

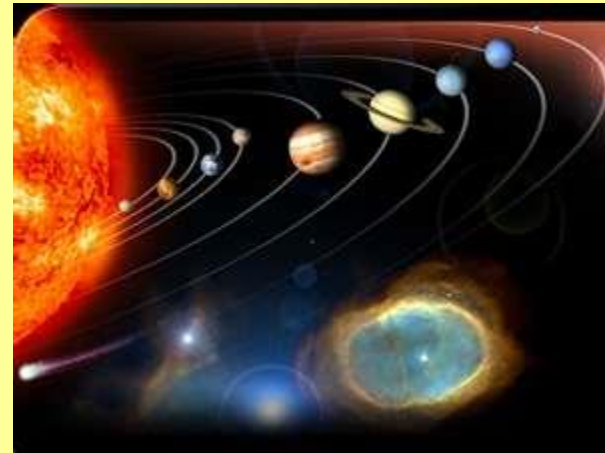
UNIT 10
LESSON 1

Comparing Sun, Earth, and Moon



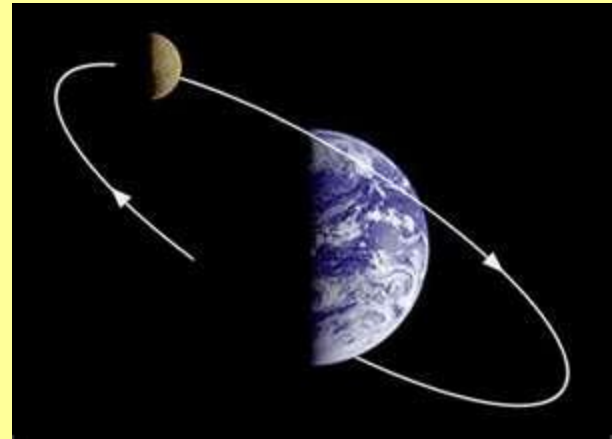
celestial body

a naturally occurring object in space such as a star, planet, moon, asteroid, galaxy, or comet



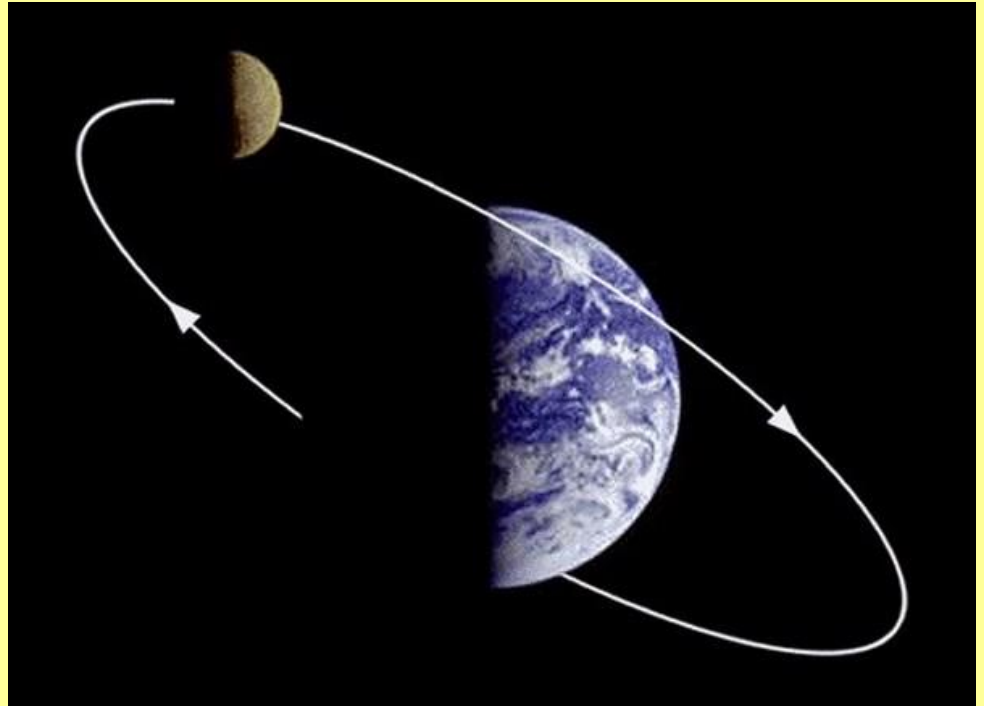
satellite

a celestial body or man-made object that revolves around a larger body



Moon

A natural satellite in space that revolves around Earth.



