

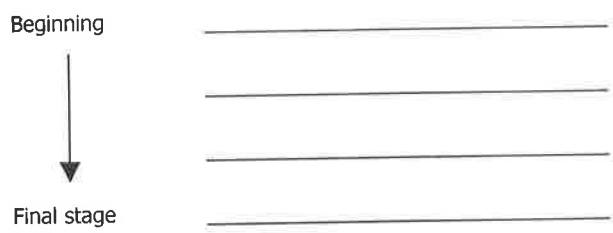
Name: _____ Date: _____

Hertzprung – Russell Diagram coloring (pg 15 ESRT)

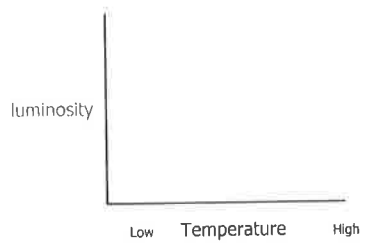
1. Stars emit colored light. A star's color depends on its temperature. Color the ⊕ for each of these stars with its color:

Spica **40 Eridani B** **Proxima Centauri** **Polaris**

- 2. Circle all the main *sequence stars* with a **blue** pencil.
- 3. Circle the *white dwarf* stars with a **brown** pencil.
- 4. Lightly shade all stars with luminosities more than 10,000 times brighter than the sun **yellow**.
- 5. Use the chart to put these stages of a star's development in the proper order (*hint: the first stage is nebula (gas/dust cloud)*): **main sequence, white dwarf, nebula, supergiant/giant**



- 6. _____ Which of the following stars is hottest: *Procyon B, Betelgeuse, the sun*
- 7. _____ Which of these stars is brightest (highest luminosity): *40 Eridani B, Deneb, Alpha Centauri*
- 8. _____ Which of these stars is white: *Sirius, Barnard's Star, Spica, Aldebaran*
- 9. (circle the correct answers) Compared to white dwarfs, giant stars are (*cooler, hotter, the same*) and have (*higher, lower, the same*) luminosity.
- 10. _____ The hottest main sequence stars are what color?
- 11. _____ Name 2 stars that are lower temperature than *Pollux*.
- 12. Draw a line graph for main sequence stars **only**.



13. Put these in the proper order: *Proxima Centauri, Rigel, Aldebaran, Sirius*



Characteristics of Stars

(Name in *italics* refers to star represented by a ⊕.)
 (Stages indicate the general sequence of star development.)

