







6. Above are HR diagrams of two clusters of stars, an open cluster, and a globular cluster. What property of the clusters causes the two HR diagrams to differ? Explain how this property causes the effect.
7. You observe a main sequence star, a red giant star, and a white dwarf star in a star cluster. Which star was originally the most massive, and which the least massive, when the star cluster first formed? Explain.

8. Study the spectral types listed in Appendix F of Cosmic Perspective for the 20 brightest stars, and for the stars within 12 lightyears. Why do you think the lists are so different? Explain.

9. When a gravitating system loses energy, it contracts, and increases its temperature. Explain how this effect comes into play when a main sequence star runs out of Hydrogen at its core.