



Great Russian scientists and inventors



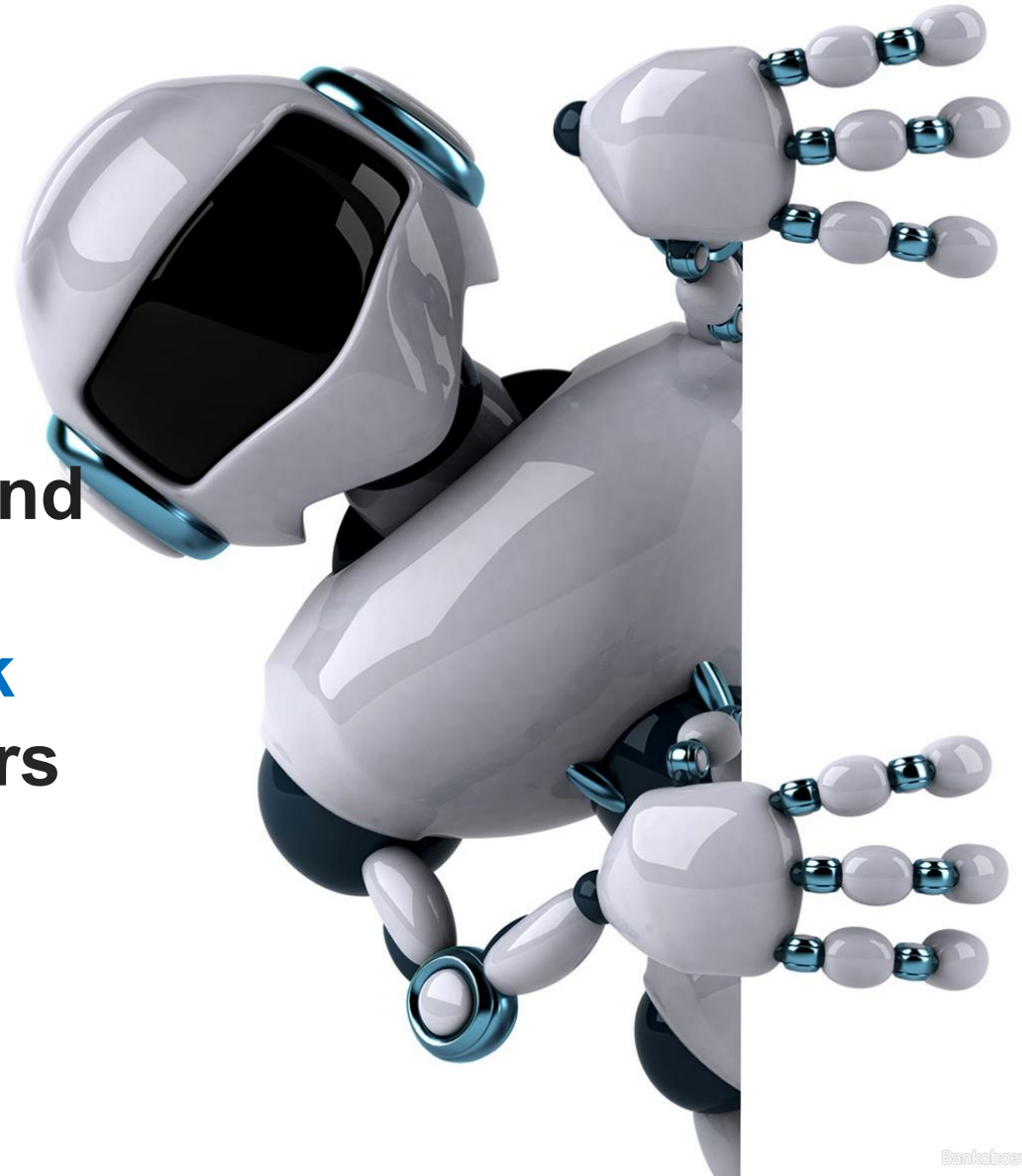
Today at our classes we

-study and practice

Gerund: its formation and use;

-get information and talk about Russian inventors and inventions;

-read for specific information.

