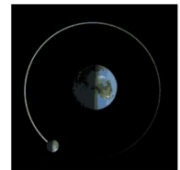


Recall

Revolve - means to move an object around an other object

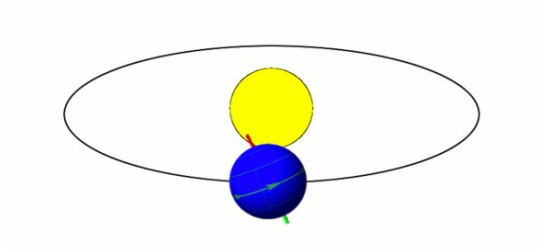


Rotate - means to spin



## Earth

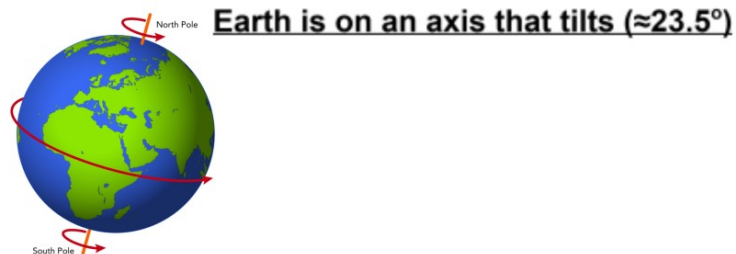
- The Earth revolves around the sun, which means it travels in a loop around the sun know as an **orbit**.



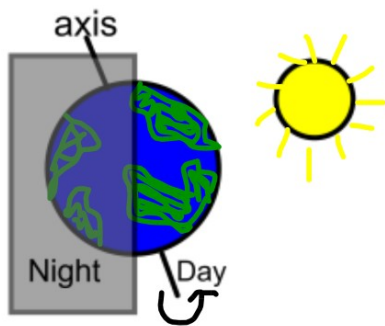
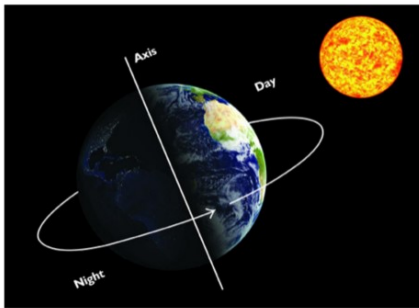
- revolves counter-clockwise ↻

- As Earth revolves around the sun it is also spinning on a tilted axis

- An **axis** is an imaginary line from the north pole to the south pole



## Reason For Day & Night











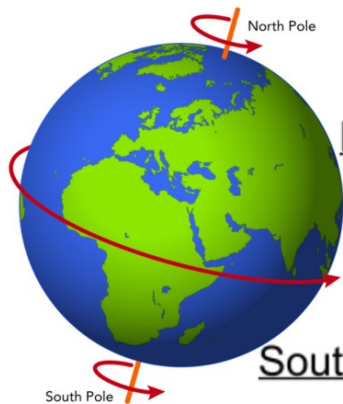
Rotating on axis makes Earth's night and day.

- As the earth spins on its axis only half of the earth is facing the sun at a particular time. This is when we have daylight. The back half is dark which is night.

- It takes Earth 24 hours (1 day) to make a complete rotation.

### Comparing Planets to Earth

	Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune
Distance from sun	58 million Km	108 million Km	150 million Km	228 million Km	778 million Km	1427 million Km	2870 million Km	4497 million Km
Orbital period	88 days	224 days	365 days	687 days	11.9 years	25.5 years	84 years	165 years
Rotation Day\Night direction	59 days 	243 days 	24 Hours 	24 Hr 39 min 	9 Hr 50 min 	10 Hr 39 min 	17 Hr 18 min 	15 Hr 40 min 



Northern hemisphere (NH) is the top part of Earth  
Remember we live on the northern hemisphere

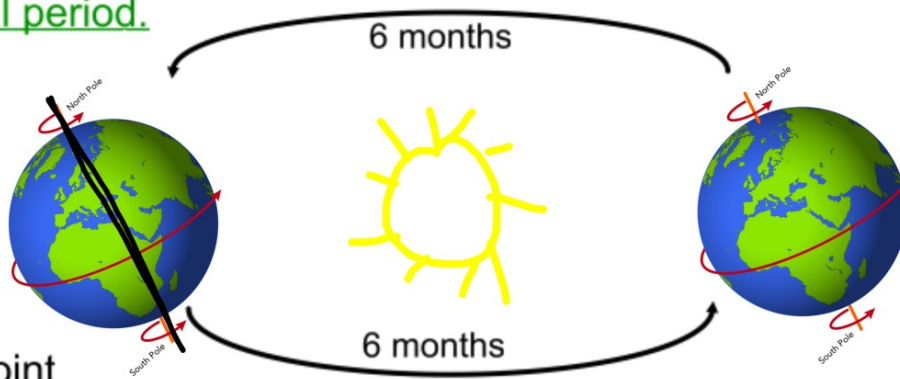
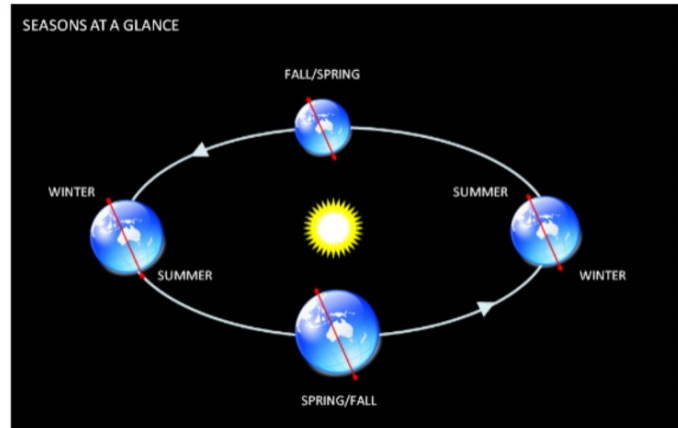
Southern hemisphere (SH) is the bottom part of Earth

Earth is on an axis that tilts ( $23.5^\circ$ )

[Earth's Tilt I: The Reason for the Seasons - YouTube](#)

The 2 reasons for the seasons are Earth's Revolution around the sun AND it's tilt of the earth on its axis.

It takes Earth 365 days (1 year) to make a complete orbit around the sun. This is know as the orbital period.



Main point

Winter in Northern Hemisphere since it is pointing away from the sun (Indirect sunlight).  
Summer in the Southern Hemisphere since is pointing towards the sun (direct sunlight).

Summer in Northern Hemisphere since it is pointing toward the sun (direct sunlight).

Winter in the Southern Hemisphere since is pointing away from the sun(indirect sunlight)..

