

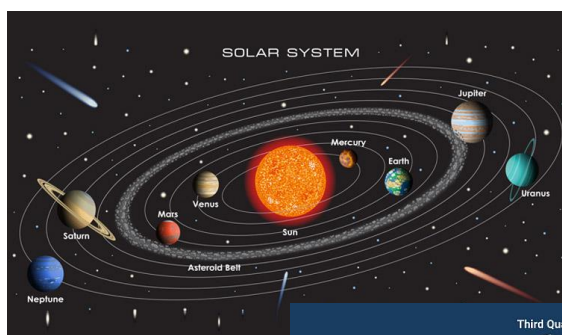
Year 6 Earth and Space Knowledge Organiser

Key vocabulary

Sun	a huge star that Earth and the other planets in our solar system orbit around
star	a giant ball of gas held together by its own gravity
moon	a natural satellite which orbits Earth or other planets
planet	a large object, round or nearly round, that orbits a star
sphere	a round 3D shape, the shape of a ball
spherical bodies	astronomical objects shaped like spheres
satellite	any object or body in space that orbits something else. E.G. the moon is a satellite of Earth. These can be natural or man-made
orbit	to move in a regular, repeating curved path around another object
rotate	to spin
axis	an imaginary line that a body rotates around – e.g. Earth's axis runs from the North Pole to the South Pole
geocentric model	a belief people used to have that other planets and the Sun orbited around Earth
heliocentric model	the structure of the Solar System where the planets orbit around the Sun
astronomer	someone who studies or is an expert in astronomy (space science)
waxing / waning	period before a full moon when the moon appears to be 'growing' / period after a full moon when the moon appears to be 'shrinking'

Key knowledge:

- ✓ Mercury, Venus, Earth and Mars are rocky planets. They are mostly made up of metal and rock. Jupiter, Saturn, Uranus and Neptune are mostly made up of gases (helium and hydrogen) although they do have cores made up of rock and metal.
- ✓ The Moon orbits Earth in an oval-shaped path while spinning on its axis. At various times in a month, the Moon appears to be different shapes. This is because as the Moon rotates round the Earth, the Sun lights up different parts of it.
- ✓ Pluto used to be classed as a planet but was reclassified as a dwarf planet in 2006
- ✓ Earth rotates on its axis. It completes a full rotation every 24 hours. At the same time it is rotating, it is also orbiting the Sun. It takes a little more than 365 days to do this.
- ✓ Daytime occurs when the side of Earth is facing towards the Sun and night occurs when the side of the Earth is facing away from the Sun
- ✓ It appears to us that the Sun moves across the sky during the day but it does not move at all
- ✓ Years ago people believed the Sun moves around the Earth. However, the work of astronomers, helped by Galileo's work on gravity, helped people to understand how planets stay in orbit around the Sun.



Key questions:

- What is the Solar System?
- How did the Solar System form?
- Is it us or the Sun that moves?
- How have ideas about the shape of the Earth changed?
- What causes night and day?
- Why does the moon appear to change shape?