



Name \_\_\_\_\_

Date \_\_\_\_\_

### #34 - Binary and Multiple Stars

1. Stars that appear close together, even though they are actually very far apart, are called \_\_\_\_\_
2. Two stars that physically orbit each other are called \_\_\_\_\_
3. What percentage of all stars in the sky are part of a binary, or multiple, star system? \_\_\_\_\_
4. If two stars of a binary system can be resolved using a telescope, they're called \_\_\_\_\_
5. The brightest star in the night sky, a luminous blue star, is a visual binary called \_\_\_\_\_
6. The white dwarf companion of Sirius is by far the brighter of the two when using \_\_\_\_\_
7. Observing the orbital motion of visual binaries allows us to calculate \_\_\_\_\_
8. The only way we know to get accurate measurements of stellar masses, is when \_\_\_\_\_
9. The shift in wavelength for an observer moving relative to a wave source is called \_\_\_\_\_
10. Binaries detected by a red or blue shift of the stars' spectral lines are called \_\_\_\_\_
11. How many stars are gravitationally bound together in the Mizar and Alcor star system? \_\_\_\_\_
12. Polaris, the North Star, is actually a pentuple star system, composed of \_\_\_\_\_
13. Stars that were born in the same multiple star system would likely have similar \_\_\_\_\_
14. In an eclipsing binary, when the fainter star blocks the brighter one, we see \_\_\_\_\_
15. Stars that get so close together that they touch each other are called \_\_\_\_\_
16. When stars in a binary system have evolved opposite of what we expect, it's called \_\_\_\_\_