Lunar Plains (Maria)*

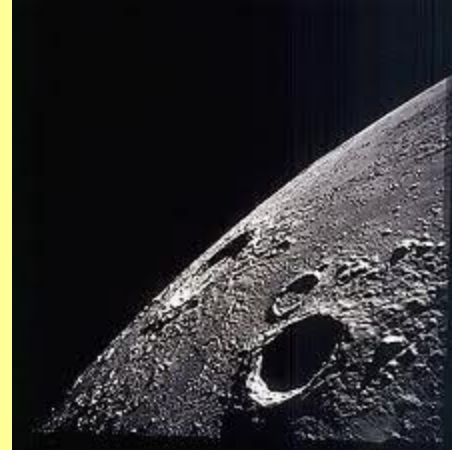
A dark region on the surface of the moon; solidified pools of ancient basaltic lava.

The "seas" of the moon are not water filled areas; they are large smooth areas.



Crater*

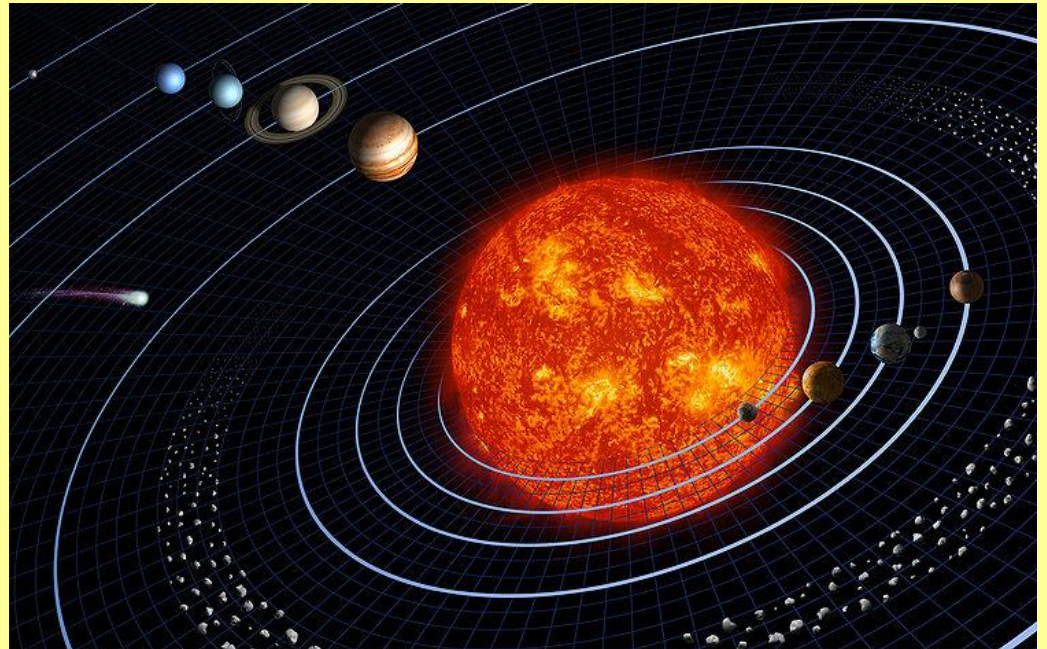
A bowl-shaped depression formed by the impact of a meteorite or bomb.



Sun

Star nearest to Earth, which is in the center of our solar system.

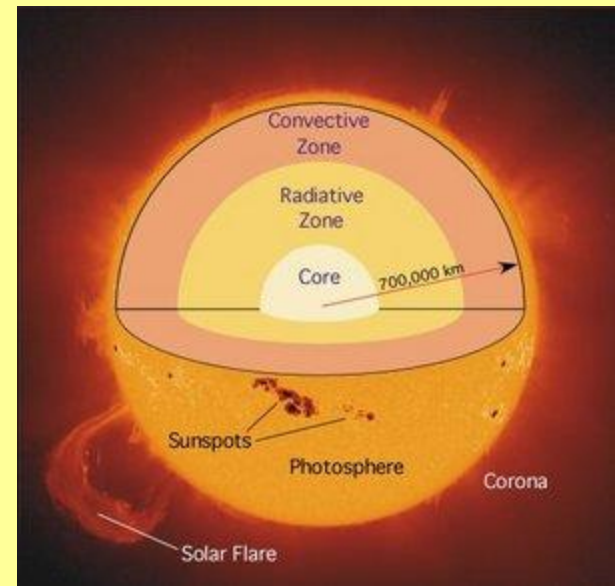
A sphere of burning gas that does rotate.



