**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Chapter 24 Homework**

1. **What is the electromagnetic spectrum?**
2. **Which part of the EM spectrum can we see?**
3. **What is the highest energy type of EM radiation?**
4. **What is a photon?**
5. **How is light like a wave?**
6. **How is light like a photon?**
7. **What produces a comet’s tail?**
8. **What is spectroscopy?**
9. **What is a continuous spectrum and what does it look like?**
10. **What is an absorption spectrum and what does it look like?**
11. **What is an emission spectrum?**
12. **How does spectroscopy help us study stars like the sun?**
13. **What does the Doppler Effect say about what happens as objects move away from us?**
14. **What kind of Doppler shifts indicate slower speeds?**
15. **Who was the first astronomer to use telescopes to study astronomy?**
16. **What is a refracting telescope?**
17. **What is the most important lens in a refracting telescope?**
18. **What is a focus?**
19. **What is chromatic aberration?**
20. **What does chromatic aberration do to an image?**
21. **What is a reflecting telescope?**
22. **What is the main advantage of using reflecting telescopes?**
23. **Are both reflecting and refracting telescopes optical telescopes?**
24. **What are the three properties of optical telescopes?**
25. **How do scientists detect radiowaves?**
26. **Name at least 3 advantages of radio telescopes?**
27. **When was the Hubble Space Telescope put into orbit?**
28. **Do space telescopes actually take pictures of objects? If not, how do they get images?**
29. **Is the sun a large star compared with stars in the universe?**
30. **Even though the sun is an average star, why is it important to the solar system?**
31. **What are the four parts of the sun?**
32. **What is the average temperature of the photosphere?**
33. **What is the photosphere?**
34. **What are granules?**
35. **What is the chromosphere?**
36. **When can the chromosphere be seen?**
37. **What are spicules and in what layer of the sun are they found?**
38. **What is the corona?**
39. **How hot can the corona get?**
40. **What is solar wind and how fast can it travel?**
41. **Why does the corona radiate much less energy than the photosphere, even though its much hotter?**
42. **Who first found sunspots?**
43. **What is a sunspot?**
44. **Are sunspots hotter or cooler than the surrounding photosphere? By how much?**
45. **What are prominences?**
46. **What is a solar flare?**
47. **How long do solar flares usually last?**
48. **When solar flares release energy, what forms of EM radiation is usually ejected?**
49. **How can solar flares affect earth?**
50. **What is an aurora and where do they occur?**
51. **What is nuclear fusion?**
52. **What is the lifespan of our sun?**
53. **Is our sun young, middle-aged, or old?**
54. **Approximately how much longer does the sun have to burn?**