

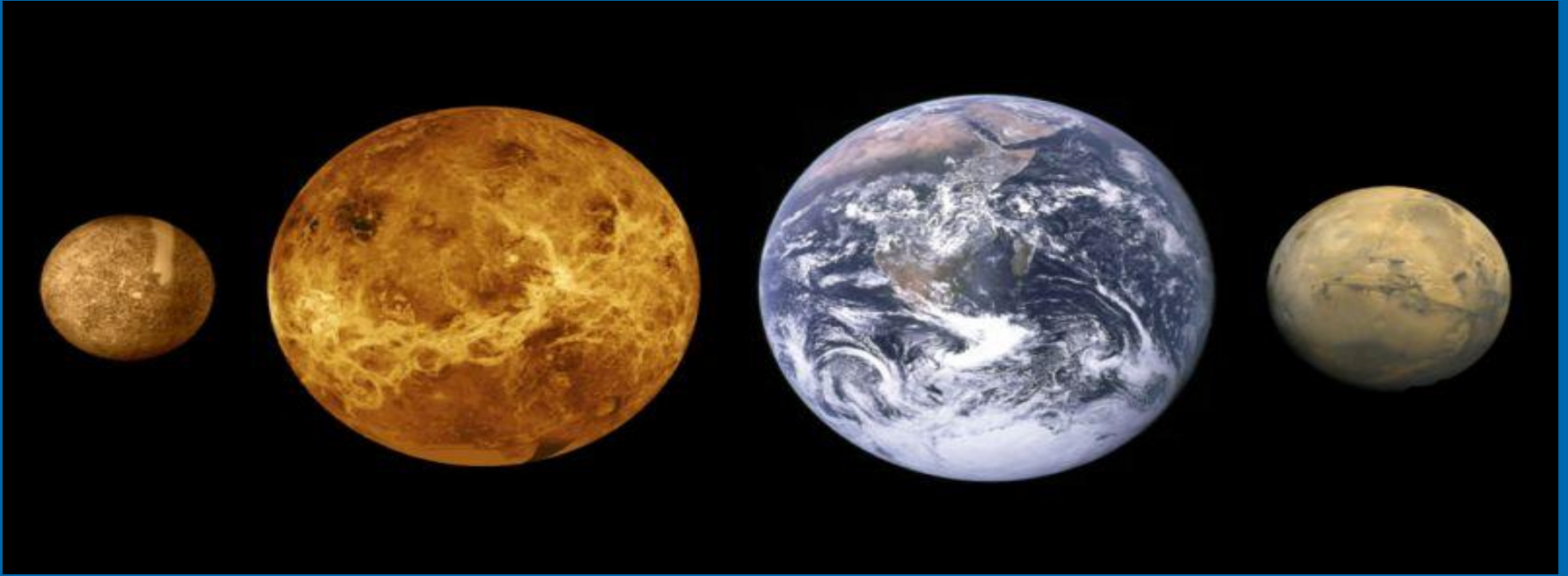
**It is**  
**interesting**  
**to know**



# *Solar System.*



# *Inner planets*



## *The inner planets :*

- The Mercury,
- The Venus,
- The Earth,
- The Mars.

# *The Mercury.*



- It is the closest planet to the Sun and the smallest planet (0.055 Earth masses). The Mercury has no natural satellites.

# *The Venus.*

- It is close in size to the Earth, (0.815 Earth masses). It is much drier than the Earth. The Venus has no natural satellites. It is the hottest planet, with surface temperatures over 400 °C.