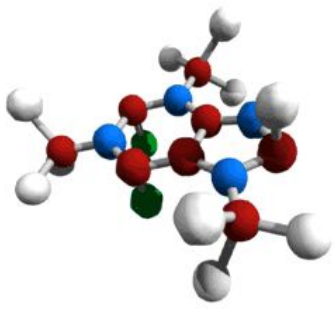


STUDY THE TERMS:

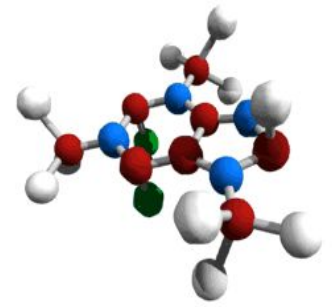
1. изобретать	to invent
2. делать, производить	to produce
3. запустить	to launch
4. смесь	mixture
5. испытывать	to test
6. делать открытие	to discover
7. развивать	to develop
8. творить, создавать	to create
9. улучшать	to improve
10. прокладывать путь, быть пионером	to pioneer
11. патентовать	to patent
12. усовершенствовать	to perfect
13. без провода	cordless

STUDY THE WORD EQUIVALENTS:

1. A small device	Gadget
2. To make bright or brighter	To brighten
3. Absolutely necessary	Essential
4. To work, act or function	To operate
5. Common or ordinary	Commonplace
6. Increase in value or excellence	Improvement
7. To call to a contest	Challenge
8. A device, especially, an electrical or gas-operated household device	Appliance



GERUND ГЕРУНДИЙ



- **Неличная форма глагола (non-finite form of the verb)**
- **выражает название действия и обладает признаками существительного и глагола**
- **формы: Indefinite Active – reading**
Indefinite Passive – being read
Perfect Active – having read
Perfect Passive – having been read



Функции герундия в предложении

- **Drinking tea is good** – подлежащее,
- **I hate making people cry** – дополнение,
- **Seeing is believing** – именная часть сказуемого,
- **Smoking room** — определение,
- **I went on by breathing deeply** — обстоятельство.

Герундий в английском

ЯЗЫКЕ МОЖНО ПЕРЕВОДИТЬ:

- **Существительным, которое передает процесс** (reading – чтение, walking – прогулка, painting – рисование).
- **Глаголом, деепричастием** (Much depends on his leaving the hotel. – Многое зависит от того, покинет ли он отель; without saying a word – не сказав ни слова).
- **Придаточными предложениями** (Mother disapproved of her son's having come so late. Мать неодобрительно отнеслась к тому, что ее сын пришел так поздно).

Make up sentences using gerund

1. She is interested

2. We really enjoy

3. I'm looking forward

4. He is used

5. She pretended

6. Pamela is good

7. I couldn't help

8. She avoids

a) being ill.

b) laughing at her.

c) to living in a country.

d) to seeing my friend.

e) swimming in the sea.

f) speaking loudly.

g) in surfing the Internet.

h) at riding a horse.

Quotations:

“If you think that you are able to do something, you are right. If you think that it's no-go (ничего не получится), you are right too.”

Henry Ford.



“A thing which was an event a couple of months ago, it becomes absolutely out-of-date today.”

Artyom Mikoyan



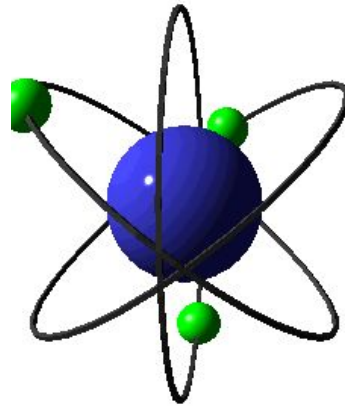
INVENTIONS

New inventions appear every day to make our lives easier, longer, warmer, faster, and so on. But only a few inventors design a new machine or product that becomes so well known all over the world.



OUTSTANDING INVENTORS OF RUSSIA

For thousands of years people's mode of life was primitive. In a short period of time a gigantic leap was made by people in science and technology to reach the present state of human development. The world knows the names of many great scientists: chemists, biologists etc.



The Russian inventors and scientists made the great contribution to the development of world science. Their names are world-known.

It's almost impossible to name the branch of science in which the Russian inventors haven't played the greatest role.

