



# THE UNIVERSE

Intellectual Game  
For 8<sup>th</sup> Form  
Venediktova T.V.

- ▣ This space, same for everything existing, no god and any person created, but always it was, is and will be eternal... →

Efessky, Heraclitus



# Themes of the first round

- **“Famous people”**
- **“Planets”**
- **“the Earth”**
- **“The Solar System”**

# Heavenly bodies rotate all on the same orbits, but every time under other laws.

Lets, Stanislav Ezhi

“Famous people”	<u>100</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>
“Planets”	<u>100</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>
“The Solar System”	<u>100</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>
“The Earth”	<u>100</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>

**To us for a long time not to get out of one system —  
from solar.**

**Lets, Stanislav Ezhi**



# “Famous people”

## Who was the first astronaut?

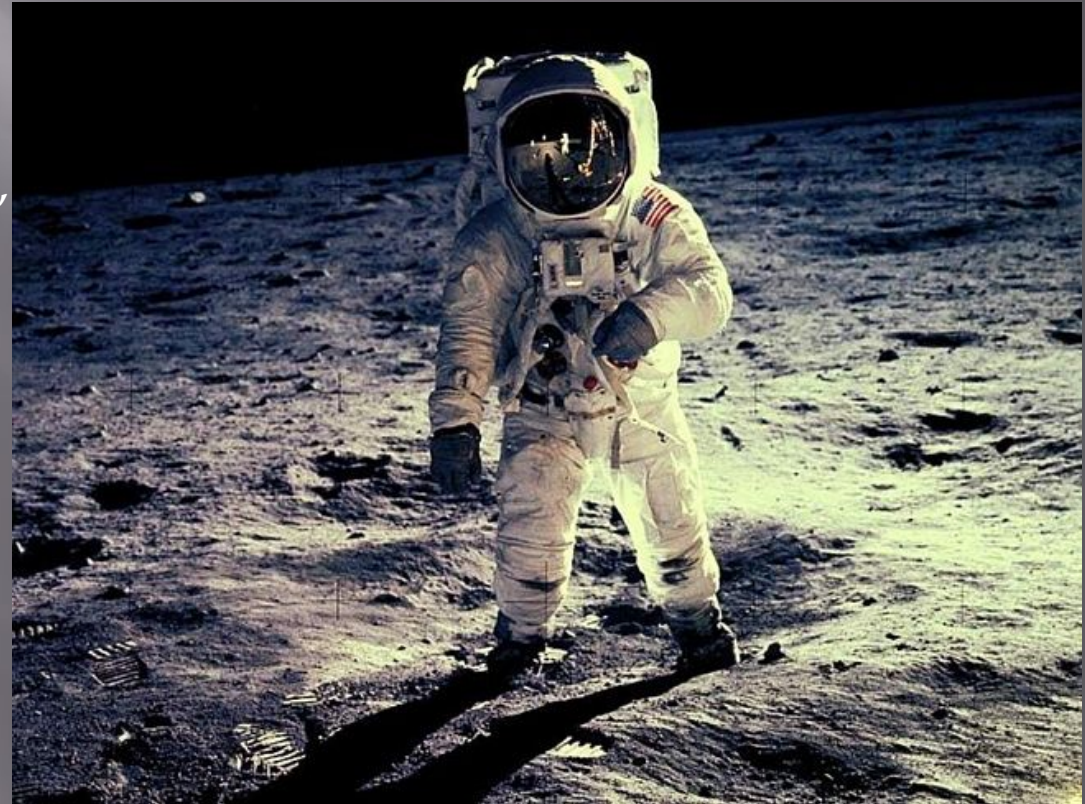


YAHOOEURI



# “Famous people”

## Who was the first man on the Moon?



# “Famous people”

Who was  
the first person  
to invent  
the idea of  
space rockets?





# “Famous people”

Who constructed  
the first  
spaceship?



# “Famous people”

1



2



3



5



4

7



6



# The Earth

What are  
the names  
of the oceans?



# The Earth

Why do  
people call  
the Earth  
“The Blue  
Planet”?



# The Earth

How old is  
the Earth?



# The Earth

What is the distance from  
pole to pole?



