Today's Plan

Warm Up: Seasons/Eclipses

Review HW: 2 Seasons

Activity: Draw Eclipses

Lecture

HW: 3 Eclipses

Warm Up 2: Seasons
6-1-16

LT I can explain what eclipses are and why they happen.

Q1. What is the difference between rotation and revolution?

Q2. Why does the tilt of the earth's axis cause the seasons?

Warm Up 2: Seasons
6-1-16

LT I can explain what eclipses are and why they happen.

Q1. What is the difference between rotation and revolution?

A1. Rotation is the spinning of earth, causes sun to rise and set.

Revolution is the movement of Earth around the Sun, contributes to the seasons

Q2. Why does the tilt of the earth's axis cause the seasons?

A2. When the axis is pointed toward the sun that hemisphere is hit more directly by the Sun's rays and are in the rays for longer hours.

HW 2: Seasons

Ask neighbors

2 minutes

Ask LeMay

? min

5 Minutes to Review 5 words in Space Research

Then share out with each other.

Period 1, Work on HW 2

Diagrams of a Lunar Eclipse

Pre assement

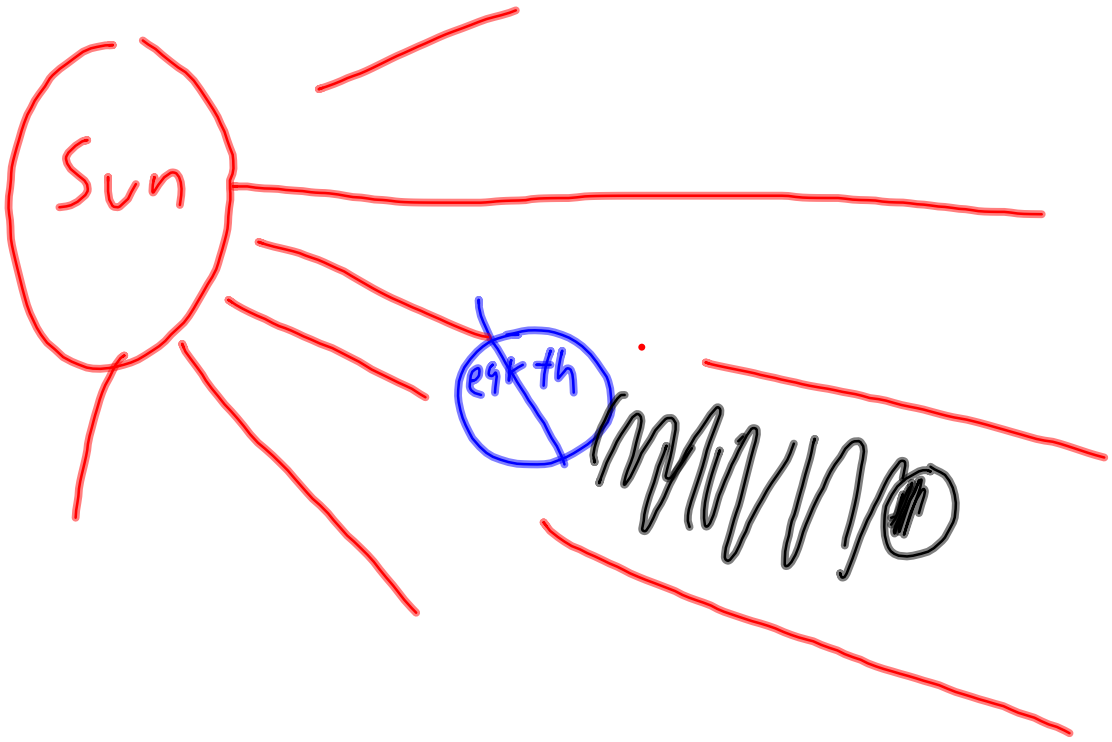
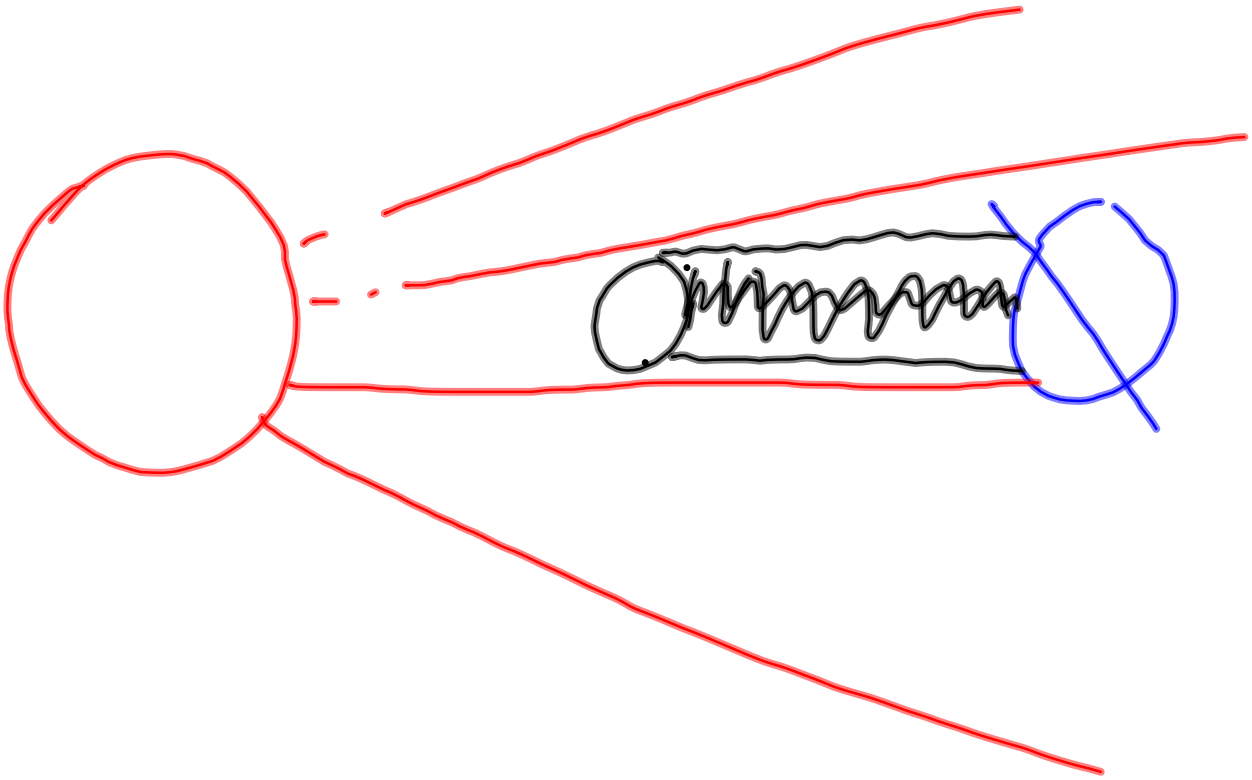


