

Characteristics of Stars: The H-R Diagram

(ESRT page 15)

Directions: Use the HR diagram on from page 15 of the ESRT to answer the questions about stars in our GALAXY.

1. Fill in the spaces below to describe certain characteristics of our Sun.

Color: _____
Temperature: _____
Size (S,M,L): _____
Class: _____

2. What type of star would Procyon B be classified as? _____

3. According to the diagram, what is the definition of "luminosity"?

4. Of the stars given on the HR diagram, what is the name of the star that is the hottest? _____

5. Give two properties of a White Dwarf star.

6. How many times brighter is Betelgeuse than our Sun _____

7. List the color of the stars in order of increasing temperature.

8. What is the approximate temperature of Barnard's Star? _____

9. Compared to the Sun, Aldebaran is: (circle all that apply)

hotter cooler brighter
larger smaller dimmer

10. What property of a star can be inferred based on its color? _____

11. Which property of a star is related to its luminosity?

(1) color (3) size
(2) temperature (4) shape