Photosphere*

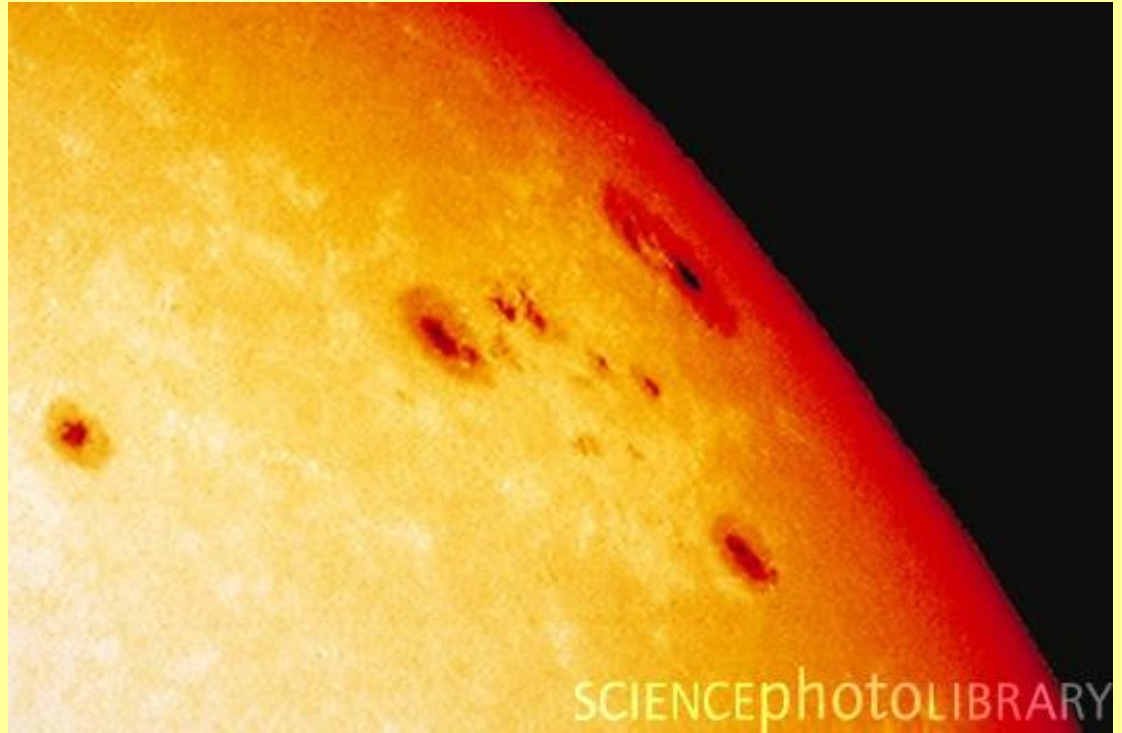
The visible and coolest outer layer of a star, especially of the Sun.

The photosphere of the Sun is a very thin layer where hot gases rise and give off light and heat. It has a temperature of almost $6,000^{\circ}\text{C}$ and is the region in which sunspot activity is located.



Sunspots*

dark spots on the
Sun's surface
(photosphere)



Earth

The planet on which we live; the third planet from the Sun.



impact crater*

a mark on the earth's surface, usually circular, formed by a large ancient meteorite impact



atmosphere

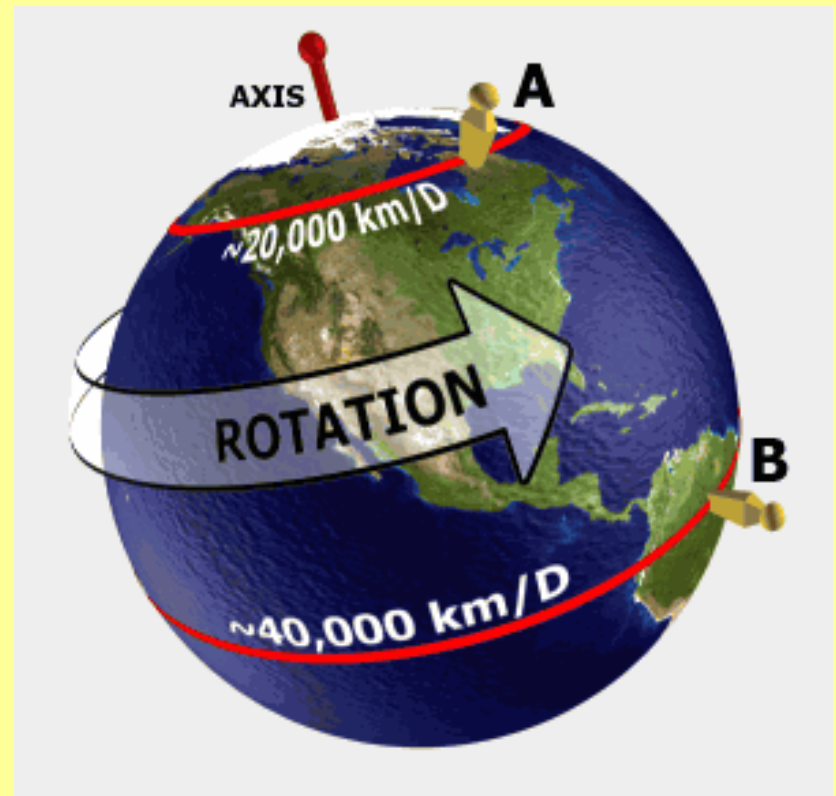
The atmosphere is the layer of air (gas) that surrounds and protects a celestial body.

