

Solar system

Tashkent state institute of
Oriental studies
Chinese philology faculty
Chinese – English group
2nd year student Djalilova
Sokhida

Theme: About Planets
Checked by : Jo'rayeva Z.

Plan:

- 1. The planets
- 2. Outer planets
- 3. Some important facts about planets

About Planets

Planets are the large celestial bodies which revolve around the sun in closed elliptical paths called orbits. The planets shine because they reflect the light of the sun which falls on them. The easiest way to distinguish planets from the stars in the night sky is that the stars twinkle at night but the planets do not twinkle at night. The planets move around the sun from west to east, so the relative positions of the planets in the night sky keep changing day by day. The planets are very small as compared to the sun or other stars.

There are eight planets in the solar system -

1. Mercury

2. Venus

3. Earth

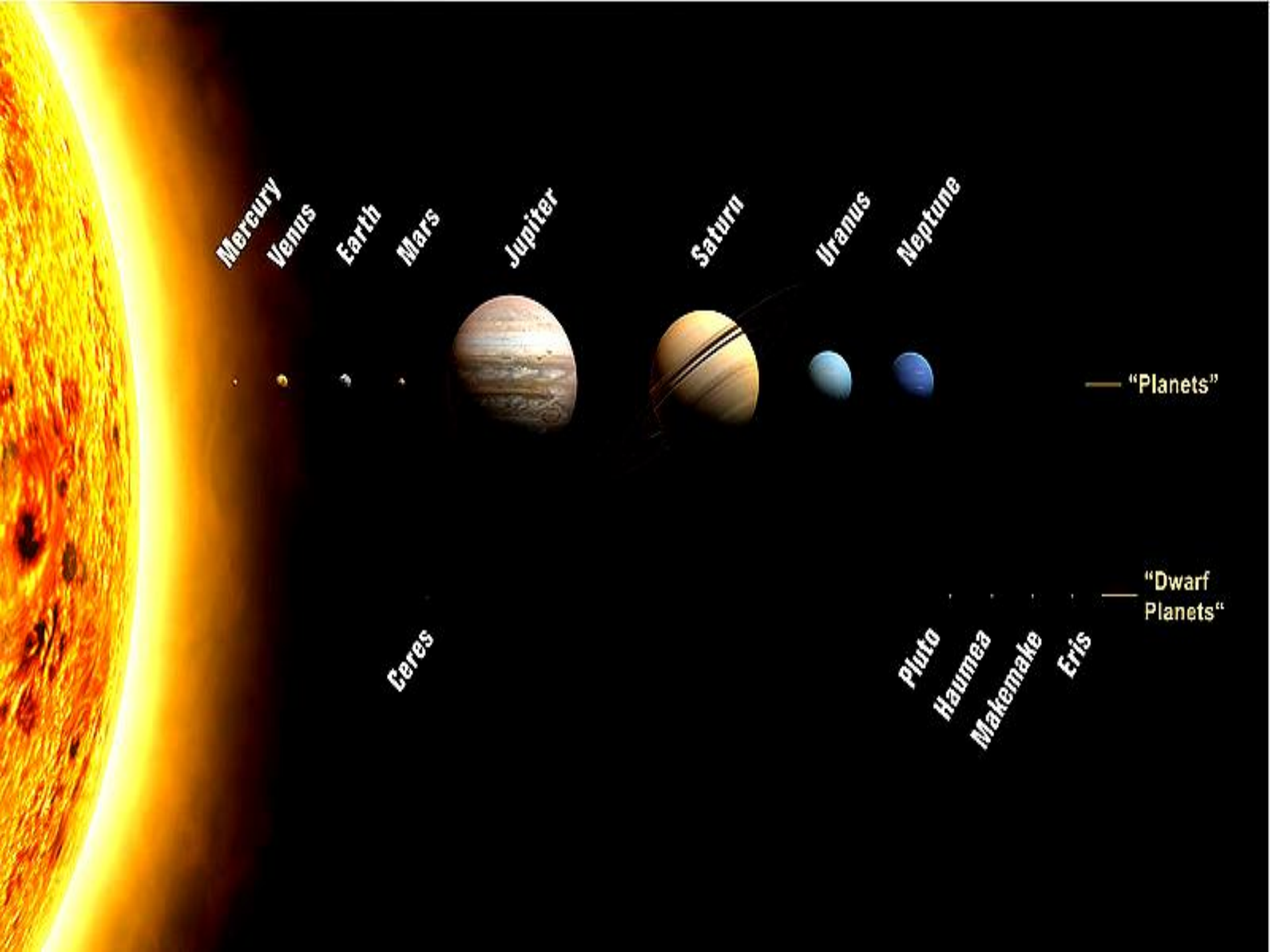
4. Mars

5. Jupiter

6. Saturn

7. Uranus

8. Neptune



Mercury

Venus

Earth

Mars

Jupiter

Saturn

Uranus

Neptune

— "Planets"

Ceres

Pluto

Haumea

Makemake

Eris

— "Dwarf Planets"

Outer planets

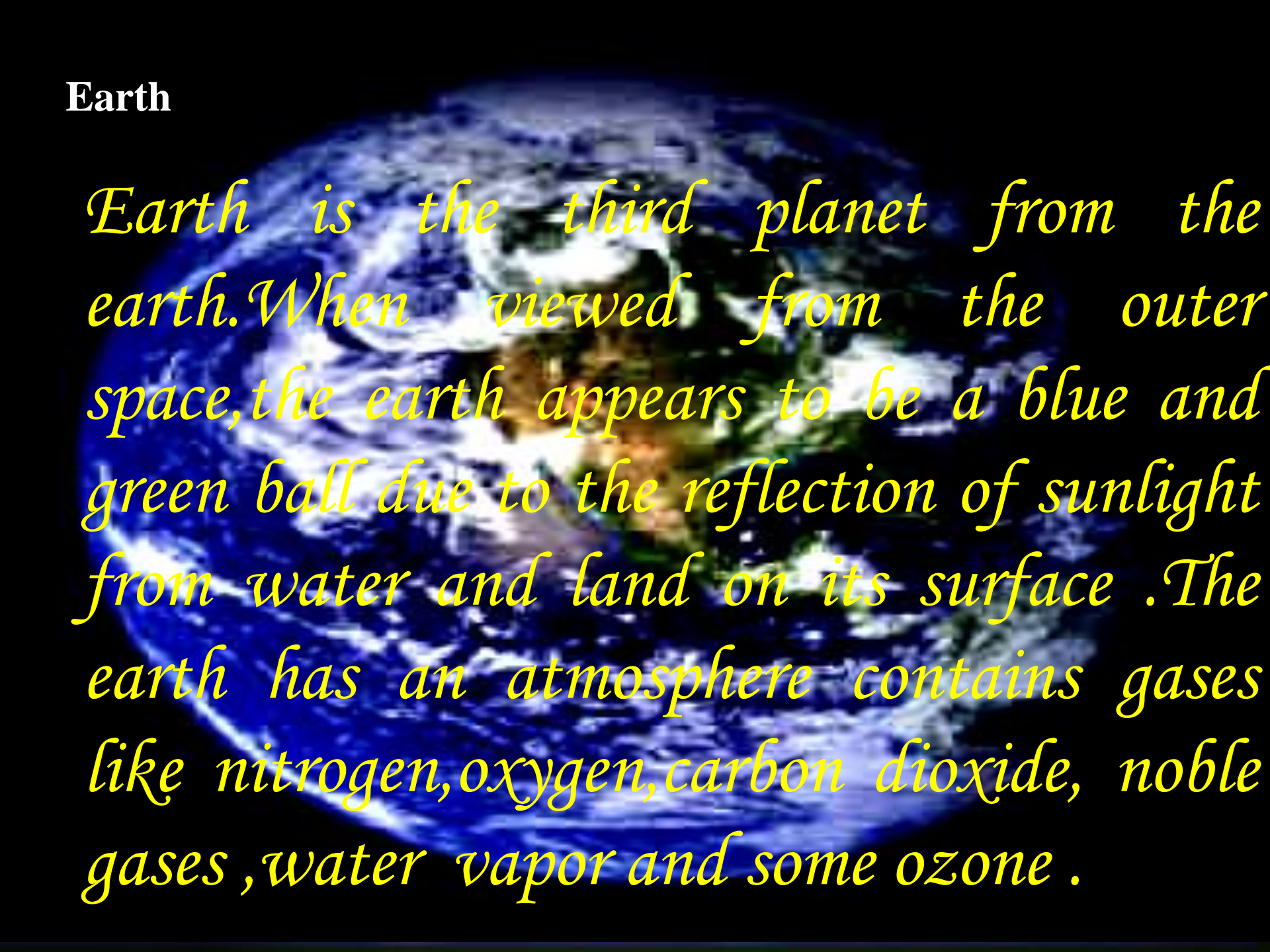
- *Jupiter, Saturn, Uranus and Neptune are called outer planets. The first four outer planets are very giant. They are made of hydrogen and helium gases and not of rock and metal.*

