



At the end of these Night Sky activities students will understand:

- Humans have been exploring space for more than 60 years
- Yuri Gagarin was the first person in space
- Neil Armstrong and Buzz Aldrin were the first people on the Moon
- There are now thousands of satellites in orbit

Astronomy background information

The first satellite placed in orbit was Sputnik 1, launched by the Soviet Union (USSR) in 1957. The first event listed in the timeline is the Vostok 1 flight of Yuri Gagarin. On April 12, 1961 Gagarin became the first human in space.

Valentina Tereshkova, pilot of the Vostok 6 spacecraft, was the first woman in space. In 1983, Sally Ride became the third woman and first American woman in space.

In the 1960s the US and USSR competed to be first to land people on the Moon in the "Space Race". American astronaut Neil Armstrong was the first man on the Moon on July 20, 1969. Buzz Aldrin was the other astronaut on the Apollo 11 mission to walk on the Moon. Five more successful Apollo landings followed and the final missions carried out very ambitious explorations, driving a rover to sites on the Moon.

Robot probes have hugely increased our knowledge of the Solar System. One of the most important of these is Voyager 2 (launched in 1977 *before* Voyager 1). Voyager 2's trajectory took advantage of a rare alignment of the outer planets to visit Jupiter, Saturn, Uranus and Neptune between 1979 and 1989. The spacecraft is on its way out of the Solar System but is still returning data to Earth every week.

The number of functioning satellites in orbit has increased from one in 1957 to 7,389 satellites in April 2021. There are also thousands of 'dead' satellites and space junk fragments in orbit. Although many satellites benefit us, there are now genuine reasons for concern about the number of them. Already satellites are spoiling astronomers' view of deep space objects while the chance of a disastrous chain reaction of satellites collisions is growing.

Accessible Learning:

- Text size can be increased in the Preferences section
- Star numbers can be reduced by sliding two fingers down the screen

App Essential Settings

No essential settings are required for this activity.