Earth, Sun, and Moon Study Guide

Remember!
24 hours = 1 day
365 ¼ days = 1 year

- A **cycle** is a series of events that happen over and over again in the same order.
- The cycle of **day and night** occurs because the Earth is rotating on its **axis**.
- Be able to name another cycle from nature. (life cycles, seasons, etcetera)

- The Earth completes one **rotation** (spin) in one day (or 24 hours).

- An imaginary line that runs through the middle of the planet from the North Pole to the South Pole is the Earth's **axis**.

- The imaginary line that circles the Earth halfway between the two poles is the **equator**.

- The Earth **revolves** (orbit) around the sun.

- It takes the Earth **one year** (365 ¼ days) to make a complete **revolution** around the sun.

- We have **seasons** because the Earth is **tilted** and it revolves around the sun.
  - *Toward the sun: summer.
  - *Away from the sun: winter.

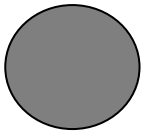
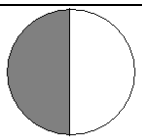
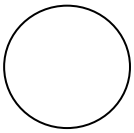
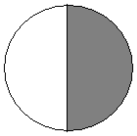
- The changing shapes of the moon we see are called **phases**.

- The phases of the moon occur because the Moon **revolves** around the Earth.

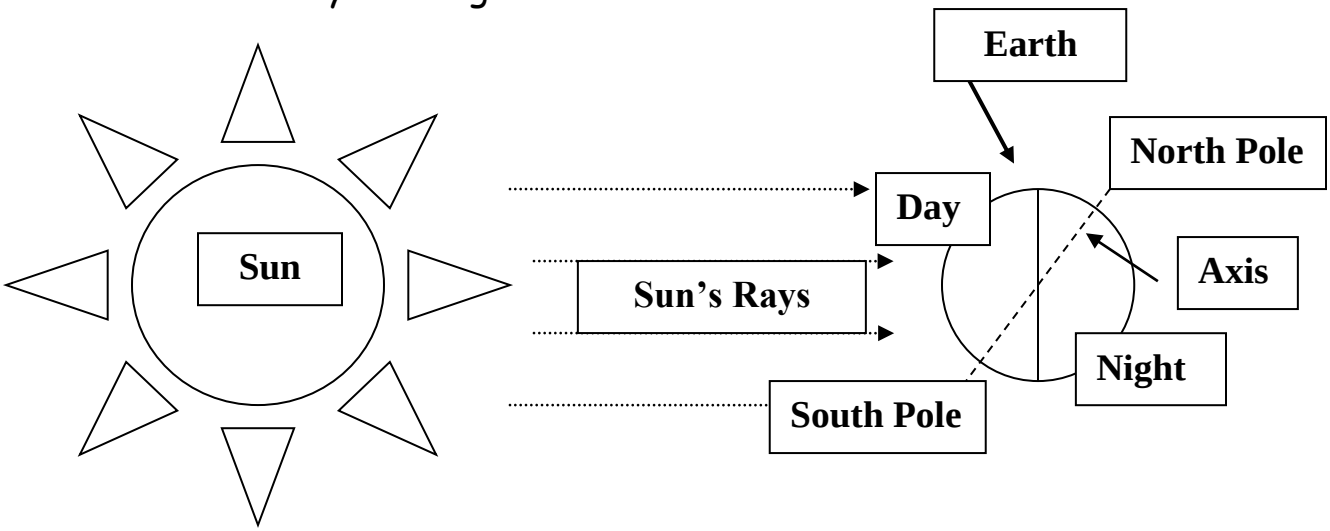
- The **gravity of the moon** makes the oceans rise and fall in **daily tides**.