Where weather comes from.



rotate/rotation

to turn on an axis;
the spinning of
Earth on its axis



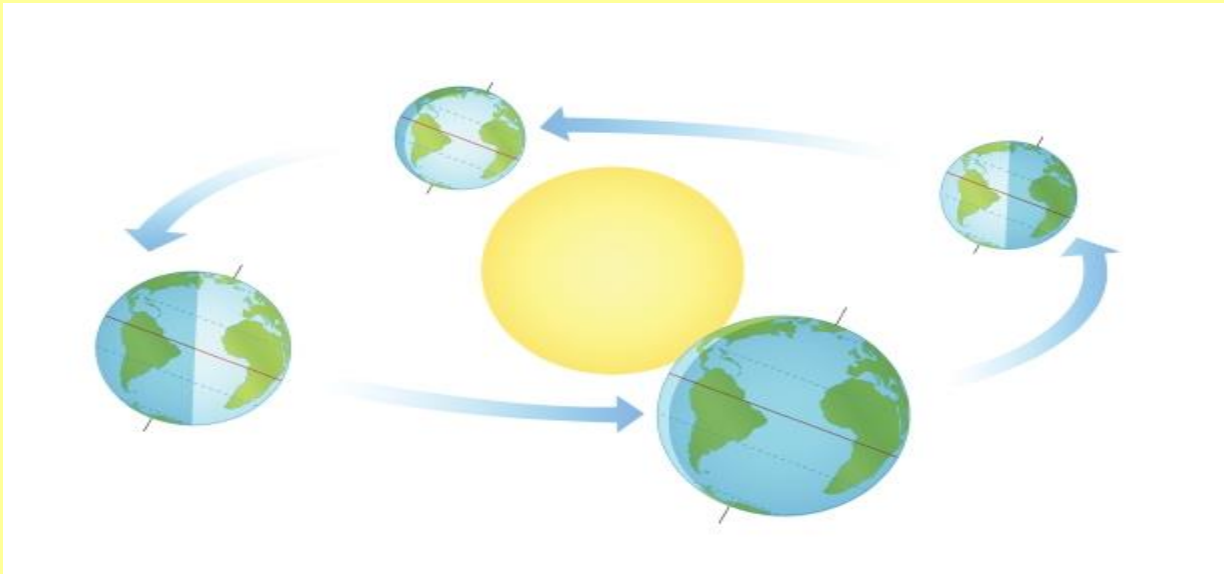
revolve/revolution

to travel in a closed path (orbit) around a larger object completing a fixed course

Earth as it moves around the sun or the moon as it moves around the Earth;

Earth's revolution causes the seasons to change.

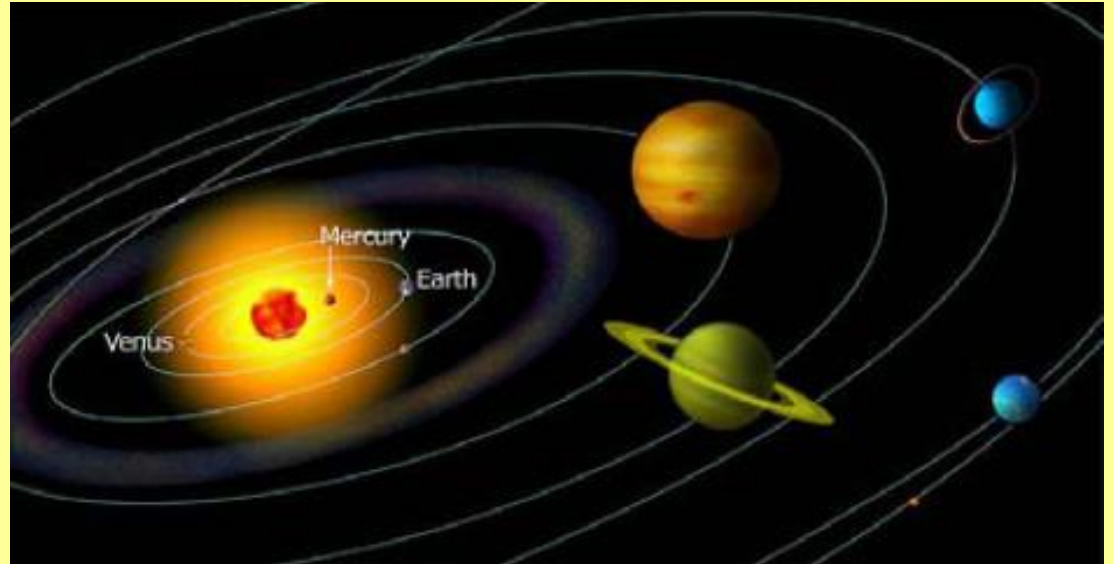
It takes the Earth 365 days or 1 year to revolve around the Sun



orbit

The path an object takes as it moves around another object (revolving).

