

Name: _____

Earth in the Solar System

Date: _____ Period: _____

The Physical Setting: Earth Science

Supplemental: Annotating Class Notes

Directions: Using the Class Notes: Astronomy, complete the following activity.

I. Apparent to Actual Motions

- Geocentric Model - _____

Problem 1: _____
Problem 2: _____
- Heliocentric Model - _____

Match the Terms:

- | | |
|------------------------|--|
| _____ Celestial Object | a. star directly above the north pole and/or south pole |
| _____ Celestial Sphere | b. the visible portion of the sky |
| _____ Horizon | c. angular distance measured along the horizon |
| _____ Zenith | d. long exposure photo providing evidence of rotation |
| _____ Star Trail | e. the edge of the visible portion of the celestial sphere |
| _____ Circumpolar Star | f. angular distance measured above the horizon |
| _____ Polar Star | g. stars that move around a polar star |
| _____ Altitude | h. a natural object that can be seen in the sky |
| _____ Azimuth | i. the highest point on the celestial sphere |

Supplemental: Annotating Class Notes

II. Earth's Motions

- Rotation - _____

1. Evidence: _____

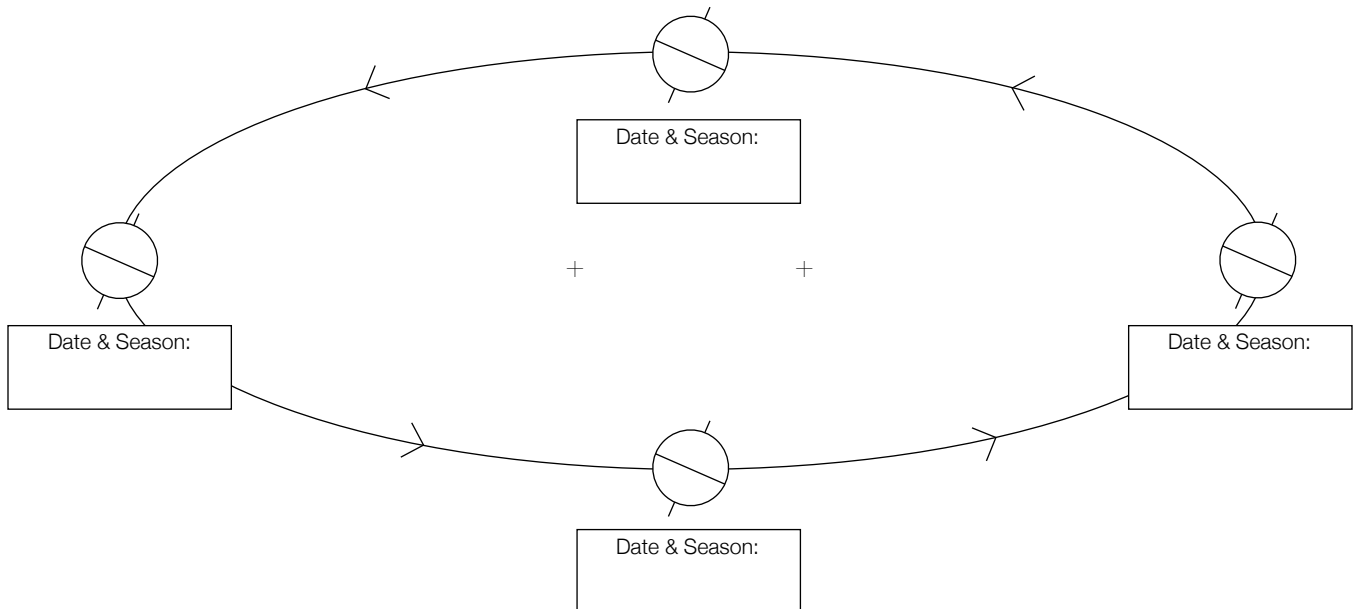
2. Evidence: _____

- Revolution - _____

1. Evidence: _____

Label the following:

1. Dates of the solstices and equinoxes
2. Draw in the Major Axis
3. Label the Foci
4. Label the Sun



Supplemental: Annotating Class Notes

- Eccentricity - _____

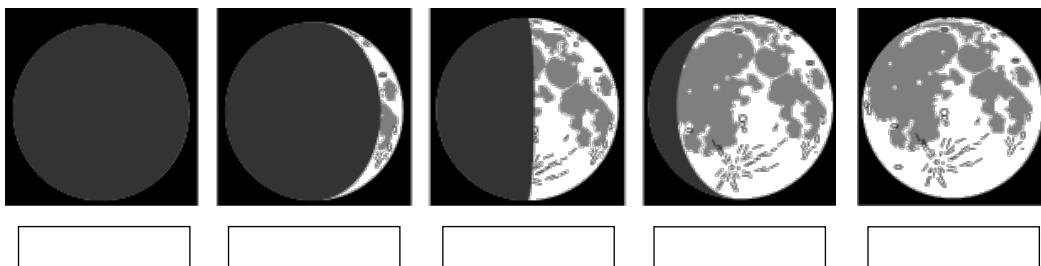
- The eccentricity of a circle is _____ and the eccentricity of a line is _____
- Solve: As Planet X revolves around a star, calculate the eccentricity if the distance between to foci is 5,000,000 km and the length of the major axis is 149,600,000 km [show all work].
- Compare: Planet X's eccentricity of orbit to Earth's orbit. _____

III. The Moon

Fill in the chart below with the associated time for each Moon motion:

Period of Rotation	Period of Revolution	Lunar Phase Cycle

Fill in the chart below with the associated time for each Moon motion:

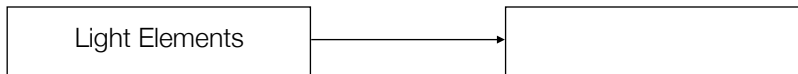


Supplemental: Annotating Class Notes

IV. The Sun

- Sun - _____

- Makes up _____ of the mass in our solar system
- Fusion - the source of the _____ energy



V. The Solar System

Match the Terms:

- | | |
|--------------------------|---|
| _____ Jovian planet | a. gaseous planet with low densities |
| _____ Asteroid | b. solid surface planets with high densities |
| _____ Terrestrial Planet | c. rock that creates a streak through our atmosphere |
| _____ Meteorite | d. solids that change to a gas when heated by the Sun |
| _____ Comet | e. small fragment that orbits the Sun |
| _____ Solar System | f. everything under the Sun's gravitational influence |

Complete the Paragraph about the Evolution of our Solar System

Five billion years ago a large cloud of gas and dust left over from an exploded star started to condense and rotate due to _____. A large portion of the gas and dust began to accumulate in center. The other concentrations clumped together and formed the planets. Eventually the concentration in the center became too _____ it ignited due to nuclear fusion. A violent _____ radiated outward from the Sun and pushed most of the gases and debris between the planet of _____ and _____.