Could the planets ever collide?

St. Peter's CE Primary Academy

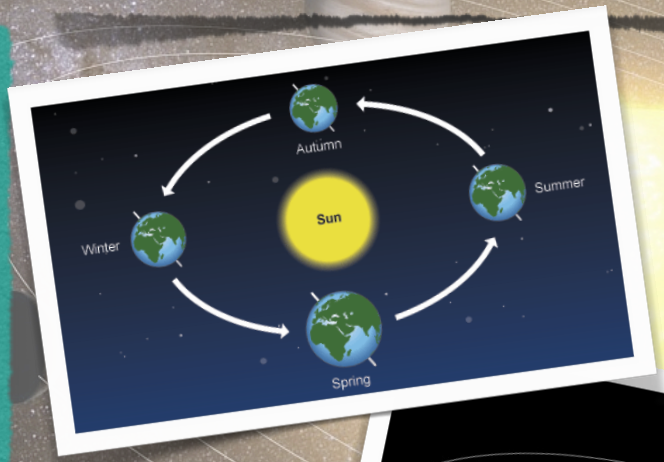
Space Y5 / Y6

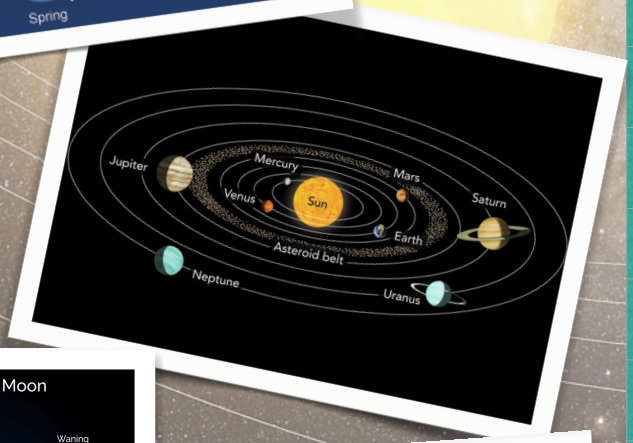
Key scientist – Katherine Johnson

She was a mathematician who went to work for NASA (National Aeronautics and Space Administration). She used geometry to figure out paths to spacecraft to orbit Earth and land on the moon.

Key learning

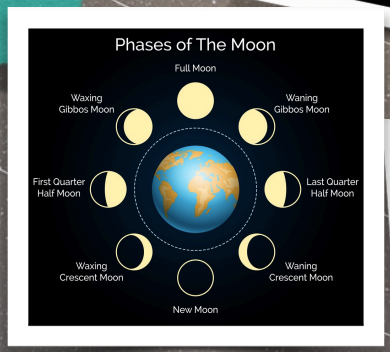
- Describe the movement of the Earth and other planets relative to the sun in the solar system
- Describe the movement of the moon relative to the Earth
- Describe the sun, Earth and moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

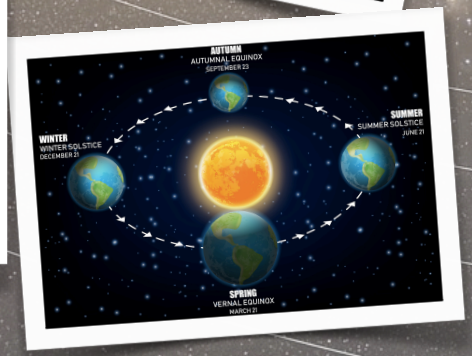




Working scientifically focus

- Asking questions
- Recording data
- Observing and measuring





Scientific enquiry types

Observation over time

Research

Key vocabulary

solstice	The longest and shortest days of the year.
equinox	The time or date (twice each year) at which the sun crosses the celestial equator, when day and night are of approximately equal length
celestial	Relating to the sky or outer space
eclipse	When one celestial body (e.g. a planet or moon) moves in front of another and obscures it from view either fully or partially.
lunar	Relating to the moon
moon	A natural object that orbits a planet.
moon phase	How much of the moon is lit by the sun and can be seen from Earth.
orbit	The curved path of a celestial object around a star, planet or moon.
planet	A large natural object that orbits a star.
satellite	A moon planet or machine that orbits a star or planet.
solar system	A set of planets that orbits a star. Ours is the Milky Way and we orbit the sun.
star	Giant spheres of super hot gas, generally made up of hydrogen and helium.
time zone	A region of the Earth that uses the same time.

Ethics

Do we need to keep exploring outer space? Why?