A celestial body's "road"



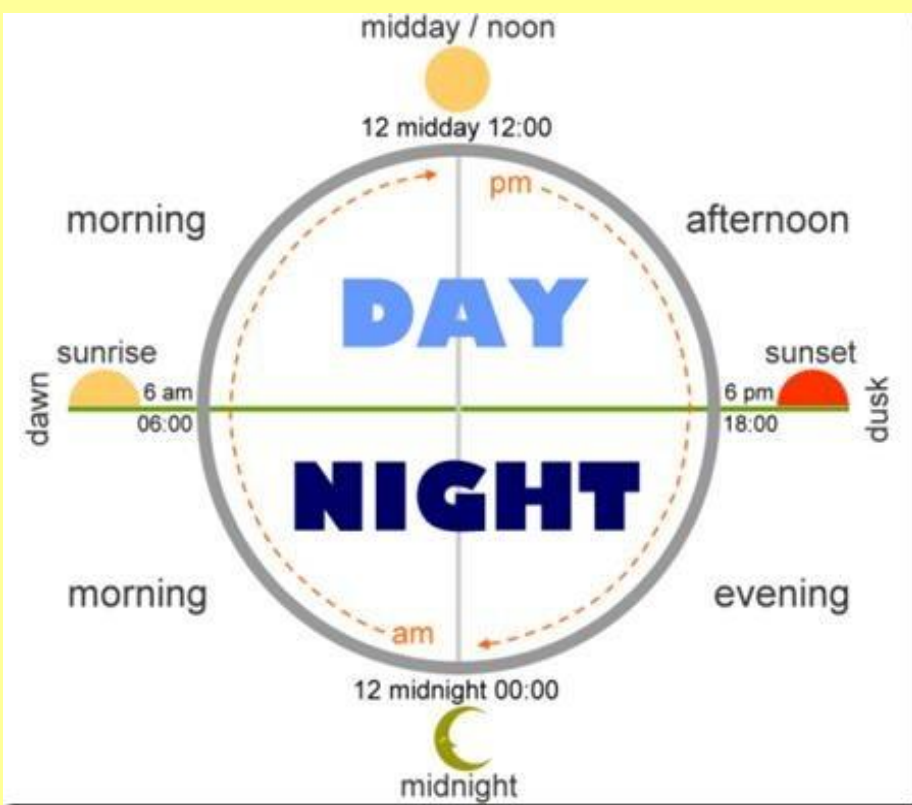
UNIT 10
LESSON 2

Day and Night Cycle



cycle

A pattern or event that is repeated on schedule or in the exact same order



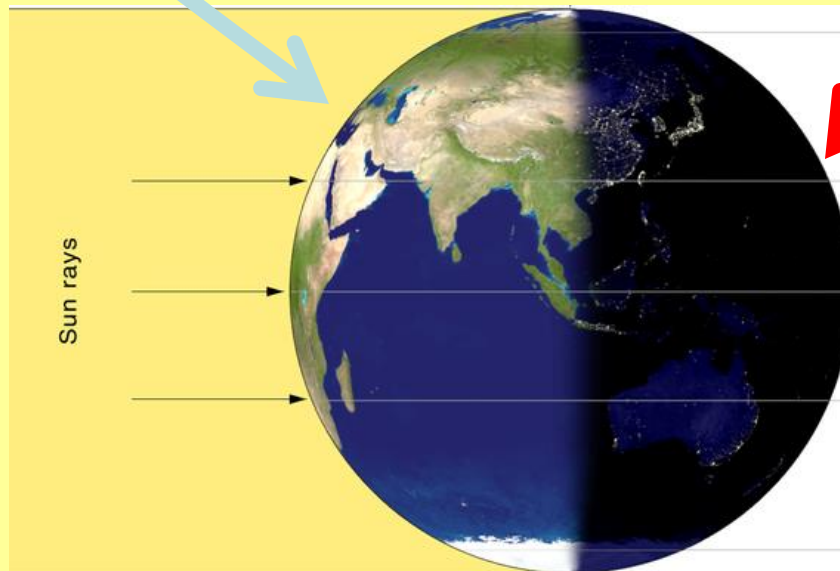
Day and Night:*

Day

The 12-hour period between sunrise and sunset, especially hours of light

Night

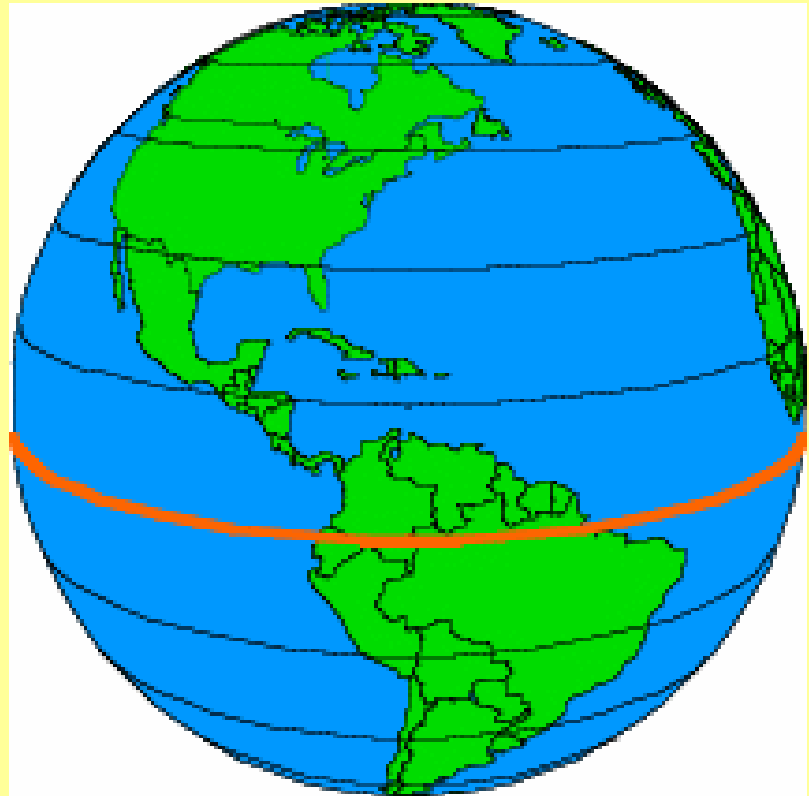
