,often,regularly etc.*

**Настоящее длительное время.Present Continuous Tense.**

 I. Настоящее продолженное время употребляется в следующих случаях:

1. Для выражения действия, совершающегося в момент говорения или в настоящий момент. Этот момент может быть выражен такими словами, как *now*, *at this moment* *Professor P. is delivering a lecture in the assembly hall.*

2. Для выражения действия, проходящего в определенный период времени. Период может длиться от 5 дней до 5 лет. *What are you doing these days? I am preparing for my exams.*

3. Для выражения действия, которое запланировано и произойдет в ближайшем будущем. *We are leaving Moscow tomorrow.*

4.Для выражения эмоционально-окрашенных действий. *Не is forever losing his things! Вечно он теряет свои вещи!*

II. Для образования вопросительной формы вспомогательный глагол *to be* ставится перед подлежащим, а причастие настоящего времени смыслового глагола - после подлежащего.*Is he reading a newspaper? What are you doing tonight?*Для образования отрицательной формы после вспомогательного глагола *to be* ставится отрицательная частица *not. Не is not (isn’t) reading a newspaper.*

III. Глаголы, выражающие чувство, восприятие, умственную деятельность и т. п. не могут обозначать действие и состояние как процесс, поэтому в формах продолженных времен они не употребляются. В английском языке они называются *state verbs.*
К их числу относятся такие глаголы, как:

1. Глаголы физического восприятия (verbs of physical perception): to hear, to notice,to see;
2. Глаголы эмоционального состояния (verbs denoting emotions): to adore, to care for,to detest, to dislike, to hate, to like, to love, to respect;
3. Глаголы желания (verbs denoting wish): to desire, to want, to wish;
4. Глаголы умственной деятельности (verbs denoting mental processes): to admire (в значении «восхищаться»), to appreciate, to assume, to believe (полагать), to consider (считать кем-либо, рассматривать как), to doubt, to expect (полагать), to feel(полагать), to imagine, to know, to mind (возражать), to perceive, to presume, to recall, to recognize, to recollect, to regard, to remember, to suppose, to think (думать), to trust, to understand;
5. Глаголы отношения (relational verbs): to apply, to be, to belong, to concern, to consist, to contain, to depend, to deserve, to differ, to equal, to fit, to have, to hold (содержать), to include, to involve, to lack, to matter, to need, to owe, to own, to possess, to remain, to require, to resemble, to result, to signify, to suffice;
6. Другие глаголы: to agree, to allow, to appear (казаться), to astonish, to claim, to consent, to displease, to envy, to fail to do, to feel, to find, to forbid, to forgive, to intend, to interest, to keep doing, to manage to do, to mean, to object, to please, to prefer, to prevent, to puzzle, to realize, to refuse, to remind, to satisfy, to seem, to smell, to sound, to succeed, to suit, to surprise, to taste, to tend, to value.

**Тренировочные упражнения. *Present Continuous and Present Simple Tenses.***

*Put the verb into the correct form (Present Continuous Tense).*

1.     Tom and Ann cannot go out now. It \_\_\_\_\_\_\_\_ (snow) now.

2.     Have you got umbrella? It \_\_\_\_\_\_\_\_\_ (start) to rain.

3.     [Jane](http://www.google.com/url?q=http%3A%2F%2Fkupi-kolyasku.ru%2F&sa=D&sntz=1&usg=AFQjCNGudUh5Pr8SdhgC56A8NaAze3g1jA)’s on holiday in Italy. She\_\_\_\_\_\_\_\_ (have) a great time and doesn’t want to come back.

4.     Mother \_\_\_\_\_\_\_\_\_ (look for) her son. Do you know where he is?

5.     Are you ready, Nick? “Yes, I \_\_\_\_\_\_\_\_\_ (come)”.

6.     My father \_\_\_\_\_\_\_\_\_\_ (repair) the car.

7.     \_\_\_\_\_ you \_\_\_\_\_\_\_\_(clean) the house now?

*Put the verb into the correct form (Present Simple Tense)*

1.     The shop \_\_\_\_\_\_\_\_\_\_ (open) at 8 am and \_\_\_\_\_\_\_\_\_ (close) at 6 pm every day.

2.     The earth \_\_\_\_\_\_ (go) round the sun.

3.     My brother \_\_\_\_\_\_\_ (get up) at 7 o’clock every morning.

4.     My mother \_\_\_\_\_\_\_\_ (wash) dishes every day.

5.     My parents \_\_\_\_\_\_\_\_ (go) to the cinema once a month.

6.     Usually I \_\_\_\_\_\_\_ (make) my bed at 6.30.

7.     My grandfather \_\_\_\_\_\_\_\_\_ (read) newspaper every evening.

*Put the verb into the correct form (Present Simple or Present Continuous Tenses)*

1.     Tom is very good at languages. He \_\_\_\_\_\_\_ (speak) three languages very well.

2.     Are you ready? Everybody \_\_\_\_\_\_\_\_ (wait) for you.

3.     My friends \_\_\_\_\_\_\_\_ (live) in France.

4.     The train always \_\_\_\_\_\_\_\_\_ (leave) on time.

5.     My mother \_\_\_\_\_\_\_\_\_\_ (go) to the swimming pool now.

6.     My grandparents \_\_\_\_\_\_\_\_\_\_ (swim) in the river every day.

7.     Ann \_\_\_\_\_\_\_\_\_ (play) computer games at the moment.

8.     I \_\_\_\_\_\_\_ (like) to watch cartoons.

1. I can’t afford that thing. It (cost) too much.
2. I (own, not) an umbrella. I (wear) a waterproof hat on rainy days.
3. The house (to be) in a mess, because we have’ve got the workmen in.The plumber (put) a new bath, the electricians (rewire) the system, and the carpenter (build) us some new bookshelves.
4. You (hear) the wind? It (blow) very strongly tonight.
5. You (see) my car keys anywhere?-No I (look) for them but I (not see) them.
6. Why you (walk) so fast today? You (walk) usually quite slowly.-I (hurry) because I (meet) my mother at 5 o’clock and she (not like) to be kept waiting.
7. You (recognize) that man?-I (think) I have seen him before but I (not remember) his name.
8. Look at that crowd. I wonder what they (wait) for.
9. Stop! You (not see) the notice?-I (see) it but I can’t read it because I (not wear) my glasses. What it (say)?
10. You (need) another blanket or you (feel) warm enough?
11. It (save) time if I (take) the path through the wood?-No, it (not matter) which path you take.
12. I (save up) because I (go) abroad in July.
13. It’s a pity you (not take) more exercise. You (get) fat.
14. The plane you (look) at now just (take) off to Paris.
15. That film (come) to local cinema next week. You (want) to see it?
16. How Peter (get) on at school?-Very well. He (seem) to like the life.
17. This is our itinerary. We (leave) home on the 8th, (arrive) in Paris on the 9th,(spend) the day in Paris, and (set) out that night for Venice.-That(sound) very interesting.
18. The last train (leave) the station at 11.30.
19. She always (lose) her glasses and (ask) me to look for them.
20. You (do) anything this evening?

**IV.Подведение итогов урока и задание на дом. Подготовить или выучить рассказ о театре.**

**Тема «Политическое устройство Великобритании».**

**Преподаватель Климова Ирина Владимировна.**

**Тип урока: комбинированный.**

**Цели урока.**

* Совершенствование навыков чтения вслух и про себя.
* Развитие умения извлекать из текста нужную информацию.
* Развитие навыков монологической речи.
* Совершенствование грамматических навыков.

**Оснащение.** Карточки с раздаточным материалом.

**Ход урока.**

**I Выполнение упражнений на повторение лексики предыдущего урока.**

1. Повторение лексики.(почеркнутые слова-работа фронтально и в парах)

According to the Constitution adopted in 1993, the Russian Federation is a presidential republic. Just like political systems in other countries, our political system also has three branches of power˸ legislative, executive and judicial.

The Federal Assembly represents the legislative branch of power. It is also made up of two houses˸ the Federation Council and the State Duma, which make laws. Both houses are headed by chairmen called speakers. Russia is divided into 89 federal subjects. Each subject elects two representatives to the Federation Council, so there are 178 members in the Federation Council. The State Duma consists of 450 deputies. 225 members are elected directly by the people. The other half of deputies is appointed by their parties after party-list voting according to which every party gains a number of seats. The main function of the Federal Assembly is to make laws. Every law must be approved by the State Duma and the Federation Council, and signed by the President.

The Federal Government represents the executive branch of power. It consists of the Prime Minister and the Cabinet of Ministers.

The President is the head of state in Russia and he is elected directly by the people. In fact he has a lot of power. The President can even dissolve the State Duma if it doesn't agree with his sugges­tions three times running. The President has his Administration but it is not part of the Federal Government. The President is involved in the work of the legislative and executive branches.

The judicial branch of power is represented by the Supreme Court and the Constitutional Court. The Supreme Court is the highest court for civil and criminal cases. The responsibility of the Constitutional Court is to determine whether new laws or actions of President correspond to the Constitution. The Constitution is the main law of Russia. It guarantees the rights and freedoms of Russian citizens.

Russian political system also has "the system of checks and balances" like that in the USA. For example, the President appoints the heads of the Federal Government and the Chairman of the Government, but the State Duma must approve his appointment. The President can veto laws passed by the Federal Assembly, but the Federal Assembly can pass laws over the President's veto by a two-thirds majority. The Constitutional Court has the right to declare actions of the President, the Federal Assembly and the Federal Government unconstitutional.

There are many political parties in our country. The most well-known are the Communist Party, the Liberal Democratic Party, the "Unity" Party, the Union of the Right Forces and the "Apple" Party.

1. What political system does the Russian Federation represent? 2. How many branches are there in the political system of Russia? 3. Which institutions exercise the legislative, executive and judicial power? 4. What is each branch of power responsible for? 5. Can you explain how the branches of power interact? 6. Who is the head of state in Russia? Does he have much power? 7. Are there many political parties in Russia? 8. What are the most well-known parties?

**II. Выполнение упражнений по освоению темы Работа с темой «Государственное**

**устройство Великобритании».**

1. Мозговой штурм «Что вы знаете о Великобритании». Ответьте на следующие вопросы.

Where is the UK situated?-On the British Isles.

What is the total area of Great Britain?-244 000 square km.

What countries is the UK made of?-England, Wales, Scotland, and Northern Ireland.

What are their capitals?- London, Cardiff, Edinburg, Belfast.

What channel separates the British Isles from the European Continent? The English Channel.

Great Britain is very beautiful. One of the poets called the country a ‘precious stone set in the silver sea’. Do you know this poet? Shakespeare.

What is the highest mountain in Great Britain?-Ben Nevis.

What is the longest river in Great Britain?-Severn.

What is the deepest and most important river?-Thames

Where do most people live (in cities or in villages)?-in cities.

What is one of the chief industries in the country?-shipbuilding.

Why is the climate of the British Isles mild?-because it is washed by the Atlantic Ocean and different seas and Channels from four sides Великобританияомывается Атлантическим океаном на севере и западе, Северным морем на востоке и Ирландским морем на западе, на юге отделена от материка проливами Ла-Манш и Па-Де-Кале.

The UK is a constitutional monarchy. What does it mean? In law the head of state is the Queen. In practice the Queen reigns but doesn’t rule. The country is ruled by the elected government with the prime minister at the head.

What are the main political parties in Great Britain? Labor, Conservative, Liberal

How is the English flag called? Union Jack.

2.Выполнение упражнений на отработку навыка чтения про себя. Работа с текстом «Британское правительство» (Кисунько Е. И. « Устные темы для подготовки к ЕГЭ» стр. 193). Расположите абзацы в правильном порядке. (Put the passages in the right order).

1 The United Kingdom or UK is a political term which includes England, Scotland, Wales and Northern Ireland. All of these countries are represented in Parliament in London, and the abbreviation UK is used on most official documents produced by Parliament. Britain is split into counties. The word *county* describes an area with its own local government. County councils are elected to run things, such as education, housing, town planning, and rubbish disposal. They look after things like roads, libraries and swimming pools.

2 In Britain the Queen is the Head of State, but in fact she doesn't rule the country .The most important function of the queen is ceremonial. The Queen is a symbol of the country, its history and its traditions. She is very rich. She travels about the United Kingdom, meets different people and visits schools, hospitals and other public places.

3 The real power in the country belongs to the British Parliament and to the British Government. The British Parliament has two houses, or chambers: the House of Commons and the House of Lords. The House of Commons is the most powerful and decides national policy, but the House of Lords can ask the House of Commons to rewrite certain parts of a bill before it becomes a new law.

4 The House of Commons consists of Members of Parliament, or MPs. The British people elect 650 members of the House of Commons every five years. The 1,203 members of the House of Lords are not elected. These members are permanent.

They are often aristocrats, people of the church, lawyers and former politicians.

5 The head of both Houses of Parliament is the Queen but she has very little power. It is the Queen who formally opens Parliament every autumn but the speech she makes from the throne is written for her by politicians. Nothing becomes British law without the monarch’s signature, but the Queen would never refuse to sign a bill which has been passed by parliament.

6 The British flag, known as the *Union Jack*, is a combination of three flags: the Saint Andrew’s cross, the Saint Patrick’s cross and the Saint George’s cross.

7 The Saint George’s cross is the English flag. Saint George is the patron saint of England. He was a soldier famous for saving the Princess Cleolinda from being eaten by a dragon. Saint George’s Day is celebrated on 23 April. The symbol of England is a red rose.

8 The Saint Andrew’s cross is the Scottish flag. Saint Andrew, a fisherman, was one of the 12 apostles who followed Jesus Christ. Paintings of Saint Andrew often show him being crucified on an X-shaped cross. Saint Andrew’s Day is celebrated on 30 November. He is the patron saint of both Scotland and Russia. The symbol of Scotland is a thistle. чертополох

9.The Welsh flag shows a dragon. Saint David, the patron saint of Wales, converted Wales to Christianity and established the Welsh church. Paintings of Saint David show him with a dove on his shoulder. Saint David’s Day is celebrated on 1 March. The symbol of Wales is a daffodil нарцисс or leek.