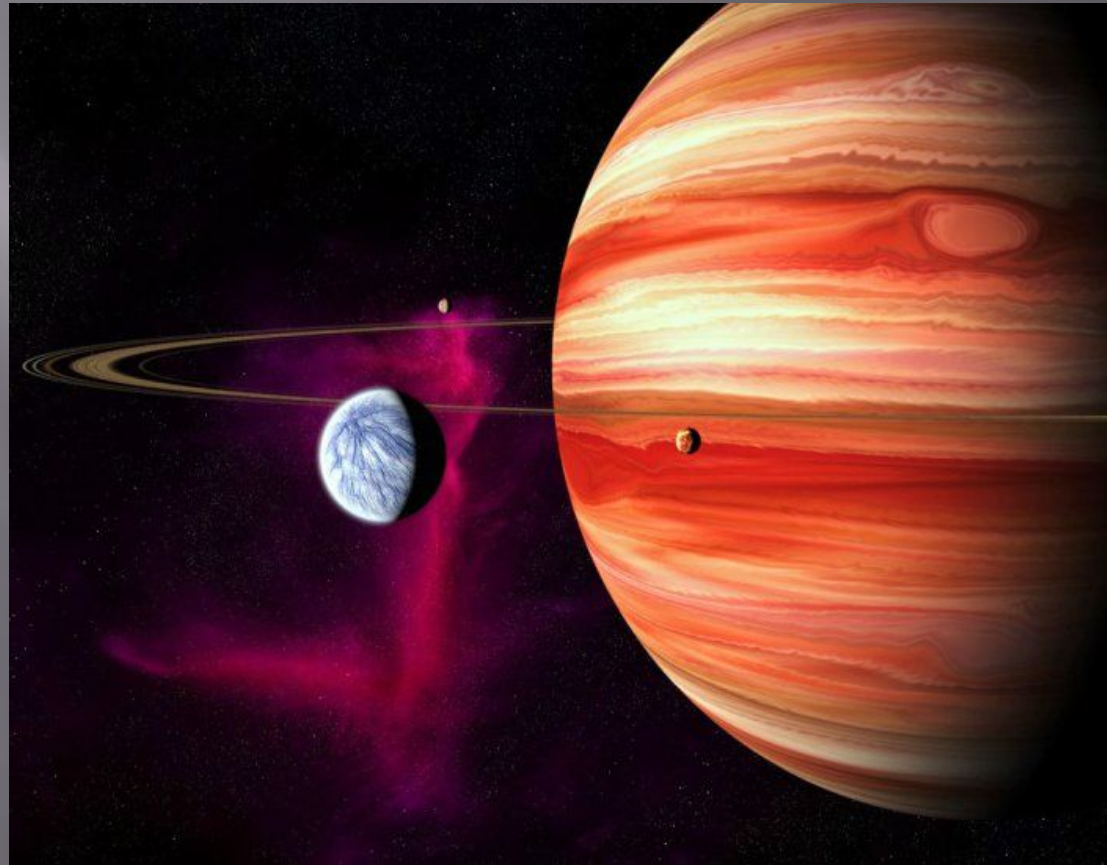
# The Earth

How far is the Earth from the Sun?