All the planets revolve around the sun and also rotate on their axis. Some important facts and figures about eight planets of the solar system are given on the next slide.

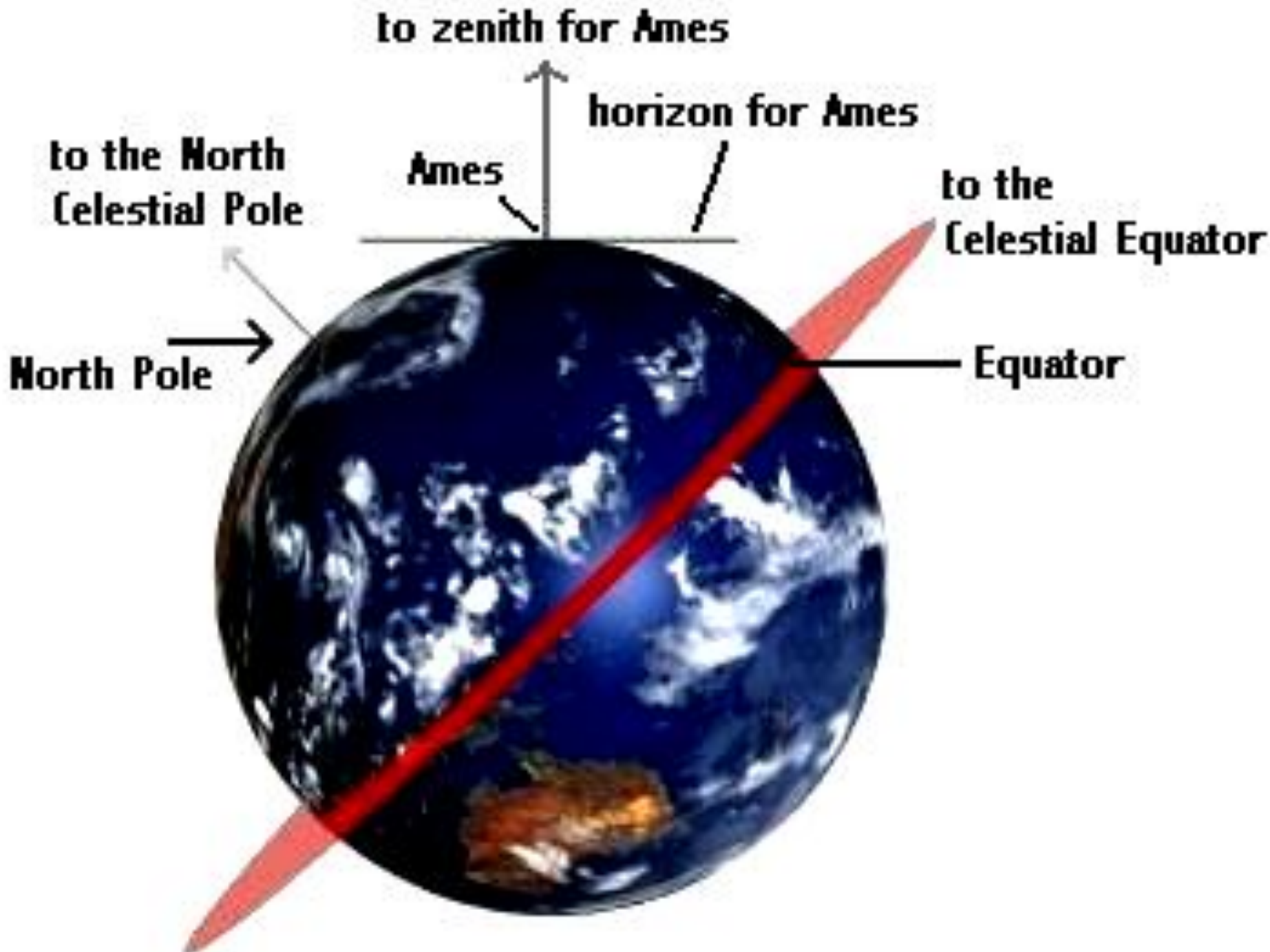
Venus

Venus is the second planet from the earth. Venus is slightly smaller than the earth. Venus is a rocky planet. The planet Venus has a dense atmosphere which consists almost entirely of carbon dioxide gas. The cloudy atmosphere of Venus is an excellent reflector of sun light. The planet Venus is the brightest object in the night sky (except the moon). Being quite near to the sun, the planet Venus is very hot. The planet Venus also gets heated excessively by the trapping of the sun's heat rays by carbon dioxide gas present in its atmosphere which is also called green house effect. The maximum temperature on the planet is 480°C .

