

Test on Chapters 5 through 9

The value of each question is shown. Please answer each question in the space provided

1. (5) What was the solar nebula, approximately how big was it, and how long ago did it form?
2. (5) What is mass? What is density? In your explanation give examples of more and less dense objects.
3. (5) What caused the density and temperature of the solar nebula to increase, creating the protosun?
4. (5) What is fusion and what does it have to do with our Sun?
5. (5) What is the definition of a planet?
6. (5) Explain the core-accretion model for how the planets formed.
7. (5) Name the terrestrial planets in order from the Sun.
8. (5) What is an asteroid and where is the asteroid belt located?
9. (5) Name the Jovian planets in order from the Sun.
10. (5) What is a dwarf planet? Give an example.
11. (5) Name three ways in which the Jovian planets are different from the Terrestrial planets.
12. (5) Why do all the planets orbit in the same direction around the Sun?

13. (5) Except for Mercury, all of the planets' rotation axes are tilted relative to the ecliptic, relative to the plane they sweep out as they orbit the Sun. What do we believe caused these tilts?

14. (5) Which two planets have the most extreme tilts?

15. (5) Which planet has the longest day?

16. (5) Which planet has the longest year?

17. (5) What is the current model of how our Moon was created?

18. (5) Other than Earth, does water exist elsewhere in the solar system? Give some examples.

19. (5) What are exoplanets and how are they found?

20. (5) What causes the Earth's greenhouse effect and why may it be getting worse?

21. (5) What causes the Earth's magnetic field?

22. (5) Which planet has the strongest magnetic field?

23. (5) Which planet is most similar to Earth? Why?

24. (5) What is the difference between meteoroids, meteors and meteorites?

25. (5) If you wanted to find a meteorite, where would you look to have the best chance of finding one?