Alexander Fedorovich Mozhaisky



1825 -1890.

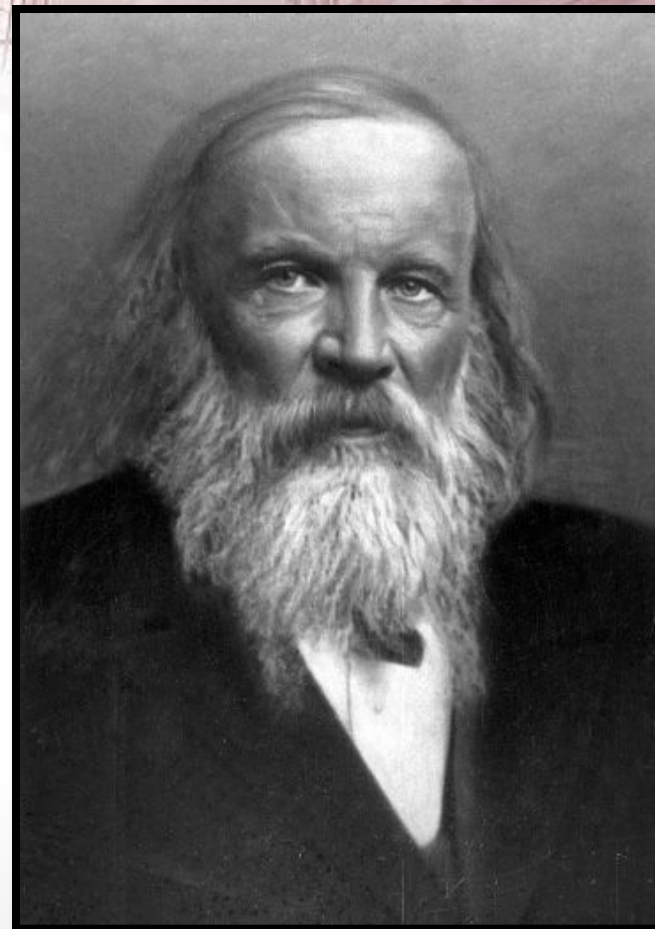
Was a Russian naval officer, aviation pioneer and designer of heavier-than-air craft.

The first flight of that aircraft took place in the military camp of Krasnoje Selo on the 20th of July, 1882. It was not allowed for Mozhaisky to raise in the sky because he was already 57.

Mozhaisky's aero plane was the 1st in the world.

Dmitri Ivanovich Mendeleev

Mendeleev invented the periodic table of elements in 1869. All future discoveries in the field of chemistry and physics are based on this law. His discovery made it possible to find 38 new chemical elements to fill the empty spaces left in the Periodic table.



1834 - 1907

Konstantin Eduardovich Tsiolkovsky



(1857 -1935)

**A rocket scientist and a
pioneer of astronautics**

- Tsiolkovsky is the father of rocket flying. He worked out the theory of cosmic flights.
- Tsiolkovsky believed that mankind would not remain on Earth forever. With Gagarin's flight his dreams came true.

Igor Ivanovich Sikorsky

A helicopter and aircraft designer.

Igor Sikorsky was considered to be "the father" of helicopters because he invented the first successful helicopter, upon which further designs were based.

He also designed and built the first military helicopter, XR-4.



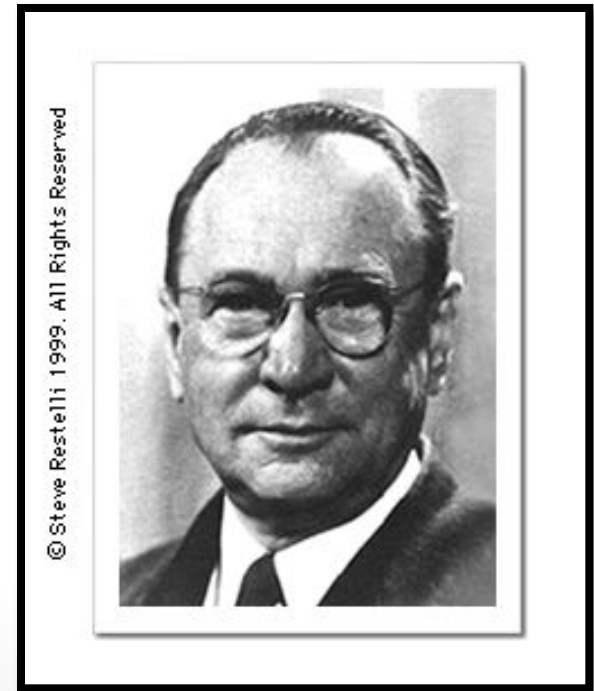
1889 - 1972

VLADIMIR ZWORYKIN

He has been called
"The Father of Television"