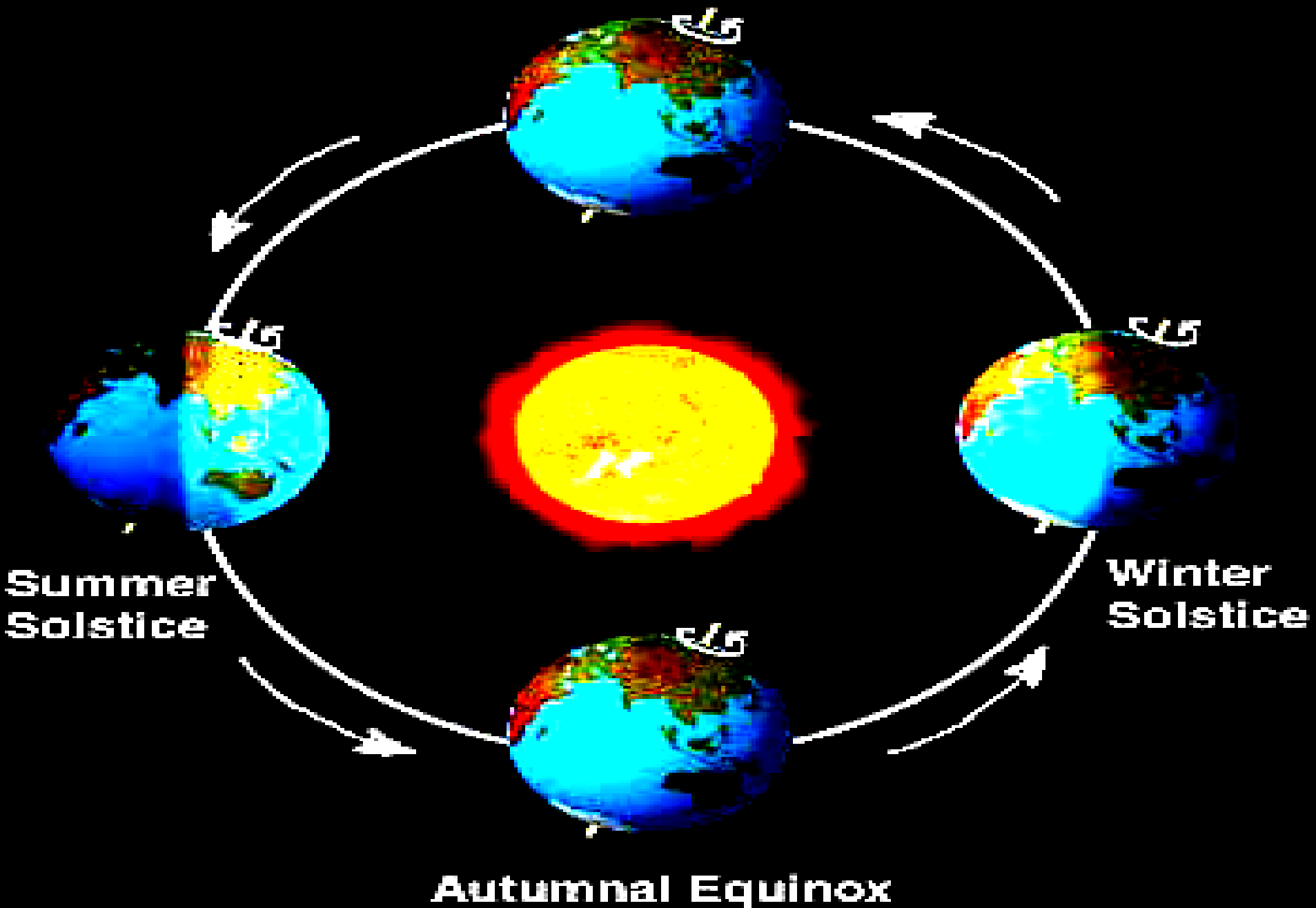
Earth

A satellite view of Earth from space, showing a blue and green planet with white clouds. The image is centered on the Earth, with the blue of the oceans and the green of the continents and forests visible. The white clouds are scattered across the surface, adding texture and depth to the view. The overall appearance is that of a vibrant, life-sustaining planet.

Earth is the third planet from the sun. When viewed from outer space, the earth appears to be a blue and green ball due to the reflection of sunlight from water and land on its surface. The earth has an atmosphere