10.The Saint Patrick’s cross is the former flag of Ireland. Saint Patrick is the patron saint of Ireland. He was born about AD 390. He converted the Irish to Christianity. Saint Patrick’s Day is celebrated on 17 March. The symbol of Northern Ireland is a shamrock. Трилистник

* **Крест Святого Георгия –прямой красный крест на белом фоне (Англия)**
* **Крест Святого Андрея- белый косой на синем фоне (Шотландия)**
* **Крест Святого Патрика- красный косой крест на белом фоне (Ирландия)**

**A** The Saint Andrew’s cross is the Scottish flag. Saint Andrew, a fisherman, was one of the 12 apostles who followed Jesus Christ. Paintings of Saint Andrew often show him being crucified on an X-shaped cross. Saint Andrew’s Day is celebrated on 30 November. He is the patron saint of both Scotland and Russia. The symbol of Scotland is a thistle. Чертополох

**B** The real power in the country belongs to the British Parliament and to the British Government. The British Parliament has two houses, or chambers: the House of Commons and the House of Lords. The House of Commons is the most powerful and decides national policy, but the House of Lords can ask the House of Commons to rewrite certain parts of a bill before it becomes a new law.

**C** The British flag, known as the *Union Jack*, is a combination of three flags: the Saint Andrew’s cross, the Saint Patrick’s cross and the Saint George’s cross.

**D** The head of both Houses of Parliament is the Queen but she has very little power. It is the Queen who formally opens Parliament every autumn but the speech she makes from the throne is written for her by politicians. Nothing becomes British law without the monarch’s signature, but the Queen would never refuse to sign a bill which has been passed by parliament.

**E** The Saint George’s cross is the English flag. Saint George is the patron saint of England. He was a soldier famous for saving the Princess Cleolinda from being eaten by a dragon. Saint George’s Day is celebrated on 23 April. The symbol of England is a red rose.

**F** The House of Commons consists of Members of Parliament, or MPs. The British people elect 650 members of the House of Commons every five years. The 1,203 members of the House of Lords are not elected. These members are permanent.

They are often aristocrats, people of the church, lawyers and former politicians.

**G** The Saint Patrick’s cross is the former flag of Ireland. Saint Patrick is the patron saint of Ireland. He was born about AD 390. He converted the Irish to Christianity. Saint Patrick’s Day is celebrated on 17 March. The symbol of Northern Ireland is a shamrock. трилистник

**H** In Britain the Queen is the Head of State, but in fact she doesn't rule the country .The most important function of the queen is ceremonial. The Queen is a symbol of the country, its history and its traditions. She is very rich. She travels about the United Kingdom, meets different people and visits schools, hospitals and other public places.

**I** The Welsh flag shows a dragon. Saint David, the patron saint of Wales, converted Wales to Christianity and established the Welsh church. Paintings of Saint David show him with a dove on his shoulder. Saint David’s Day is celebrated on 1 March. The symbol of Wales is a daffodil нарцисс or leek.

**J** The United Kingdom or UK is a political term which includes England, Scotland, Wales and Northern Ireland. All of these countries are represented in Parliament in London, and the abbreviation UK is used on most official documents produced by Parliament. Britain is split into counties. The word *county* describes an area with its own local government. County councils are elected to run things, such as education, housing, town planning, and rubbish disposal. They look after things like roads, libraries and swimming pools.

3.Выполнение упражнения на нахождение в тексе необходимой информации. Послушайте предложение и назовите героя. (Listen to the sentence and name the character.

* She travels about the United Kingdom, meets different people and visits schools, hospitals and other public places. –Queen
* decides national policy.- The House of Commons
* consists of Members of Parliament -The House of Commons
* They look after things like roads, libraries and swimming pools.- County councils
* members of this chamber are not elected. The House of Lords
* consists of 1,203 members -the House of Lords
* The members of this chamber are often aristocrats, people of the church, lawyers and former politicians- the House of Lords
* is shown in pictures with a dove on his shoulder.- Saint David
* formally opens Parliament - Queen
* The British people elect 650 members to this chamber every five years. The House of Commons
* Paintings of this saint often show him being crucified on an X-shaped cross. -Saint Andrew
* He was a soldier famous for saving the Princess from being eaten by a dragon. -St George
* she has very little power-Queen
* established the Welsh church. -Saint David
* He is the patron saint of both Scotland and Russia.- Saint Andrew
* A symbol of the country history and its traditions-Queen
* are elected to run things, such as education, housing, town planning, and rubbish disposal- County councils
* makes the speech from the throne- Queen
* a fisherman, was one of the 12 apostles who followed Jesus Christ. -Saint Andrew

4. Выполнение упражнений на развитие монологической речи. Подготовьте устные ответы на следующие вопросы.

1. What is the UK?
2. What does the word ‘county’ mean?
3. What is the role of the Queen in Britain?
4. Who does the real power in Britain belong to?
5. What does the British Parliament consist of?
6. What is the difference between the Commons and the Lords?
7. What do you know about the Union Jack?
8. What do you know about the patron saints in the UK?
9. Can you compare British and Russian political systems?

**IV.Подведение итогов урока и задание на дом.**

Повторить грамматику-подготовиться к выполнению теста.

**Тема «Российская Федерация. Страдательный залог».**

**Тип урока: комбинированный.**

**Цели урока.**

* Совершенствование навыков чтения вслух и про себя.
* Развитие умения извлекать из текста нужную информацию.
* Развитие навыков монологической речи.
* Совершенствование грамматических навыков.

**Оснащение.** Карточки с раздаточным материалом.

**Ход урока.**

1. **Проверка домашнего задания.**

Рассказ о праздниках и традициях в Америке.Учебник английского языка И. П. Агабекян стр223-224

1. **Работа с темой «Российская федерация».**
2. **Беседа с учащимися.**
3. What is the territory of Russia? 17 125 191 км²
4. How many people live in Russia? 146 804 372 чел
5. How many nationalities live in Russia? According to the 2010 census of the population of Russia there are more than 180 nationalities. The most numerous people are the Russian (111 016 896), the second largest ethnic group — the Tatars, in the third place are the Ukrainians .
6. How many subjects of the RF exist on the territory of Russia? 85
7. How can you explain the term ‘the subject of the RF’?
8. The subject of the Russian Federation or the subject of Russia is the name of the territorial unit of the upper level in the Russian Federation.
9. How many big cities are there in Russia? 1112
10. What are 5 the biggest cities in Russia? Moscow, SP, Novosibirsk, Yekaterinburg, NN
11. What is the state system of Russia? Russia is a democratic Federal state
12. What are the state symbols of Russia?

The state emblem of Russia, the State anthem Russian, the national flag of Russia.

1. Describe the Russian Flag.

The Russian flag has three equal horizontal fields with white at the top, blue in the middle and red at the bottom. Some Russians believe that white stands for generosity, blue for loyalty and red for courage. There is no official explanation for the meaning of the colors.

(The flag has three wide stripes on it. The colours of the flag are symbolic. White is faithful and sincere, blue is honest and loyal and red is brave.)

The Russian flag first appeared in 1668. It was the symbol of Russia for more than 300 years. August 22, Russia celebrates national Flag Day. For the first time it was hung over the White House in Moscow in 1991.Officially, in 1994, was adopted a decree on the appointment of this festival.When Russian people celebrate their national holidays you can see the national flag in all streets, squares, official buildings, blocks of flats and houses in big cities, small towns and villages).

1. What do you know about the Russian the coat-of-arms?

The eagle carries a sceptre, the sign of state power, and an orb, the sign of unity. The emblem also includes St George. It is the oldest Russian symbol of love for Motherland. The double-headed eagle is the emblem of Russia. Above the heads there are three crowns. Three crowns is the symbol of sovereignty [ˈsɔvrəntɪ] of the state, equality of the main governmental branches of power — legislative, judicial and executive.

The [eagle](https://en.wikipedia.org/wiki/Eagle_%28heraldry%29) has long been a symbol of power and dominion. владычество

In the [HolyRoman Empire](http://en.academic.ru/dic.nsf/enwiki/7926)'s heraldry, it represented the [Church](http://en.academic.ru/dic.nsf/enwiki/11537281) and the [State](http://en.academic.ru/dic.nsf/enwiki/7926).

The coat of arms of Russia have gone through three major periods intheir history, undergoing major changes in the transitions between the [Russian Empire](http://en.academic.ru/dic.nsf/enwiki/11449660), the [Soviet Union](http://en.academic.ru/dic.nsf/enwiki/16383), and theRussian Federation. They date back to 1472, when Ivan III began using the double-headed eagle in his seal, which, along with the image of St. George slaying a dragon, have been common in the coat of arms since. The coat of armswere changed in 1918 with the creation of the [Russian Soviet Federative Socialist Republic](http://en.academic.ru/dic.nsf/enwiki/162405), and depicted communistsymbols such as the hammer and sickle and red star. The current coat of arms, in use since 1993, once again usesthe double-headed eagle with the image of St. George.

1. Who wrote the state hymn of Russia? Since what time have Russian people been singing it?

Adopted By The State Duma. 8 December 2000.

Lyrics-Sergey Michalcov Music Alexander Alexandrov

1. **Работа с текстом « Российская Федерация» Учебник «Английский язык для инженеров» стр 53-56**
2. **Дополнительно Текст Петр Великий (поисковое чтение)**

**Задание.**

Read the text and find the following information:

Personality of Peter

Peter’s appearance

Relatives of Peter

His politic goals

His reforms

His military campaigns

Personal life

Interesting facts

What new information have you learned about Peter the first?

Peter the Great was a Russian Tsar in the late 17th century who later on became the first Emperor of Russia. Peter I was extremely tall with a height of 6 ft 8 in (203 cm). He thus stood head and shoulders above his contemporaries. He was handsome and of unusual physical strength. He believed in hard work and performed his duties with the same diligence that he demanded of others. He began his own army service at the lowest rank and required others to do likewise to gain mastery of their profession. Peter is said to have had an eye for talent which aided him to pick the right people for the work required. Peter was known to have a terrible temper and could be cruel when opposed. At such times, people usually asked his beloved wife Catherine to intercede with him for them.

His grandfather Michael I was founder of the Romanov dynasty in Russia

 Michael I of Russia, or Mikhail Fyodorovich Romanov, was the first Russian Tsar from the House of Romanov, which ruled Russia for more than 300 years from February 21, 1613 to March 15, 1917.

He traveled as Peter Mikhailov across Europe and worked as a carpenter

Peter knew that it would be difficult for Russia to face the mighty Ottoman Empire alone. In 1697, he traveled incognito to Europe under the name of Peter Mikhailov, with a large Russian delegation, known as the Grand Embassy. The principal aim of it was to form a strong alliance with European nations against the Turks to aid Russia’s quest for northern coastline of the Black Sea. The 18-month journey was not a success in that regard as European powers were occupied with the succession of the childless Spanish King Charles II. However during his time in Europe, Peter the Great studied shipbuilding and even worked as a ship’s carpenter in the yard of the Dutch East India Company. He later used his shipbuilding knowledge to strengthen the Russian navy. He also gained valuable insights into the international situation; and economic and cultural life of Europe.

**Childhood & Early Life**

• He was born as Pyotr Alekseyevich on June 9, 1672 in Moscow, Russia, as the son of Tsar Alexis and his second wife, Natalya Kirillovna Naryshkina. He was his father’s 14th child but his mother’s first son. Most of his elder half-siblings were weak and sickly while Peter himself was healthy and full of energy and vigor.

• The Tsar Alexis died when Peter was just four years old. His elder half-brother, Feodar III succeeded to the throne. Feodar was a sickly person and he died in 1682.

• Another ill half-brother, Ivan V, inherited the throne. But since Ivan was also sickly and of infirm mind, the Russian nobles chose the healthy ten-year-old Peter to become Tsar with his mother as regent. From 1682, the two brothers Ivan and Peter ruled jointly.

**Ascension & Reign**

• Ivan died in 1696 and Peter was officially declared Sovereign of all Russia. When Peter came to power, Russia was severely underdeveloped as compared to the other European nations which were prosperous and culturally rich. Russia lagged behind in modernization and this was something Peter vowed to change.

• He implemented a series of progressive reforms during his reign in an attempt to bring Russia at par with the other European nations. He reorganized his army according to Western standards, and invited experts in the fields of shipbuilding, engineering, architecture and business from all over Europe to come to Russia and help modernize the country. He also encouraged the Russians to move out to different parts of Europe for furthering their education.

• Industrial development was boosted in an unprecedented way during the reign of Peter. He encouraged the Russians to adopt the latest European technologies and this led to a surge in the number of factories being built. Trade and commerce flourished during his reign.

• Peter realized that it was important to make Russia a maritime power in order to make trading with other nations easier. He sought to create more maritime outlets and after several wars with Turkey in the south, he secured access to the Black Sea. He officially founded the first Russian Navy base, Taganrog, in September 1698.

• He also embarked on extensive military campaigns in order to expand his territories. He started the Northern War with Sweden in 1700. The city of St. Petersburg was founded (1703) on the delta of the Neva River during the course of the war and in 1712 Peter the Great moved the Russian capital from Moscow to St. Petersburg which prospered as a hub of trade and culture.

• The war went on for 21 long years and ended with the Treaty of Nystad in 1721. By the time the war ended, Russia had acquired Ingria, Estonia, Livonia, and a substantial portion of Karelia. After the end of the Northern War in 1721, Russia was declared an Empire and Peter the Great proclaimed himself its Emperor.

• His later reign too was marked by several radical reforms. In 1722, Peter created a new order of precedence known as the Table of Ranks. The Russian Orthodox Church was also reformed during his reign.

**Major Works**

• Peter the Great is famous as the ruler under whose administration Russia became a great European nation. He implemented several reforms to modernize Russia. Among other things, he focused on the development of science and technology, encouraged trade and commerce, secularized schools and

modernized the Russian alphabet, introduced the Julian calendar, and established the first Russian newspaper.

**Personal Life & Legacy**

• When Peter was a young man, his mother arranged his marriage with Eudoxia Lopukhina, the daughter of a minor noble. The marriage which took place in 1689 was unhappy from the very beginning. Peter divorced his wife in 1698 and forced her to join a convent. This union produced three children.

• A few years after his divorce, he took a mistress by the name Martha Skavronskaya who converted to the Russian Orthodox Church and took the name Catherine. He married her in Saint Petersburg on 9 February 1712. This marriage resulted in the birth of 11 children though only a few survived to adulthood.

• Peter the Great began having problems with his urinary tract and bladder мочевой пузырь in 1723. He had a surgery in 1724 though his health started failing again soon after. He died on February 8, 1725, without nominating an heir.

1. **Повторение грамматики –тема « Страдательный залог»**

**Учебник «Английский язык для инженеров» стр 53-56**

**Дополнительные упражнения**

**I.Найти в тексте предложения со страдательным залогом, перевести на русский язык и определить грамматическое время.**

Computers. Now and in the Future.