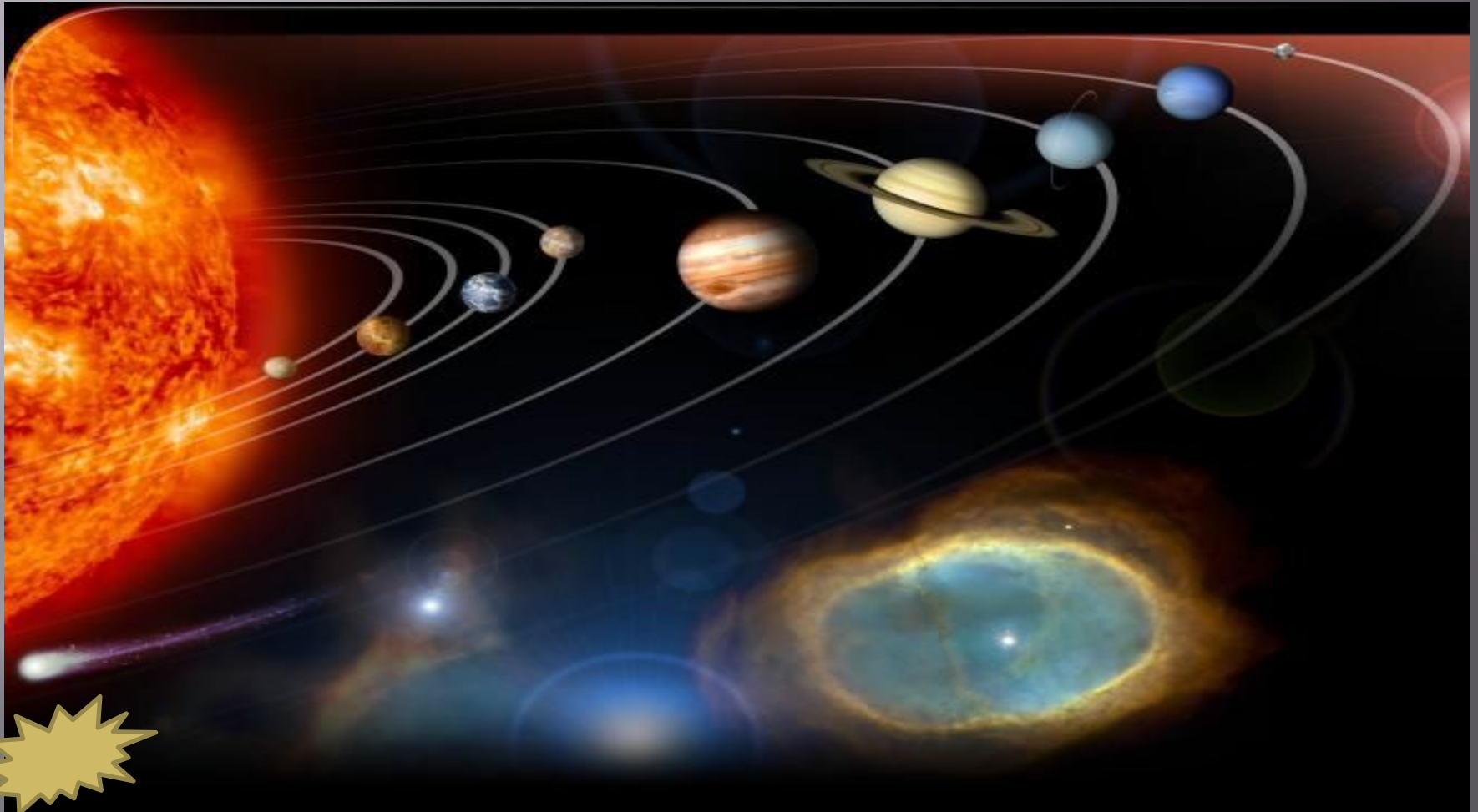
# “Planets”

How many  
main planets  
are there  
in the Solar  
system?



