

Earth and Space Cycles

Vocabulary:

Axis: the imaginary line that runs through the center of the earth from the north to south pole on which the earth rotates

Cycle: a repeated pattern

Gravity: a force that pulls two or more objects toward each other

Moon Phases: the appearance of the moon as it makes one revolution around the earth

Revolution: an orbit around another object

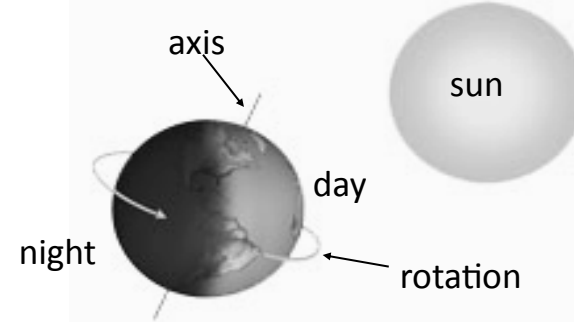
Rotation: spinning on its own axis

Sequence: a series of events that occur in a natural order

Tide: the rise and fall of the ocean surface

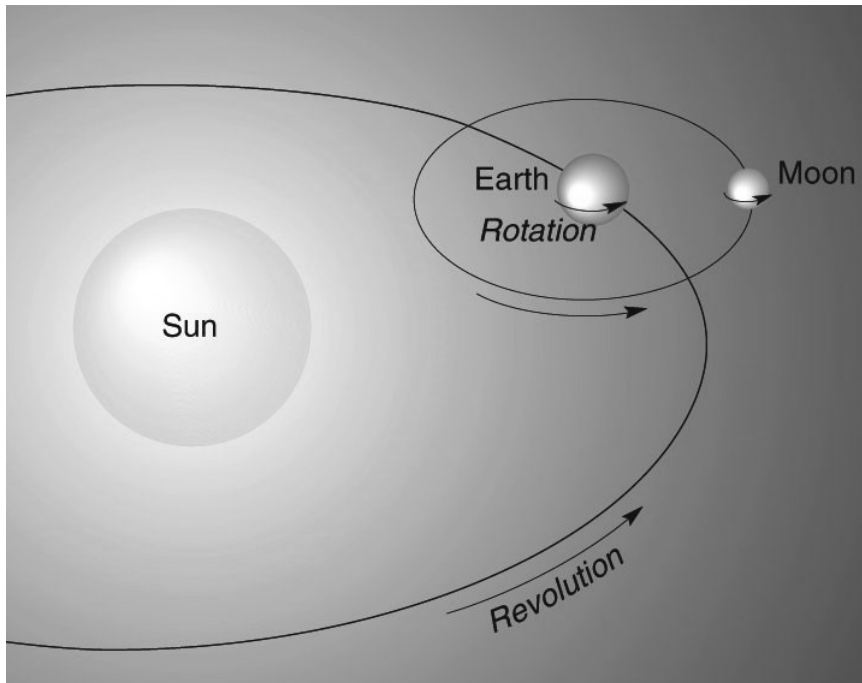
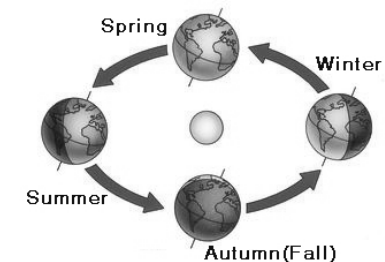
Day and Night

- The sequence of day and night is caused by the rotation of the earth.
- 1 rotation = 24 hours (1 day)
- The part of the earth facing the sun has daylight, and the part of the earth away from the sun has night.



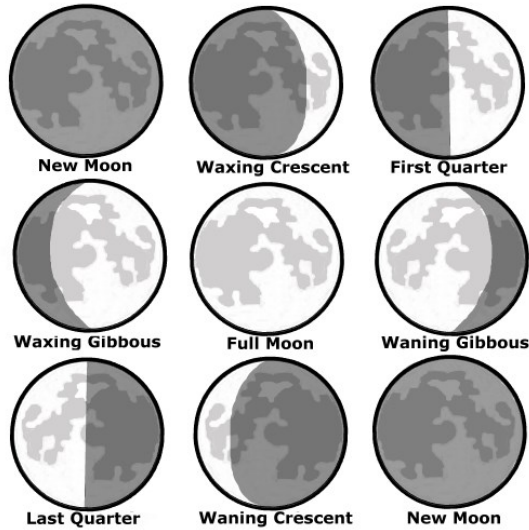
Seasons

- The sequence of changing seasons is caused by the tilt of the earth on its axis as it revolves around the sun.
- 1 revolution = 1 year (365 days)
- The part of the earth that is tilted towards the sun has summer, and the part of the earth that is tilted away from the sun has winter. The Northern Hemisphere has summer while the Southern Hemisphere has winter.



Moon Phases

- The cycle of moon phases occur as the moon makes one revolution around the Earth. Moon phases follow a pattern.
- 1 revolution around the earth = 28 days (about 1 month)



EST = Eastern Standard Time (UT-5) EDT = Eastern Daylight Time (UT-4) DST = Daylight Saving Time							NM = New Moon FQ = First Quarter PM = Full Moon LQ = Last Quarter						
March 2014													
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 NM: 3:00 AM (EST)							
2	3	4	5	6	7	8 FQ: 8:27 AM (EST)							
9 DST begins	10	11	12	13	14	15							
16 FM: 1:08 PM (EDT)	17	18	19	20	21	22							
23 LQ: 9:46 PM (EDT)	24	25	26	27	28	29							
30 NM: 2:45 PM (EDT)	31												

Tides

- Tides follow a pattern of 2 high tides and 2 low tides in a 24 hour period.
- Tides are caused by the gravitational attraction between the earth and the moon.

