



# THE SPACE RACE



## Timeline

| 1955  | 1957  | 1957   | 1961   | 1961   | 1963  | 1969   | 1971  |
|---|---|--|--|--|---|--|---|
| The Space Race begins when the U.S.A. and Soviet Union announce they want to launch satellites. | The Soviet Union send Laika (a dog) into space and it orbits the Earth. | The Soviet Union sends the first satellite into space (Sputnik). | The U.S.A. successfully sends the first chimpanzee to space (Ham). | The Soviet Union launches the first human into space (Yuri Gagarin). | Soviet cosmonaut Valentina Tereshkova becomes the first woman in space. | Americans Neil Armstrong and Buzz Aldrin land on the moon. | The U.S.A. take part in their 5 <sup>th</sup> and 6 <sup>th</sup> moon landings, using the Lunar Rover to travel. |

## Key Vocabulary

|                      |  |
|----------------------|--|
| Apollo Program       | American spaceflight project between 1961-1972 run by NASA who successfully landed the first humans on the moon.   |
| asteroid             | Giant rocks or smaller planets that orbit the sun, especially between Mars and Jupiter.  |
| cold war             | Political and military tension between two countries which does not involve open warfare.  |
| gravity              | Gravity is the force which causes things to drop to the ground.  |
| Kennedy Space Centre | Launch site of Apollo 11 and many other spacecrafts in Florida, U.S.A. named after President John F. Kennedy.  |
| lunar                | A term relating to the moon.   |
| N.A.S.A.             | The National Aeronautics and Space Administration  |
| orbit                | An orbit is the curved path in space that is followed by an object going round and round a planet, moon, or star.  |
| satellite            | A satellite is an object which has been sent into space to collect information or to be part of a communications system. Satellites move continually round the Earth or around another planet. |
| Vostok Program       | Soviet Union spaceflight program which ran between 1961-1963 and successfully placed the first humans into space.  |



## DID YOU KNOW?



The Russians called their space pilots cosmonauts meaning "sailors of the universe". The Americans were called astronauts meaning "star sailors".

## General Knowledge

### Space Exploration

The Space Race had its origins in the missile-based nuclear arms race between the Soviet Union and the U.S.A. following World War II, which then led to a competitive race to get humans in space and a man on the moon. However, space exploration truly comes from our fascination with what is 'out there': aliens, asteroids, inhabitable planets and even the origins or the meaning of life itself.

### President John F. Kennedy's Speech

In 1962, during a speech at Rice University, he said, "The great British explorer George Mallory, who was to die on Mount Everest, was asked why he wanted to climb it. He said, "Because it is there." Well, space is there, and we're going to climb it, and the moon and the planets are there, and new hopes for knowledge and peace are there. As we set sail, we ask God's blessing on the most hazardous and dangerous and greatest adventure on which man has ever embarked."

### Space Tourism

In 2021, a private company 'Virgin Orbit' sent a manned crew (including owner Richard Branson) onboard the VSS Unity for a brief test flight 82km above the Earth's surface. Since then, Jeff Bezos (Amazon) and Elon Musk (Tesla) have also enjoyed travelling to space.

## Famous Figures

### Laika and Ham

Laika the dog was launched in 1957 by the Soviet Union. The first chimpanzee to be launched into space was called Ham, named after the American laboratory that prepared his mission (Holloman Aerospace Medical Centre). Laika did not survive but Ham did.

### Yuri Gagarin

The Soviet cosmonaut became a worldwide celebrity after he made the journey into space in 1961. He spent 108 minutes orbiting the Earth and was celebrated in Moscow's Red Square two days later with millions in attendance. He now has a titanium statue in the same place!

### Neil Armstrong, Buzz Aldrin and Michael Collins

In 1969, Apollo 11 successfully landed on the moon where Neil Armstrong would famously say, 'One small step for man, one giant leap for mankind.' Michael Collins, the third astronaut continued to orbit the spacecraft whilst the others explored the moon, spending almost 22 hours on the surface. Some suggest the unmoving flag and lack of stars in the images means it was a hoax, although moon rocks collected, footage taken, and equipment left behind, prove otherwise.