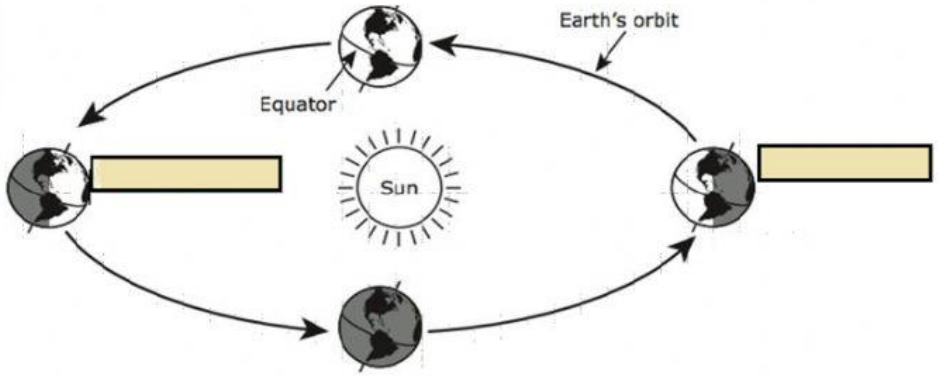
Sun, Moon, & Earth Interactions.

Use the website to help answer the questions below.

Day-Night

The earth appears to rotate _____ *(hint: direction)* to an observer on the North Pole. The Earth's _____ is the reason for the cycle of daylight and darkness every 24 hours.

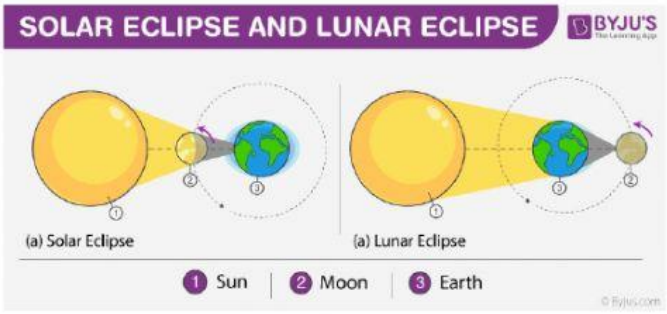
Earth's Seasons



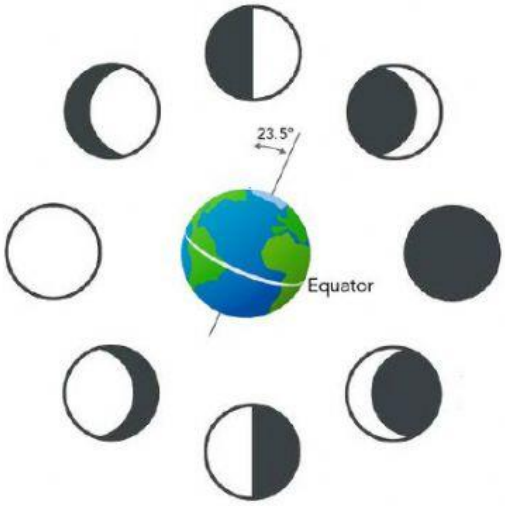
The seasons are caused by the _____ of Earth's axis of rotation relative to its plane of orbit around the Sun. Because of this, one hemisphere of the earth is facing the Sun _____ than the other. During the summer, areas north of the equator experience _____ days and shorter nights.

Eclipses

There are two type eclipses, a solar and a lunar eclipse. Each one of them is caused by a _____ which might cover the sun or the moon. When the sun is covered it may even get cooler outside. When the Earth is between the moon and the sun and the moon is blocked, this is called a _____ eclipse.



