Earth, Sun, and Moon Notes

The <u>Earth</u> is the 3rd planet from the Sun. It supports life because it has water and oxygen. It has a protective atmosphere that blocks out most of the Sun's damaging rays and protects it from small objects floating in space. It is made mostly of rock.

The <u>Moon</u> revolves around Earth (it is a satellite of Earth). It is 240,000 miles away and is $\frac{1}{4}$ the size of Earth. There is NO atmosphere. It has no air, wind or liquid water. It reflects the light of the Sun.

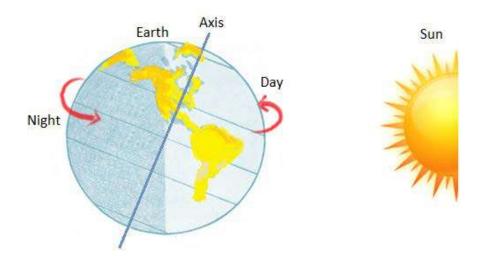
The **Sun** is made of hot, glowing gases. It is about 93 million miles away.

EARTH'S ROTATION

Rotation = A single complete turn

The Earth rotates on an imaginary line called an <u>axis</u>, which runs through Earth from the North Pole to the South Pole.

The <u>rotation</u> of the Earth causes day and night. One complete rotation of the Earth takes <u>24 hours or 1 day</u> As it rotates, one side of Earth faces the sun. This side has daytime. The side of Earth facing away from the sun has nighttime.



EARTH'S REVOLUTION AROUND THE SUN

Gravity pulls Earth toward the Sun, holding it in orbit.

Orbit is the path that an object takes around another object.

Earth **revolves** or travels around the Sun.

It takes Earth about $\underline{365}$ days or $\underline{1 \text{ year}}$ to complete one revolution around the Sun.

Earth rotates on a **<u>tilted</u>** axis.

Earth's axis is always tilted in the same direction. The Earth has seasons because it revolves around the Sun on a tilted axis.

The Earth is divided into halves called hemispheres

The Northern Hemisphere extends from the equator to the North Pole.

The **Southern** Hemisphere extends from the equator to the South Pole.

The part of the Earth that tilts toward the Sun will get more direct sunlight and will experience <u>summer</u>.

The part of the Earth that tilts away from the Sun will get less direct sunlight and will experience <u>winter</u>.