 A computer is an electronic device. It makes calculations and processes information. Complicated problems can be solved very quickly. Millions of pieces of information can be processed in seconds. Nowadays, computers are used for many different purposes. Businesses use their computers not only to bill their customers, but also to send information to customers and to communicate with their businesses.in industry; many complicated machines are controlled by computers. Machines that produce chemicals, steel, and hundreds of other products are connected to computers. In transportation, airplanes, ships, and even spacecraft are guided by computers.in science, complicated problems and scientific data are almost always analyzed by computers. Even earthquakes and hurricanes can be predicted by computers. In education, computers are used as teaching machines. In the home people are buying computers to help them manage household more efficiently. People can shop, make travel arrangements, and pay their bills using computers right in their own homes.

In the future, computers will be even more widely used -in our offices ,our homes, and our cars.Developmenta are being made every day that allow computers to solve more and more complex problems. It has been said by many experts that some days computers will be able to “think “creatively like human beings. For example, some day computers may be able to understand human language and to respond to it.In the near future, sophisticated forms of art and music may also be created by computers.Indeed, some forms of “computer art” and “computer music” have already been produced.

Ответы.

1. Complicated problems can be solved very quickly. (Passive Voice with Modal Verb)
2. Nowadays, computers are used for many different purposes. (Present Simple Passive)
3. Many complicated machines are controlled by computers. (Present Simple Passive)
4. Millions of pieces of information can be processed in seconds. (Passive Voice with Modal Verb)
5. Machines that produce chemicals, steel, and hundreds of other products are connected to computers. (Present Simple Passive)
6. In transportation, airplanes, ships, and even spacecraft are guided by computers. (Present Simple Passive)
7. In science, complicated problems and scientific data are almost always analyzed by computers. (Present Simple Passive)
8. Even earthquakes and hurricanes can be predicted by computers. (Passive Voice with Modal Verb)
9. In education, computers are used as teaching machines. (Present Simple Passive)
10. In the future, computers will be even more widely used -in our offices, our homes, and our cars.(Future Simple Passive)
11. Developments are being made every day that allow computers to solve more and more complex problems. (Present Continuous Passive)
12. It has been said by many experts that some days computers will be able to “think “creatively like human beings. (Present Perfect Passive)
13. In the near future, sophisticated forms of art and music may also be created by computers. (Passive Voice with Modal Verb)
14. Indeed, some forms of “computer art” and “computer music” have already been produced. (Present Perfect Passive)

**II.Переведите предложения на русский язык, используя структуру страдательного залога.**

1. Об этом фильме много говорят. Я думаю, его стоит посмотреть.
2. Вам не придется ждать. Документы будут проверены и письма напечатаны, когда вы придете.
3. Роман написан молодым талантливым автором в 2008 году.
4. Эта картина нарисована неизвестным художником.
5. Не говори таких вещей. Над тобой будут смяться.
6. Когда пришел директор, все было готово. Документы были проверены и письма напечатаны.
7. Почему так холодно в зале? Его как раз проветривают. Читальный зал проветривается несколько раз в день.
8. Он квалифицированный врач. О нем хорошо отзываются.
9. Можно взглянуть на документы? - Их все еще печатают.
10. Дворец Спорта все еще строился, когда я приехал в Минск.
11. К вечеру работа будет закончена.
12. К вечеру работа была закончена.
13. Поторопись. Тебя ждут.
14. Где будет построена новая библиотека?
15. Что производится на этой фабрике?
16. Письмо не может быть отправлено сегодня, так как оно еще не подписано директором.
17. Иностранным студентам показали аудитории, лаборатории и общежитие Московского Университета.
18. Этот вопрос сегодня обсуждаться не будет.
19. Какой вопрос обсуждался на собрании, когда вы пришли?
20. Школу построят к началу учебного года.
21. Газеты и письма доставляются рано утром.
22. Мне были даны все необходимые указания.

Ответы.

1. This film is much spoken about. I think it is worth seeing.
2. You won’t have to wait. When you come the documents will have been checked and the letters will have been typed.
3. The novel was written by a young talented writer in 2008.
4. The picture was (is) painted by an unknown artist.
5. Don’t say such things. You’ll be laughed at.
6. When the director came everything was ready: the documents had been checked and the letters had been typed.
7. Why is it so cold in the reading room?-It is just being aired. The reading room is aired several times a day.
8. He is a qualified doctor. He is highly spoken of.
9. May I have a look at the documents?-They are still being typed.
10. The Palace of Sports was still being built when I came to Minsk.
11. By the evening the work will have been finished.
12. By the evening the work had been finished.
13. Hurry up. You are being waited for.
14. Where will the new library be built?
15. What is produced at this factory?
16. The letter can’t be sent today because it hasn’t been signed by the director.
17. The foreign students were shown the classrooms, the laboratories and the dormitory of Moscow University.
18. This question won’t be discussed today.
19. What question was being discussed at the meeting when you came?
20. The school will have been built by the beginning of the new school year.
21. Newspapers and letters are delivered early in the morning.
22. I was given all the necessary instructions.

**IV.Подведение итогов урока и задание на дом.**

**Выучить текст «Российская федерация» стр.174-176**

**Тема «Дистанционное обучение».**

**Тип урока: комбинированный.**

**Учебные цели урока.**

* Развитие навыков монологической и диалогической речи.
* Пополнение словарного запаса по теме «Образование в России и за рубежом».
* Совершенствование грамматических навыков

**Развивающие цели:**

1. Развитие критического мышления студентов, умения высказывать мнения и  делать выводы.

2. Развитие памяти и внимания.

3. Развитие умения вести дискуссию.

**Воспитательные цели:**

1. Воспитывать умения внимательно слушать и слышать своих товарищей.

2. Развитие навыков работы в команде. Формирование уважение к мнению товарищей.

3. формировать устойчивый интерес к изучению английского языка; чувство коллективизма и активную жизненную позицию.

**Оснащение.** Карточки с раздаточным материалом.

**Используемая литература.**

* Занина Е.Л. Английский язык. Эссе: темы и аргументы - Москва, Айрис Пресс, 2016
* Ягудена А.Р. Эссе по английскому на «отлично»- Ростов -на –Дону, Феникс, 2016
* Музланова Е.С. Английский язык. Экспресс-репетитор для подготовки к ЕГЭ «Письмо» АСТ Астрель, Москва, 2015
* Интернет - ресурсы

**Ход урока**

**Сообщение темы урока и вступительная беседа.**

***Distant learning is considered by many a convenient and promising form of education. However its opponents say that it is no match for personal intellectual contact and development (тема написана на доске).***

**I.What kinds of distanсе learning do you know?**

* **Correspondence Learning:** With correspondence learning, you receive your textbooks, study guides, assignments and other study materials via the post. You work through these materials in your own time and at your own pace. Depending on the institution through which you choose to study your course, you may be able to ask a tutor or instructor for help via e-mail, telephone, instant messaging, or post.
* **Electronic Learning:** Electronic learning, often referred to as e-learning, enables you to access your course material on a computer. CDs, DVDs, and computer-based applications can all be used to deliver e-learning courses.
* **Online Learning:** [Online learning](https://www.oxbridgeacademy.edu.za/courses/online/) is a form of electronic learning that requires you to have access to the internet. Online learning is often more interactive than the other types of distance learning, as it allows you to communicate with tutors, instructors and fellow students in real time. With online learning, you might also be able to download your study material from the internet, submit your assignments via an online student portal, complete assessments online, attend webinars, and participate in virtual classes.

**2.What do you now about Synchronous Distance Learning?**

Synchronous learning is where you take part in learning activities (such as webinars and virtual classes) simultaneously with your instructors and fellow students.

**3.What do you now about Asynchronous Distance Learning?**

Asynchronous learning does not require you to participate in learning activities at the same time as your fellow students. Instead, you are given the opportunity to work through the course material at your own pace and according to your own schedule. Textbooks, e-mail and postal correspondence, virtual libraries, online databases, message boards, CDs and DVDs can all play an important role in the delivery of study material for asynchronous distance learning courses.

**4.What groups of students are usually involved in online learning?**

Distance [learning](https://www.britannica.com/topic/learning) traditionally has focused on nontraditional students, such as full-time workers, military personnel, and nonresidents or individuals in remote regions who are unable to attend classroom lectures. However, distance learning has become an established part of the educational world, with trends pointing to ongoing growth. In U.S. higher education alone, more than 5.6 million [university](https://www.britannica.com/topic/university) students were enrolled in at least one online course in the autumn of 2009, up from 1.6 million in 2002.

An increasing number of universities provide distance learning opportunities. A pioneer in the field is the [University of Phoenix](https://www.britannica.com/topic/University-of-Phoenix), which was founded in Arizona in 1976 and by the first decade of the 21st century had become the largest private school in the world, with more than 400,000 enrolled students. It was one of the earliest adopters of distance learning technology. A precise figure for the international enrollment in distance learning is unavailable, but the enrollment at two of the largest public universities that heavily utilize distance learning methods gives some indication: in the early 21st century the Indira Gandhi National Open University, headquartered in [New Delhi](https://www.britannica.com/place/New-Delhi), had an enrollment in excess of 1.5 million students, and the China Central Radio and TV University, headquartered in [Beijing](https://www.britannica.com/place/Beijing), had more than 500,000 students.

**Students and institutions embrace distance learning with good reason. Universities benefit by adding students without having to construct classrooms and housing, and students reap the advantages of being able to work where and when they choose. Public-school systems offer specialty courses such as small-enrollment languages and Advanced Placement classes without having to set up multiple classrooms. In addition,**[**homeschooled**](https://www.britannica.com/topic/homeschooling)**students gain access to centralized instruction.**

**II.Подготовка к дискуссии.**

1. Работа с лексикой по теме «Дистанционное обучение».
2. Чтение и перевод коротких текстов.
3. Работа с лексикой по теме «Направляемый диалог»

**III. Проведение дискуссии.**

***1.Приветствие и сообщение темы дискуссии.***

Good morning / afternoon / evening.

Is everybody ready to begin? Why don’t we get started?

We’re here today to talk about pros and cons of distance learning.

The purpose / goal of this discussion is decide if this method can be the perfect alternative to traditional education.

***2.Представление участников дискусси.***

Why don’t you introduce yourselves?

***3.Начало дискуссии.***

Mary / Andrew, would you like to begin? или

Who would like to begin?

**Time saving.**

**St.1.A** Well, let me start. It is general knowledge that distance education is a brilliant possibility for many people to study from home or work. There are several reasons for it.

 First of all **it’s time saving because it does not require commuting.** There’s no time wasted on going to and from college, **no time wasted waiting for a bus or train**. When you learn online, your classroom is right in your room - the study material on your computer. Secondly, you don’t have to go to the library because you can download your course from the internet. This, furthermore, saves your travel time and helps you utilize time in the best possible way.

**Complicated technology.**

**St.1.D** There are some problems related to online education.

One of them is adaptability to new technologies. If a student is not computer and tech savvy, his learning experience can be dissatisfactory. Not every student knows how to attend virtual classrooms well. Some learners may also be afraid of technology or dislike it.

On the other hand, overdependence on technology can be a major drawback in distance learning mode of education, especially when the learning takes place in an online environment. Any malfunctioning software or hardware can bring an ongoing class to a standstill and interrupt the learning process. So, the performance of distance learning programs through the Internet cannot be guaranteed. Similarly, both the instructors and students involved in distance learning may often need to make sacrifices to get things done in time.

For these reasons many teachers are reluctant to switch from the traditional methods of teaching to technology-oriented approaches.

**Money saving.**

**St.2.A You can save money:** For any given program, the fee of a distance education degree (online or otherwise) may be much more affordable than the fee of a regular on-campus degree. Students who are looking for economically viable options can go for a distance learning program.

Most of the courses turn out to be cheaper through distance learning as opposed to attending a traditional college. You can study at home without paying unnecessary costs for classrooms, boards .

and transportation. Apparently, the cost of studying a course at a university is three to four times more than the tuition fee for distance learning programs.

**Simultaneously, You gain extra knowledge about working online .**  You can transfer the computer and Internet skills that you'll obtain in the process of your distance learning experience to other aspects of your life.

**Hidden costs**

**St.2.D** Although the cost of a distance education program is usually cheaper than a regular program, there can be hidden costs involved. For example, if your distance learning course is offered online, you might have some initial expenses like installing a computer and getting a reliable Internet connection. You may need to buy additional resources such as a printer, a web camera and so forth. Some expenses might be recurring/ regular, like maintenance and electricity costs.

Thus, starting a high-tech distance learning programs still can be expensive.

**You can study at your convenience.**

**St.3.A** You can complete most of the classes at your convenience. Most of the classes are asynchronous, which means you don't have to attend a lecture at a particular time and place. You can review the assignments and do your homework during off-hours or from home.

In other words, You can study whenever, wherever it is convenient for you. Except in scenarios where you have to attend an online tutorial at a given time or a lecture through videoconferencing, you can pretty much study whenever you want to, wherever you choose to. You need not be stuck in a classroom, but can go and study in your garden, your own room. Irrespective of whether you're a morning lark or a night owl, you can choose an optimum time to study whenever you're at your productive best.

The educational information is stored electronically, thus learners with access to the site can download or use the information as long as it is stored there. This makes it easy for learners to work at their own place and to visit the site as frequently as they like.

What is more,working independently, without distractions from others, will keep the student more focused on their studies.

**Lack of valuable communication.**

**St.3.D**  Not everyone is an ideal candidate for online learning. In most cases students involved in distance learning do not get the practice of verbal interaction with professors and other students. Sharing ideas between students and their teachers are limited.Although you may have an allocated tutor, this contact may be minimal, so feedback will be restricted to notes concerning submitted coursework. This is one of the major disadvantages of distance learning

Many students work better with other people around.

If you are one of the students who prefer interacting with teachers and seeking their attention, then distance learning is probably not your choice, as you cannot interact with teachers as well as with other fellow students. While interactions enhance critical thinking and problem-solving skills, distance education largely lacks this advantage. Though many distance learning sites have developed online forums or chat rooms, this is only a partial substitute, which cannot be compared with college classrooms.

Although distance education is very flexible and convenient, it still cannot provide the ‘college experience.’ Working with other learners, being part of a total educational environment, and collaborate closely with academic mentors is still valuable to many learners.

Nothing can be compared to the beauty of the college campus and the college spirit. All these experiences of a traditional college are excluded from distance education courses.

**Self-paced learning.**

**St.4A** It can be confidently said that using this method You can learn at your own pace ,in other words it is for   slow and quick learners. Needless to say that it reduces stress especially for low achieving students.

Sometimes it can be quite embarrassing for students to grasp a concept in class. Some students are too shy to raise their doubts in class. Distance education comes to rescue here! If you have any doubts or questions , there are discussion forums, chat facilities with the faculty and complete support from the distance education provider.

Finally, since you are given all course work beforehand, you can study as much or as little as you want every day, as long as you complete your study material within the stipulated time.

