Moon Exploration

For as long as humans have looked up into the sky, the Moon has been a familiar sight.

Because Earth's moon is so close to us, only about 240,000 miles away, we can see its features even with the unaided eye.

In 1959, the Soviet Union's Luna spacecraft completed the Moon's first flyby.

By 1964, NASA's Ranger spacecraft provided the first photos of the Moon.

A few years later, the first robot on the Moon, Surveyor 1, captured over 11,000 photos and collected soil and temperature data.

In July of 1969, the Apollo 11 mission launched from Earth to head to the Moon, with a lunar module aboard.

The lunar module, the Eagle, landed in the Sea of Tranquility, delivering the first humans to its surface.

Buzz Aldrin and Neil Armstrong walked on Earth's moon, gazing back at our blue planet.

The Moon's proximity has made it accessible to humans for study, but what about other moons in our solar system?

Five planets other than Earth have moons,

and some of these moons were first discovered by telescope.

Galileo, an Italian astronomer, physicist and engineer, viewed Jupiter's four largest moons by telescope.

These moons are aptly called the Galilean moons.

Over the next 267 years, several more large moons in our solar system, including Mars's only two, were discovered by telescope.

In 1971, NASA's Mariner 9, the first spacecraft to orbit a planet, got a much better look at Mars's moons.

Although not the first spacecraft to examine Jupiter's major moons, NASA's Galileo orbited the gas giant for almost 8 years, capturing images from as low as 162 miles above the moons' surfaces.

NASA's Cassini spacecraft orbited Saturn for over a decade, collecting data about the planet and its moons, only to make a directed plunge into Saturn's thick atmosphere in 2017.

In two separate launches in 1977, the Voyager 1 and 2 spacecrafts were launched.

For decades, they have collected valuable information about the outer planets and their numerous moons.

Voyager 1 and 2 are now traveling in the outer reaches of our solar system, heading into interstellar space, and will continue to send information to Earth at the speed of light until their ability to generate electrical power ends.

Data on the moons in our solar system continues to be collected today with unmanned spacecraft, including the Hubble Space Telescope, which travels in orbit around Earth.