

Station 1

Question	Hint
1. <i>What is astronomy the study of?</i>	<i>Page 6</i>
2. One unit used commonly in astronomy is "AU." (a) What does the abbreviation AU stand for? (b) AU was calculated based on what measurement?	<i>Dictionary – "AU"</i>
3. Approximately how much larger (diameter) is the Sun compared to the Earth? (e.g. 10 times larger, 20 times larger...)	<i>Dictionary – Look up "planets" and "sun" pay attention to units of size, diameter</i>
4. Why do we place telescopes in outer space versus always on Earth's surface?	<i>Page 751</i>
5. Edwin Hubble made two remarkable discoveries in astronomy that contributed to the honor of having a telescope named after him in outer space. What were his two large contributions?	1). <i>Page 839</i> 2). <i>Page 842</i>
6. What are the four main types of galaxies in our universe? (Include both name and a sketch in your answer)	<i>Page 839 – 840</i>
7. (a) What is the name of our galaxy? (b) What type of galaxy is our galaxy? (c) Approximately how many stars make-up our galaxy? (d) Our galaxy belongs to a group of galaxies. What is the name of this group?	a) <i>Page 833</i> b) <i>Page 835</i> c) <i>Page 836</i> d) <i>Page 841</i>

Station 2

8. Our Sun is one of many stars in our galaxy. Our planetary system around the sun is one of many planetary systems in our galaxy. Where is our solar system approximately located in our galaxy?	<i>Page 835</i>
9. Order the following terms smallest to largest: Sun, Milky Way, Earth, Universe, Solar System, Local Group	<i>Page 841</i>
10. What is the difference between the geocentric and heliocentric models of the solar system?	<i>Page 775</i>
11. How many planets are in our solar system?	(Exclude Pluto)
12. Why did Pluto get “demoted” to the status of a dwarf planet?	Think about what would happen if Pluto and every other small rock were planets
13. In the diagram below label the planets:	<i>Page 780-790</i>
14. What is your favorite mnemonic to remember the order of the planets?	Yummy Pizza!!!

Station 3

Question	Hint
15. Which planet in our solar system is the largest?	<i>Page 786</i>
16. Other than Earth, who are the planets named after?	Not royalty... but...
17. Which two planets have the largest number of moons?	<i>Pages 787 and 788</i>
18. Why is Earth considered one of the Sun’s satellites (ie: moon)?	Think what satellites and moons do...
19. Where is the asteroid belt located (ie: between which two planetary orbits)?	

Station 4

Question	Hint
<p>20. History of Astronomy: Who are the 7 historical astronomers we discussed in class? What were their main contributions?</p> <p>1) 2) 3) 4) 5) 6) 7)</p>	See Notes and Returned Quiz
<p>21. (a) What is retrograde motion? (b) Why did retrograde motion cause a problem with the geocentric model?</p>	<i>Page 776</i>
<p>22. How did Ptolemy try to solve the problem of retrograde motion? (<i>Hint: Think of the system he introduced</i>)</p>	Not a bicycle...
<p>23. What are Kepler's three laws of planetary motion?</p> <p>1) 2) 3)</p>	<p>1) <i>Page 776</i></p> <p>2) <i>Page 778</i></p> <p>3) <i>Page 778</i></p>

Station 5

Question	Hint
<p>24. Kepler's laws solved the problem of explaining retrograde motion! Yay! Draw a smiley face to congratulate Kepler.</p>	Two eyes + a mouth
<p>25. Label the major axis, semi-major axis, and foci in the following ellipse:</p>	<i>Page 776</i>
<p>26. According to Kepler's first law, where can the sun be located in an elliptical orbit?</p>	<i>Page 776</i>
<p>27. What is the difference between aphelion and perihelion?</p>	<i>Page 777</i>
<p>28. Draw a diagram to illustrate Kepler's 2nd Law:</p>	<i>Page 778</i>
<p>29. According to the Big Bang Theory and Hubble's Law what is the current state of the Universe?</p>	<i>Page 842</i>