

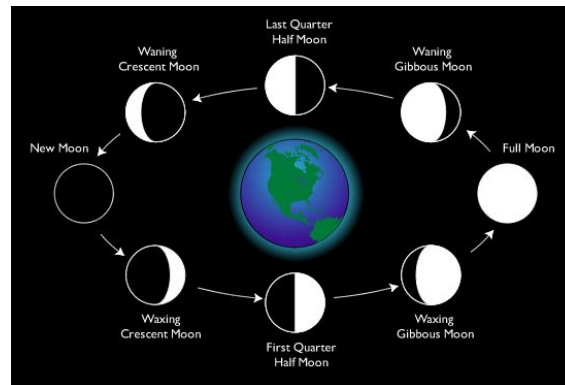
**What should I already know?**

- We have four seasons (Autumn, Winter, Spring and Summer)
- The Sun is a source of light, but the moon is not.
- Know that a shadow is caused when something blocks light from passing through.
- Know that objects can be found in three states of matter: solid, liquid or gas.

**What will I know by the end?**

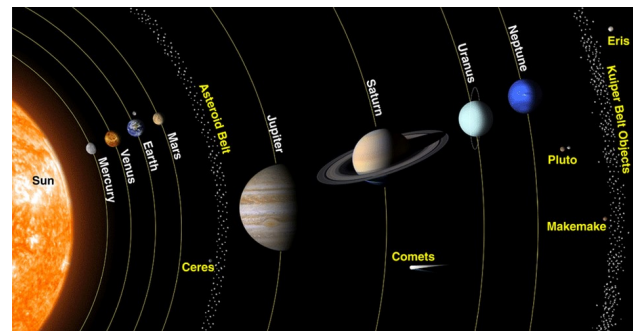
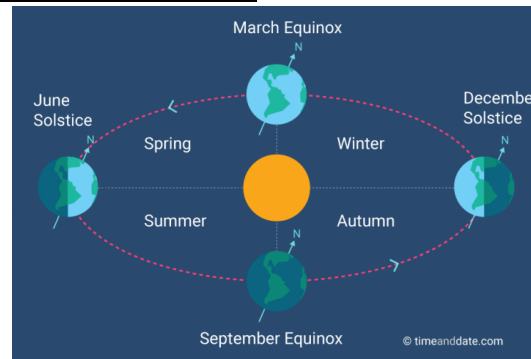
- Know that the Earth is part of a Solar System
- The Solar system is part of a galaxy known as the Milky Way.
- That there is more than one galaxy in the universe.
- The order of the planets in the solar system and their relative distances from the sun.
- Be able to compare the planets and the Earth's moon on size.
- Know how and why the Earth's rotation causes day and night.
- Know that this rotation is what causes different time zones.
- The Moon has phases and these phases are what causes the Moon to appear different in the night sky.
- Seasons are caused by the tilt of the Earth and it's position in its revolution around the sun.
- That time is related to the Earth's rotation and its revolution around the sun—for example there are 365 days in a year which is one complete revolution of the sun.
- Know that there are other entities in the solar system other than planets: Dwarf planets, asteroids, meteoroids and comets.

**Diagrams**



This shows the different phases of the moon: New Moon, Waxing Crescent, First Quarter, Waxing Gibbous, Full Moon, Waning Gibbous, Last Quarter, Waning Crescent.

This shows how the Earth's tilt causes the seasons. As the Earth revolves around the sun the tilt causes one of the hemispheres to be closer to the sun while the other is further away—causing the four distinct seasons.



This is a map of our Solar system—it shows the relative sizes and distances from the sun and shows some of the entities other than planets which revolve around the

**Vocabulary**

- astronaut—person trained to travel in a spacecraft.
- asteroid—small celestial body composed of rock and metal.
- axis—an imaginary line through the middle of something.
- celestial—something that is found in space.
- Earth—the third planet from the sun.
- galaxy—a collection of solar systems.
- gravity—a force that attracts something to the centre of something with a mass.
- meteorite—a rock or metal that arrives on Earth from space.
- orbit—the path of a celestial body while it revolves around another. (For example: the Moon orbits the Earth while the Earth orbits the sun)
- planet— a celestial body that revolves around a star.
- rotate— turn on or around an axis
- shadow—a dark area on a surface which is made when something blocks the light from travelling to the surface.
- solar system—a collection of planets that orbit around a star.
- star— a huge ball of burning gas in space.
- The Sun—the name of the star at the centre of our solar system.
- universe—everything that exists everywhere..