The 12 hour period between sunset and sunrise, especially the hours of darkness.



Equator*

An imaginary line around Earth that is halfway between the North and South Poles.

Sun shines directly on the equator



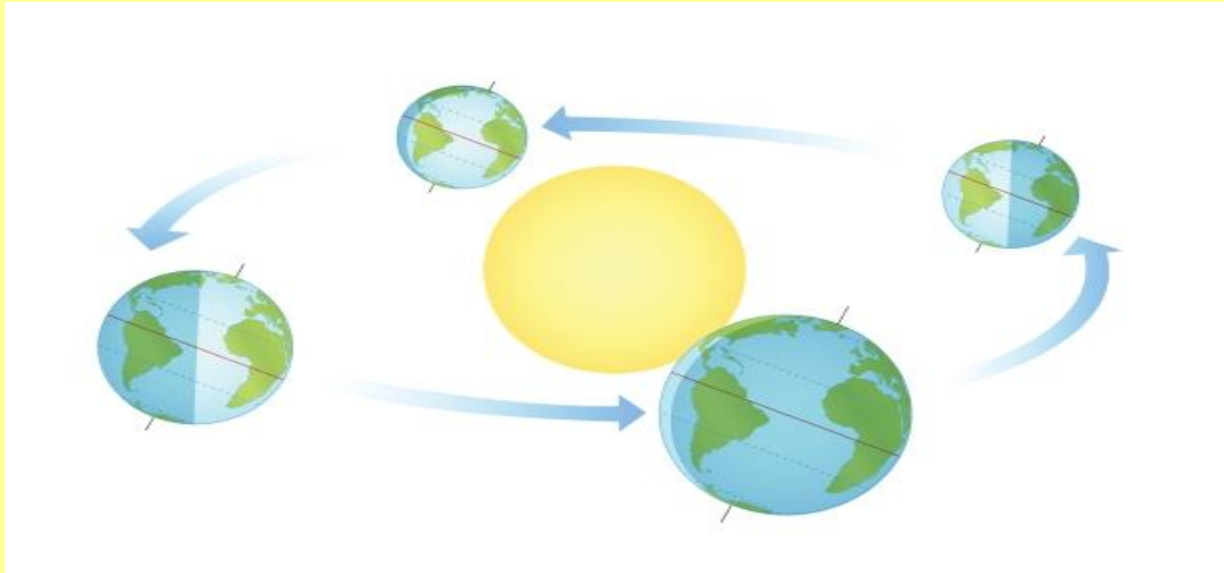
revolution

To go around a larger object; to orbit

Earth revolves around the sun or the moon revolves around the Earth;

Earth's revolution causes the seasons to change.

