**Astronomy Review Questions**

***You must answer ALL of these questions in order to qualify for a re-test. Questions must be turned into Ms. Simmons by October 17th, the day of EES Enrichment. If you fail to complete ALL of the questions below, you will NOT be eligible for re-test.***

1. How did the Universe form?
2. What is the Big Bang Theory? (What does it state?)
3. What is the difference between a galaxy and a universe?
4. The Earth is part of what galaxy?
5. How did our solar system form?
6. Explain Hubble’s Law.
7. What are Kepler’s three Laws of Planetary Motion?
8. What does eccentricity measure?
9. If a planet has a high eccentricity, what does that mean about its orbital shape?
10. If a planet is less eccentric, what does that mean about its orbital shape?
11. What is the **rotation** period of Earth?
12. What is the **revolution** period of Earth?
13. What is barycenter?
14. Explain how the barycenter is affected when there are 2 celestial bodies of unequal mass.
15. TRUE or FALSE. Explain your answer. If FALSE, re-write the statement to be TRUE. – Speed increases the farther Earth is from the sun and decreases the closer it is to the Sun.
16. How does the Sun produce its energy?
17. Describe what is happening in fusion? Describe in detail.
18. What are the two elements you would expect to find in a star such as the sun? (Hint: think about **fusion**)
19. What is fission? Give an example. (Hint: think about what happens at the nuclear power plant)
20. Other than visible light, what are the other types of rays in the electromagnetic spectrum?
21. Does the distance from the Sun determine the season?
22. Draw the Earth in APHELION and PERIHELION
23. What are the 2 reasons for the seasons?
24. What causes the length of time between day and night on Earth to change throughout the year?
25. What determines the intensity of the Suns heat?
26. Does intensity increase or decrease as you move toward the poles?
27. Draw a picture of the Northern hemisphere in relation to the sun during the **summer** **solstice**. Must include a picture of the Earth tilted on its axis and a picture of the sun.
28. Draw a picture of the Northern hemisphere in relation to the sun during the **winter** **solstice**. Must include a picture of the Earth tilted on its axis and a picture of the sun.
29. What two things determine what kinds of crops will grow in an area?
30. What two parts of the water cycle would stop without the Sun?
31. What are the two steps in how ozone is created?
32. Without an ozone layer we are more likely to suffer from what three things?
33. What is photosynthesis?
34. What two things does photosynthesis provide for us?
35. Every living thing needs \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to survive.
36. What is the difference between a **PRODUCER** and a **CONSUMER**?
37. The Sun contains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of all matter in our solar system.
38. What is the relationship between an objects size and its gravitational pull?

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