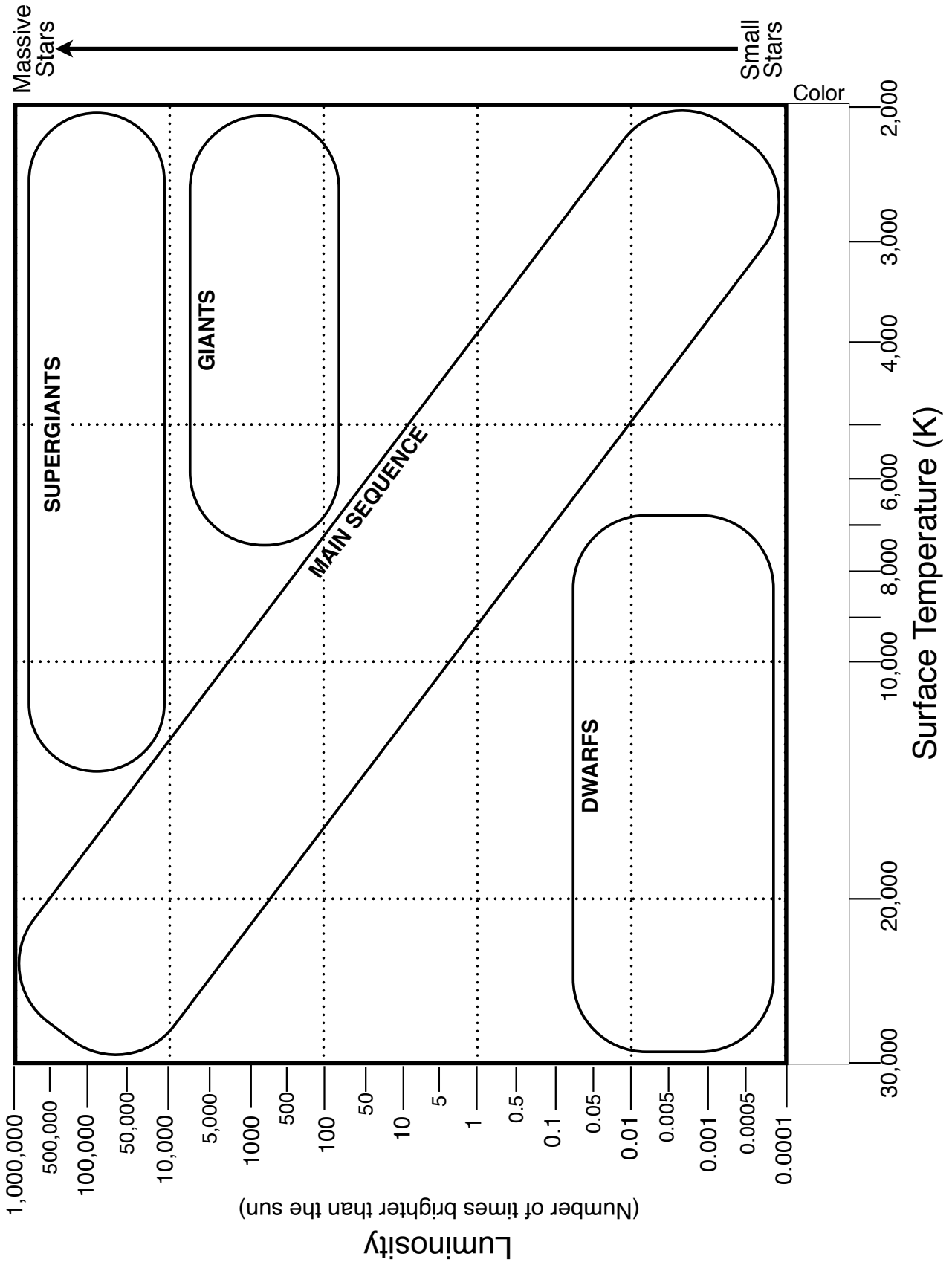


LAB: HERTZSPRUNG-RUSSELL DIAGRAM

Characteristics of Stars



CONCLUSION QUESTIONS

1. Which four properties does the HR diagram use to classify stars?

1. _____

2. _____

3. _____

4. _____

2. How many types of stars are shown on the HR Diagram? _____

3. Which of the stars you plotted was the brightest? _____ hottest? _____

4. As a star changes color from red to blue, describe what happens to its surface temperature?

5. A Main Sequence star that is 10,000 times more luminous than the sun, most likely has a temperature of _____

6. What color is a Main Sequence star that is 1000 times brighter than the sun? _____

7. According to the HR diagram, a massive star with a surface temperature of 20,000 K that is nearly a million times brighter than the sun would mostly likely be classified as a _____

8. Which type of star is dimmer than the Sun? _____

9. How does the temperature and luminosity of the Sun compare to that of the other stars on the Main Sequence? _____

10. What is the relationship between luminosity and temperature for stars on the Main Sequence?