It takes the Earth 365 days or 1 year to revolve around the Sun

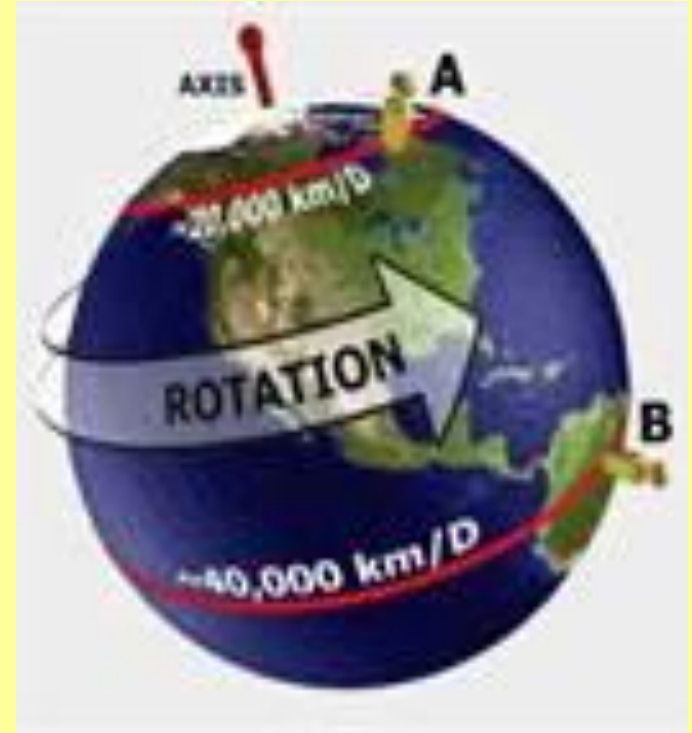


rotation

to turn or spin on an axis; the spinning of Earth on its axis

Causes the day and night cycle.
It takes the Earth 24 hours or 1 day to make a complete rotation

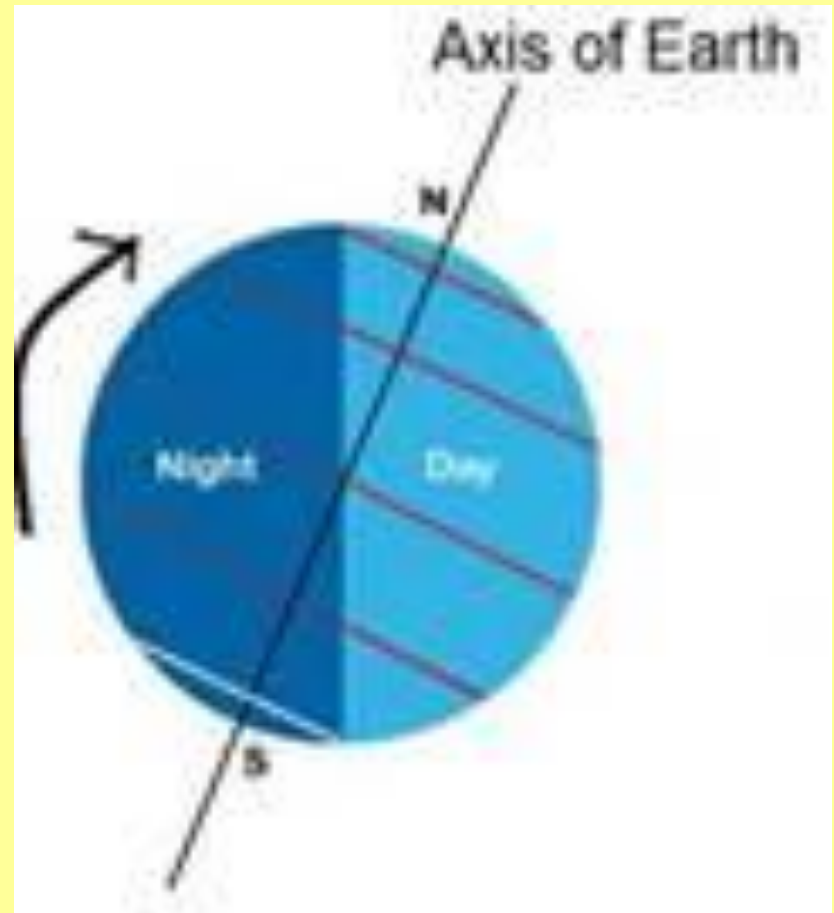
Earth rotates counter clock wise:
towards the East



axis

an imaginary line that runs between the North and South poles.

