



KNOWLEDGE ORGANISER

Time

It takes **24 hours** for the Earth to spin once on its axis. (When the Earth faces the Sun it is daylight and when it faces away from the sun it is night. It makes the sun appear to travel across the sky).

It takes **28 days** for the Moon to orbit the Earth (This is a lunar month – see Phases of the Moon).

It takes **365 days 1/4 days** for the Earth to orbit the Sun (Every 4 years there is a leap year due to the extra quarter – an extra day in February)

The Earth's tilt on its axis is what causes the 4 seasons. Sometimes it points towards the Sun and other times it points away from the sun.

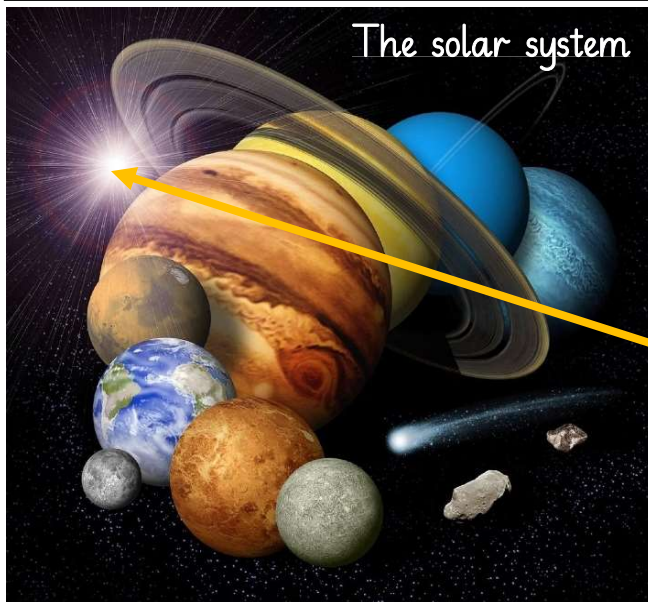


The phases of the Moon



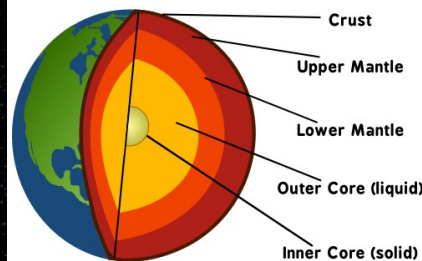
An easy way to remember the names of planets in order is: **My Very Easy Method Just Speeds Up Naming**
Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune

(Pluto was reclassified as a dwarf planet in 2006)



The solar system

Earth



The Sun

A star at the centre of our solar system. 15 million degrees hot at its centre. It is 1.3 million times bigger than Earth.

Key People

Katherine Johnson- Mathematician who worked for NASA, her skills helped put America's first rocket into space in 1961



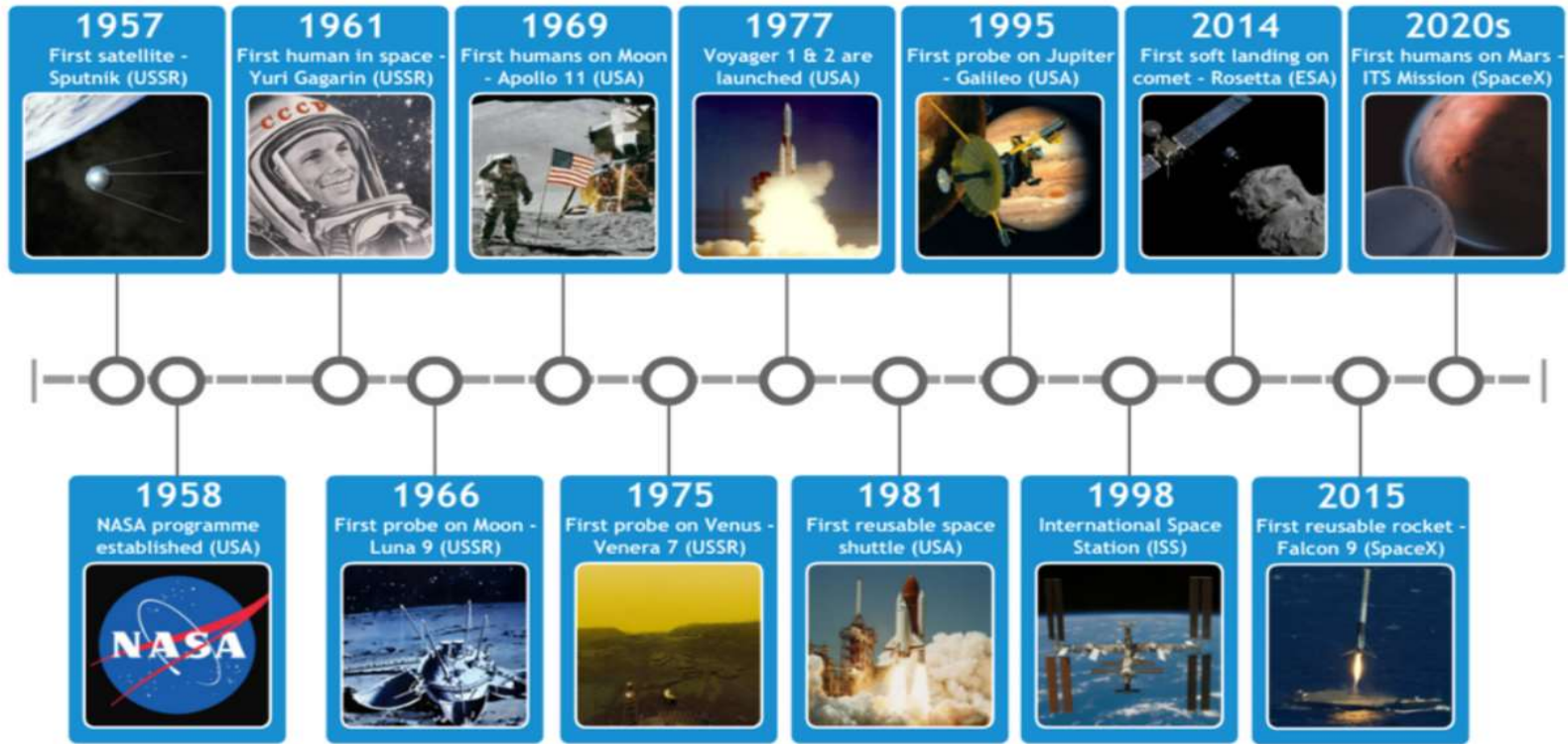
Neil Armstrong-The first man to step on the Moon - 1969



Helen Sharman- The first British person and the first Western European woman in space- 1991



Key Events in Space Exploration



Key Vocabulary

Planet	An object that orbits a star and does not emit its own light.	Solar system	The solar system consists of the Sun and everything that orbits, or travels around, the Sun.
Star	A giant ball of gas held together by its own gravity that makes heat and light energy.	Astronomy	Astronomy is the study of outer space and all of the objects outside of the Earth's atmosphere, like stars, planets and comets.
Gravity	The force that attracts an object towards a larger object.	Axis	An imaginary line about which a body rotates.
Orbit	A curved path of a planet taken by one body circling around another body. The Earth makes an orbit around the Sun.	Satellite	An object either natural (moon) or man-made that orbits around a planet.
NASA	The National Aeronautics and Space Administration, a US agency responsible for the exploration and study of space	Asteroid	A small rocky body orbiting the Sun.
Geocentric model	A belief people used to have that other planets and the Sun orbited around the Earth.	Heliocentric model	The structure of the solar system where the planet orbits around the Sun.