

Key Knowledge

- The sun is considered an average sized-star.
- It takes the Earth 365 days to orbit the sun.
- Jupiter, Saturn, Uranus and Neptune have no solid surface – it's made of gas!
- The Space Race began in 1955 between the USSR and the USA.
- The moon goes through 8 phases in a month and orbits the Earth in an oval pattern. The shadows of the Earth creates the moon's phases. It takes 28 days for the moon to orbit the Earth.
- Space is completely silent – there is no air to carry the sound vibrations.
- The Earth spins on it's axis and as it rotates, it faces towards and away from the sun; creating day and night. It takes 24 hours for the Earth to complete 1 rotation.

Key Text

The War of the Worlds by H.G. Wells supplemented by the classic music score written by Jeff Wayne.



MASTERS OF SPACE

YEAR 5: AUTUMN 2

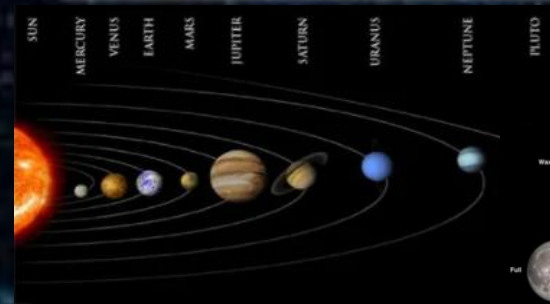
BIG QUESTION: WHO ARE THE TRUE MASTERS OF SPACE?

Key questions:

- How has our knowledge and attitude about the Earth's place in our solar system changed over time?
- How does the moon move relative to the Earth?
- Who conquered space exploration first?
- How does the Earth's movement in space affect us?
- What are the characteristics of celestial bodies in our solar system?

Key Vocabulary

eclipse	A complete or partial hiding of the sun caused by the moon's passing between the sun and the earth.
equator	An imaginary line around the middle of a planet.
geocentric	A previously common-held belief (now proved to be wrong) that the Earth is the centre of the solar system.
phases of the moon	This is the shape of the sunlit side of moon that we can see from Earth. The eight phases of the moon are: new moon, waxing crescent, first quarter, waxing gibbous, full Moon, waning gibbous, third quarter and waning crescent.
gravity	The field around an object in which a force is felt. It causes the planets in our solar system to orbit the sun.
heliocentric	Belief that the sun is the centre of our solar system (The Milky Way).
hemisphere	A hemisphere is half of a sphere
lunar	Relating to the moon
orbit	The curved path of an object or spacecraft round a star, planet, or moon.
rotation	Where an object turns around an axis
solar	Made to work by the action of the sun's light or heat solar energy.



Experiences

Residential trip to the National Forest including visits to:

- The National Space Centre
- Conkers Activity Centre
- Rosliston Observatory