The <u>Space Race</u> was a competition of space exploration between the Soviet Union (now Russia) and the United States, which lasted from 1955 to 1969.

The Space Race began after the Soviet launch of *Sputnik 1* on 4 October 1957. The term "Space Race" started as a comparison to the arms race.

The Space Race became an important part of the rivalry between the United States and the Soviet Union during the Cold War. Space technology became an extra important area in this rivalry, because of possible military uses.

Autumn 1—Knowledge Organiser. What was the Space Race and why was it such an important event?



Valentina Tereshkova was the first female in space.



Laika was the first dog in space.



Yuri Gargarin was the first man to orbit Earth

Timeline of Key Space Race Events

4 October 1957 - The world's first artificial satellite.

28 May 1959 - First creatures to return alive from space.

12 April 1961 - The first man in space.

16 June 1963 - The first woman in space.

18 March 1965 - First ever spacewalk.

20 July 1969 - First man on the Moon

Key People

John F Kennedy - American President who made promise to reach the moon by 1970.

Alan Shepherd - First American in Space.

Yuri Gargarin – First person to orbit Earth.

Neil Armstrong – One of 3 American's on Apollo 11.

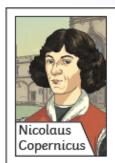
Buzz Aldrin - One of 3 American's on Apollo 11.

Michael Collins - One of 3 American's on Apollo 11.

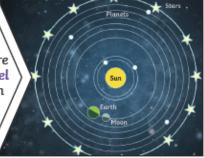
Valentina Tereshkova – First female in Space



Dr. Helen Sharman. Britain's first astronaut



The work and ideas of many astronomers (such as Copernicus and Kepler) combined over many years before the idea of the heliocentric model was developed. Galileo's work on gravity allowed astronomers to understand how planets stayed in orbit.



Key Vocabulary

<u>Apollo 11</u> - the first manned mission of the United States Apollo program, which had as its ultimate goal a manned lunar landing.

<u>Astronomer</u>—Someone who studies or is an expert at astronomy (space science.)

<u>Axis</u>—An imaginary line that a body rotates around e.g. Earth's axis (imaginary line) runs from the North Pole to the South Pole.

<u>Communism</u> - A theory or system of social organization in which all property is owned by the community and each person contributes and receives according to their ability and needs.

<u>Democracy</u> – A system of government by the whole population or all the eligible members of a state, typically through elected representatives.

Exploration - the action of exploring an unfamiliar area.

<u>Geocentric model</u>— A belief people used to have that other planets and the Sun

orbited around Earth.

<u>Heliocentric model</u>—The structure of the Solar System where the planets orbit around the sun.

Soviet - a citizen of the former Soviet Union, now Russia.

<u>Satellite</u> - an artificial body placed in orbit round the earth or moon or another planet in order to collect information or for communication.

<u>NASA</u> - National Aeronautics and Space Administration. United States government agency responsible for the civilian space program as well as aeronautics and aerospace research

<u>Orbit</u>—to move in a regular, repeating curved path around another object. <u>Rivalry</u> - competition for the same objective or for superiority in the same field.

Rotate — To spin e.g. Earth rotates on its own axis.

<u>Sputnik</u> - First artificial Earth satellite, it was launched by Moscow in 1957 and sparked U.S. fears of Soviet dominance in technology and outer space. <u>Technological advancement</u> – how this has impacted us today.

Key facts

- The Cold War (1945 1991) was a long period of tension between the democracies of the Western World and the communist countries of Eastern Europe. The west was led by the United States and Eastern Europe was led by the Soviet Union (Russia).
- These two countries became known as superpowers.
- Although the two superpowers never officially declared war on each other, they fought indirectly in proxy wars, the arms race, and the space race.
- The Space Race was considered important because it showed the world which country had the best science, technology, and economic system.
- After World War II both the United States and the Soviet Union realized how important rocket research would be to the military. They each recruited the top rocket scientists from Germany to help with their research. Soon both sides were making progress in rocket technology.
- The Space Race began in 1955 when both countries announced that they would soon be launching satellites into orbit. The Soviets took the US announcement as a challenge and even established a commission whose goal was to beat the US in putting a satellite into space.