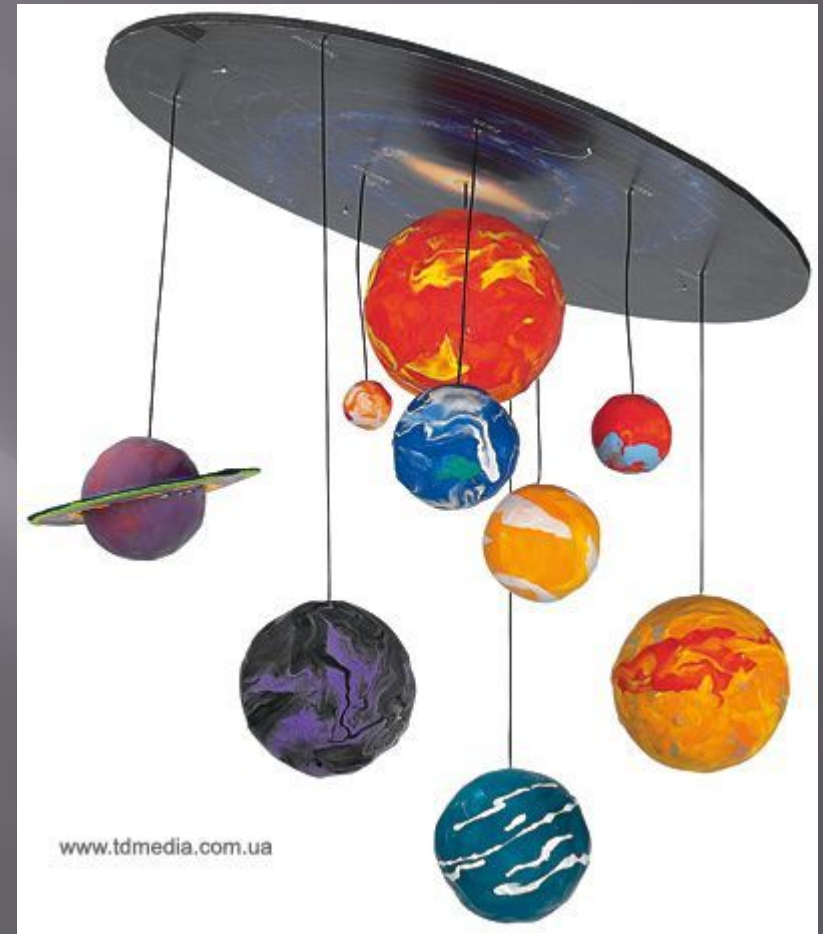


# Name the main planets of the Solar System



# “Planets”

What planet of  
the Solar System  
is the biggest ?



**What is  
the coldest  
planet in  
the Solar System?**



# Planets

How many Saturn satellites are there?



# The Solar System

What is the nearest galaxy to our Solar System?



# The Solar System

**What is the smallest star?**



# The Solar System

**What is the most distant star in our galaxy?**



# What is the brightest star?





# What is the Solar System?



# 22 satellites of Saturn

22 satellites of Saturn. They have the names of ancient heroes, for example, Mimas, Enceladus, Pandora, Epimetheus, Tethys, Dione, Prometheus. The most interesting of them: Janus - it is the closest to the planet Titan - the largest (greatest satellite in the solar system in mass and size)



# The most powerful solar flare.

The most powerful outbreaks were reported from 6 to 14 March 1989. These solar explosions were so powerful magnetic storms that northern lights, typical of the northern polar regions of the planet, moved far to the south. It could have been observed even the Mediterranean.



# Y. Gagarin- the first astronaut in the world

**Yury Gagarin (on March 9, 1934, Klushino, Gzhatsky area, the Western area on March 27, 1968, about the city of Kirzhach, the Vladimir region) the Soviet space pilot, the Hero of the Soviet Union, the gentleman of the highest distinctions of a number of the states**



# **Neil Alden Armstrong**

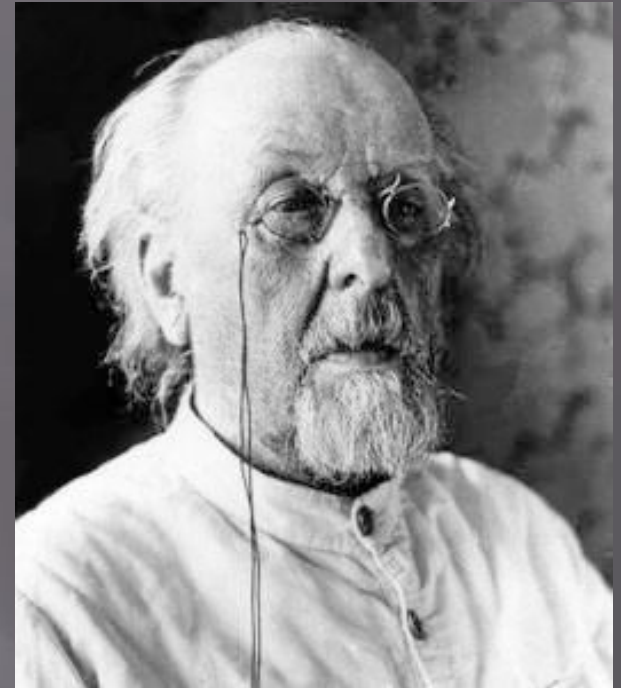
**On August 5, 1930 — on August 25, 2012)**

**the American astronaut of NASA, the test pilot, the space engineer, the professor of university, the naval pilot of the USA, the first person who has stepped into the Moon (on July 20, 1969) during lunar expedition of the ship "Apollo-11".**



# **Konstantin Tsiolkovsky**

**(5 September (17), 1857- September 19, 1935, the Russian and Soviet scientist-self-educated person and the inventor, the school teacher. The Founder of theoretical astronautics. He proved use of rockets for flights in space, he came to a conclusion about need of use of "rocket trains" — prototypes of multistage rockets. His main scientific works belong to aeronautics, rocket dynamics and astronautics.**



