Name: _____ Date: _____ Period: _____

Unit 2 Review: Our Solar System

1. Where was the majority of the matter in the early solar system located? (Before the nuclear fission happened in the protosun)

2. After nuclear fission was established in the protosun, what happened to the remaining gasses in the nebula?

3. What is the “snowline”?

4. Why do scientists think that there was no water inside the snowline?

5. Which planets where made up of mainly refractory materials?

6. Which planets where made up of mainly volatile materials?

7. Based upon data, there is supposed to be another planet roughly four times the size of Earth between Jupiter and Mars. Why is there not a planet there? And what is there now?

8. Scientists believe that the objects that could not form in to planets (like comets and asteroids) are important because…

9. How did the terrestrial planets get water if it was too hot for water to form inside the snowline?

10. List the order of the planets (hint: there are 8, we are not counting Pluto)

11. What is a coma?

12. What are the names of the two different tails of a comet?

13. Besides keeping a planet from forming between Mars and Jupiter, what else did Jupiter do to the material within this area of the solar system?

14. Besides Pluto, what is found in Kuiper Belt?

15. Comets that originate in the Kuiper belt are called _____ comets. These comets take _____ years to orbit the Sun.

16. Scientists have estimated that there are _____ of icy bodies larger than 100 km within the Kuiper Belt as well as _____ or more comets.

17. What bodies come from the Oort Cloud?

18. Scientists think that the Oort Cloud may hold more than _____ icy bodies.

19. What Planet has the fastest orbit of the Sun?

20. What is the hottest planet?

21. Which planet has the largest moon proportional to its own size?

22. Which planet has “dry ice” at its poles?

23. Which is the largest planet?

24. Which planet has a giant red spot that resembles a hurricane?

25. Which planet has the most discernable ring system?

26. Which planet has its axis flipped to where it rotates on its side?

27. Which planet is the furthest from the Sun?

28. Which two planets are almost identical?

29. Describe the leading theory as to how the moon was formed?

30. What were some of the main factors that scientists were looking to be explained when they tried to explain the formation of the Moon?

31. Know the 8 phases of the Moon and their order.

32. Be able to recognize or draw the phases of the Moon.

33. Describe the Moons rotation around its axis as well as how this is related to its revolving around the Earth.

34. What is a sidereal month?

35. What is a synodic (or lunar) month?

36. Describe what a Solar Eclipse is.

37. Describe what a Lunar Eclipse is.

38. What is the Umbra?

39. What is the Penumbra?

40. Why do we not get Solar and Lunar eclipses very often?

41. Be able to describe what type of tide you will be seeing at the beach based on where the Moon is in the sky.

42. What is the Magnetosphere and why is it important?

43. What are auroras and how do they form?