



Name \_\_\_\_\_

Date \_\_\_\_\_

## #26 - Stars

1. When you divide the incoming light from an object into individual colors it's called \_\_\_\_\_
2. Hot objects, that emit light at all wavelengths, are said to give off \_\_\_\_\_
3. The continuous spectrum of a star has gaps in it, darker bands where different elements \_\_\_\_
4. In 1901, who developed a system to classify stars using absorption lines in their spectra? \_\_\_\_
5. Who showed how objects emit light of different colors based on their temperature? \_\_\_\_\_
6. Hotter stars put out more light at the blue end of the spectrum, while cooler ones peak \_\_\_\_
7. Payne-Goposchkin showed that stars were overwhelmingly composed of \_\_\_\_\_
8. The letters 'O', 'B', 'A', 'F', 'G', 'K' and 'M' arrange stars in order from \_\_\_\_\_
9. Which star, classified as an A0, is the brightest star in the night sky? \_\_\_\_\_
10. If you look at the Sun's spectrum, it actually peaks \_\_\_\_\_
11. The total amount of energy emitted by a star is called its \_\_\_\_\_
12. The luminosity of a star depends on \_\_\_\_\_
13. A plot of a stars luminosity vs it's temperature is called \_\_\_\_\_
14. The thick line, running diagonally down an HR diagram is called \_\_\_\_\_
15. Comparatively, as shown on an HR diagram, massive stars are \_\_\_\_\_
16. Most stars live the majority of their lives \_\_\_\_\_