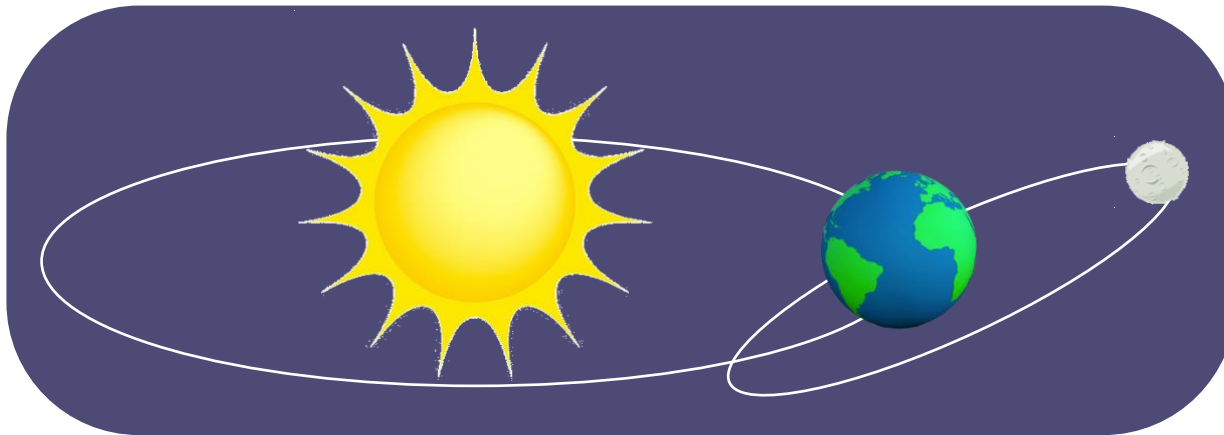


# Year 5: Let's Learn About... Stargazers

Spring 1



## Earth, Sun and Moon

The Sun is a star at the centre of our Solar System. The Earth rotates on its axis as it orbits the sun. As the Earth rotates, the part of the planet that faces the Sun experiences daytime. The part of the Earth that faces away from the Sun experiences night time.

The Moon orbits the Earth. It reflects the light of the Sun and looks different every day, depending on how much of its surface we can see from Earth.

Gravity keeps the Moon in orbit around the Earth and the planets in orbit around the Sun.

## Key events

**1957:** The first satellite in space, known as Sputnik 1 (USSR)

**1961:** The first human in space was Yuri Gagarin (USSR)

**1965:** The first spacewalk was completed by Alexey Leonov (USSR)

**1968:** Apollo 8 was the first spacecraft with a crew to orbit the moon (USA)

**1969:** The first person to step on the moon was Neil Armstrong (USA)

## Key Vocabulary

<b>Solar System</b>	A collection of planets, their moons and smaller objects that orbit the sun. Our solar system has 8 planets.	<b>axis</b>	An invisible line that objects spin on	<b>satellite</b>	A human-made machine or natural object that orbits in space and sends signals to and from Earth
<b>planet</b>	An almost spherical object made of rock, metal and gas that orbits a star.	<b>gravity</b>	A force that pulls objects towards each other. On Earth, gravity keeps everything on the ground.	<b>USSR</b>	A group of countries called the Soviet Union (which included Russia). These countries became independent in 1991.
<b>orbit</b>	A curved, invisible path that a planet or moon takes as it goes around something else	<b>rotate</b>	To turn around a fixed point	<b>USA</b>	A country in North America made up of 50 states



**Galileo Galilei (1564 – 1642)** was an Italian scientist who proved that the Earth orbits the Sun. He invented a telescope and noticed that sunspots appeared to move across the Sun's surface. Really, it was the Earth moving around the Sun.



In July 1969, **Neil Armstrong (1930 – 2012)** was the first person to step on the Moon. He famously said, "That's one small step for man, one giant leap for mankind."

**Katherine Johnson (1918 – 2020)** loved maths and in 1962, when the USA decided to send someone to the moon, she played a key role in making it possible. She used her understanding of geometry to calculate paths for the spacecraft to orbit the Earth and land on the moon. NASA couldn't have done this without her! She worked for NASA for more than 30 years and even once she'd retired, she spoke to school students and encouraged them to never give up on their dreams.

