

Name: _____

Period: _____ Date: _____

Ch.1: *The Cycles of the Sky (The Celestial Sphere)* Study Guide Review
Astronomy



Vocabulary

1. Horizon –
2. Celestial Sphere –
3. Constellation –
4. Asterism –
5. Celestial Pole –
6. Celestial Equator –
7. Circumpolar Constellations –
8. Star Trails –
9. Zenith –
10. Nadir –
11. North Point –
12. South Point –
13. East/West Points –
14. Angular Distance –
15. Arc Minute –

16. Arc Second –

17. Rotation –

18. Revolution –

19. Ecliptic -

Review

1. We see space in how many dimensions and why is that?
2. Why is the horizon a key factor in studying the sky above us?
3. What does celestial actually mean?
4. How much of the celestial sphere do we see at a time and why is that?
5. The view of the celestial sphere is heavily dependent on what? Explain.
6. What significant feature of human intelligence helped us to revolutionize agriculture and keep time? Explain how this relates to astronomy.
7. What's the IAU? Why was this group needed?
8. How many constellations are recognized today?

9. How does an asterism compare to a constellation? Give an example.
10. Do stars actually move/can we see them move? Explain.
11. Many constellation patterns were associated to survival. Name 3 important circumstances that humans used the sky for in order to survive.
12. Which celestial pole is always in our sky and which one isn't? Why is that?
13. Are the celestial equator and the horizon the same for our location? Could it be elsewhere? Explain.
14. How is the north point different from the north celestial pole? Explain.
15. Why would computer software showing us star trails be good to know if we're studying the sky?
16. Compare and contrast the zenith and the nadir. Why are these necessary to have?
17. Explain angular distance and how arc minutes and arc seconds tie into it.
18. If looking towards the north point on the horizon and the north celestial pole, what would the angle be if I was standing on the latitude line of 67 degrees? Where would I be if the south celestial pole and the zenith were in the same spot for me? Explain.

19. Compare and contrast revolution and rotation. Provide an example for each.
20. We only see certain constellations throughout the year, especially ones on the ecliptic. Why is that? How does that relate to stars rising earlier each day?
21. How are astronomy and astrology related? How are they different? Explain.
22. Joe, here, is hanging out on the beach of Hilton Head Island in South Carolina and scoping out the sky above him. Being that Hilton Head is just off the eastern coastline, he's facing east in order to look out over the ocean. Help Joe by labeling all of the important celestial points that he needs to be aware of in order to effectively study the sky above him. Hilton Head sits 32.2163° N. (← Be sure to use a protractor for this one *hint hint*.)

He's originally from our Steeler country here. His dad has always told him to look north and he'll see the mighty big dipper! Is that the case here? Would he see it out over the ocean? Help him out and explain it to him...

