Checkpoint 8.8 AB

- 1. Which of the following accurately organizes the size of components from largest to smallest?
 - A. Universe > Solar System > Galaxy > Star
 - B. Star > Universe > Galaxy > Solar System
 - C. Galaxy > Solar System > Star > Planet
 - D. Universe > Planet > Star > Comet
- 2. Stars, such as our Sun, are composed of gases that are held together by gravity. Which of the following best describes the star at the center of our solar system?
 - A. The Sun is categorized as a supergiant that burns cooler than most other stars and appears yellow.
 - B. The Sun is an average-sized star that burns hotter than most other stars and appears blue.
 - C. The Sun is a very small star that burns cooler than most other stars and appears white.
 - D. The Sun is an average-sized star that burns at a temperature that is slightly below average and appears yellow.
- 3. Analyze the diagram below:



In which quadrant would find bright stars that burn at a higher temperature than most?

- A. Quadrant I
- B. Quadrant II
- C. Quadrant III
- D. Quadrant IV

4. The space object shown below revolves around the Sun, is composed of rock, ice, and frozen gases, and creates a fan-shaped tail. What is the name of the object?



- A. Asteroid
- B. Meteor
- C. Nebula
- D. Comet
- 5. Answer the question based on the diagram below:



In which category would you place a star that burns at a temperature of 4,000 K and has a magnitude of -7.

- A. Red Supergiant
- B. White Dwarfs
- C. Blue Giant
- D. Main Sequence

6. At which location in the diagram below would you most likely find the Sun? (HOTSPOT)



7. In which Spectral Class would you find The Sun?



- B. Class B
- C. Class G
- D. Class M

Hertzsprung-Russell Diagram



Most of the stars in the universe fit into one of the four areas on this Hertzsprung-Russell diagram.

Which area of the diagram represents the white dwarfs?

- a. Area M
- b. Area X
- c. Area P
- d. Area Z

KEY:

- 1. C
- 2. D
- 3. B
- 4. D
- 5. A
- 6. Hotspot Position 4
- 7. C
- 8. D