# *The Earth.*



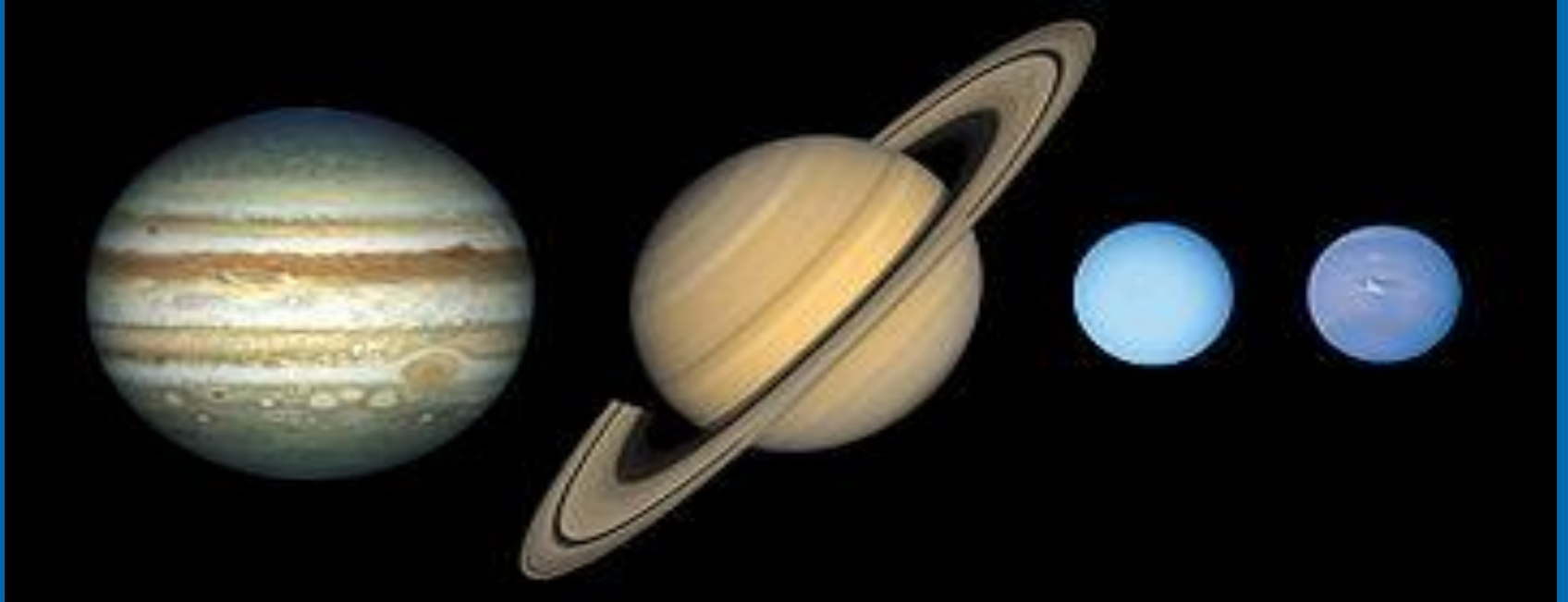
- It is the largest and densest of the inner planets and is the only place in the universe where life is known to exist. The Earth's atmosphere is radically different from those of the other planets, having been altered by the presence of life to contain 21% free oxygen.

# *The Mars.*

- It is smaller than the Earth and the Venus (0.107 Earth masses). It possesses an atmosphere of mostly carbon dioxide. The Mars has two tiny natural satellites (Deimos and Phobos) thought to be captured asteroids.



# Outer planets



The outer planets:

- The Jupiter
- The Saturn
- The Uranus
- The Neptune



# *The Jupiter.*



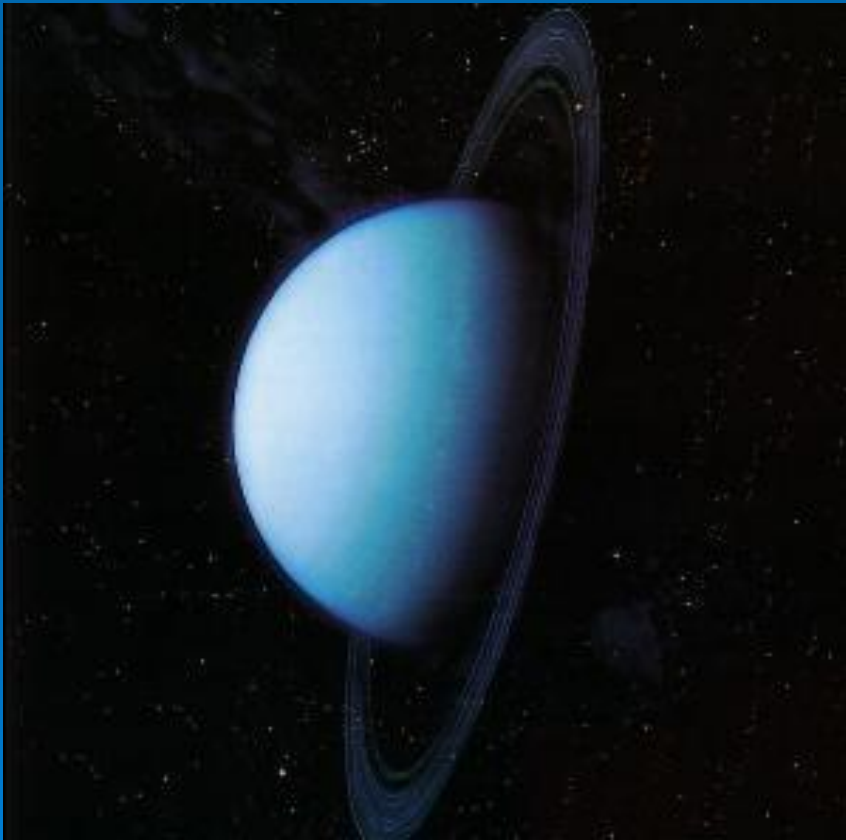
- The Jupiter has 318 Earth's masses. The Jupiter has 63 known satellites. The four largest are Ganymede, Callisto, Io, and Europa, show similarities to the terrestrial planets. Ganymede, the largest satellite in the Solar System, is larger than the Mercury.

