

Astronomy: Solar System Unit 1 Homework Chapter 1-4

Name \_\_\_\_\_ Date \_\_\_\_\_

Write or preferably type out your answers to each question on separate paper. Answer each question in a complete sentence that implies the original question asked. You may submit your homework by email with a computer (use your cougar email account please) and send to the following address: [mbroyles@cccd.edu](mailto:mbroyles@cccd.edu) Always save an electronic copy in case the original is lost.

1. Define or explain the following concepts:
  - a. constellation
  - b. celestial coordinates
  - c. synodic vs. sidereal day and month
  - d. rotation vs. revolution
  - e. triangulation and parallax
  
2. Describe and list the contributions of the following people:
  - a. Erathosphenes
  - b. Ptolemy
  - c. Copernicus
  - d. Brahe
  - e. Kepler
  - f. Galileo
  - g. Newton
  
3. Explain how Galileo's observations supported the heliocentric model.
  
4. What was the significance of discovering the aberration of starlight?
  
5. How did the model of Ptolemy explain retrograde motion?
  
6. What is meant by the term "spectral window"?
  
7. In what way is the Doppler effect useful in astronomy?
  
8. Briefly list and discuss Kirchhoff's laws.
  
9. How do astronomers analyze starlight?
  
10. What is rotational broadening and what information do this study give astronomers?