Russian inventor, Vladimir Zworykin invented kinescope in 1929. Zworykin was one of the first to demonstrate a television system with all the features of modern picture tubes.



1899 -1982

Sergei Pavlovich Korolyov

S. Korolyov devoted his life to rocket research, constructing artificial satellites.

History changed on October 4, 1957, when the Soviet Union successfully launched Sputnik I. While the Sputnik launch was a single event, it marked the start of the space age and the U.S.-U.S.S.R space race.

He was a Rocket engineer and designer, the “father” of the space program.



1907 - 1966

Andrei Dmitrievich Sakharov



1921 - 1989

Sakharov worked on a bomb in October 1961, which was the most powerful nuclear device ever exploded.

Born in 1921 Sakharov an outstanding scientist and public figure worked on hydrogen bomb and came to conclusion that any atomic and nuclear weapon should be banned. He protested against the invasion in Afghanistan, against any violation of human rights.

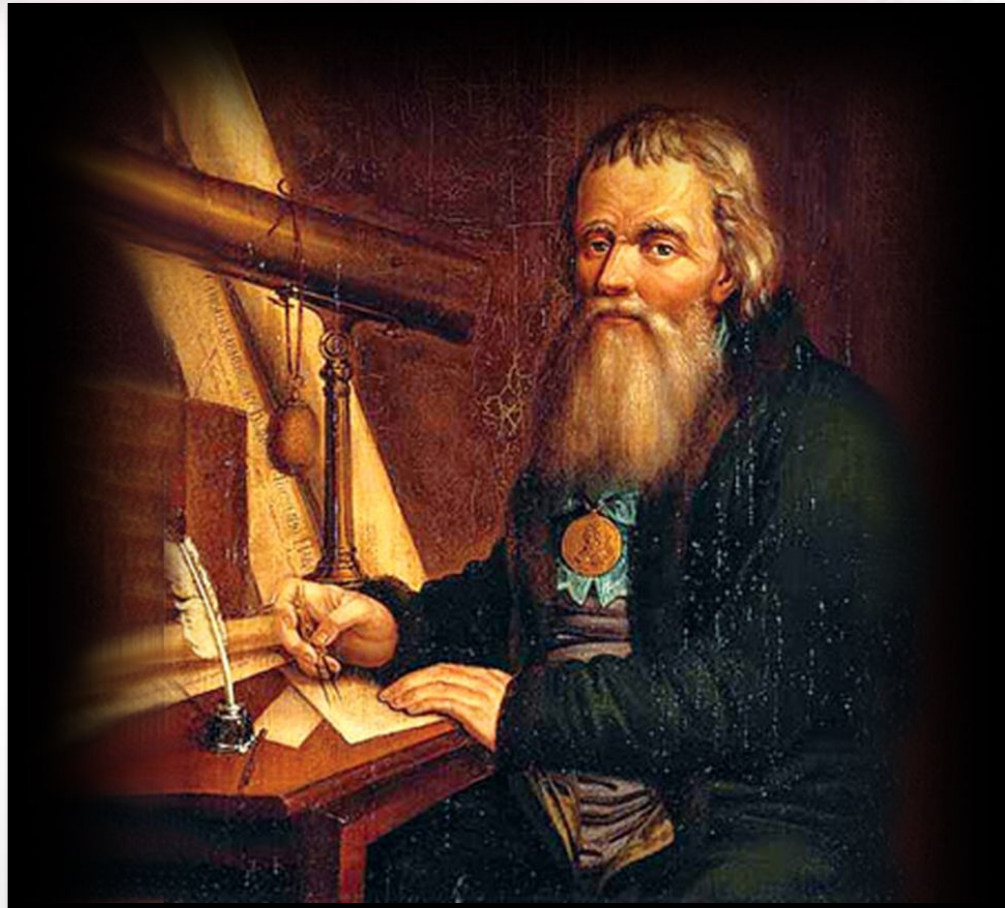
He was recognized as a civil rights activist and received the Nobel Prize.

