

STARGAZER KNOWLEDGE ORGANISER



The Space Race

The Space Race was a competition between the Soviet Union (USSR) and the United States that took place in the 1950s and 1960s when the two countries were involved in a war called the Cold War. The main aim of the Space Race was to go into space and reach the Moon first. President of the United States, John F Kennedy, famously declared, *'We choose to go to the Moon!'* By the end of the decade, both the USSR and the USA had invented the technology to make it possible. There were many exciting firsts during the Space Race.



First satellite in space (USSR)
Sputnik 1
October 1957



First animal in space (USSR)
Laika the dog
November 1957



First human in space (USSR)
Yuri Gagarin
April 1961



First spacewalk (USSR)
Aleksey Leonov
March 1965



First manned spacecraft to orbit the Moon (USA)
Apollo 8
December 1968



First person to step on the Moon (USA)
Neil Armstrong
July 1969

Youri Gagarin was a Soviet Air Forces pilot and cosmonaut who became the first human to journey into outer space in his capsule, Vostok 1 and he completed one orbit of Earth on 12 April 1961.



Sally Ride had many positive attributes, she worked hard and she was keen on science. She worked hard in her education and she was also an excellent sports person who went on to win a place at Stamford university. On 18th June, 1983, Dr Sally Ride made history as the first American woman in Space.



Apollo 11 timeline

The first Moon landing took place on the 21st July 1969.

16th July Apollo 11 takes off from the launch pad at Kennedy Space Centre, Florida. It is manned by Neil Armstrong, Buzz Aldrin and Michael Collins.

18th July Armstrong and Aldrin check the *Eagle*, the lunar landing module, to make sure everything is ready for the Moon landing.

19th July Apollo 11 begins to orbit the Moon.

20th July 5.44pm The *Eagle*, manned by Armstrong and Aldrin, undocks from the command module *Columbia* and descends towards the Moon's surface. Collins stays onboard *Columbia*.

8.18pm Armstrong lands the *Eagle* on the surface of the Moon.

21st July 2.56am Armstrong steps onto the surface of the Moon and says, *'That's one small step for man, one giant leap for mankind.'*

3.15am Aldrin steps onto the surface of the Moon. The astronauts lay commemorative plaques, plant an American flag, collect samples and carry out experiments.

5.11am Armstrong and Aldrin climb back into the *Eagle*.

5.54pm The *Eagle* lifts off from the surface of the Moon.

9.35pm The *Eagle* docks back onto the command module *Columbia*.

22nd July The astronauts begin their return journey to Earth.

24th July 4.50pm Apollo 11 splashes down into the Pacific Ocean.



THE TELESCOPE:

A telescope is an instrument that allows people to see distant objects. Telescopes are important tools in **astronomy**, or the study of planets, stars, and other objects in outer space. There are several different types of telescopes. Some, called light telescopes, gather **light** from objects. Other telescopes gather different kinds of information about the object being viewed.

By the early 1600s several people had made simple refracting telescopes. In 1609 the Italian scientist **Galileo** improved the design of a telescope made by a Dutch inventor. Later in the 1600s several inventors, including the English scientist Isaac Newton, built reflecting telescopes.

A U.S. astronomer built the first radio telescope in 1937. Other scientific telescopes developed along with spacecraft, which scientists began launching in the 1950s.



Neil Armstrong
Source: NASA

- **Occupation:** Astronaut
- **Born:** August 5, 1930 in Wapakoneta, Ohio
- **Died:** August 25, 2012 in Cincinnati, Ohio
- **Best known for:** First man to walk on the Moon

Apollo 11 and Walking on the Moon

On December 23, 1968 Neil was offered the command of the Apollo 11. This would be the first manned landing on the Moon. This was an exciting time for the entire country. The United States was in a race with the Soviet Union to put the first man on the Moon. If the flight was successful, Armstrong would be that man.