

1. What is the difference between astrology and astronomy?
2. When we consider the meaning of the statement, "Space is reallllly big." we need to consider the units of measure. How do we measure distances in space?
3. What constellation in the night sky is closest to the Zenith in January?
4. Give three examples of asterisms and the night sky and 3 non-Zodiac constellations.
5. Contrast heliocentric with geocentric viewpoints.
6. Distinguish between Zodiac, the ecliptic, and your astrological sign using the Sun as the common link.
7. How can I tell the first quarter moon from the last quarter moon?
8. Name the 5 circumpolar constellations.
9. If I move across the galaxy, almost 100000 light years away, what would the Big Dipper look like?
10. What are some differences in stars we have looked at?
11. Why are there 13 constellations on the ecliptic?
12. How did Galileo's viewpoint of the solar system differ from that of Tycho Brahe?
13. Pick one heliocentric astronomer and discuss the important parts of his or her life, as detailed in the class project.
14. How can I find Bootes and the little dipper by using the Big Dipper as a marking stone.
15. How are Kepler and Tycho Brahe connected in astronomy?
16. Which astronomer found a method to measure the distance from the sun to the planets?
17. It is said that the speed of the planets changes with time; explain why in terms of Kepler's laws.
18. What's the difference between epicycles and ellipses?
19. Describe the constellation Cepheus.
20. Can you see all of the 88 constellations from Iowa? Explain.
21. What mimics the system of latitude and longitude for the stars?
22. Explain the difference between winter and summer.
23. The solstices differ from the equinoxes in what way?
24. What is precession?
25. Over a period of say, a hundred thousand years, what happens to a constellation?
26. What is the meaning of the phrase, "The culture is written in the stars?"
27. Give an example of a pseudoscience, a science, and a non-science and explain their similarities and differences.
28. If you were given a ticket for speeding while headed east on 20 at 9 pm, could you argue the moon was in your eyes?
29. Why was Galileo's discovery that the moon and the sun had blemishes so disconcerting to the religious of the time?
30. What is Newton's law of universal gravitation and why does it matter?