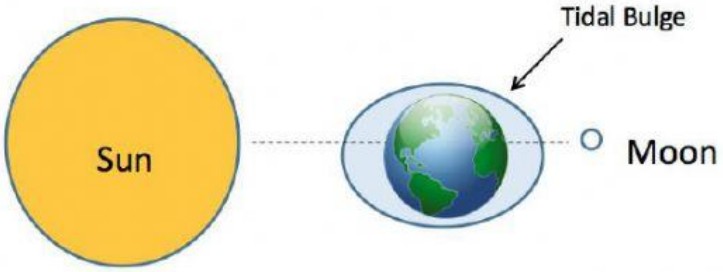
The Phases of the Moon



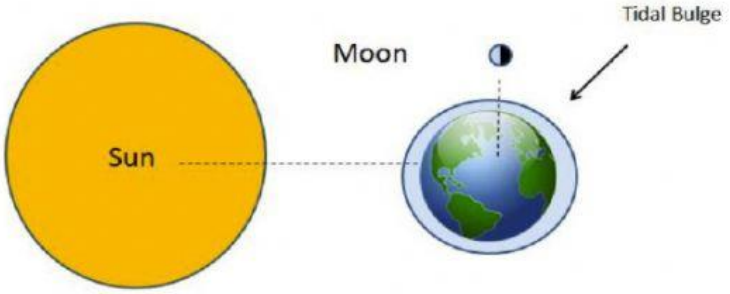
The Moon does not produce any light of its own it only reflects sunlight. As the moon moves around Earth, different portions of it are _____by the sun's light. The parts of the moon that visible are called the moon's _____. **They are not caused by shadows** they occur as the moon _____ **around the earth,** different portions of the satellite are illuminated.

The Tides

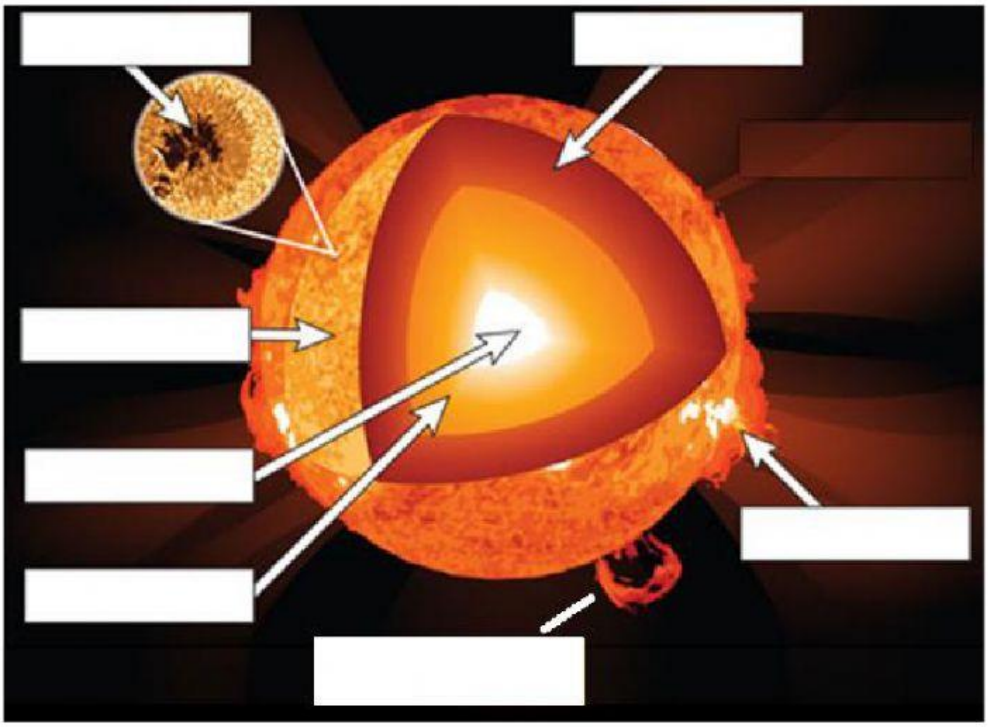
Tides are the regular rising and falling of Earth's surface water in response to the _____ attraction of the Moon and Sun. The Moon's gravity pulls upwards on Earth's water, causing it to _____ out in the direction of the Moon. This causes a high _____ on the other side of the Earth. The Sun also pulls on the Earth's water. When the Sun and Moon are in line, during the new moon and the full moon, their high tides add up and create _____ tide.



When the Earth and Sun are in line but the Moon is perpendicular to the Earth a _____ tide occurs. These tides produce less extreme tides than the normal tides. They are the tidal range that is relatively_____.



Label the Parts of the Sun



Word Bank

- Core
- corona
- Convective zone
- Prominence
- Radiative zone
- Photosphere
- Sun Spot