In a word, working at your own pace takes the pressure and strain out of learning and encourages a student to develop their skills in a way they are comfortable doing. Learning only the things they need to know will also keep the student more focused on their learning, and motivated to complete the coursework.

**Lack of immediate feedback and poor motivation.**

**St.4D** Distance learning does not always offer immediate feedback. **This f**ormat isn’t ideal for all learners.

As far as I know, in a traditional classroom setting, a student's performance can be immediately assessed through questions and informal testing. With distance learning, a student has to wait for feedback until the instructor has reviewed their work and responded to it.

Not everyone can be well suited to distance learning programs. Successful participants must be highly motivated and self-disciplined. Otherwise it may become a problem for students who lack self-discipline.

If you come across students who have studied through distance learning, you will find they often complain of staying **motivated,** without attending a class every day. Since most distance learning courses are self-paced, it becomes tremendously difficult to stay motivated, allowing one to easily lose inspiration and desire to study further. Hence, dropout rates for distance learning are exceptionally high.

**Living in remote areas.**

**St.5A You don't have to live in the same city or the same country to** attend the learning institution of your choice. You can study wherever you have access to a computer and Internet connection. Online education gives the opportunity for everyone regardless of his nationality and place of residence to obtain a diploma of any university anywhere in the world.

As an example I would like to speak about distance education New York to China. For the Chinese learner taking classes in English from instructors in the United States there are some particular advantages. First of all, it saves money for the learners that would be spent on travel and lodging. Secondly, they don’t have to overcome difficulties in obtaining visa for educational travel. Lastly, it helps to overcome the sense of disorientation for the Chinese learner living in the United States or Europe. The learner remains within the home environment while gradually learning the language and content materials and developing language skills, technical skills, research skills and educational proficiency.

So, on-line education gives equal opportunities for education regardless of place of living, health and material status.

**Quality of faculty compromised**

 **St.5D.** Often considered to be the lesser cousin of regular education, distance education is often plagued by lack of enough good quality faculty members. In other cases, even if the instructor is good, he or she may not be comfortable with teaching in an online environment. Sometimes the technology might not do full justice to the delivery and design of the course. A student loses out in all these scenarios. Distance education providers should realise that it is not the technology, but good and effective teachers that teach students.

**Work/family along with studies**

**St.6.A** You can pursue a job along with studies: A lot of students who actually choose to study online are those who don't want to give up their jobs but want a higher education, too. Distance education comes as a blessing for such students. You can study on the weekends, when you're back from work or even in the middle of the night. You get to learn while you earn!

Keeping your job gives you more income, experience and stability while completing your degree giving you less to worry about and more time to focus on your studies.

A majority of distance learning students are female and many are single parents who want to stay close to home for various reasons. They might not be able to afford child care or must care for a confined relative at home. Other students are physically disabled and cannot easily travel to campus.

Some do not have the time, money, or educational background to come to campus.

You don't have to spend time and effort gaining access to a classroom or sitting on uncomfortable desks. Instead, you can use your comfortable furniture in your home while enjoying free movement and a chance to further your education.

Distance learning makes it much easier for some students to complete a degree or get additional job-training while balancing work and family commitments.

**Chances of distraction high**

**St.6.D** With no faculty around for face-to-face interaction and no classmates who can help with constant reminders about pending assignments, the chances of getting distracted andlosing track of deadlines are high. You need to keep yourself motivated and focused if you want to successfully complete your distance learning course. Distance education is not a good idea if you tend to procrastinate and can't stick to deadlines. If you are not self-disciplined and self-motivated, the best benefit for you is to choose a regular program.
With more flexibility comes more responsibility on the part of the learner. Students must learn to work well independently and without the constant guidance and monitoring of an instructor, making distance learning a challenge for those who are not easily selfmotivated

**Gaining recognition among employers**

**St.7.A** Distance education over the years has finally found some acceptance and recognition among employers, which is an encouraging sign. As long as the distance learning program is accredited, you need not be worried. In India, all distance education programmes that are approved by the Distance Education Council (DEC) stand automatically recognized for the purpose of employment to posts and services under the Central Government. Private sector employers also value a distance education degree now, and even encourage employees to pursue higher education along with their job so that employees can develop skills and expertise in their field of work.

**Lack of reliability**

St.7.D Distance learning degrees may not be acknowledged by all employers because of Questionable credibility of degrees. Although most employers do acknowledge distance learning, certain employers do not. Students who want to work for a specific employer upon graduation should be sure of that employer's perspective about online education.

Actually, even though distance and online education is starting to get recognition, there are still a lot of fraudulent and non-accredited degrees being offered. With the increase in the number of distance/online programs, the number of scam operators are also rising. This affects the credibility of the recognised distance learning degrees among prospective employers.

**The wide choice of programs and studying materials.**

**St.8.A** There are many web sites providing plentiful distance education resources, and the potential learners can link to each resource mentioned. There are Numerous choices for schools. Even if you live in a community with few or no colleges distance learning allows you to choose from a wide variety of schools to complete your education. You may find online schools that specialize in your particular field or one that can provide a great general education. Either way, your options for education will be greatly expanded.

When the learner links to the Web site that he is interested in, he can see the goal, content, policy, and tuition of the educational programs.

On the other hand, the Web can provide learning information in many different interesting formats. It can present information in sound bits, such as music, voice or special effects. Graphics may be also presented in a special type of artwork such as animation or video.

Furthermore, through the Internet, the distance learning community can access hundreds of libraries and databases. It is very convenient.

**Distance learning does not always offer all the necessary courses online.**

**St.8.D**

Students pursuing a specific certificate or degree program may not have all the necessary courses available through distance learning so it is not suited for all subjects. While you can study a history lesson completely online, you cannot perform nursing clinicals online. because it is not possible to have a practical classes or experiments to be conducted over the internet because part of the degree is learning to work directly with patients.

**Фразы для ведения дискуссии.**

What do you think / suggest?

What’s your opinion of?

Do you have anything to add?

Yes, I see what you mean, but let’s see what some of the others have to say about this.

I think you’ve got a point here. Can we hear what some others think about this?

1. **Завершение дискуссии.**

I’m afraid that we’ll have to end here/Unfortunately, we’ve ran out of time/Excuse me, it looks like our time is up.

to summarize, we agreed/decided that online learning can be alternative to traditional education but cannot replace it.Its growing popularity in the future is evident but there will always be its opponents who prefer face-to-face interaction.

We must realize that distance education might not be the best choice for every student, but understanding its advantages and drawbacks can help you decide if distance learning is right for you.

Well, we weren’t able to make a clear final decision, but i think that we accomplished a lot today. thank you all for coming/’d like to thank you all for your cooperation.

**Речевые клише для ведения беседы**

**Как выразить личное мнение.**

In my opinion... По моему мнению... The way I see it... С моей точки зрения... In my experience... По моему опыту... As far as I’m concerned... Насколько я понимаю... To tell the truth... / Frankly speaking... Честно говоря... According to Mr. Smith... Как говорит мистер Смит... If you ask me... Лично я считаю... Personally, I think... Лично я думаю... Speaking for myself... По-моему... I’d say that... Я бы сказал, что... I’d suggest that... Я бы предположил, что... I’d like to point out that... Я бы хотел упомянуть о том, что... I believe that... Я считаю, что... / Я верю, что... What I mean is... Я имею в виду, что... To my mind... На мой взгляд... From my point of view... С моей точки зрения... My opinion is that... Мое мнение состоит в том, что... I hold the opinion that... Я придерживаюсь мнения, что... I guess that... Я считаю, что... It goes without saying that... Само собой разумеется, что... It seems to me that... Мне кажется, что..

**Как не согласиться с мнением собеседника.**

I agree with you one hundred percent. Я согласен с тобой/Вами на сто процентов. I couldn’t agree with you more. Я с тобой/Вами полностью согласен. You’re absolutely right. Вы абсолютно правы. Absolutely. Абсолютно верно. Exactly. Точно. No doubt about it. Несомненно. I suppose so. / I guess so. Полагаю, что так. (есть небольшая доля неуверенности) I was just going to say that. Я как раз собирался это сказать. That is exactly what I think. Это именно то, что я думаю по этому поводу. / Я думаю именно так. I agree with you entirely. / I totally agree with you. Я полностью согласен с тобой/Вами. I am of the same opinion. Я того же мнения.

**Как не согласиться с мнением собеседника.**

I’m afraid I disagree. Я боюсь, я не согласен. That’s not really how I see it, I’m afraid. Я боюсь, я вижу это несколько иначе. I’m afraid I have to disagree. Я боюсь, я вынужден не согласиться. I’m sorry to disagree with you but... Мне жаль, что я не согласен с Вами, но... Yes, but don’t you think... Да, но не думаете ли Вы... The problem is that... Проблема в том... With all due respect... При всем уважении... I am of a different opinion because... У меня другое мнение, потому что... On the whole I agree with you but... В общем я согласен с Вами, но... I see what you mean but have you thought about... Я понимаю, что Вы имеете в виду, но Вы не думали, что... I see your point but... Я понимаю, что Вы имеете в виду,но... I agree to some extent but... В некоторой мере я согласен, но... No way. I completely disagree with you. Ни в коем случае. Я абсолютно не согласен с тобой. I can’t share this view. Я не могу разделить твою точку зрения. I can’t agree with this idea. Я не могу согласиться с этой идеей. That’s not always true. / That’s not always the case. Это не всегда верно. I don’t think so. Я так не думаю. I have my own thoughts about that. У меня есть свои мысли насчет этого. I totally disagree. Я категорически не согласен.

**IV.Подведение итогов урока и задание на дом.**

Написание эссе на тему «Частные и общественные школы».

.

**Викторина на тему тема « Страдательный залог».**

Цели: совершенствование грамматических навыков по теме « Страдательный залог»; тренировка навыков диалогической и монологической речи; совершенствование лексических навыков.

**Ход мероприятия.**

**Задание 1.Повторение трех форм неправильных глаголов.**

Учащиеся вытаскивают по очереди карточки с первой формой неправильных глаголов и называют три формы данного глагола.

|  |  |
| --- | --- |
| **DO** | **SWIM** |
| **BRING** | **SELL** |
| **GIVE** | **BUY** |
| **SAY** | **PAY** |
| **SEE** | **MEET** |
| **BE** | **TAKE** |
| **BUILD** | **SPEAK** |
| **WRITE** | **READ** |

**Задание 2. Повторение времен страдательного залога.**

Учащимся раздаются карточки со словами, обозначающимися обстоятельства времени и карточки с предложениями в страдательном залоге. Учащиеся должны подобрать к каждому предложению соответствующее обстоятельство времени.

|  |  |
| --- | --- |
| **yet?** | **The house will be repaired** |
| **in 2005** | **A lot of electronic goods are manufactured**  |
| **When i came to the office** | **The room will be cleaned** |
| **tomorrow** | **The ship-building industry has been reduced** |
| **in two months** | **Has your composition been written** |
| **today** | **The article will have been translated** |
| **since 1970** | **the letters had already been printed** |
| **the whole day yesterday** | **The radio is being repaired** |
| **by next Friday** | **The new school was built** |
| **at the moment** | **The streets were being redecorated** |

Ответы.

1. The house will be repaired in two months.
2. A lot of electronic goods are manufactured today,
3. The room will be cleaned tomorrow.
4. The ship-building industry has been reduced since 1970.
5. Has your composition been written yet?
6. The article will have been translated by next Friday.
7. When I came to the office the letters had already been printed.
8. The radio is being repaired at the moment.
9. The new school was built in 2005.
10. The streets were being redecorated the whole day yesterday.

**Задание 3.Исправление ошибок.**

1. The story were read three days ago.
2. The building of the museum is being reconstructing at the moment.
3. We are not never asked at the English lesson.
4. The text will be translated when he came.
5. English is speak all over the world.
6. Ice cream be made from milk.
7. The game will be played in four days?
8. The computers was bought in the shop.
9. The flowers are not watered last week.
10. The homework must be not done in time.

Ответы.

1. The story **were** read three days ago. was
2. The building of the museum is being **reconstructing** at the moment. reconstructed
3. We are **not** never asked at the English lesson. Not-extra word
4. The text **will be** translated when he came. Had been
5. English is **speak** all over the world. Spoken
6. Ice cream **be** made from milk.is
7. The game will **is** played in four days? be
8. The computer **was** bought in the shop. Were
9. The flowers **are** not watered last week. were
10. The homework **must be not** done in time. Must not be done

**Задание 4. Разделительные вопросы.**

1. America was discovered in 1492,…?
2. All dictionaries are always made in two languages,…?
3. The English language is taught in all schools of Russia,…?
4. Two apples are given to you every day,…?
5. Kate is being asked now,…?
6. Grapes are not grown in the North,…?
7. Your homework must be done every day,…?
8. People in hospitals should be visited,…?
9. English idioms are not easily memorized,…?
10. Jazz was not created in the United States,…?

Ответы.

1. wasn’t it ?
2. aren’t they ?
3. isn’t it ?
4. aren’t they ?
5. isn’t she ?
6. are they ?
7. mustn’t it ?
8. shouldn’t they ?
9. aren’t they?
10. was it?

**Задание 5. Превращение активного залога в пассивный.**

1. They must visit Mr. Grey in the morning.
2. He will ask his cousin tomorrow.
3. They often give her fruits from their garden.
4. They built a new hospital last year.
5. She is reading a book at the moment.
6. When Jack came his sister was preparing supper.
7. I have done my homework. Now I can go for a walk.
8. He will look after his brother next week.
9. Pupils didn’t visit the boy last week.
10. We don’t translate poems at home.

Ответы.

1. Mr. Grey must be visited in the morning.
2. His cousin will be asked tomorrow.
3. She is often given fruits from their garden./ Fruits from their garden are often given to her.
4. A new hospital was built last year.
5. A book is being read by her at the moment.
6. When Jack came supper was being prepared.
7. My homework has been done. Now I can go for a walk.
8. Next week his brother will be looked after (by him).
9. The boy was not visited by pupils last week.
10. Poems are not translated at home.

**Задание 6. Работа с пословицами и поговорками. Соотнести две части предложения и перевести пословицы и поговорки.**

1. The devil is not so black…
2. Rome was not built…
3. What is done…
4. Better untaught…
5. Marriages are made …
6. Easily earned money…
7. cannot be undone
8. is quickly spent
9. as he is panted
10. in heaven
11. in a day
12. than ill-taught

Сделанного не воротишь. Не сразу Москва строилась. Не так страшен черт, как его малюют. Худая грамота-только пагуба. Браки совершаются на небесах. Что легко наживается, легко и проживается.

Ответы.