ANDREW KONSTANTINOVICH NARTOV (1693 – 1756)



- born in Moscow
- Was a “personal turner” of Peter I
- was one of the remarkable mechanical engineers and inventors
- invented optics (оптические приборы)

IVAN KULIBIN (1735— 1818)



- was born in Nizhniy Novgorod
- Russian mechanic and self-educated person
- designed clocks to ships

РЮОТР КОЗМИЧ ФРОЛОВ **(1775—1839)**

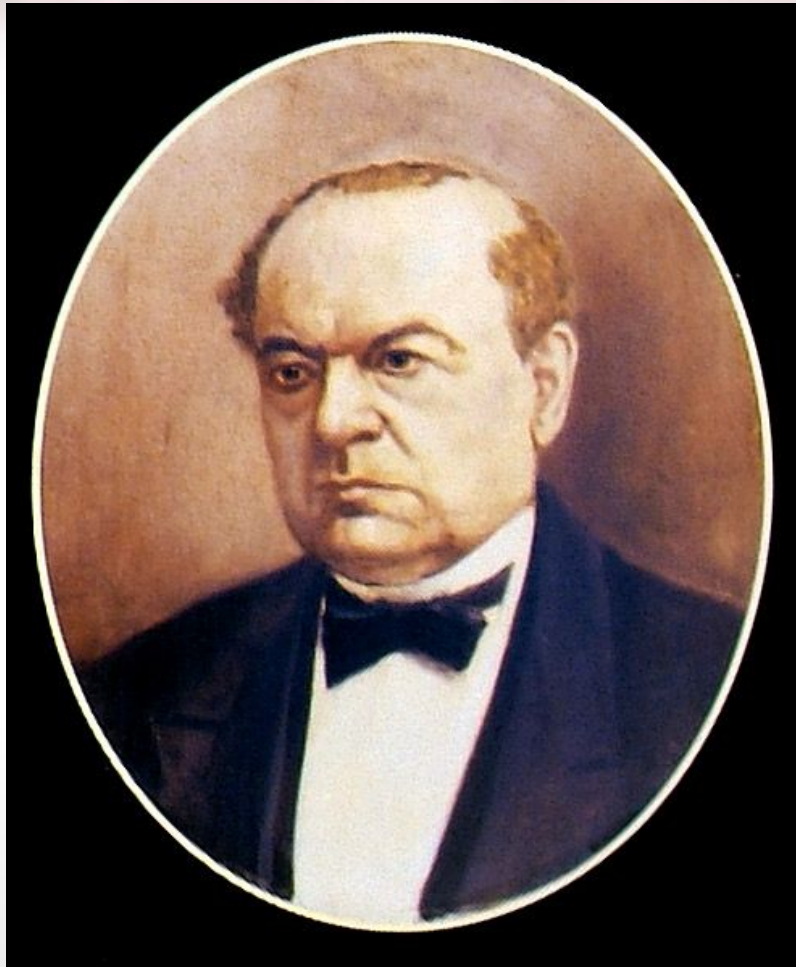


- worked in Altai, studied Primary Metal Manufacturing (металлургическое производство)
- founded a Picture Gallery in Barnaul
- created the 1st in Russia cast-iron (чугунная) railway
- developed metallurgical technology
- founded a museum of local lore (краеведческий)

BORIS SEMYONOVICH JACOBI (1801-1874)



(1801-1874)



**was a Russian
physicist,
invented electrical
appliances in the
sphere of
electrical
engineering**

ALEXANDER STEPANOVICH POPOV (1859 -1906)



- was a Russian physicist
- invented radio



Useful sites for you:

