TA18A –Teach About
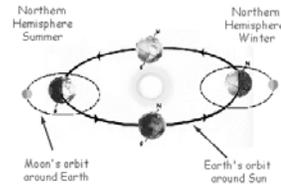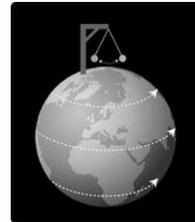
Earth and Its Moon

Use with BrishLab ES18A
Done By: Coach

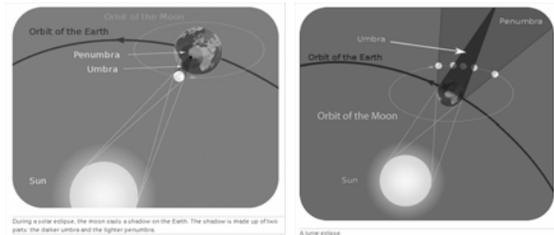1- What is the difference between rotate and revolve?

Earth rotates once a day,
and revolves around the sun once a year.

Image Link

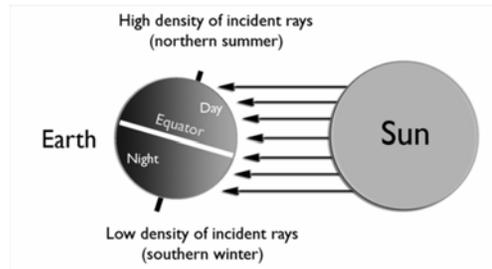2- How does the position of Earth, the Moon and Sun make for different eclipses?

An eclipse is named after the object that becomes hidden – solar or lunar.

Image Link

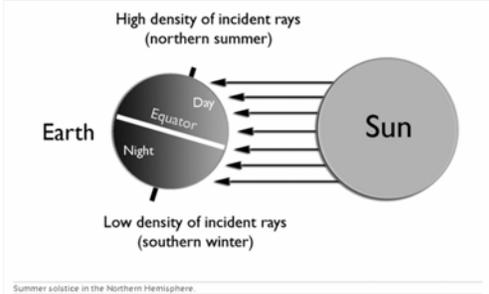3- What season is it when there are more direct rays from the sun and why?

When sun rays are more direct, it is summer because the Earth is heated more directly.

Image Link

4- What is a solstice and how many times a year does it happen?

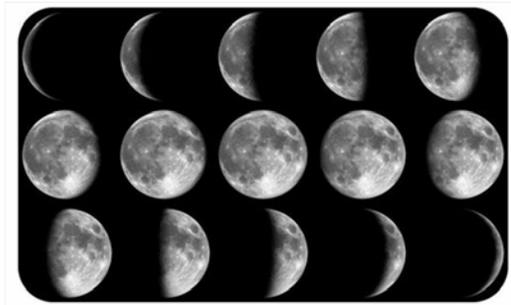During the solstice, the sun's rays strike the surface most directly at either north or south latitudes.

Image Link

5- Why do we see the moon in different phases?

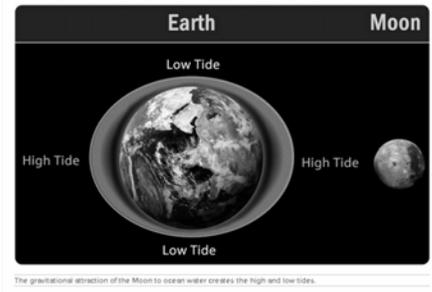We see only the lighted portion of the moon as it revolves the Earth.

Imag

6- What causes tides?

Earth   Moon
Low Tide
High Tide   High Tide
Low Tide
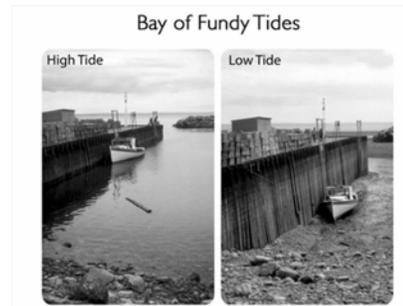The gravitational attraction of the Moon to ocean water creates the high and low tides.

**The Sun's and Moon's gravity
pulling the oceans cause tides on Earth.**

Image Link

7- How many high tides and how many low tides are there in a single day?
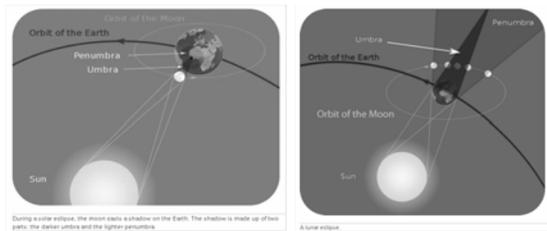
Bay of Fundy Tides
High Tide   Low Tide

**There are two high tides and two low tides
a day – each about 6 hours apart.**

Image Link

8- What is the difference between a solar and lunar eclipse?

Orbit of the Moon
Orbit of the Earth
Penumbra
Umbra
Sun

Penumbra
Orbit of the Earth
Orbit of the Moon
Sun

During a solar eclipse, the moon casts a shadow on the Earth. The shadow is made up of two parts: the darker umbra and the lighter penumbra.   A lunar eclipse.
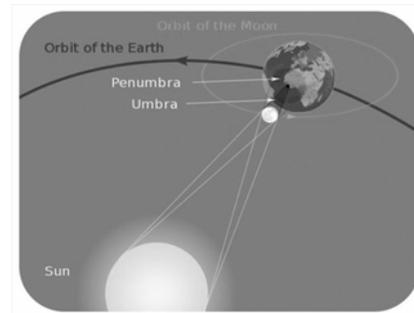
**The order of the planet, sun and moon
determine the kind of eclipse.**

Image Link

9- How is the penumbra different than the umbra in an eclipse?

Orbit of the Moon
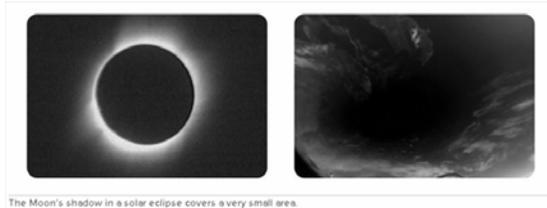Orbit of the Earth
Penumbra
Umbra
Sun

**The umbra is the darkest shadow and
the penumbra is a partial shadow.**

Image Link

10- Why do we see eclipses for only a short period of time?

The Moon's shadow in a solar eclipse covers a very small area.

**The Sun, Earth and Moon are all
moving fast so eclipses do not last long.**

Image Link

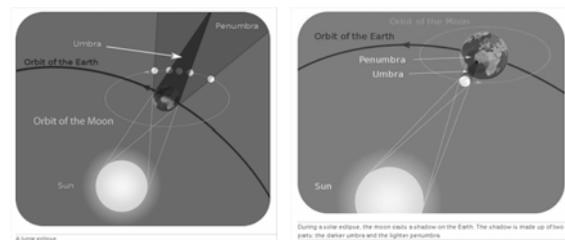## Wrap it up:

Draw, color and label a lunar eclipse and a solar eclipse.

Umbra   Orbit of the Earth
Orbit of the Earth   Penumbra
Umbra
Orbit of the Moon
Sun   Sun
A luna eclipse.   During a solar eclipse, the moon casts a shadow on the Earth. The shadow is made up of two parts: the darker umbra and the lighter penumbra.

Image Link