**Тема 3.5 Научно- технический прогресс.**

*Лексика:*

- виды наук (*science, physics, chemistry and etc.)*

- профессионально ориентированная лексика.

*Грамматика:*

страдательный залог, грамматические структуры предложений, типичные для научно-популярного стиля.

Устная речь: сообщение по теме

Подготовка доклада, презентации по теме

Выполнение лексико-грамматических упражнений

**Работа с текстом**: **«Achievements of Russia. Russian Famous People.»**

 Much was done by people to reach the present state of human development.
It is necessary to say that great contribution to the development of the world science and culture, literature, music and painting was made by the Russian people. The names of Russian scientists and writers, poets, composers and painters are world-famous - Pushkin, Lermontov, Chekhov, Levitan. This chain can be endless. It is almost impossible to name a branch of science in the development of which the Russian scientists haven't played the greatest role.

 Lomonosov, the founder of the Moscow University was an outstanding innovator both in the humanities and sciences.

 Mendeleev's greatest discovery was the Periodic System of Elements.

Popov invented radio.

 Sechenov and Pavlov were the world’s greatest physiologists.

Russia is rightly called the mother of aviation and cosmonautics. Names of Tsiolkovsky, Korolov and Gagarin are symbols of new space era.People in many countries admire paintings, portraits and landscapes. Surikov, Levitan, Repin.

Works of our Russian writers and poets are translated into many languages.

Pyotr Illicit Tchaikovsky is an outstanding Russian composer.

 Igor Sikorsky invented a helicopter in 1909.

Sergei Korolyov invented a satellite Sputnik 1 in 1957.

 The Cherepanovs – father and his son. The most interesting aspect of the Cherepanovs' work was [steam engines](http://en.wikipedia.org/wiki/Steam_engine) which they stubbornly tried to introduce into industrial production. Since 1820, the Cherepanovs had built about 20 steam engines. In 1833-34 they built the first Russian steam locomotive.

 Alexander Lodygin invented a few types of filament lamps with metallic filaments; some say he was the first scientist to use a [tungsten](http://en.wikipedia.org/wiki/Tungsten) filament. He invented an incandescent light bulb.

 Vladimir Zworykin was a [Russian-American](http://en.wikipedia.org/wiki/Russian-American) inventor, engineer, and pioneer of [television](http://en.wikipedia.org/wiki/Television) technology. Zworykin invented a television transmitting and receiving system employing cathode ray tubes. He played a role in the practical development of television from the early thirties.

**Лексический материал (слова и выражения, подлежащие усвоению).**

cathode ray tubes - электронно-лучевая трубка

great contribution – великий вклад

[tungsten](http://en.wikipedia.org/wiki/Tungsten) filament - вольфрамовая нить накала

filament lamps - лампы накаливания

admire - восхищаться

an incandescent light bulb - лампа накаливания

greatest discovery – величайшее открытие

outstanding – выдающийся

invented a helicopter – изобрел вертолет

steam engine – паровой двигатель

**Грамматика: времена Continuous Passive**

Формы страдательного залога английских глаголов образуются с помощью вспомогательного глагола to be в соответствующем времени, лице и числе и причастия II (Participle II) смыслового глагола:

|  |  |
| --- | --- |
| Present Continuous | The letter is being written |
| Past Continuous | The letter was being written |
| Future Continuous | The letter will be being written |

Глагол-сказуемое в страдательном залоге показывает, что подлежащее предложения является объектом действия со стороны другого лица или предмета.

**Устная речь: сообщение по теме**

**Подготовка доклада, презентации по теме**

**Выполнение лексико-грамматических упражнений**:

Exercise 1.

1. All letters ……..when we came.

2. This film ……….about.

3. The machine……...

4. The experiment ……..out from ten till twelve o'clock.

5. Music ………the whole evening.

6. The book ………at 5 o\*сlock.

*were being written, is being tested, is being much spoken, will be being playing,*

*was being read, was being carried*

Exercise 2. Translate into English. Determine the Tense and Voice of the verb:

1. He left for Moscow. 2. The news will be of great interest. 3. They were speaking to him. 4. She studied many subjects. 5. He was much spoken about. 6. New subjects will be studied next term. 7. I am working now. 8. The text has already been written by them. 9. He studies at our school. 10. You are playing chess, aren't you? 11. The text is being translated at the moment. 12. Do you work at this lab? 13. When I saw him, he was going home. 14. They will have passed their exams by 3 o'clock. 15. This book was written by our teacher. 16. We shall be writing our tests at 10 o'clock. 17. The work will have been done when he comes. 18. We translated this text. 19. The letter had been written before we came. 20. We shall inform you. 21. These toys are made in Japan. 22. Does he work here? 23. Is he working now? 24. The conference will be held in May. 25. Rostov was named after Dmitry Rostovsky. 26.What are you doing here? 27. This work must be done at once. 28. You may take my book. 29. I am often asked at the lessons. 30. This article was being translated when I came.

Exercise 3. Translate into English. Determine the Tense and Voice of the verb:

l.They can be seen in our library every day. 2. The delegation is headed by the Prime Minister. 3. The child was often left home alone. 4. These houses were built last year. 5. All letters had been written when we came. 6. This film is much spoken about. 7. The machine is being tested now. 8. His work has been already finished. 9.1 was told to wait for him. 10.Your letter will have been answered by Monday. 11. The experiment was being carried out from ten till twelve o'clock. 12.Children under sixteen will not be admitted here.

Exercise 4. Put the verbs in brackets in the right form:

1. I'm not reading these books today. They (return) to the library. 2. The paintings (exhibit) till the end of the month. 3. Why your home task (not do)? 4. She was taken to the hospital today, and (operate) tomorrow morning. 5. This room (use) only on special occasions. 6. Bicycles must not (leave) here. 7. This newspaper (not read). The pages (not cut). 8. Dictionaries may not (use) at the examination. 9. Usually this street (sweep) every day, but it (not sweep) yesterday. 10. This book (leave) in the classroom yesterday; it (find) by the teacher. 11. Thousands of new houses (build) every year. 12. This room (not use) for a long time. 13. The children are very excited this morning. They (take) to the circus this afternoon.