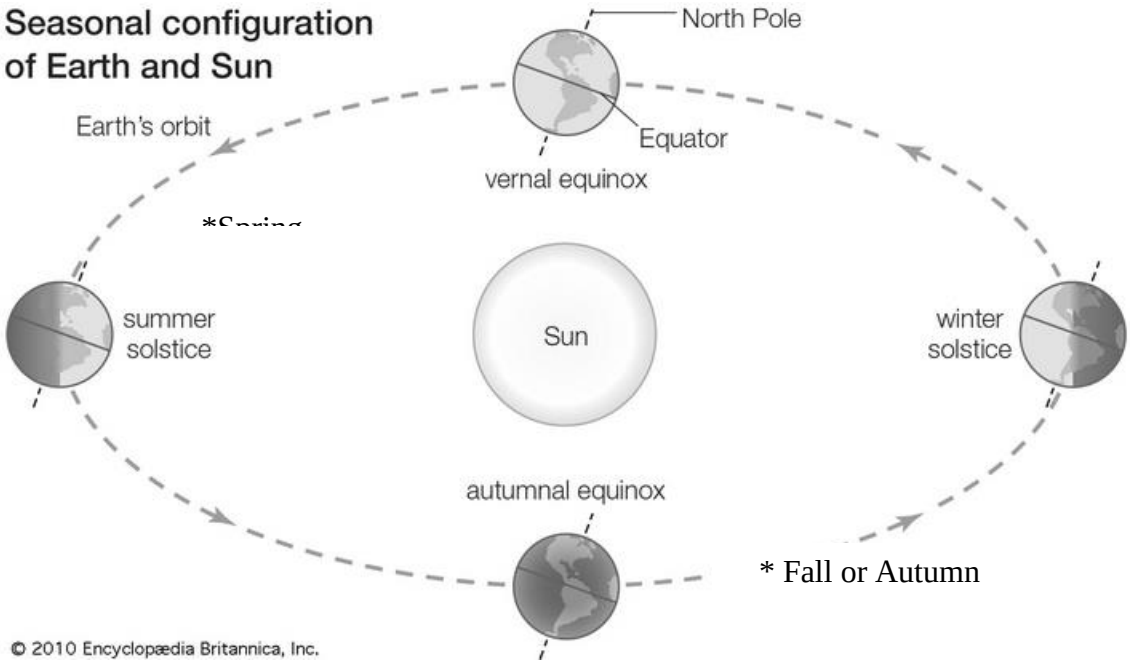
- Tides are the rise and fall of the ocean's water level.
  - *This happens every day twice a day (high tide and low tide).
- Be able to describe how the Moon and Earth are different.
  - ☾The moon is smaller than the Earth.
  - ☾The moon has less gravity.
  - ☾The moon has no liquid water.
  - ☾The moon has many craters.
  - ☾The moon cannot support life.

☼ Be able to draw and label these 4 phases of the Moon.

 1. New Moon	 2. First Quarter
 3. Full Moon	 4. Last Quarter

Label the following diagram: Sun, Sun's rays, Earth, the equator, Earth's axis, the North Pole, South Pole.
Be able to shade Day and Night.





* Fall or Autumn

EARTH, SUN, AND MOON
STUDY GUIDE

- A _____is a series of events that happen over and over again in the same order.

- The cycle of **day and night** occurs because the Earth is _____ on its **axis**.

- Be able to name another cycle from nature.

- The Earth completes one **rotation** (spin) in one _____ (or _____ hours).

- An imaginary line that runs through the middle of the planet from the North Pole to the South Pole is the Earth's _____.

- The imaginary line that circles the Earth halfway betw[illegible]he _____.

Remember!
___ hours = 1 day
_____ days = 1 year

- The Earth _____ around the sun.

- It takes the Earth **one** _____ (365 $\frac{1}{4}$ days) to make a complete **revolution** (orbit) around the sun.

- We have **seasons** because the Earth is _____and it revolves around the sun.
  *Toward the sun: summer. *Away from the sun: winter.
  * The changing shapes of the moon we see are called _____.

- The phases of the moon occur because the Moon _____ around the Earth.

- Describe three ways how the Moon and Earth are different.

☼ Know and be able to sketch these moon phases.

New Moon	First Quarter	Full Moon	Last Quarter

☼ The **gravity of the moon** makes the oceans rise and fall in **daily _____.**

☼ Tides are the _____ and _____ of the ocean's water level.
*This happens every day.

Label the following diagram: Sun, Sun's rays, Earth, Earth's axis, the North Pole, South Pole. Be able to shade Day and Night.