# **Sergey Pavlovich Korolyov**

**(on December 30, 1906 (on  
January 12, 1907), Zhitomir —  
on January 14, 1966, Moscow)  
the Soviet scientist, the designer  
and the organizer of production  
of the missile and space  
equipment and the rocket USSR  
weapon, the founder of practical  
astronautics. One of the largest  
figures of the XX century in the  
field of space rocket production  
and shipbuilding.**



- 1- Konstantin Tsiolkovsky**
- 2- Valentina Tereshkova**
- 3- Sergey Korilev**
- 4- Alexey Leonov**
- 5- Neil Alden Armstrong**
- 6- Svetlana Savitskaya**
- 7- Yuriy Gagarin**

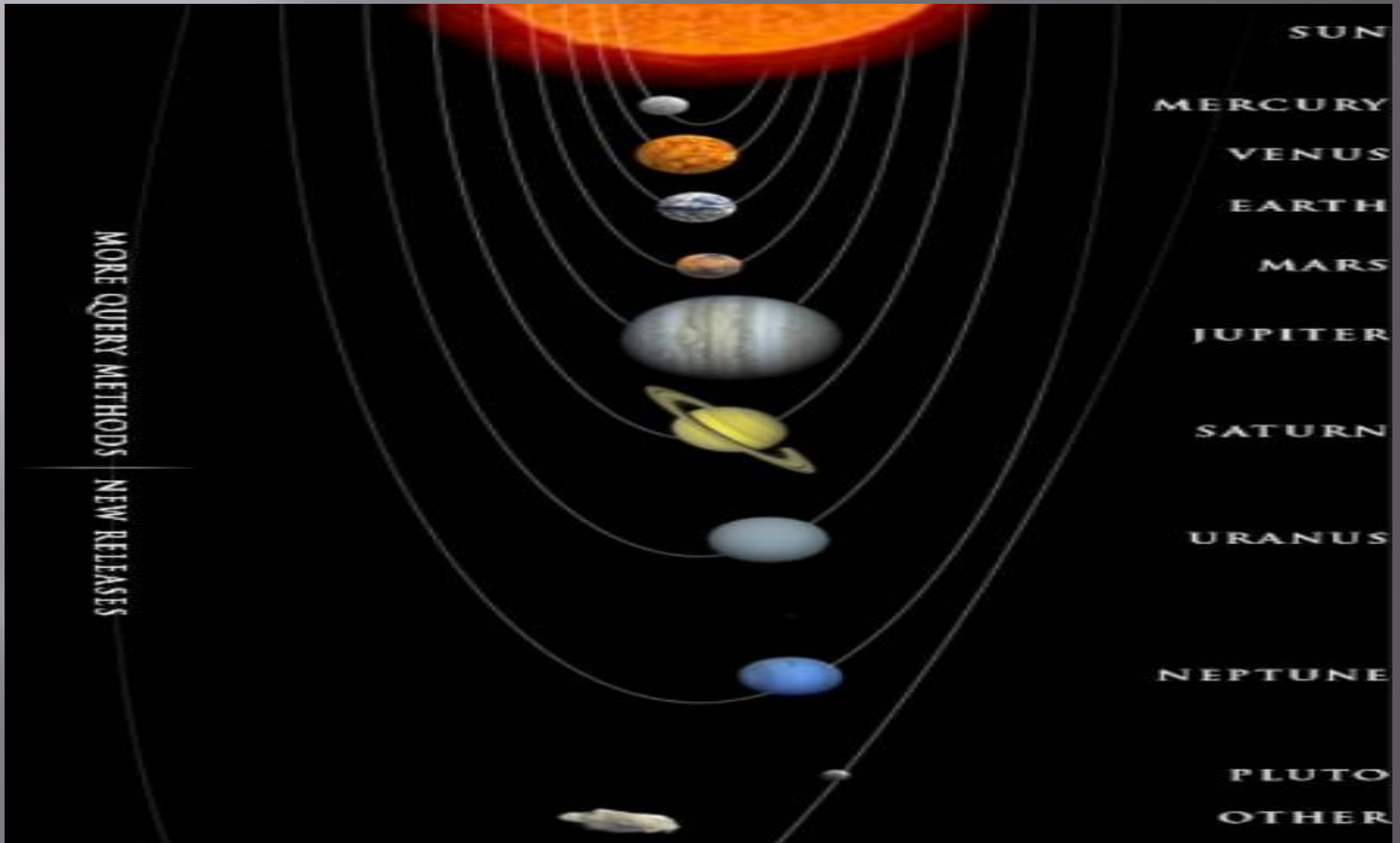




# There are 9 main planets in the Solar system



# The Solar System



**The Earth looks blue from space because 70 %, nearly three quarters, is covered with water**



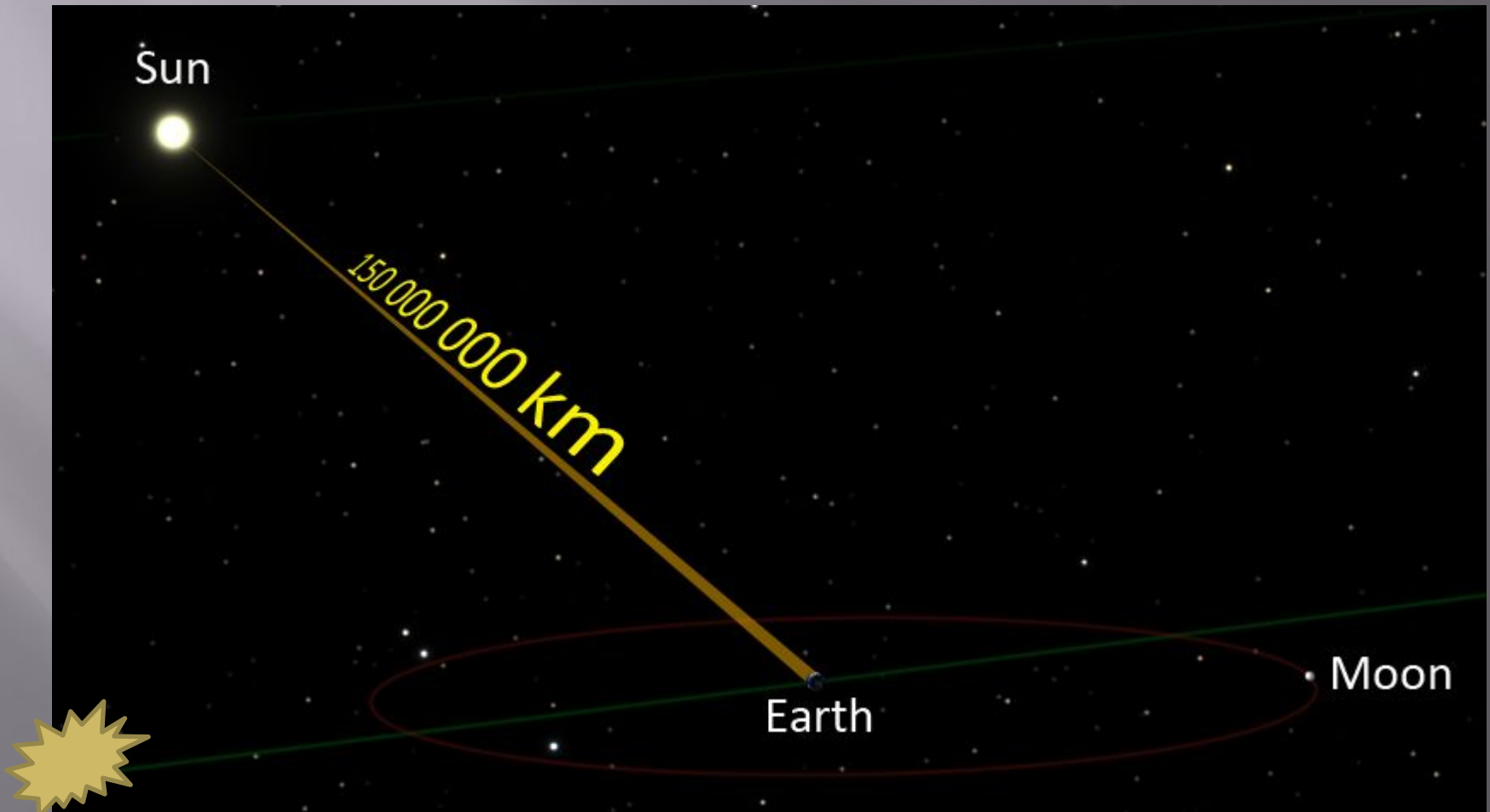
**The Earth is 4,600 millions  
years old**



