

## Worksheet: The Solar System

name: \_\_\_\_\_

\*Use sentences.

1. (p. 645) List the Jovian planets and tell three ways they are different from terrestrial planets.
2. Look at the figure 2 on page 646. If the Sun were the size of a boys' basketball, what is an object that could be used to represent the Earth (approximate).
3. According to page 646, what two basic substances are the terrestrial planets made of?
4. \*Why do the Jovian planets have such low densities (they are light for their size)?
5. \*Why can't small objects like our moon and the planet Mercury keep an atmosphere?
6. \*What is the point of figure 3 on page 647? Do not use the word "nebular".
7. \*Why does Mercury have the greatest temperature extremes of any planet? (Think! Don't ask your teacher.)
8. \*Give two reasons why the surface of Venus is so hot.
9. List two kinds of evidence that suggest Mars once had liquid water.
10. Jupiter has over 60 moons. List the 4 largest.
11. What is believed to be the source of heat within Io?
12. What are Saturn's rings made of?

13. \*What is the most unusual characteristic of Uranus?
14. \*According to the IAU, (besides size) what is the main difference between regular planets and dwarf planets?
15. \*What did the spacecraft (unmanned) “NEAR Shoemaker” accomplish? Be sure to include the extra thing that it did.
16. What are asteroids, and between what two planets are most of them found?
17. \*How is the composition of comets different from asteroids?
18. \*What is the point of figure 23?
19. \*Explain why the tail of a comet always points away from the Sun.
20. What are the two source areas where comets originate? Circle the one closest to the Sun.
21. In what year will Halley’s comet return?
22. \*Read about meteoroids. Look at table 2 on p. 664. What is the connection between comet 1862 III and the meteor shower that we can see every August 12?
23. Read p. 665. The red spots on the map are impact structures. Explain what this means?
24. \*Read p. 665. Explain the Tunguska event. (When, where, what happened?)