1. The devil is not so black as he is panted. Не так страшен черт, как его малюют.
2. Rome was not built in a day. Не сразу Москва строилась.
3. What is done cannot be undone. Сделанного не воротишь.
4. Better untaught than ill-taught. Худая грамота-только пагуба.
5. Marriages are made in heaven. Браки совершаются на небесах.

Easily earned money is quickly spent. Что легко наживается, легко и проживается.

**Тема «Теория относительности. Повторение артиклей».**

**Тип урока: комбинированный.**

**Цели урока.**

* Совершенствование навыков чтения вслух и про себя.
* Развитие навыков перевода.
* Совершенствование грамматических навыков.
* Развитие межпредметных связей.

**Оснащение.** Карточки с раздаточным материалом.

**Ход урока.**

**Чтение и перевод текста «Теория относительности».**

The **theory of relativity** usually encompasses two theories by [Albert Einstein](https://en.wikipedia.org/wiki/Albert_Einstein): [special relativity](https://en.wikipedia.org/wiki/Special_relativity) and [general relativity](https://en.wikipedia.org/wiki/General_relativity). Concepts introduced by the theories of relativity include [spacetime](https://en.wikipedia.org/wiki/Spacetime%22%20%5Co%20%22Spacetime) as a unified entity of [space](https://en.wikipedia.org/wiki/Space) and [time](https://en.wikipedia.org/wiki/Time_in_physics), [relativity of simultaneity](https://en.wikipedia.org/wiki/Relativity_of_simultaneity), [kinematic](https://en.wikipedia.org/wiki/Kinematics) and [gravitational](https://en.wikipedia.org/wiki/Gravity) [time dilation](https://en.wikipedia.org/wiki/Time_dilation), and [length contraction](https://en.wikipedia.org/wiki/Length_contraction).

The theory of relativity transformed theoretical [physics](https://en.wikipedia.org/wiki/Physics) and [astronomy](https://en.wikipedia.org/wiki/Astronomy) during the 20th century. When first published, relativity superseded a 200-year-old [theory of mechanics](https://en.wikipedia.org/wiki/Classical_mechanics) created primarily by [Isaac Newton](https://en.wikipedia.org/wiki/Isaac_Newton). In the field of physics, relativity improved the science of [elementary particles](https://en.wikipedia.org/wiki/Elementary_particles) and their fundamental interactions. With relativity, [cosmology](https://en.wikipedia.org/wiki/Cosmology) and [astrophysics](https://en.wikipedia.org/wiki/Astrophysics) predicted extraordinary [astronomical phenomena](https://en.wikipedia.org/wiki/Astronomy) such as [neutron stars](https://en.wikipedia.org/wiki/Neutron_stars), [black holes](https://en.wikipedia.org/wiki/Black_holes) and [gravitational waves](https://en.wikipedia.org/wiki/Gravitational_waves).

**Two-theory view**

1. [Special relativity](https://en.wikipedia.org/wiki/Special_relativity) was published in 1905, and the final form of [general relativity](https://en.wikipedia.org/wiki/General_relativity) was published in 1916.

 2. Special relativity applies to [elementary particles](https://en.wikipedia.org/wiki/Elementary_particles) and their interactions, whereas general relativity applies to the [cosmological](https://en.wikipedia.org/wiki/Cosmological) and astrophysical realm, including astronomy.

 3. Special relativity was accepted in 1920 and used in the new fields of [atomic physics](https://en.wikipedia.org/wiki/Atomic_physics), [nuclear physics](https://en.wikipedia.org/wiki/Nuclear_physics), and [quantum mechanics](https://en.wikipedia.org/wiki/Quantum_mechanics). General relativity was used mostly in astronomical fields.

4. The [mathematics of general relativity](https://en.wikipedia.org/wiki/Tensor_analysis) appeared to be very difficult. Only a small number of people in the world, at that time, could fully understand the theory in detail, General relativity was relevant in discovery of the following astronomical phenomena :[quasars](https://en.wikipedia.org/wiki/Quasars) (1963), the 3-kelvin [microwave background radiation](https://en.wikipedia.org/wiki/Microwave_background_radiation)(1965), [pulsars](https://en.wikipedia.org/wiki/Pulsar) (1967), and the discovery of the first [black hole](https://en.wikipedia.org/wiki/Black_hole) candidates (1981).

5. The special theory of relativity and the general theory of relativity are connected.

**Работа с текстом «Виды теории относительности».**

**Special relativity**

It applies to all physical phenomena except gravity.

The main consequences of special relativity.

1. [Relativity of simultaneity](https://en.wikipedia.org/wiki/Relativity_of_simultaneity): Two events, simultaneous for one observer, may not be simultaneous for another observer if the observers are in relative motion.
2. [Time dilation](https://en.wikipedia.org/wiki/Time_dilation): Moving [clocks](https://en.wikipedia.org/wiki/Clock) are measured to tick more slowly than an observer's "stationary" clock.
3. [Relativistic mass](https://en.wikipedia.org/wiki/Mass_in_special_relativity)
4. [Length contraction](https://en.wikipedia.org/wiki/Length_contraction): Objects are measured to be shortened in the direction that they are moving with respect to the observer.
5. [Mass–energy equivalence](https://en.wikipedia.org/wiki/Mass%E2%80%93energy_equivalence): *E* = *mc*2, energy and mass are equivalent and transmutable.
6. [Maximum speed is finite](https://en.wikipedia.org/wiki/Speed_of_light#Upper_limit_on_speeds): No physical object, message or field line can travel faster than the speed of light in a vacuum.
7. The effect of Gravity can only travel through space at the speed of light, not faster or instantaneously.

**General relativity**

Technically, general relativity is a theory of [gravitation](https://en.wikipedia.org/wiki/Gravitation) whose defining feature is its use of the [Einstein field equations](https://en.wikipedia.org/wiki/Einstein_field_equations). The solutions of the field equations are [metric tensors](https://en.wikipedia.org/wiki/Metric_tensor_%28general_relativity%29) which define the [topology](https://en.wikipedia.org/wiki/Topology) of the spacetime and how objects move inertially.

Some of the consequences of general relativity are:

1. Clocks run slower in deeper gravitational wells. This is called [gravitational time dilation](https://en.wikipedia.org/wiki/Gravitational_time_dilation).
2. Orbits [precess](https://en.wikipedia.org/wiki/Precession%22%20%5Co%20%22Precession) in a way unexpected in Newton's theory of gravity. (This has been observed in the orbit of [Mercury](https://en.wikipedia.org/wiki/Mercury_%28planet%29) and in[binary pulsars](https://en.wikipedia.org/wiki/Binary_pulsar)).
3. Rays of [light](https://en.wikipedia.org/wiki/Light) [bend in the presence of a gravitational field](https://en.wikipedia.org/wiki/General_relativity#Light_deflection_and_gravitational_time_delay).
4. Rotating masses "drag along" the [spacetime](https://en.wikipedia.org/wiki/Spacetime%22%20%5Co%20%22Spacetime) around them; a phenomenon termed "[frame-dragging](https://en.wikipedia.org/wiki/Frame-dragging)".
5. [The universe is expanding](https://en.wikipedia.org/wiki/Metric_expansion_of_space), and the far parts of it are moving away from us [faster than the speed of light](https://en.wikipedia.org/wiki/Faster-than-light#Universal_expansion).

**A.Прочитать текст про себя и выписать выражения.**

Притяжение, последствия, одновременность, одновременный, относительное движение, расширение времени, измерять, относительная масса, сокращение длины, Закон эквивалентности массы и энергии, максимальная скорость ограничена, мгновенно, определяющая черта, уравнение, решение, двигаться, лучи света, вращающиеся массы, вселенная, скорость света

**B.Перевести вопросы на английский язык и ответить на них.**

1. Где применима специальная теория относительности?
2. Объясните принцип относительности одновременности?
3. Что такое расширение во времени?
4. What law is explained by the formula *E* = *mc*2?
5. Is maximum speed finite or infinite?
6. Что такое общая теория относительности?
7. Какие явления объясняются уравнениями полей Эйнштейна?
8. Where do clocks run slower? With what law is it connected?
9. How do rays of light behave in the presence of a gravitational field?
10. Назовите пятый принцип общей теории относительности?
11. Where is the special theory of relativity applied?
12. Explain the principle relativity of simultaneity?
13. What is time dilation?
14. Какой закон объясняется формулой *E* = *mc*2?
15. Является ли максимальная скорость ограниченной или неограниченной?
16. What is general theory of relativity?
17. What phenomena are explained by the Einstein field equations?
18. Где часы идут медленнее?
19. Как ведут себя лучи света в присутствии гравитационного поля?
20. Name the 5th law of general theory of relativity?
21. It applies to all physical phenomena except gravity.
22. [Relativity of simultaneity](https://en.wikipedia.org/wiki/Relativity_of_simultaneity): Two events, simultaneous for one observer, may not be simultaneous for another observer if the observers are in relative motion.
23. [Time dilation](https://en.wikipedia.org/wiki/Time_dilation): Moving [clocks](https://en.wikipedia.org/wiki/Clock) are measured to tick more slowly than an observer's "stationary" clock.
24. [Mass–energy equivalence](https://en.wikipedia.org/wiki/Mass%E2%80%93energy_equivalence): *E* = *mc*2, energy and mass are equivalent and transmutable.
25. [Maximum speed is finite](https://en.wikipedia.org/wiki/Speed_of_light#Upper_limit_on_speeds): No physical object, message or field line can travel faster than the speed of light in a vacuum.
26. Technically, general relativity is a theory of [gravitation](https://en.wikipedia.org/wiki/Gravitation) whose defining feature is its use of the [Einstein field equations](https://en.wikipedia.org/wiki/Einstein_field_equations).
27. The solutions of the field equations are [metric tensors](https://en.wikipedia.org/wiki/Metric_tensor_%28general_relativity%29) which define the [topology](https://en.wikipedia.org/wiki/Topology) of the spacetime and how objects move inertially.
28. Clocks run slower in deeper gravitational wells. This is called [gravitational time dilation](https://en.wikipedia.org/wiki/Gravitational_time_dilation).
29. Rays of [light](https://en.wikipedia.org/wiki/Light) [bend in the presence of a gravitational field](https://en.wikipedia.org/wiki/General_relativity#Light_deflection_and_gravitational_time_delay).
30. [The universe is expanding](https://en.wikipedia.org/wiki/Metric_expansion_of_space), and the far parts of it are moving away from us [faster than the speed of light](https://en.wikipedia.org/wiki/Faster-than-light#Universal_expansion).

**Повторение темы «Артикли».**

**1.Правило.**

В английском языке есть два артикля: *неопределённый* — **a** (**an**) и *определённый* — **the**.При наличии прилагательного артикль ставится перед ним. Сравните: an apple — a big green apple.

***Неопределённый артикль.***

Неопределённый артикль происходит от числительного *one* (один). Поэтому неопределённый артикль можно употреблять только с исчисляемыми существительными и только в единственном числе. Неопределённый артикль употребляется:

1. Когда предмет, существо или лицо упоминается в первый раз, например: I see a boy (Я вижу (какого-то) мальчика).
2. Если используется оборот *there is,* например: There is an apple in my pocket (У меня в кармане/в моём кармане (имеется) яблоко).
3. Если используется оборот *have something*/*have got something*, например: I have (got) an orange (У меня есть апельсин).
4. Если называются профессия, должность, национальность и другие характеристики человека, например: I am a teacher (Я учитель); Her son is a pupil (Её сын — ученик).
5. В значении *один,* например: Do you have pencils? Yes, I have a pencil (У тебя есть карандаши? Да, есть (один)).

***Определённый артикль.***

Определённый артикль выделяет конкретный предмет из числа сходных («этот», «именно этот», «тот самый»). Определённый артикль употребляется:

1. Если предмет уже упомянут и речь продолжается именно о нём, например: *My friend has got a dog. He walks with the dog every day (У моего друга есть собака. Он гуляет с собакой каждый день).*
2. Если есть определенная конкретизация , например: *The flowers in our garden are very beautiful (Цветы в нашем саду очень красивые).* (Здесь *in our garden* и есть определенная конкретизация, поэтому слово *flowers* пишется с определённым артиклем. В этом случае слово может упоминаться в первый раз, но артикль будет определённым.)
3. Если перед существительным стоит порядковое числительное, например:*The second lesson is English (Второй урок — английский).*
4. Если перед существительным стоит прилагательное в превосходной степени, например: *Не is the best pupil in our school (Он лучший ученик в нашей школе).*
5. Если речь идёт о предмете, единственном в своем роде, например: the Earth /the Sun.

Упражнение 1.

1. I’d like … chicken sandwich and … glass of … mineral water. (Я бы хотел сэндвич с курицей и стакан минеральной воды.)
2. Would you like … banana or … strawberries? (Ты хочешь банан или клубнику?)
3. She always has … apple, … toast and … cup of … coffee for … breakfast. (Она всегда съедает яблоко, тост и пьет чашку кофе на завтрак.)
4. The fly is on … ceiling in … kitchen. (Муха – на потолке на кухне.)
5. My mother is … accountant and my father is … lawyer. They work in … same company in … centre of … our town. (Моя мама – бухгалтер, а папа – юрист. Они работают в одной компании в центре нашего города.)
6. How much are … her Italian lessons? – Ten dollars … hour. (Сколько стоят ее занятия по итальянскому языку? – Десять долларов в час.)
7. Where are … dogs? – They are in … garden. (Где собаки? – Они в саду.)
8. … cats like eating … fish.  … cows like eating … grass.  … birds like eating … insects. (Кошки любят есть рыбу. Коровы любят есть траву. Птицы любят есть насекомых.)
9. My favourite subjects are … chemistry and … biology. (Мои любимые предметы – химия и биология.)
10. There is … parrot in … cage. And there are … pieces of … fruit in it. (В клетке попугай. И в ней есть кусочки фруктов.)
11. My granny lives in … small village in … country. (Моя бабушка живет в маленькой деревушке в сельской местности.)
12. Your baby shouldn’t sit in … sun on … hot day. (Вашему малышу не следует сидеть на солнце в жаркий день.)
13. Please open … book.  … exercise is on … page 68. (Пожалуйста, откройте книгу. Упражнение находится на странице 68.)
14. Ann has been looking for … job for … long time. (Аня ищет работу долгое время.)
15. What’s … matter? - I missed … 6 o’clock train. (Что случилось? – Я не успел на 6-часовой поезд.)
16. Do you like … vegetables? (Ты любишь овощи?)
17. … mother has got … terrible headache today. (У мамы сегодня ужасная головная боль.)
18. There were … tears in … her eyes. (В ее глазах были слезы.)
19. She is … very nice woman but her sons are … bad boys. (Она очень хорошая женщина, но ее сыновья – плохие парни.)
20. Look at … woman. She is … neighbor I told you about. (Посмотри на женщину. Это соседка, о которой я тебе говорил.)