**It's 20,000 kilometers**

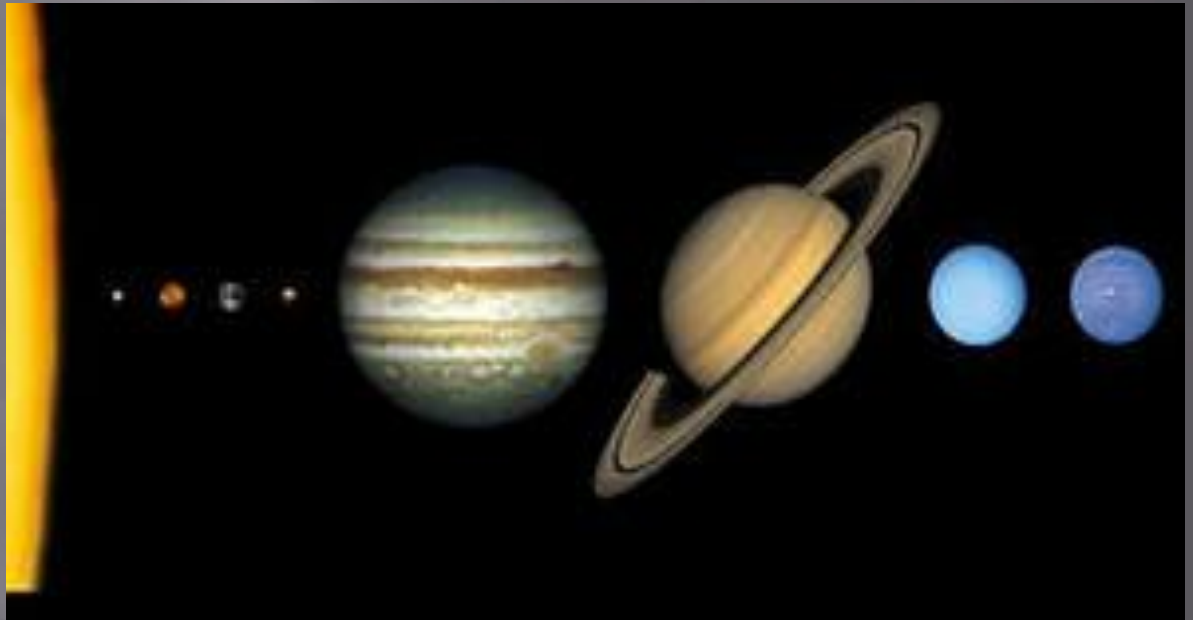


# The Earth



# “Planets”

The biggest planet of the Solar system is Jupiter



# Oceans

The Pacific

The Atlantic

The Indian

The Arctic





# Uranus

The coldest planet in the Solar System is Uranus. Uranium is the seventh from the orbit of the sun, having a diameter of 4 times the diameter of the earth, it goes to 140 times less solar energy. That is why the temperature on this planet varies from -208 to -224 degrees Celsius. Distance from Uranus to the Sun is 2871 million km. The size of its 25600 km radius, weight -  $8,7 \cdot 10^{25}$  kg (almost 15 times more than the mass of the Earth). So Uranus refers to the giant planets.



# Sirius

The brightest of the nearest stars.

Sirius in the constellation Canis Major, which is considered the brightest among our closest star, brighter than the sun just 23.5 times, the distance to it - 8.6 light years away.



The closest galaxy is considered to be an astronomical object at No. M31, better known as the Andromeda Galaxy. The distance to it is 670,000 pc or slightly less than 2.2 million light-years.



The most distant star in our galaxy - red giant star size 18, located towards the constellation of Libra and remote from the Earth at a distance of 400,000 light years. The diameter of the Milky Way is estimated at about 100 000 light-years away, and the star is in the area of so-called galactic halo.



# The smallest star.

In 1986, the efforts of mostly American astronomers at the Kitt Peak Observatory in our galaxy has been discovered previously unknown star, designated LHS 2924, whose mass is about 20 times smaller than the sun, and the luminosity of less than 6 orders of magnitude.



# The Solar System

- ▣ The solar system - one of about 400 billion star systems that make up the Milky Way, a spiral galaxy with a diameter 30 kpc. It is located at a distance of 8 kpc from the galactic center, 20-25 pc north of the plane of the spiral.

