Science • Earth and Space

Science
Year 5

Crucial Knowledge

- the universe comprises all matter and space in existence
- a celestial body is a large object in the universe
- a star is an exceptionally hot ball of gas, originally made from hydrogen and helium
- the Sun is a star
- a planet (e.g Earth) is defined as a spherical celestial body that orbits a star and that has cleared the neighbourhood of its orbit of other objects, some of which crash into the planet and others that become moons of that planet
- The Sun and the objects that orbit it are collectively known as our Solar System
- there are eight major planets in our solar system: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune
- a satellite orbits a planet and that moons are natural satellites

Key Vocabulary

Planet: A large object, round or nearly round, that orbits a star.

Satellite: Any object or body in space that orbits something else e.g. the moon is a satellite

spherical bodies: Astronomical objects shaped like spheres.

Star: A giant ball of gas held together by its own gravity.

Eclipse: is when one object in space blocks another from view. E.g. during a solar eclipse the

Universe: is everything we can touch, feel, sense, measure or detect. It includes living things, planets, stars, galaxies, dust clouds, light, and even time.

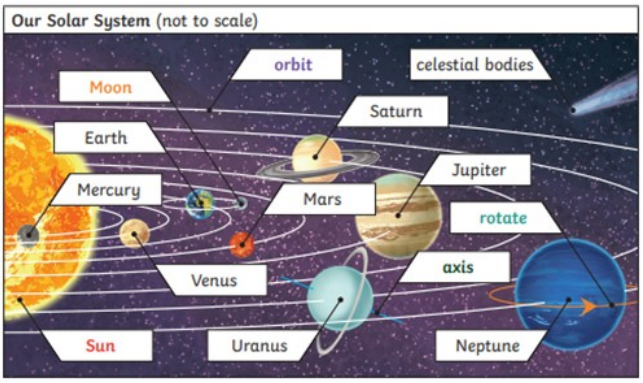
Axis: is an invisible line around which an object rotates, or spins.

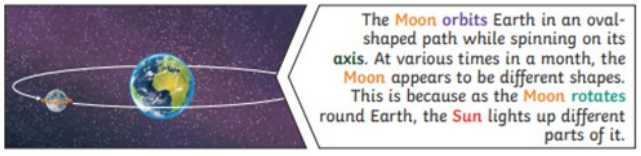
celestial body: a natural object that exists outside the Earth's atmosphere

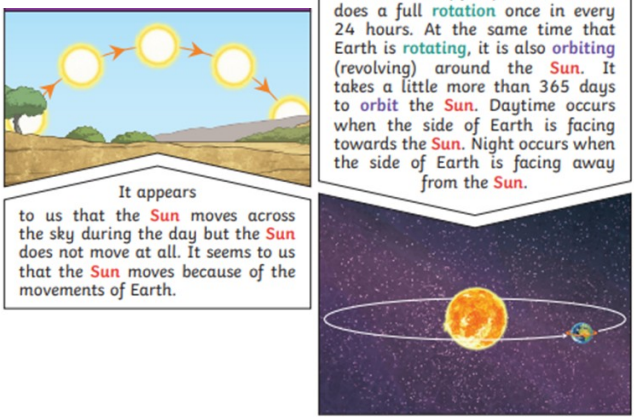
Lunar: something that is related to the moon.

Solar: relating to the sun

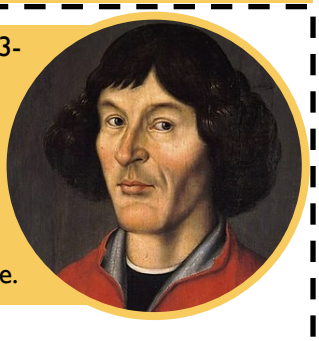
Diagrams / Images







Important People



Nicolaus Copernicus (1473-1543) was a mathematician and astronomer who formulated a model of the universe with the Sun rather than Earth at its center. This was a major event in the history of science.

Mary Jackson (1921-2005) was a mathematician and engineer who became the first African American female engineer at NASA, helping the USA in the Space Race.

We Are Building Our Knowledge From

- Forces and Motion (Y5)