that contains gases like nitrogen, oxygen, carbon dioxide, noble gases, water vapor and some ozone.



Vernal Equinox



Mars

Mars is the fourth planet from the sun. Mars is also called the Red planet because its surface appears red. The red color of Mars is caused by the presence of hydrated iron oxide compound on its soil.

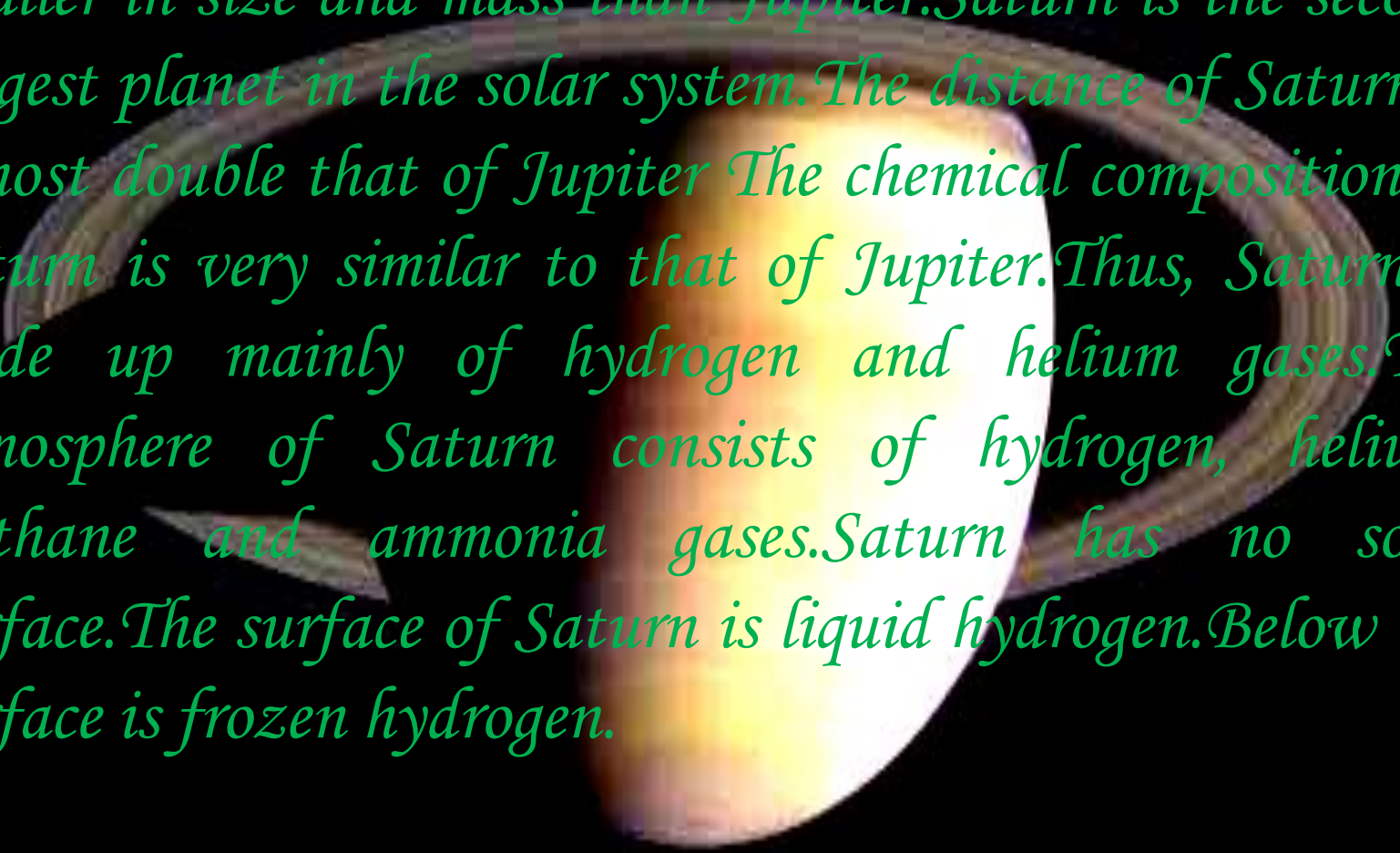
Of all of the planets, Mars is most like the Earth. Mars is a rocky planet. Mars has a thin atmosphere as compared to the Earth. The thin atmosphere of mars contains mainly carbon dioxide with small amounts of nitrogen, oxygen, noble gases and water vapour.

