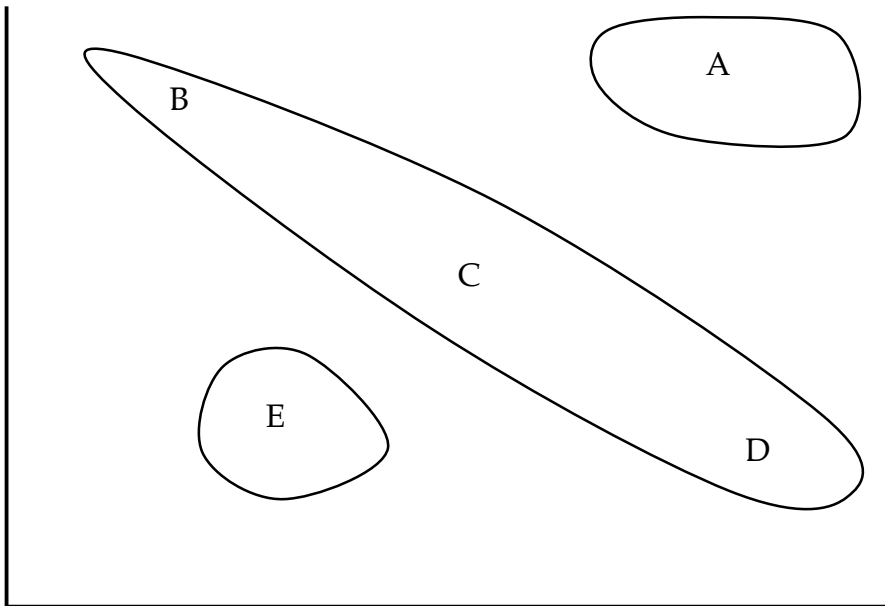


NAME: _____

A typical HR diagram is shown below. Use this diagram in answering the questions that follow.



- On which axis of an HR diagram would temperature be plotted?
 - horizontal
 - vertical
 - temperature is not plotted on an HR diagram
- On which axis of an HR diagram would luminosity be plotted?
 - horizontal
 - vertical
 - luminosity is not plotted on an HR diagram
- On which axis of an HR diagram would absolute magnitude be plotted?
 - horizontal
 - vertical
 - magnitude is not plotted on an HR diagram
- On which axis of an HR diagram would spectral class be plotted?
 - horizontal
 - vertical
 - spectral class is not plotted on an HR diagram
- In the diagram shown above, where would one find low mass main sequence stars?
 - A
 - B
 - C
 - D
 - E
- In the diagram shown above, where would one find high mass main sequence stars?
 - A
 - B
 - C
 - D
 - E
- In the diagram shown above, where would one find a star like the Sun?
 - A
 - B
 - C
 - D
 - E
- In the diagram shown above, where would one find white dwarfs?
 - A
 - B
 - C
 - D
 - E

(OVER →)

9. In the diagram shown above, where would one find red giants?
 a) A b) B c) C d) D e) E
10. Which spectral class corresponds to the hottest main sequence stars?
 a) A b) B c) F d) G e) K f) M g) O
11. Which of the following nebulae are places where stars are forming?
 a) emission nebulae b) planetary nebulae c) supernova remnants
12. In a *main sequence star* the energy comes from the fusion of _____ into _____.
13. The longest stage in a star's life is the...
 a) main sequence stage b) red giant or supergiant stage
14. Which are more numerous, high mass stars or low mass stars? a) high mass b) low mass
15. Which last longer, high mass stars or low mass stars? a) high mass b) low mass
16. When helium fuses, what does it produce? _____
17. What is the heaviest element that a star with a mass of 1 solar mass can fuse? _____
18. What is the last element that a star with a mass of 10 solar masses will *attempt* to fuse? _____

NOTE: All of the following stars (Questions 19 – 30) and nebulae (Questions 31 – 40) can be found in the readings in your book.

- 19 – 30. *Indicate whether each of the following stars is a main sequence star (MS), a red giant (RG), a supergiant (SG), or a white dwarf (WD):*

_____ Aldebaran	_____ Alpha centauri	_____ Arcturus	_____ Betelgeuse
_____ Eta Carinae	_____ Polaris	_____ Procyon B	_____ Regulus
_____ Sirius B	_____ Spica	_____ The Sun	_____ Vega

- 31 – 40. *Indicate whether each of the following nebulae is a star forming nebula (SFN), a planetary nebula (PN), or a supernova remnant (SR):*

_____ the Cat's Eye	_____ the Crab	_____ the Eagle	_____ the Eskimo
_____ the Helix	_____ the Lagoon	_____ the Omega	_____ the Orion
_____ the Tarantula	_____ the Trifid		

*The Moon in the water
 Broken and broken again
 Still it is there*

~ Choshu