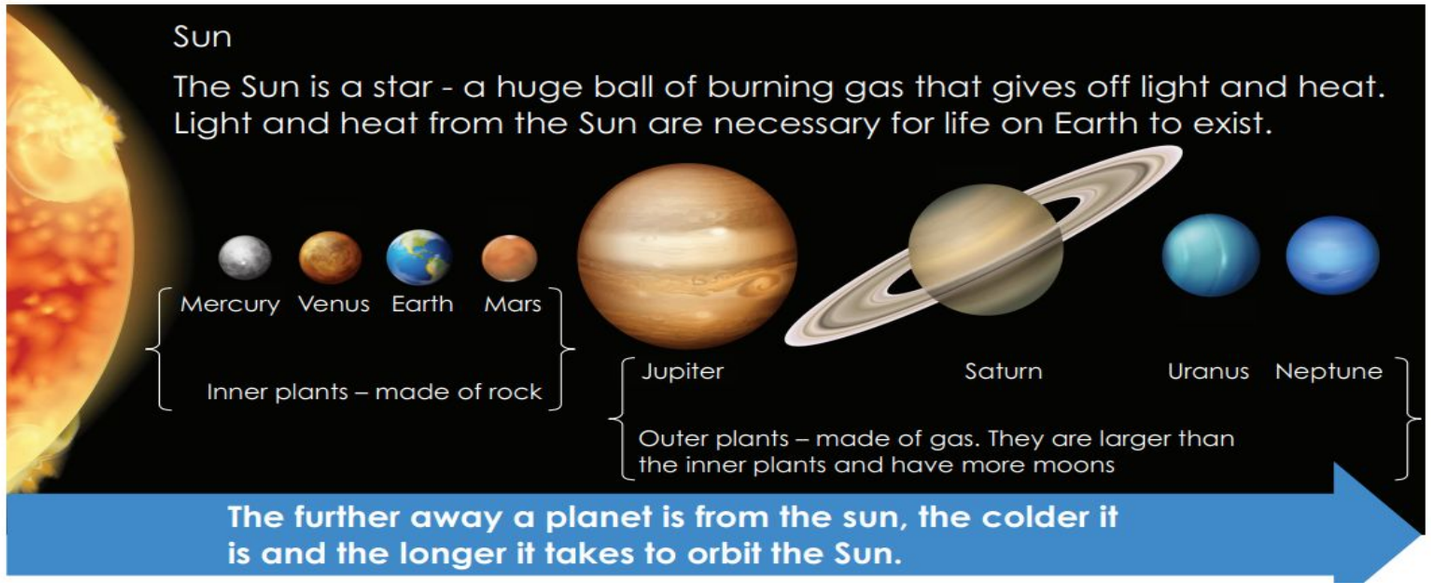
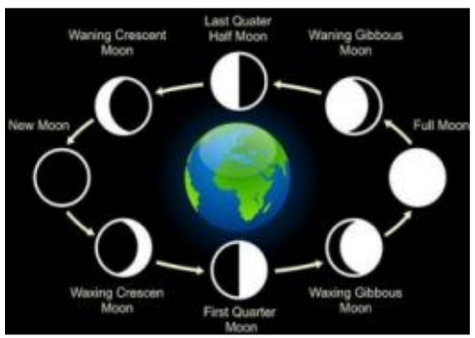
Year 5 Autumn - How do the Earth, Moon and Sun work together?

Key Vocabulary	
axis	An imaginary line through the Earth from the north pole to the south pole. The Earth rotates around its axis.
orbit	When something is in orbit, it is moving around the Sun or a planet.
planet	A very large object in space that moves around the Sun or around another star
Solar System	The planets, moons, and everything that obits the Sun.
star	A large mass of burning gas that you see as a bright speck of light in the sky at night.
Sun	The star at the centre of our Solar System
crescent	A curved shape, like the shape of a new moon.
waning	When the visible surface of the Moon is getting smaller.
waxing	When the visible surface of the Moon is getting bigger.
gibbous	A moon that is more than a half moon but less than a full moon.
galaxy	A large group of stars and planets.



- There are 8 planets in our solar system. Pluto is a dwarf planet.
- They all orbit the Sun (a star) and have moons.
- The first four planets are relatively small and rocky, while the four outer planets are gas giants or ice giants.
- There are also asteroids, meteoroids and comets in the solar system.
- The solar system is in a galaxy called the Milky Way. the galaxy is part of the universe.



There is gravity on the moon. However it is a much lesser force than the gravity on earth.

- The moon orbits the Earth anticlockwise and takes approximately 28 days.
- The moon spins once on its axis every time it orbits Earth. The moon has different phases depending on where it is in its orbit.
- The moon's gravity cause high and low tides.

- The Earth takes 365.25 days to orbit the Sun.
- The Earth rotates on its axis anti-clockwise. It takes 24 h (1 day) to make a complete rotation.
- The rotation causes day and night.
- Different parts of Earth experience daylight at different times. This is why we have time zones.