Jupiter

Jupiter is the fifth planet from the earth. Jupiter is the biggest planet of the solar system. The diameter of Jupiter is 11 times the diameter of the Earth and mass is about 318 times that of the Earth. Because of its very big size, Jupiter can be seen easily in the night sky. Jupiter is made mainly of hydrogen and helium gases. Jupiter has a very deep atmosphere . The atmosphere of the Jupiter consists of helium, hydrogen, methane and

Saturn

Saturn is the sixth planet from the sun. Saturn is somewhat smaller in size and mass than Jupiter. Saturn is the second biggest planet in the solar system. The distance of Saturn is almost double that of Jupiter. The chemical composition of Saturn is very similar to that of Jupiter. Thus, Saturn is made up mainly of hydrogen and helium gases. The atmosphere of Saturn consists of hydrogen, helium, methane and ammonia gases. Saturn has no solid surface. The surface of Saturn is liquid hydrogen. Below the surface is frozen hydrogen.

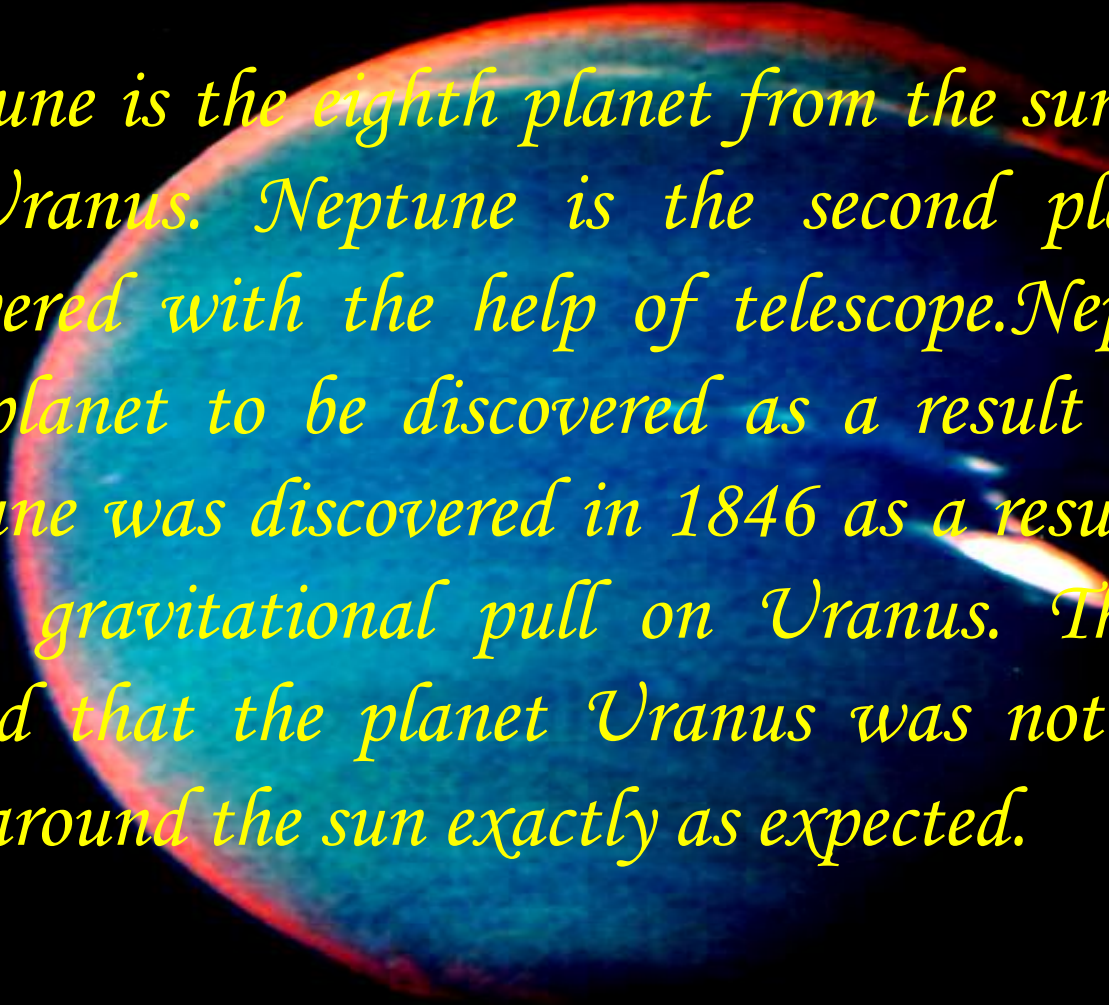
A photograph of the planet Saturn, showing its characteristic rings. The planet is a pale yellowish-white color, and the rings are a similar color, appearing as a series of concentric bands. The background is dark, making the planet and rings stand out.

Uranus

