

Name \_\_\_\_\_

**Open-book, Take-home Test of Stars and Stuff**

This test will count for your test grade.  
By the way, I decided to be nice and give you page numbers.

1. What are the contributions to astronomy of the following scientists? [3]  
Hipparchus (p. 615)  
  
Nicholaus Copernicus (p. 617)  
  
Tycho Brahe (p. 617)  
  
Johannes Kepler (p. 618)  
  
Galileo Galilei (p. 619)  
  
Sir Isaac Newton (p. 620)
  
6. What is the difference between rotation and revolution? (p. 622-624) [1]
  
7. What are the moon's phases, and during which are solar and lunar eclipses possible? (626-9) [1]
  
8. Describe four major features of the lunar surface. (p. 631-2) [2]
  
9. List the planets in order, and add the asteroid belt and Kuiper belts. (p. 644) [5]

10. What are three differences between the Jovain and Terrestrial planets. (p. 645) [2]
11. Explain the nebular theory of the solar system's origins. (p. 647) [1]
12. List one major feature of each of the eight planets. (p. 649-658) [4]
13. Describe the three parts of a comet. (p. 662) [2]
14. What are the differences between meteoroids, meteors, and meteorites? (p. 663-4) [1]
15. How does the Doppler Effect relate to astronomy? (p. 667 and 718) [1]

16. What are the different types of telescopes, and the advantages of each? (p. 678 – 683) [2]
17. Diagram the layers of the sun. (p. 685) [2]
18. How does nuclear fusion produce energy? (p. 689) [1]
19. How does star color relate to star temperature? (p. 701, 704) [1]
20. What are binary stars, and what portion of stars are binary? (p. 701) [1]
21. What is parallax and how does it relate to star distance? (p. 702) [1]
22. Define a light year. (p. 702) [1]
23. Create a Hertzsprung-Russel Diagram (p. 704) [2]

24. What is the difference between a nova and a supernova? (p. 705, 711, 713) [1]
25. Follow the life cycle of a medium-sized star from birth to death, (p. 707-710) [2]
26. What is the evidence for black holes in the universe? (p. 714) [1]
27. What are three common galaxy shapes, and what is a barred spiral? (p. 717) [2]
28. Explain Hubble's law. (p. 719) [1]
29. Explain the big bang theory. (p. 720) [2]
30. What is the zodiac and list all of its signs. (p. 722) [7]