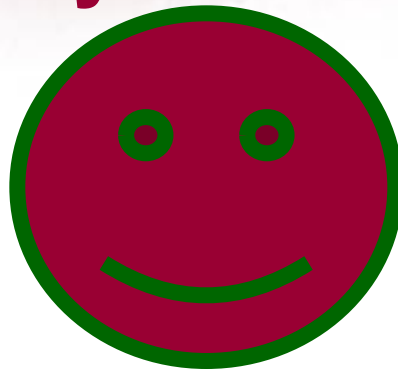
- <http://inventors.about.com>
- <http://subscribe.ru/archive/history.izobretatel/200607/24125712.html>
- <http://www.youtube.com/watch?v=sgQzD7ALVnc>
- <http://rangevoting.org/BIInventions.html>
- <http://englishrussia.com/tag/russian-inventions/>



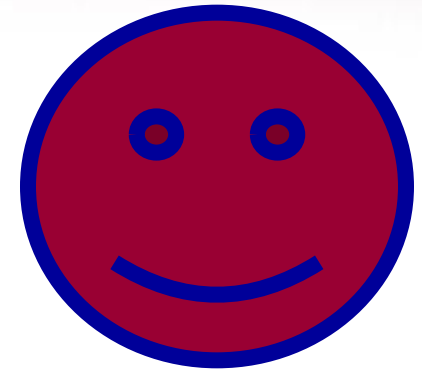
What emotions do you feel after our lesson ?



joy
happiness
proud
success
satisfaction
admiration
surprise



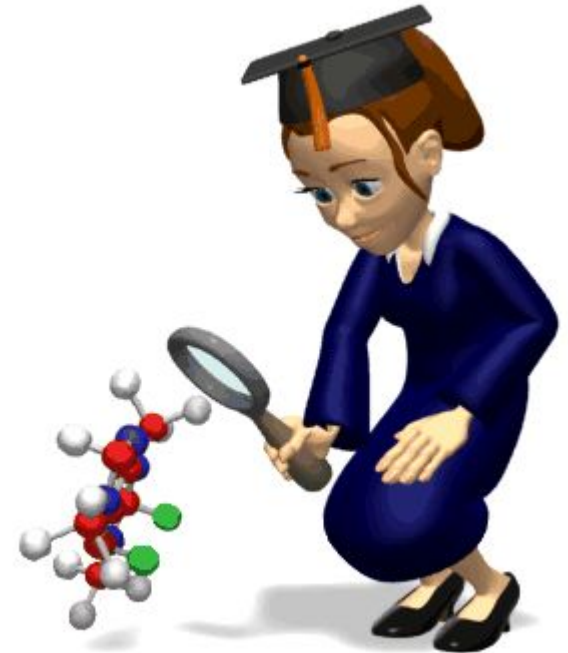
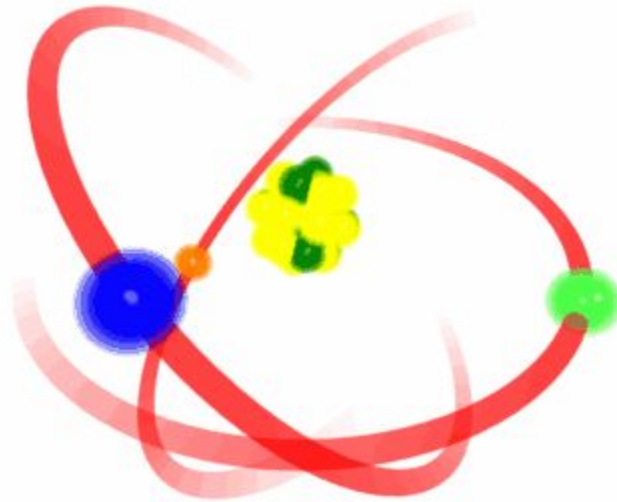
I feel...Why?
Because I ...
...was (not) bored;
... worked hard;
... didn't relax;
... answered properly;
... was active, emotional;
... fulfilled the task;
... received a reward (a good mark)



- unsatisfaction
- irritation
- anxiety
- fear
- sadness
- boredom

Hometask:

Portfolio “Great Russian scientists”
(biography, main inventions, their
meaning in the development of Russian
science.



**THANK YOU FOR THE WORK
AND GOOD LUCK !!!**