**Ответы.** 1. a, a. - .  2. a, - .  3. an, a, a, - , - .  4. the, the.  5. an, a, the, the, - .  6. - , an.  7. the, the.  8. - , - , - , - , - , - . 9. - , - .  10. a, the, - , - .  11. a, the.  12. the, a.  13. the, the, - .  14. a, a.  15. the, the.  16. - .  17. - , a.  18. - , - .  19. a, - .  20. the, the.

Упражнение2.

1. Yesterday I bought … pair of … shoes. Unfortunately … shoes are too tight. (Вчера я купила пару туфель. К сожалению, туфли слишком узкие.)
2. We had … dinner in … restaurant … last night. – What is … name of … restaurant? (Вчера ночью мы ужинали в ресторане. – Как называется ресторан?)
3. Tony has two children: … boy and … girl. They are … twins.  … girl is in … France now. (У Тони двое детей: мальчик и девочка. Они близнецы. Девочка находится сейчас во Франции.)
4. Would you like another piece of … cake? – No, … cake is too fat for me. (Хотите еще один кусок торта? – Нет, для меня торт слишком жирный.)
5. His office is on … Floor 5. And I live on … tenth floor. (Его офис находится на этаже 5. А я живу на десятом этаже.)
6. Little Mike leaves for … school very early because … school is quite far from … his home. (Маленький Майк уходит в школу очень рано, потому что школа довольно далеко от его дома.)
7. Lara saw … letter under … door. She read … letter and started crying. (Лара увидела под дверью письмо. Она прочитала письмо и начала плакать.)
8. Did you enjoy … food at … party … last Friday? (Тебе понравилась еда на вечере в прошлую пятницу?)
9. Roger is … scientist, he works for … government. (Роджер – ученый, он работает на правительство.)
10. We go to … gym twice … week. (Мы ходим в спортзал дважды в неделю.)

**Ответы.** 1. a, - , the.  2. - , a, - , the, the.  3. a, a, - , the, - .  4. - , the.  5. - , the.  6. - , the, - .  7. a, the, the.  8. the, the, - .  9. a, the.  10. the, a.

Упражнение3.

1. I come to … work by … bus. Today … bus was a bit late. (Я езжу на работу на автобусе. Сегодня автобус немного опоздал.)
2. … Jack is … youngest but … cleverest boy at … school. (Джэк – самый младший, но самый умный мальчик в школе.)
3. It rained, so I stayed at … home in … evening. But today … sun is shining brightly in … sky. (Шел дождь, поэтому я остался дома вечером. Но сегодня ярко светит солнце в небе.)
4. On … Monday … kids were tired and they went to … bed very early. (В понедельник дети устали и пошли спать очень рано.)
5. My wife is … best woman in … world and I’m … happiest husband! (Моя жена – лучшая женщина на свете, а я самый счастливый муж!)
6. They are having … test on … third of December. (У них будет тест третьего декабря.)
7. What … beautiful painting! … artist is such … talented person. (Какая красивая картина! Художник – такой талантливый человек.)
8. Robin Hood robbed … rich and helped … poor. (Робин Гуд грабил богатых и помогал бедным.)
9. David is … old friend of mine. He plays … guitar perfectly. His sister has been playing … tennis since … age of ten. (Давид - мой старый друг. Он отлично играет на гитаре. Его сестра играет в теннис с 10 лет.)
10. … Jacksons live in that lovely cottage with … fantastic garden. (Семья Джэксонов живет в том милом коттедже с фантастическим садом.)
11. Sam used … drugs and was sent to … prison in … August. What … shame! (Сэм применял наркотики и был отправлен в тюрьму в августе. Какой позор!)
12. … Harrisons are not religious and they never go to … church. (Семья Гаррисонов не религиозна, и они никогда не ходят в церковь.)
13. He has been in … hospital for … month. (Он лежит в больнице в течение месяца.)
14. … English are very fond of … gardening. (Англичане очень увлекаются садоводством.)
15. I’ve tried to learn … Japanese many times. (Я пробовал изучать японский язык много раз.)
16. She is … famous actress and she often appears on … TV. (Она – известная актриса и часто появляется на телевидении.)
17. It’s such … original idea! Besides you’ve got … good sense of humour. (Это такая оригинальная идея! Кроме того, у тебя хорошее чувство юмора.)
18. On … rainy day … castle looks like … prison. (В дождливый день замок выглядит как тюрьма.)

**Ответы.**

1. - , - , the.  2. - , the, the, - .  3. - , the, the, the.  4. - , the, - .  5. the, the, the.  6. a, the.  7. a, the, a.  8. the, the.  9. an, the, - , the.  10. the, a.  11. - , - , - , a.  12. the, - .  13. - , a.  14. the, - .  15. - .  16. a, - .  17. an, a.  18. a, the, a.

**Подведение итогов урока и задание на дом.**

Подготовить устное сообщение на тему « Теория относительности».

**Тема «Физические явления».**

**Тип урока: комбинированный.**

**Цели урока.**

* Совершенствование навыков чтения вслух и про себя.
* Развитие навыков перевода.
* Совершенствование грамматических навыков.
* Развитие межпредметных связей.

**Оснащение.** Карточки с раздаточным материалом.

**Ход урока.**

**Чтение и перевод теста «Physical Laws».**

A physical law or scientific law "is a theoretical statement [inferred](https://en.wikipedia.org/wiki/Inferred)  выводимые from particular facts, applicable применимые to a defined group or class of [phenomena](https://en.wikipedia.org/wiki/Phenomena), and expressible by the statement that a particular определенное phenomenon always occurs if certain conditions be present."  Physical laws are typically conclusions выводы based on repeated scientific [experiments](https://en.wikipedia.org/wiki/Experiment) and [observations](https://en.wikipedia.org/wiki/Observations) наблюдения  over many years and which have become accepted universally within the [scientific community](https://en.wikipedia.org/wiki/Scientific_community). The production of a summary description создание краткого описания of our environment in the form of such laws is a fundamental aim цель of science.

The main characteristics of physical laws. They are:

1. True, at least within their regime of validity достоверность, действие. By definition по определению, there have never been repeatable contradicting observations.
2. Universal. They appear to apply применять everywhere in the universe.
3. Simple. They are typically expressed in terms of a single mathematical equation.
4. Absolute. Nothing in the universe appears to affect them.
5. Stable. Unchanged since first discovered (although they may have been shown to be approximations of more accurate laws).
6. Omnipotent всемогущий, всесильный Everything in the universe apparently must comply подчиняться,соглашаться with them (according to observations).
7. Often expressions of existing homogeneities ([symmetries](https://en.wikipedia.org/wiki/Symmetries)) of [space](https://en.wikipedia.org/wiki/Space) and time.
8. Typically theoretically reversible обратимый in time (if non-[quantum](https://en.wikipedia.org/wiki/Quantum_mechanics)), although [time itself is irreversible](https://en.wikipedia.org/wiki/Arrow_of_time).

Физические законы, как правило, выражаются в виде короткого словесного утверждения или компактной математической формулы. Для того, чтобы некая связь могла быть названа физическим законом, она должна удовлетворять следующим требованиям: 1.Эмпирическая подтверждённость. Физический закон считается верным, если подтверждён многократными экспериментами. 2.Универсальность. Закон должен быть справедлив для большого числа объектов. В идеале — для всех объектов во Вселенной. 3.Устойчивость. Физические законы не меняются со временем, хотя и могут признаваться приближениями к более точным законам.

**Работа с текстом « Классическая механика».**

**Classical mechanics.**

In [physics](https://en.wikipedia.org/wiki/Physics), classical mechanics and [quantum mechanics](https://en.wikipedia.org/wiki/Quantum_mechanics) are the two major sub-fields of [mechanics](https://en.wikipedia.org/wiki/Mechanics). Classical mechanics is concerned with the set of [physical laws](https://en.wikipedia.org/wiki/Physical_law) describing the motion of [bodies](https://en.wikipedia.org/wiki/Physical_body) under the influence of a system of [forces](https://en.wikipedia.org/wiki/Force). The study of the motion of bodies is an ancient one, making classical mechanics one of the oldest and largest subjects in [science](https://en.wikipedia.org/wiki/Science), [engineering](https://en.wikipedia.org/wiki/Engineering) and [technology](https://en.wikipedia.org/wiki/Technology). It is also widely known as Newtonian mechanics.

Classical mechanics describes the motion of [macroscopic](https://en.wikipedia.org/wiki/Macroscopic) objects, from [projectiles](https://en.wikipedia.org/wiki/Projectile) to parts of [machinery](https://en.wikipedia.org/wiki/Machine_%28mechanical%29), as well as [astronomical objects](https://en.wikipedia.org/wiki/Astronomical_objects), such as [spacecraft](https://en.wikipedia.org/wiki/Spacecraft), [planets](https://en.wikipedia.org/wiki/Planets), [stars](https://en.wikipedia.org/wiki/Star), and [galaxies](https://en.wikipedia.org/wiki/Galaxies). Within classical mechanics are fields of study that describe the behavior of [solids](https://en.wikipedia.org/wiki/Solid), [liquids](https://en.wikipedia.org/wiki/Liquid) and [gases](https://en.wikipedia.org/wiki/Gas) and other specific sub-topics. Classical mechanics also provides extremely accurate results as long as the domain of study is restricted to large objects and the speeds involved do not approach the [speed of light](https://en.wikipedia.org/wiki/Speed_of_light). When the objects being examined are sufficiently small, it becomes necessary to introduce the other major sub-field of mechanics, quantum mechanics, which adjusts the laws of physics of macroscopic objects for the [atomic nature of matter](https://en.wikipedia.org/wiki/Atomic_model) by including the [wave–particle duality](https://en.wikipedia.org/wiki/Wave%E2%80%93particle_duality) of [atoms](https://en.wikipedia.org/wiki/Atom) and [molecules](https://en.wikipedia.org/wiki/Molecule). When both quantum mechanics and classical mechanics cannot be applied, such as at the quantum level with high speeds, [quantum field theory](https://en.wikipedia.org/wiki/Quantum_field_theory) (QFT) becomes applicable.

The term *classical mechanics* was coined in the early 20th century to describe the system of physics begun by [Isaac Newton](https://en.wikipedia.org/wiki/Isaac_Newton) and many contemporary 17th century philosophers. The earliest development of classical mechanics is often referred to as Newtonian mechanics, and is associated with the physical concepts employed by and the mathematical methods invented by Newton, [Leibniz](https://en.wikipedia.org/wiki/Gottfried_Wilhelm_Leibniz), and others. Later, more abstract and general methods were developed, leading to reformulations of classical mechanics known as [Lagrangian mechanics](https://en.wikipedia.org/wiki/Lagrangian_mechanics%22%20%5Co%20%22Lagrangian%20mechanics) and [Hamiltonian mechanics](https://en.wikipedia.org/wiki/Hamiltonian_mechanics). These advances were largely made in the 18th and 19th centuries, and they extend substantially beyond Newton's work, particularly through their use of [analytical mechanics](https://en.wikipedia.org/wiki/Analytical_mechanics).

**A.Прочитать текст про себя и выписать выражения.**

квантовая механика, основные разделы механики, набор физических законов, движение тел под действием системы сил, движение макроскопических объектов, снаряд, космический корабль, поведение твердых веществ, жидкостей и газов, даёт чрезвычайно точные результаты, область изучения, ограничивается, не достигает, скорость света, существенно, преобразовывать законы ,атомная природа материи, корпускулярно–волновой дуализм атомов и молекул, применяться, квантовые теории поля, применимый, достижения ,распространяться далеко за пределы.

[quantum mechanics](https://en.wikipedia.org/wiki/Quantum_mechanics) / major sub-fields of [mechanics](https://en.wikipedia.org/wiki/Mechanics) /the set of [physical laws](https://en.wikipedia.org/wiki/Physical_law) / the motion of [bodies](https://en.wikipedia.org/wiki/Physical_body) under the influence of a system of [forces](https://en.wikipedia.org/wiki/Force) /the motion of [macroscopic](https://en.wikipedia.org/wiki/Macroscopic) objects/ [projectile](https://en.wikipedia.org/wiki/Projectile) / [spacecraft](https://en.wikipedia.org/wiki/Spacecraft)/ the behavior of [solids](https://en.wikipedia.org/wiki/Solid), [liquids](https://en.wikipedia.org/wiki/Liquid) and [gases](https://en.wikipedia.org/wiki/Gas) / provides extremely accurate results /the domain of study/ is restricted /do not approach /the [speed of light](https://en.wikipedia.org/wiki/Speed_of_light) /sufficiently /adjust the laws / the [atomic nature of matter](https://en.wikipedia.org/wiki/Atomic_model) / the [wave–particle duality](https://en.wikipedia.org/wiki/Wave%E2%80%93particle_duality) of [atoms](https://en.wikipedia.org/wiki/Atom) and [molecules](https://en.wikipedia.org/wiki/Molecule)/ tobe applied/ [quantum field theory](https://en.wikipedia.org/wiki/Quantum_field_theory) (QFT) /applicable/advances /extend substantially beyond