# *The Saturn.*

- The Saturn is distinguished by its extensive ring system. The Saturn has 60% of the Jupiter's volume. The Saturn has 60 confirmed satellites. The Titan is larger than the Mercury and the only satellite in the Solar System with a substantial atmosphere.



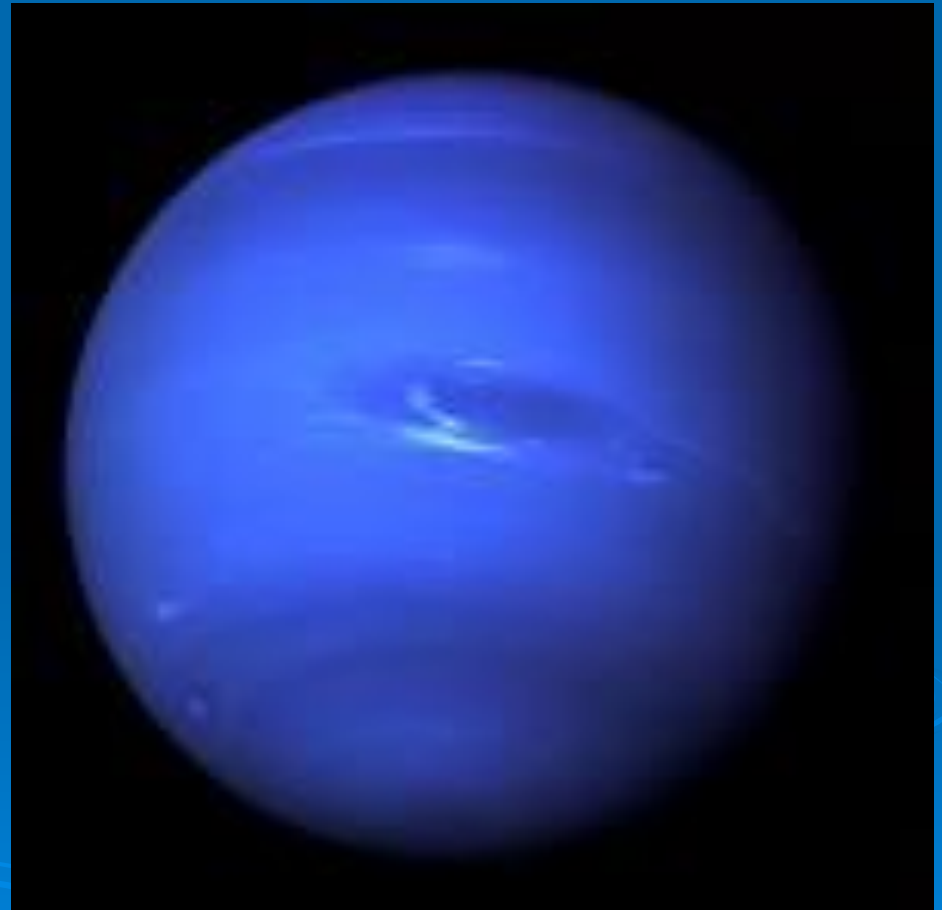
# *The Uranus.*



- The Uranus is the lightest of the outer planets. Uniquely among the planets, it orbits the Sun on its side. The Uranus has 27 known satellites, the largest ones being the Titania, the Oberon, the Umbriel, the Ariel and, the Miranda

# *The Neptune.*

- The Neptune though slightly smaller than the Uranus, is more massive (equivalent to 17 Earths) and therefore more dense. It radiates more internal heat, but not as much as the Jupiter or the Saturn. The Neptune has 13 known satellites.



# Comets.







- Comets are small Solar System bodies, typically only a few kilometres across, composed largely of volatile ices. Short-period comets have orbits lasting less than two hundred years. Long-period comets have orbits lasting thousands of years. Old comets that have had most of their volatiles driven out by solar warming are often categorised as asteroids.