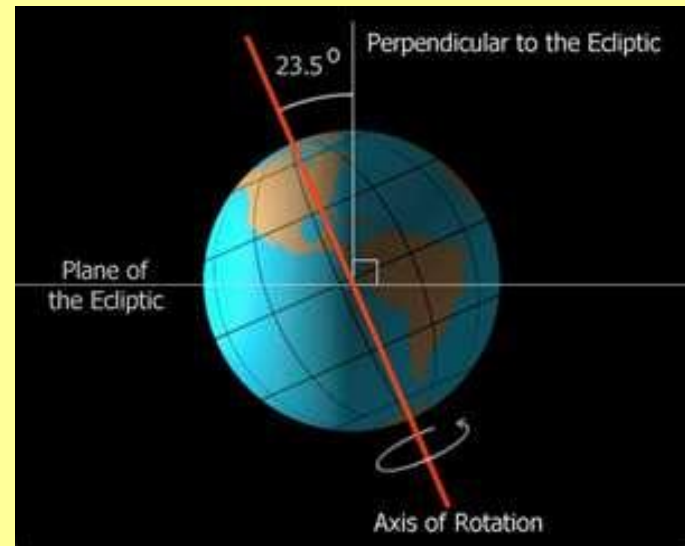
As Earth revolves around the Sun, it also rotates, or spins, on its ***axis***



axial tilt

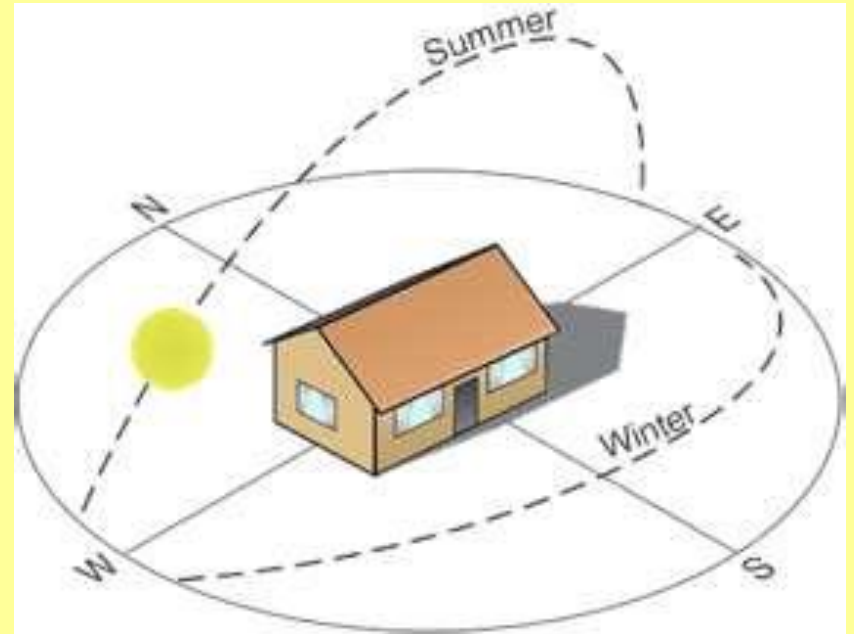
Angle or slant of Earth's axis of rotation at 23.5°

Also causes seasons based on if the axis is tilted towards or away from the Sun



solar arc (apparent movement)

the apparent daily path of the Sun moving across the sky from east to west



lunar arc (apparent movement)

the appearance that the moon is moving across the night sky

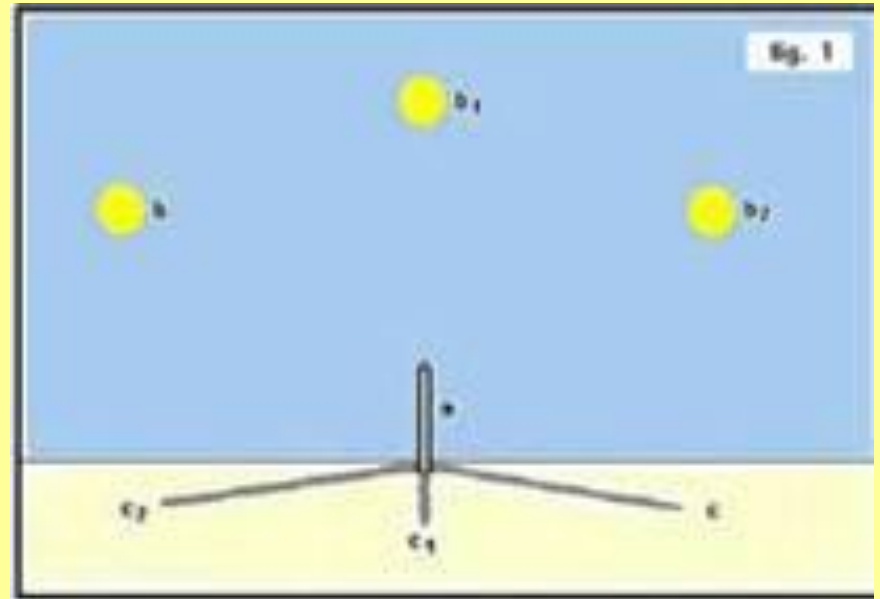


Shadow

Created when an object is blocking the path of sunlight.

Length of the shadow is determined by how much light the object is blocking

Points in the opposite direction of the sun:
west to south to east



terminator

is a moving line that marks the illuminated day side and the dark night side of earth. sometimes called the twilight zone or “grey line”