**B.Перевести вопросы на английский язык и ответить на них.**

1. Назовите основные разделы механики.
2. Какое другое название классической механики вы знаете?
3. Что изучает классическая механика?
4. Классическая механика-очень старая наука, не так ли?
5. Всегда ли она предоставляет точные результаты?
6. Когда используется квантовая механика?
7. Каким образом квантовая механика преобразует законы физики макроскопических объектов?
8. Какая теория применима, когда мы не можем использовать законы квантовой механики и классической механики?
9. Когда появился термин «классическая механика»?
10. С чем ассоциируется раннее развитие классической механики?
11. Что вы можете сказать о достижениях в области механики в 18 и 19 столетиях.
12. Name the two major sub-fields of [mechanics](https://en.wikipedia.org/wiki/Mechanics). (Classical mechanicsand [quantum mechanics](https://en.wikipedia.org/wiki/Quantum_mechanics))
13. What other name of classical mechanics do you know? (Newtonian mechanics).
14. What does classical mechanics study? (Classical mechanics is concerned with the set of [physical laws](https://en.wikipedia.org/wiki/Physical_law) describing the motion of [bodies](https://en.wikipedia.org/wiki/Physical_body) under the influence of a system of [forces](https://en.wikipedia.org/wiki/Force). Classical mechanics describes the motion of [macroscopic](https://en.wikipedia.org/wiki/Macroscopic) objects, from [projectiles](https://en.wikipedia.org/wiki/Projectile) to parts of [machinery](https://en.wikipedia.org/wiki/Machine_%28mechanical%29), as well as [astronomical objects](https://en.wikipedia.org/wiki/Astronomical_objects), such as [spacecraft](https://en.wikipedia.org/wiki/Spacecraft), [planets](https://en.wikipedia.org/wiki/Planets), [stars](https://en.wikipedia.org/wiki/Star), and [galaxies](https://en.wikipedia.org/wiki/Galaxies). Within classical mechanics are fields of study that describe the behavior of solids, liquids and [gases](https://en.wikipedia.org/wiki/Gas) and other specific sub-topics).
15. Classical mechanics is an ancient one, isn’t it? (It is one of the oldest and largest subjects in [science](https://en.wikipedia.org/wiki/Science), [engineering](https://en.wikipedia.org/wiki/Engineering) and [technology](https://en.wikipedia.org/wiki/Technology)).
16. Does it always provide extremely accurate results? (The results are accurate only when the domain of study is restricted to large objects and the speeds involved do not approach the [speed of light](https://en.wikipedia.org/wiki/Speed_of_light)).
17. When does man use quantum mechanics? (When the objects being examined are sufficiently small).
18. In what way (how) does quantum mechanics adjust the laws of physics of macroscopic objects? (By including the [wave–particle duality](https://en.wikipedia.org/wiki/Wave%E2%80%93particle_duality) of [atoms](https://en.wikipedia.org/wiki/Atom) and [molecules](https://en.wikipedia.org/wiki/Molecule)).
19. When does [quantum field theory](https://en.wikipedia.org/wiki/Quantum_field_theory) (QFT) becomes applicable? (When both quantum mechanics and classical mechanics cannot be applied, such as at the quantum level with high speeds).
20. When was the term *classical mechanics* coined? (In the early 20th century to describe the system of physics begun by [Isaac Newton](https://en.wikipedia.org/wiki/Isaac_Newton) and many contemporary 17th century philosophers).
21. What is the earliest development of classical mechanics associated with? (The earliest development of classical mechanics is often associated with the physical concepts employed by and the mathematical methods invented by Newton, [Leibniz](https://en.wikipedia.org/wiki/Gottfried_Wilhelm_Leibniz), and others).
22. What can you tell about the advances made in the field of classical mechanics in the 18th and 19th centuries? (These advances extend substantially beyond Newton's work, particularly through their use of [analytical mechanics](https://en.wikipedia.org/wiki/Analytical_mechanics)).

**С.Перевести текст с русского языка на английский.**

Класси́ческая меха́ника — вид [механики](https://ru.wikipedia.org/wiki/%D0%9C%D0%B5%D1%85%D0%B0%D0%BD%D0%B8%D0%BA%D0%B0) (раздела [физики](https://ru.wikipedia.org/wiki/%D0%A4%D0%B8%D0%B7%D0%B8%D0%BA%D0%B0), изучающего законы изменения положений тел в пространстве со временем и причины, его вызывающие), основанный на [законах Ньютона](https://ru.wikipedia.org/wiki/%D0%97%D0%B0%D0%BA%D0%BE%D0%BD%D1%8B_%D0%9D%D1%8C%D1%8E%D1%82%D0%BE%D0%BD%D0%B0) и [принципе относительности Галилея](https://ru.wikipedia.org/wiki/%D0%9F%D1%80%D0%B5%D0%BE%D0%B1%D1%80%D0%B0%D0%B7%D0%BE%D0%B2%D0%B0%D0%BD%D0%B8%D1%8F_%D0%93%D0%B0%D0%BB%D0%B8%D0%BB%D0%B5%D1%8F). Поэтому её часто называют «ньютоновой механикой».

Классическая механика подразделяется на:

* [статику](https://ru.wikipedia.org/wiki/%D0%A1%D1%82%D0%B0%D1%82%D0%B8%D0%BA%D0%B0) (которая рассматривает равновесие тел);
* [кинематику](https://ru.wikipedia.org/wiki/%D0%9A%D0%B8%D0%BD%D0%B5%D0%BC%D0%B0%D1%82%D0%B8%D0%BA%D0%B0) (которая изучает геометрическое свойство движения без рассмотрения его причин);
* [динамику](https://ru.wikipedia.org/wiki/%D0%94%D0%B8%D0%BD%D0%B0%D0%BC%D0%B8%D0%BA%D0%B0_%28%D1%84%D0%B8%D0%B7%D0%B8%D0%BA%D0%B0%29) (которая рассматривает движение тел с учётом вызывающих его причин).

Существует несколько эквивалентных способов формального математического описания классической механики:

* [Законы Ньютона](https://ru.wikipedia.org/wiki/%D0%97%D0%B0%D0%BA%D0%BE%D0%BD%D1%8B_%D0%9D%D1%8C%D1%8E%D1%82%D0%BE%D0%BD%D0%B0)
* [Лагранжев формализм](https://ru.wikipedia.org/wiki/%D0%9B%D0%B0%D0%B3%D1%80%D0%B0%D0%BD%D0%B6%D0%B5%D0%B2_%D1%84%D0%BE%D1%80%D0%BC%D0%B0%D0%BB%D0%B8%D0%B7%D0%BC)
* [Гамильтонов формализм](https://ru.wikipedia.org/wiki/%D0%93%D0%B0%D0%BC%D0%B8%D0%BB%D1%8C%D1%82%D0%BE%D0%BD%D0%BE%D0%B2_%D1%84%D0%BE%D1%80%D0%BC%D0%B0%D0%BB%D0%B8%D0%B7%D0%BC)
* [Формализм Гамильтона — Якоби](https://ru.wikipedia.org/wiki/%D0%A3%D1%80%D0%B0%D0%B2%D0%BD%D0%B5%D0%BD%D0%B8%D0%B5_%D0%93%D0%B0%D0%BC%D0%B8%D0%BB%D1%8C%D1%82%D0%BE%D0%BD%D0%B0_%E2%80%94_%D0%AF%D0%BA%D0%BE%D0%B1%D0%B8)

На рубеже XIX—XX вв. были выявлены пределы применимости классической механики. Выяснилось, что она даёт исключительно точные результаты, но только в тех случаях, когда она применяется к телам, [скорости](https://ru.wikipedia.org/wiki/%D0%A1%D0%BA%D0%BE%D1%80%D0%BE%D1%81%D1%82%D1%8C) которых много меньше [скорости света](https://ru.wikipedia.org/wiki/%D0%A1%D0%BA%D0%BE%D1%80%D0%BE%D1%81%D1%82%D1%8C_%D1%81%D0%B2%D0%B5%D1%82%D0%B0), а размеры значительно превышают размеры [атомов](https://ru.wikipedia.org/wiki/%D0%90%D1%82%D0%BE%D0%BC) и [молекул](https://ru.wikipedia.org/wiki/%D0%9C%D0%BE%D0%BB%D0%B5%D0%BA%D1%83%D0%BB%D0%B0) и при расстояниях или условиях, когда скорость распространения гравитации можно считать бесконечной (обобщением классической механики на тела, двигающиеся с произвольной скоростью, является [релятивистская механика](https://ru.wikipedia.org/wiki/%D0%A0%D0%B5%D0%BB%D1%8F%D1%82%D0%B8%D0%B2%D0%B8%D1%81%D1%82%D1%81%D0%BA%D0%B0%D1%8F_%D0%BC%D0%B5%D1%85%D0%B0%D0%BD%D0%B8%D0%BA%D0%B0), а на тела, размеры которых сравнимы с атомными — [квантовая механика](https://ru.wikipedia.org/wiki/%D0%9A%D0%B2%D0%B0%D0%BD%D1%82%D0%BE%D0%B2%D0%B0%D1%8F_%D0%BC%D0%B5%D1%85%D0%B0%D0%BD%D0%B8%D0%BA%D0%B0); квантовые релятивистские эффекты рассматриваются [квантовой теорией поля](https://ru.wikipedia.org/wiki/%D0%9A%D0%B2%D0%B0%D0%BD%D1%82%D0%BE%D0%B2%D0%B0%D1%8F_%D1%82%D0%B5%D0%BE%D1%80%D0%B8%D1%8F_%D0%BF%D0%BE%D0%BB%D1%8F)).

Тем не менее, классическая механика сохраняет своё значение, поскольку она:

1. Намного проще в понимании и использовании, чем остальные теории.
2. В обширном диапазоне достаточно хорошо описывает реальность.

Классическую механику можно использовать для описания движения очень широкого класса физических объектов: и обыденных объектов макромира (таких, как волчок и бейсбольный мяч), и объектов астрономических размеров (таких, как [планеты](https://ru.wikipedia.org/wiki/%D0%9F%D0%BB%D0%B0%D0%BD%D0%B5%D1%82%D0%B0) и [звёзды](https://ru.wikipedia.org/wiki/%D0%97%D0%B2%D0%B5%D0%B7%D0%B4%D0%B0)), и многих микроскопических объектов.

**Повторение грамматики.**

Прочитайте текст. Преобразуйте слова, напечатанные заглавными буквами так чтобы они грамматически соответствовали содержанию текста. Вербицкая М.В., Соловова Е.Н.Английский язык ЕГЭ -2011 стр.58 ***Albert Einstein***

**Подведение итогов урока и задание на дом.**

Подготовить устное сообщение на тему «Физические законы».

**Тема «Мой колледж. Порядок слов в английском повествовательном предложении».**

**Тип урока**: комбинированный.

**Цели урока.**

Пополнение лексического запаса.

Развитие навыков чтения вслух и перевода.

Развитие навыков монологической речи.

Совершенствование грамматических навыков.

**Ход урока.**

**I.Повторение темы предыдущего урока «Система образования в России».**

1. At what age do children start school in Russia?-6
2. How long does the course of study at school last?-11 years-4 primary 7-secondary
3. What kind of schools exist in Russia nowadays?-state schools, private schools, lyceums, gymnasiums.
4. In what school do parents pay for education of their children?-private schools
5. What subjects do pupils study in primary schools?-Reading, Writing, Arithmetics, Handicrafts, Drawing, Music, Physical Education, History of Arts Fundamentals of Security, History, Geography and others.
6. How long does the lesson last? 40
7. At what age do children pass to the second stage of education? 10 secondary school
8. What choice do children have after finishing the 9th form?-they can either continue their education in the 10th form, or leave school and go to technical (vocational) schools and colleges.
9. How many entrance exams do children take when they go to a higher educational institutions?-3-4
10. What can you tell me about higher educational institutions?- institutes, academies, universities. The term of study -3-4 years. At the end students take final examinations and get a diploma.

**II.Работа с текстом «Мой колледж».**

1.What can you tell me about your college? Ответы учащихся.

2.Ознакомление с новой лексикой.

**My Сollege.**

1. educational institution
2. solid background
3. sphere of knowledge
4. prepares for practical work.
5. To be founded
6. currently
7. to be enrolled.
8. full-time students.
9. To divide
10. A term.
11. credit test
12. a mark
13. up-to date equipment
14. to carry out lab work
15. various experiments
16. to do research work.
17. To continue education.
18. To graduate
19. To enter a university
20. To take entrance exam.
21. successfully
22. to attend
23. scholarship
24. 24To take part in social activities,
25. College of Technical Communication

**3. Чтение и перевод текста.**

1. Now let me tell you about my College of Technical Communication number 54.
2. I am really glad that I study here.
3. It is one of the finest country’s educational institutions.
4. It gives a solid background in all spheres of knowledge and prepares for practical work.
5. The Moscow College of Technical Communication It was founded in 2005.
6. It is a large school where more than 3000 students are currently enrolled.
7. All of them are full-time students.
8. The course of study in my College lasts from 3 to 4 years.
9. The academic year is divided into two terms.
10. At the end of each term students pass examinations and credit tests
11. For an exam you get a mark, and when you take a credit test you get a mark or a pass.
12. We have holidays twice a year: two weeks in January and two months in summer.
13. There are many faculties in my college.
14. .I study in the Faculty of Automation, Electronics and Information and Communication Technologies in the group. The installer of electronic equipment and devices (Монтажник радиоэлектронной аппаратуры и приборов).
15. Our College has several buildings in Moscow with up-to date equipment and students can carry out lab work and various experiments there.
16. Many students from my group do their own research work.
17. After finishing college many of them continue their education.
18. Our college is connected with a number of institutes and universities, for example Moscow Financial and Industrial University (FIDH) "Synergy» -the Department of Telecommunications (Московский финансово-промышленный университет- факультет телекоммуникаций), Moscow Technical University of Communications and Informatics (MTUCI)- faculty " Networks and Communication Systems».
19. When we graduate we can enter a university without taking entrance exams.
20. The graduates of our college work successfully in many companies and offices of the country such as Samsung Unify Communications, the Fund of Social Insurance, MGTS, Ministry of Defense, the Post of Russia, Moscow Metro, Federal Taxes Service.
21. If you work regularly, attend all the lectures and seminars, and get good marks, you will be given a scholarship.
22. If you are at the top of the group and take part in social activities, your scholarship will be higher.
23. The classes in the college begin at 9 o’clock and we have 3 or 4 lessons a day.
24. Each lesson lasts 90 minutes, between lessons we have 15minutes breaks when we can relax, talk with friends or have lunch.
25. Students can also stay at college after classes to do sports and other activities.
26. There are different clubs such as music club, language club, automobile club, technical club and others.
27. The students of our college take part in different competitions and festivals.

**4.Ролевая игра «Профориентация».**

Один из учащихся выходит и рассказывает первые 5 предложений из текста.

После этого учащиеся по очереди задают вопросы.

Например

1. When was your college founded?
2. How many students study here?
3. How long does the course of study last?
4. How many semesters do you have?
5. Do you have any assessment tests?
6. How often do you have holidays?
7. In what faculty do you study?
8. Is the process of study interesting?
9. Where do you go after graduating from the college?
10. In what companies can you work after finishing college?
11. Do you get any scholarship?
12. What is your time-table?
13. Do students of your college take part in any social activities?

**III. Повторение грамматики**

Порядок слов в английском повествовательном предложении.

1. Повторение правила по таблице.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 |
| Обстоятельство времени или места. | (Определение)Подлежащее | Сказуемое | (Определение)Дополнение (косвенное,прямое,предложное) | Обстоятельство времени, места, образа действия. |
| Yesterday  | he | read | the text | quickly. |
|  | Olga  | bought | her brother a car for a present. | in a good shop. |
|  | My brother | taught | me to swim. | in the large swimming pool. |
|  | Olga  | bought  | a car for her brother. |  |
|  | Olga  | gave  | me a book. |  |
|  | Olga | gave | a book to me. |  |
|  | I | saw | him. | in the park. |
|  | The young man  | sent | me a long telegram | by post. |
|  |  |  |  |  |

1. Выполнение грамматических упражнений.
2. Make sentences (составьте предложения).

a friend sportsman is my.

play tomorrow will he football.

love things I beautiful.

musicians are parents his.

are tea now they drinking.

do tomorrow the my morning I in homework will.

autumn Barcelona was her in last sister.

to evening gym he the going in the likes.

to went they yesterday school. teacher week bit boy last this a.

