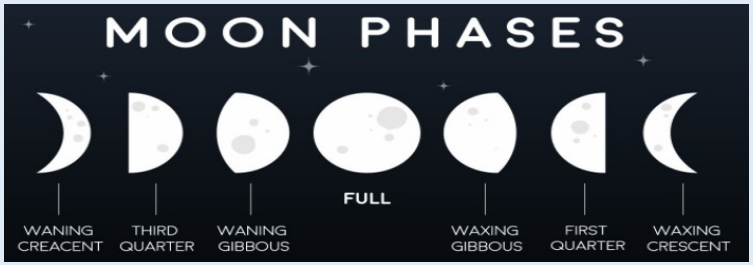
Burwell Village College Primary

Year 5 Mission to the Moon

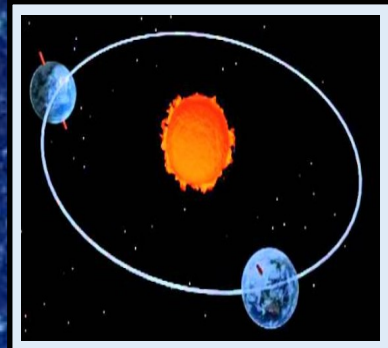
Earth and Space



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 Earth so the sun's light reflects from part of its surface.

The Moon has gravity of its own, which pulls the oceans (and us) towards it. The Moon's gravitational pull on us is much weaker than Earth's, we don't really notice it, but we can see the Moon's effect on the oceans.

Earth rotates on its axis. It does a full rotation once in every 23 hours and 56 minutes. At the same time that Earth is rotating, it is also orbiting around the Sun. It takes just over 365 days for Earth to orbit the Sun.



Prior to the 1600's, the common belief was that the planets and the Sun moved around the Earth (Geocentric model). The work and ideas of many astronomers in the idea that the Earth and other planets actually revolve around the Sun making the Sun the centre of our solar system (Heliocentric model), not Earth.

Daytime occurs when the section of Earth is facing towards the Sun. Night-time occurs when the section of Earth is facing away from the Sun.

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). Pluto used to be considered a planet but was reclassified as a dwarf planet in 2006.

Key Vocabulary

Sun	a huge star that Earth and the other planets in our solar system orbit around
star	a giant sphere 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
solar system	consists of our Sun and everything bound to it by gravity — the planets dozens of moons and millions of asteroids, comets and meteoroids
sphere	a round 3D shape - like a ball all points on the surface are the same distance from the centre
satellite	any object or body in space that orbits something else, the Moon is a satellite of Earth
orbit	a regular, repeating path that one object in space takes around another one
rotate	to circle around a centre point e.g. Earth rotates on its own axis
axis	an imaginary line that an object rotates around e.g. Earth's axis (imaginary line) 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