**Hertzsprung-Russel Diagram**

Inferring from Diagram

Name: Class: Date:

Background: An H-R diagram shows the relationship between a star’s surface temperature and its absolute brightness. It was developed nearly 100 years ago, but it is still used today by astronomers.

*Directions: Using the H-R diagram from page 140 in your book, answer the following questions.*

1. What values are on the x-axis (bottom)?
2. What is unusual about the values on the x-axis (bottom)?

1. Why can the star’s color also by on the x-axis (top)?

1. Where do most stars fall on the H-R diagram?
2. What category of star is our sun? (White Dwarf/Main Sequence/Giant/Super Giant)

*Use the H-R diagram to find the information about each of the stated stars.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | POLARIS | ALPHA CENTAURI A | SIRIUS B |
| What is the star’s color? |  |  |  |
| What is the star’s surface temperature? |  |  |  |
| What is the absolute brightness of the star? |  |  |  |
| What category of star is it? |  |  |  |