1. Translate (переведите).

Завтракаю я обычно в 8 часов.

В ресторане находилась его жена.

Через 2 недели они поедут в Америку.

На вечеринке был Том с друзьями.

В Лондоне часто идет дождь.

В прошлые выходные погода была ужасная.

Выгуливает собаку он 2 раза в день.

Мы на следующей неделе поедем в деревню.

Ученики на уроках слушают учителя.

Вчера в магазине я купила хорошие книги.

1. Find mistakes and write right sentences (найдите ошибки и напишите правильные предложения).

I think, I’ll tomorrow in the evening go to cinema.

She very much loves her parents.

In Paris we were in July last year.

I’m sure, they will in these competitions win.

Yesterday I too late went to bed.

James very well speaks English.

I’ll call in private my coach.

We don’t like at all cooking.

Last Friday very interesting cartoons children watched.

Ответы.

Упражнение 1 — My friend is a sportsman. — Tomorrow he will play football. — I love beautiful things. — His parents are musicians. — They are drinking tea now. — I will do my homework tomorrow in the morning. — Her sister was in Barcelona last autumn. — He likes going to the gym in the evening. — They went to school yesterday. — This boy bit a teacher last week.

Упражнение 2 — I usually have breakfast at 8 a.m. — His wife was in the restaurant. — They will go to the USA in 2 weeks. — Tom with his friends were at the party. — It often rains in London. — The weather was awful last weekend. — He takes his dog out for a walk twice a day. — We will go to the village next week. — Pupils listen to the teacher at lessons. — I bought good books in the shop yesterday.

Упражнение 3 — I think, I’ll go to cinema tomorrow in the evening. — She loves her parents very much. — We were in Paris in July last year. — I’m sure, they will win in these competitions. — I went to bed too late yesterday. — James speaks English very well. — I’ll call my coach in private. — We don’t like cooking at all. — Children watched very interesting cartoons last Friday.

**V.Подведение итогов урока и задание на дом.**

1. Выучить слова.
2. Подготовить рассказ о колледже

**Тема «Любимый день недели. Настоящее простое и длительное время».**

**Тип урока: комбинированный.**

**Цели урока**

* Пополнение словарного запаса
* Совершенствование фонетических навыков
* Развитие навыков аудирования
* Совершенствование грамматических навыков

**Оснащение.** Карточки с раздаточным материалом (грамматические задания, задания по чтению и аудированию). Аудиозапись.Учебники.

**Ход урока.**

**I.Прослушивание песни «Blue Monday» и ответы на вопросы.**

Blue Monday, by Fats Domino

Blue Monday, how I hate Blue Monday

Got to work like a slave all day

Here come(s) Tuesday, oh hard Tuesday

I’m so tired (I’ve) got no time to play

On Wednesday, (I) work twelve hours, then

Go home, fall into bed at ten,

‘Cause Thursday is a hard working day

And Friday I get my pay

Saturday morning, oh Saturday morning

All my tiredness has gone away

Got my money and my honey

And I’m out on the town to play

Sunday morning my head is bad

But it’s worth it for the fun that I had

Sunday evening it’s goodnight and amen

‘Cos on Monday I start again.

 T 2.2 What is the singer’s favorite day of the week?

* What’s wrong with the other days?
* Which days are OK?

**Ответ**.His favorite day is Saturday. The other days are not so good because he has to work. Friday is OK because he gets paid, and on Sunday he has a hangover but he doesn’t mind because he has had some fun in the evening before.

**II.Аудирование текста «Мой любимый день недели»**

*1. Listen to four people (Vicky, Terry, Dave, Jenny) retelling about their favorite day of the week. Answer the questions.*

* What is his/her favorite day of the week?
* Why?

**Ответы.**Vicky’s favorite day of the week is Monday because she only has two lessons on Monday.

Terry’s favorite day of the week is Friday because his friends come into the restaurant and they have a laugh.

Dave’s favorite day of the week is Sunday because he spends the day on the beach.

Mike and Jenny’s favorite day of the week is Wednesday because that is the day they go hunting.

*2. Listen again and complete the sentences.*

1. I\_\_\_\_\_\_\_with my parents during term-time.
2. I\_\_\_\_\_\_\_day today.
3. …it\_\_\_\_\_\_\_\_\_\_work at all.Time\_\_\_\_\_\_\_\_\_by.
4. The restaurant\_\_\_\_\_\_\_\_\_redecorated at the moment…
5. I\_\_\_\_\_\_\_\_\_\_\_because it’s challenging, but I\_\_\_\_\_\_\_\_\_surfing.
6. The boards\_\_\_\_\_\_\_\_\_\_\_\_in South Africa.
7. We rarely\_\_\_\_\_\_\_\_\_\_\_at the weekend or Christmas Day…
8. Now we are lambing, so we\_\_\_\_\_\_\_, either.

**Ответы.**

1. I don’t live with my parents during term-time.
2. I am having a very bad day today.
3. …it doesn’t feel like work at all. Time just flies by.
4. The restaurant is being redecorated at the moment…
5. I like my job because it’s challenging, but I live for surfing.
6. The boards are made in South Africa.
7. We rarely have a day off at the weekend or Christmas Day…
8. Now we are lambing, so we aren’t getting any sleep, either

*What else can you remember about each person?*

*3. What is your favorite day of the week and why?*

*Script.* *My favourite day of the week*

Vicky

I go to a boarding school, so I don’t live with my parents during term-time. Erm …,what I like is being with my friends all the time. Whether we’re working or just chatting, it’s great to know that there’s always someone there. There’s also a lot of freedom. I don’t have to tell my parents where I’m going, who I’m going with, you know … Normally Monday is my favourite day because I only have two lessons on a Monday, but I’m having a very bad day today because I have homework from every one of my teachers, and I have to do it now!

Terry

I work in a restaurant in Manchester. I have two days off a week, usually Monday and Wednesday, but my favourite day of the week is, in fact, Friday, even though I work that day. It’s the best night because all my mates come into the restaurant and we have a great laugh. There’s a real buzz to the place, and it doesn’t feel like work at all. Time just flies by. The restaurant’s being redecorated at the moment, so everything’s a bit crazy.

Dave

I’m a police officer. I like my job because it’s challenging, but I live for surfing. I go as often as I can. I’m opening two shops that sell surfboards in the next few months. The boards are made in South Africa. Sunday is my favourite day of the week. I get up as early as I can, and spend the day on the beach.

Jenny

Mike and I live on a farm in beautiful countryside. I know we’re very lucky, but it’s hard work. We rarely have a day off at the weekend or Christmas Day, or any day of the year. We have to feed the sheep. Now we’re lambing, so we aren’t getting any sleep, either. But I suppose our favourite day is Wednesday because that’s the day we generally go hunting. We go on the moors with about twenty friends.

**III.Повторение грамматики. Настоящее длительное и настоящее простое время.**

* *Запись правила.*
* *Тренировочные упражнения.*

*1.Прочитайте текст про себя и найдите в тексте предложения с глаголами в настоящем простом и настоящем длительном времени. Найдите в тексте предложения с глаголами в страдательном залоге.(Present Simple-8/Present Continious-5/ Present Simple Passive-2/ Present Continuous Passive-1)*

**Scottish Artist, Born and Bred.**

**Annie McLean is one of the Scotland’s most famous living artists.HENRY LUCAS went to visit her on her island paradise.**

Annie McLean was born in St Andrews on the east coast of Fife, Scotland. She trained at the College of Fine Art, in edingborough.She lives on the Isle of Lohan in Scotland with her husband Duncan and three children. Home is a 300-year-old farmhouse which overlooks the sea. It is a working farm, and Duncan keeps sheep, chickens and pigs.

Annie paints animals and wildlife. “I paint what I see around me,” she told me,” birds, animals, trees and flowers. I find my work totally absorbing. I work outside in the open air as long as it is light, from dawn until dusk-about 16 hours a day in summer, though less now because it’s winter.”

Her work is becoming increasingly popular, and she is planning to open a gallery on the island. «At the moment I am working on a series of wild flowers», she said to me over coffee in her studio.

The Isle of Lohan is inhabited by 700 hundred people who are employed mainly in the fishing industry. The population is falling because young people are leaving the island to look for work. The island is being developed as a tourist destination-50 000 visitors come every year-but it is big enough for Annie to escape and find her inspiration.

*2. Complete the sentences using the words in the box and the tense given.*

**paint** **Present Continuous** **Present Simple**

* Annie \_\_\_\_\_animals and wildlife.
* At the moment she \_\_\_\_\_\_ a series of wild flowers.

**find** **Present Simple Present Simple Passive**

* She\_\_\_\_\_\_\_her work totally absorbing.
* A lot of rare birds\_\_\_\_\_\_on the island.

**think** **Present Simple Passive Present Continuous**

* Annie\_\_\_\_\_\_of opening a small gallery.
* She\_\_\_\_\_\_\_to be one of Scotland’s most important artists.

**know Present Simple** **Present Simple Passive**

* Her work\_\_\_\_\_\_all over the world.
* She\_\_\_\_\_\_\_\_\_most of the people on the island.

**work Present Simple Present Continuous**

* She\_\_\_\_\_\_\_in the open air from dawn until dusk.
* She\_\_\_\_\_\_\_only\_\_\_\_\_\_\_six hours today because it is winter.

*3. Here are some answers to questions about Annie McLean. Write questions.*

1. Where does she live? On the Isle of Lohan in Scotland.
2. How many*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?* Three.
3. What\_*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?* He is a farmer.
4. *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?* Animals and wildlife.
5. Where*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?* In the open air.
6. *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*doing at the moment? She is painting a series of wild flowers*?*
7. *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*young people\_*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?* Because there aren’t any jobs.
8. *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?* 50 000

*4. Correct the information in these sentences.*

1. Annie lives in Ireland. She doesn’t live in Ireland. She lives in Scotland.
2. Her husband grows fruit and vegetables.
3. Annie paints portraits.
4. She’s painting a series of birds.
5. The people of Lohan are employed in farming.
6. Young people are leaving the island to get married.

**IV. Подведение итогов урока и выставление оценок.**

**V. Задание на дом.**

*Выучить правило и слова.*

***Приложение 1.***

*Лексика урока.*

1. a boarding school –школа -интернат
2. term-time –учебное время
3. mates-одноклассники
4. to have a great laugh-хорошо посмеяться
5. challenging-трудный
6. a surfboard –доска для серфинга
7. on the beach-на пляже
8. to feed -кормить
9. to lamb-принимать роды у овец
10. to go hunting-ходить на охоту
11. on the moors- на пастбище
12. born and bred-коренной
13. an island-остров
14. a paradise-рай
15. a coast-побережье
16. the College of Fine Art - колледж изобразительного искусства
17. to overlook the sea- с видом на море
18. to keeps sheep-разводить овец
19. to paint wildlife –рисовать природу
20. totally absorbing-полностью поглощающий
21. to work in the open air-работать на свежем воздухе
22. from dawn until dusk-от рассвета до заката
23. to inhabit-населять
24. mainly-главным образом
25. the population is falling-население уменьшается
26. destination –место назначения
27. to escape –уходить (от чего-то)
28. inspiration-вдохновение

***Приложение2.* Грамматические правила.**

**Настоящее простое время.Present Simple Tense.**

I.Настоящее неопределенное время употребляется в следующих случаях:

1. Для выражения обычного действия, совершающегося постоянно, регулярно.*Every day I go to school.*

2. Для выражения общеизвестных положений.*The earth goes round the sun.*

3. Вместо будущего времени в придаточных предложениях условия и времени (после союзов when, if, after, before, as soon as, till ).If the weather is fine they will stay in the wood.
2) Будущее действие в соответствии с расписанием. *The train to London leaves at 5 p.m.*

II. Утвердительная форма настоящего неопределенного времени образуется от инфинитива смыслового глагола без частицы to. В третьем лице единственного числа глаголы принимают окончание -s или -es: *study-studies/ play-plays /lose-loses /dress – dresses /wash-washes*

2. В вопросительной форме вспомогательный глагол do /doesстоит перед подлежащим, а смысловой - после него.*Do you study physics? Does he play football? Where do you live?*
3. Отрицательная форма настоящего неопределенного времени образуется также при помощи вспомогательного глагола do/does и отрицательной частицы not. This year we do not (don't) study physics. *Не does not play (doesn't) football.*

 Слова-сигналы: *every day(week,month,year,season),usually, always,sometimes,often,regularly etc.*

**Настоящее длительное время.Present Continuous Tense.**

 I. Настоящее продолженное время употребляется в следующих случаях:

1. Для выражения действия, совершающегося в момент говорения или в настоящий момент. Этот момент может быть выражен такими словами, как *now*, *at this moment* *Professor P. is delivering a lecture in the assembly hall.*

2. Для выражения действия, проходящего в определенный период времени. Период может длиться от 5 дней до 5 лет. *What are you doing these days? I am preparing for my exams.*

3. Для выражения действия, которое запланировано и произойдет в ближайшем будущем. *We are leaving Moscow tomorrow.*

4.Для выражения эмоционально-окрашенных действий. *Не is forever losing his things! Вечно он теряет свои вещи!*

II. Для образования вопросительной формы вспомогательный глагол *to be* ставится перед подлежащим, а причастие настоящего времени смыслового глагола - после подлежащего.*Is he reading a newspaper? What are you doing tonight?*Для образования отрицательной формы после вспомогательного глагола *to be* ставится отрицательная частица *not. Не is not (isn’t) reading a newspaper.*

III. Глаголы, выражающие чувство, восприятие, умственную деятельность и т. п. не могут обозначать действие и состояние как процесс, поэтому в формах продолженных времен они не употребляются. В английском языке они называются *state verbs.*
К их числу относятся такие глаголы, как:

to have - иметь
to be - быть
to seem - казаться
to mean - значить
to know - знать
to remember - помнить
to want - хотеть
to understand - понимать
to recognize - узнавать
to notice - замечать
to believe - верить
to belong - принадлежать
to matter - иметь значение
to consist - состоять
to contain - содержать
to see - видеть
to feel - чувствовать
to hear - слышать
to love - любить
to like - нравиться
to hate - ненавидеть
to prefer - предпочитать
to please - удовлетворять
to possess - обладать
to depend - зависеть