

Worksheet: The Planets

name: _____

1. See page 636. What % of the solar system's mass is contained in the Sun? _____
2. Look at the tables on page 638. Which planet has a length of day most similar to ours? _____
3. What is the "period of revolution" for Earth? _____ days . . . for Neptune? _____ years
4. What planet takes longer to spin on its axis than it does to orbit the Sun? _____
5. List the "terrestrial planets" and tell why they are called "terrestrial".
6. List the "Jovian Planets" and tell why they are called "Jovian".
7. List 5 differences between the terrestrial and the Jovian planets.
8. *According to figure 22.4, why is it not possible for our moon and Mercury to have an atmosphere?
(2 reasons)
9. *Why is it so difficult for gases to evaporate from Jovian planets? *Use sentences.
10. Skip to page 644. What unexpected thing did the Messenger (space probe) learn about Mercury?
11. What is the daily temperature range on Mercury in degrees F (calculate it)? *What is one reason for this?
12. The surface of Venus is covered with clouds. What technology did a space probe use to reveal the topography of its surface?

13. *Explain the two ways that the atmosphere of Venus makes it impossible for people to be there (even with the best space suits available today).
14. *What is one possible reason why Olympus Mons got so big?
15. What are two reasons experts think liquid water once existed on Mars?
16. *Explain what causes the heat that drives Jupiter's winds.
17. *Go back to page 639 (22.3). Describe what experts think is the structure and composition of Jupiter.
18. List the 4 largest moons of Jupiter and *tell one interesting characteristic of Io and Europa. (p. 650) Do NOT say "closest", "farthest", "biggest", "smallest".
19. *What are the rings of Saturn made of (include range of sizes)?
20. *What is the strangest thing about Uranus? Do NOT use the word "ecliptic" in your answer.
21. *Explain how it was discovered that Uranus has several rings (13)? Do NOT use the word "occultation" in your answer.
22. *Why do scientists think that Triton was "captured" by Neptune? Do NOT use the word "retrograde" in your answer!