

Space Race Notes from 02/01/21

Cold War

A 'war' between the world's 2 greatest powers: capitalist USA and communist USSR (Russia) which developed after WW2

Didn't go into battle directly but fought through spying, backing each other's enemies and inventing better technologies

Officially ended in 1991

What was the Space Race?

A race to conquer space, between 1957 and 1969, between USSR and USA – a continuation of the Cold War. They both wanted to be the first country to put a man on the Moon.

USSR seemed to be winning throughout most of the race, USA finally beat them to the Moon

£25 billion spent

Because of the Space Race, there is now great technology across the world

Russia's achievements

- 1957 – Sputnik launched – first artificial satellite – size of a beach ball – took 98 minutes to orbit the Earth. Took USA by surprise.
- Nov 1957 – Sputnik 2 – sent a stray dog into space – Laika. She orbited Earth for 7 days and proved it could be done, but was then put to sleep before her oxygen ran out
- Luna 1 – 1st spacecraft to leave Earth's orbit
- Luna 2 – 1st spacecraft to reach the moon (though it crashed)
- Luna 3 – photographed the dark side of the Moon
- 1961 – Yuri Gagarin 1st man to orbit the Earth on Vostok 1 – took 108 minutes – not an easy ride – the 2 parts stuck together and he had to eject to get back to Earth
- 1963 – Valentina Tereshkova – 1st woman in space – orbited Earth 48 times in 3 days
- 1965 – 1st Spacewalk – Alexei Leonov

Astronauts called 'cosmonauts' in Russia

USA's achievements

NASA (National Aeronautics and Space Administration) created in 1958. Many of the people working there had developed rockets in Nazi Germany.

John F Kennedy (president) said they chose to go to the Moon 'not because it is easy but because it is hard'

1961 – sent a chimp into space. May 5th – Alan Shepherd 1st American in space.

1962 – John Glenn 1st American to orbit the Earth. Project Apollo began. Apollo 2-6 – remote-controlled, 7 manned, 8 got as far as Moon, 9+10 tried out lunar module, 11 got to the Moon.

1965 – 1st American spacewalk

A man on the Moon

Before Kennedy was killed, USA and USSR were talking about working together to send a man to the moon. Afterwards, they decided to race separately.

34,000 NASA employees and 375000 others worked on the Moon landing project.

On 9:32am, July 16th 1969, Neil Armstrong, Buzz Aldrin and Michael Collins set off on Apollo 11 from Cape Canaveral– took 3 days to get there, arriving on the 20th.

Michael Collins stayed in the spaceship orbiting the Moon, Armstrong and Aldrin went in the lunar module onto the surface of the Moon.

Had to manually land the module as it was heading to the wrong place.

Quotes 'The Eagle has landed' and 'One small step for man, one giant leap for mankind'

Spent 3 hours on the Moon, collected 22 kg of rocks.

Planted a US flag

600 million people watched the take-off – the astronauts carried cameras to relay pictures back to Earth

After the Space Race

Eventually USA and USSR worked together.

After Apollo 11 – 6 more Apollo missions, till 1972, when ended – inc Apollo 13 whose crew survived an explosion to get back safely

Apollo 11 parts were reused.

Space stations began to become important – Salyut 1 launched in 1971, then NASA's Skylab. Now the ISS

NASA now developing Orion spacecraft to take people back to the Moon in 2024 to explore the possibilities of a moon base/