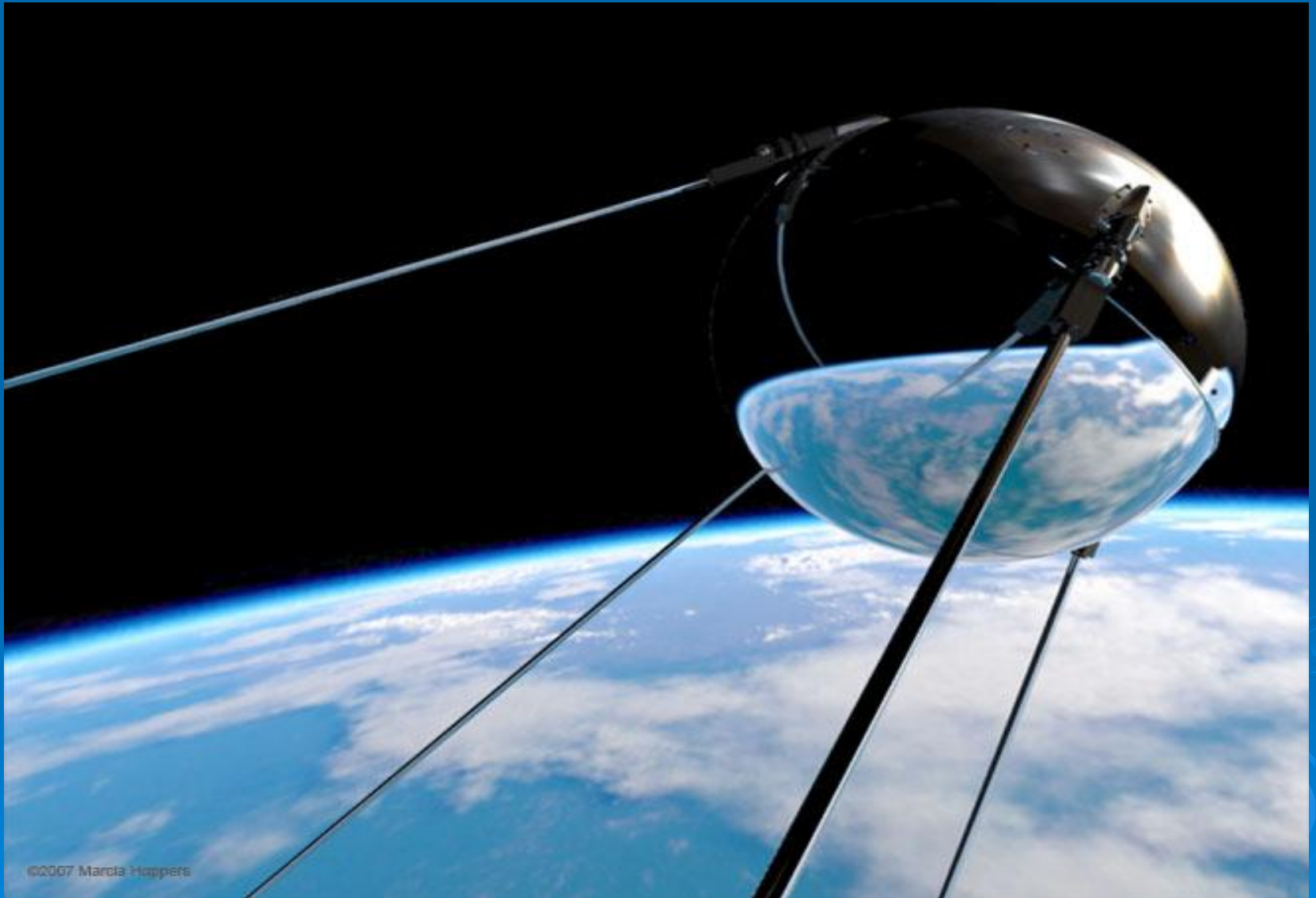
# *Space Transportation System.*





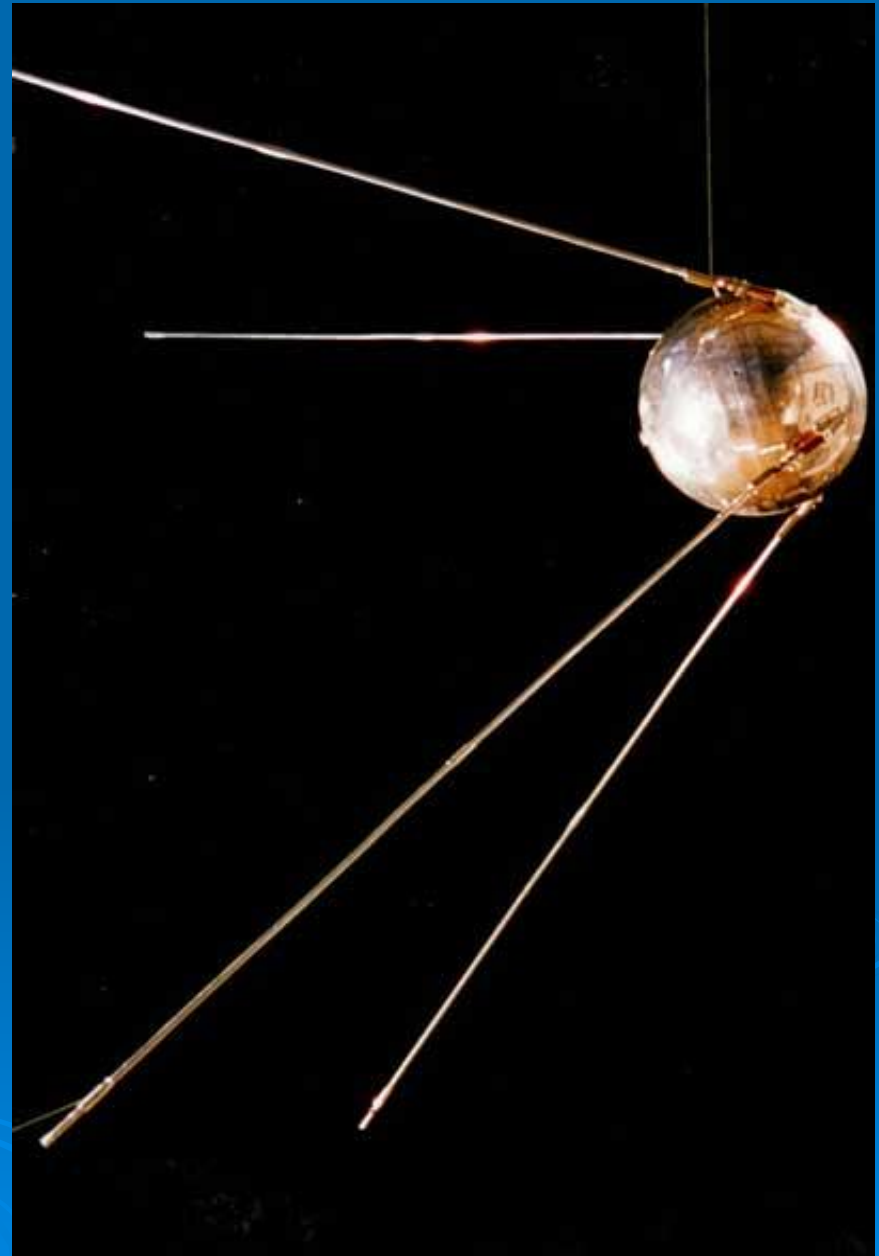
- The Space Transportation System, or The Space Shuttle is a spacecraft operated by NASA for orbital human spaceflight missions. Major missions have included launching numerous satellites and interplanetary probes, conducting space science experiments, and servicing and construction of space stations. The system is scheduled to be retired from service in 2010 after 134 launches.

# *Sputnik 1.*





□ ***Sputnik 1*** was the first Earth-orbiting artificial satellite. It was launched into an elliptical low earth orbit by the Soviet Union on 4 October 1957, and was the first in a series of satellites collectively known as the Sputnik program. *Sputnik-1* was launched during the International Geophysical Year from Site No.1, at the 5th Tyuratam range, in Kazakh SSR (now at





# Orbital flights of Soviet space dogs.



*The first animal launched into orbit.*





- **Laika** was a Soviet space dog who became the first animal to orbit the Earth and the first orbital death. Laika died a few hours after launch, presumably from stress and overheating, probably due to a malfunction in the thermal control system. On April 11, 2008, Russian officials unveiled a monument to Laika. A small monument in her honor was built near the military research facility in Moscow which prepared Laika's flight to space.

# Belka and Strelka.





- **Belka and Strelka** spent a day in space aboard Sputnik 5 on August 19, 1960 and safely returned to the Earth. They were the first Earth-born creatures to go into orbit and return alive.

