



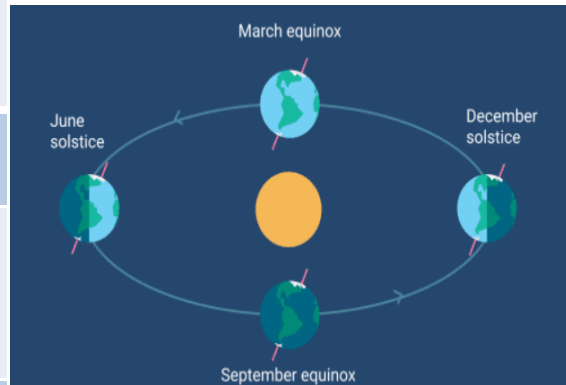
## Physics

### Key Vocabulary

1	<b>axis</b>	Is an imaginary line that passes through the north pole, centre and the south pole of the Earth. The Earth rotates around in an anticlockwise direction.
2	<b>Earth's tilt</b>	The Earth sits at a 23.5° tilted angle from vertical. Other planets have their own tilts too. Uranus has the biggest - a tilt of 97°!
3	<b>orbit</b>	An orbit is a repeating path that an object takes in space around another. They are egg-shaped patterns (elliptical). It takes the Earth 365 and a quarter days to orbit the Sun.
4	<b>Lunar month</b>	Is the time between one new moon and the next. One Lunar Month is approximately 29 days (29.53 to be exact!)
5	<b>rotate</b>	Is to turn about on an axis completely. The Earth takes 24 hours to rotate once on its axis.
6	<b>Solar System</b>	The solar system is made up of the sun and everything that orbits, or travels around, the sun. This includes the 8 planets and their moons, dwarf planets and asteroids.
7	<b>waxing</b>	Is to increase in size. This forms a part of the Moon Phases: waxing crescent, first quarter and waxing gibbous,
8	<b>waning</b>	Is to get smaller. This forms the other part of the Moon phases: waning gibbous, third quarter and waning crescent.

In this unit, our BIG Question is...

Sun, Earth and Moon: what is moving?



### Sticky Knowledge

(From your previous learning in Year 3 and KS1)

1	light source	Light is an energy source that travels in waves. Natural sources include the sun, stars and fire.
2	shadow	A dark shape made when something blocks light from a light source.
3	seasons	Are four different times during the year with different types of weather. <i>They are caused by the Earth's orbit of the Sun.</i>
4	Day and Night	Daytime is when you can see the sun from where you are. Nighttime is when the sun is on the other side of the Earth from you, so it is dark.

### Famous Scientist

Wang Zhenyi Mae Jamison  
(1768-1797)

Physicist and mathematician. A very famous and intelligent female scientist, who discovered and explained Equinoxes and how we get Lunar Eclipses.



