Hertzsprung-Russell (HR) Diagram

Name:

Click on the following website. Read the site and answer the following questions.

website: http://cse.ssl.berkeley.edu/segwayed/lessons/startemp/l6.htm

- 1. Who plotted the first H-R diagram? When did they plot these diagrams?
- 2. What does the horizontal scale show?
- 3. Where are the hottest stars located? Coolest stars?
- 4. How did scientists standardize the brightness of each star?
- 5. What is the brightness of the sun on the standardized scale?
- 6. List four important things to note about the H-R diagram.

Click on: Go to the next section to interpret the H-R Diagram

Interpreting the HR Diagram

Answer the questions on the website and then fill in the data table below.

Star	Temperature	Luminosity
A		
В		
С		
D		

- 7. Are there any stars that seem out of place? How might you explain them?
- 8. What other factors might affect the overall brightness?
- 9. What type of luminosity should a hotter star have compared to a cooler star? Do all stars fit this pattern?
- 10. What is the name of the large group that stretches across the middle of the diagram?
- 11. What type of star is our sun?
- 12. What is the name of stars that are cool but very luminous? Where are they located on the HR diagram?
- 13. What is the name of stars that are very hot but dim? Where are they located on the HR diagram?