Uranus is the seventh planet from the sun. Uranus was the first planet to have been discovered with the help of a telescope. Uranus was discovered with the William Herschel in the year 1781. Though the diameter of Uranus is almost four times that of the Earth, it appears as a small disc through a telescope. This is because Uranus is very, very far off from the Earth. The distance of Uranus from the sun is almost double that of the Saturn. After Jupiter and Saturn, Uranus is the third biggest planet in the solar system.

Neptune

Neptune is the eighth planet from the sun. It lies beyond the Uranus. Neptune is the second planet which is discovered with the help of telescope. Neptune was the first planet to be discovered as a result of predictions. Neptune was discovered in 1846 as a result of the effect of its gravitational pull on Uranus. The astronomers noticed that the planet Uranus was not moving in its orbit around the sun exactly as expected.



Some important facts about planets

Name of Planet	Diameter of planet	Distance from sun	Time taken to turn once on its axis	no.of moons
Mercury	4880km	58×10^6	58 days	None
Venus	12100 km	108×10^6	225 days	None
Earth	12760km	150×10^6	356 $\frac{1}{4}$ days	1
Mars	6780km	228×10^6	687 days	2
Jupiter	142800km	778×10^6	11 $\frac{3}{4}$ years	28
Saturn	120000km	1427×10^6	29 $\frac{1}{2}$ years	30
Uranus	50800km	2870×10^6	84 years	21
Neptune	48600km	4504×10^6	165 years	8