Diagram of a Solar Eclipse



You Tube Videos

Watch this one for sure!
https://www.youtube.com/watch?v=kgbK2FZFFdw

Solar Eclipse

http://www.youtube.com/watch?v=cGrxEhCUJn8&NR=1

Lunar Eclipse

http://www.youtube.com/watch?v=2dk--lPAi04

Lunar and Solar Eclipse

http://www.youtube.com/watch?v=Rk3Hjk_oHZ0&feature=fvw

How eclipse work

http://www.youtube.com/watch?v=xwGs8_otT64

http://www.youtube.com/watch?v=jkLlJEwdPwE

5 min with partners to discuss these questions

1. why are total solar eclipses so rare?

2. Why do lunar eclipses last so much longer and so many more people can see them?

2 Warm Up: Seasons / Eclipses
6-1-16

Q1. What are the two primary reasons the hemisphere that is tilted toward the Sun are warmer than the hemisphere away from the Sun.

Q2. How did the first person to support his claim that the Earth was round?

Q3. What is an eclipse?

Q4. Why don't we have an eclipses every month?

2 Warm Up: Seasons / Eclipses
6-1-16

Q3. What is an eclipse?
A3. When one object blocks the light from the sun.

Q4. Why don't we have an eclipses every month?
A4. The Earth-Moon orbital plane is 5 degree different from the Sun-Earth axis (ecliptic).

Name:_____ Period:_____ Date:_____

3 Eclipses

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In class, before lecture: Please diagram what you believe a solar and lunar eclipses may look like.
Please include: The Sun, Earth, Moon. The Sun's rays, and the shadows from the Earth or Moon.

Solar Eclipse

Lunar Eclipse

PLEASE DIAGRAM: include, Sun, Earth's orbit, and Moon's orbit
The Sun-Earth axis (x-axis) = Ecliptic
The Earth-Moon axis is tilted 5 degrees off the Ecliptic

Vocabulary Words

Lunar Eclipse:

Solar Eclipse:

Umbra:

Penumbra:

Please diagram what a solar and lunar eclipses look like.
Please include: The Sun, Earth, Moon. The Sun's rays, and the shadows (including Umbra and Penumbra)from the Earth or Moon.

Solar Eclipse

Lunar Eclipse