NAME _____DATE _____CLASS _____

Layers of the Sun

1. Describe how the sun produces energy.

_____

2. What happens in the radiative zone?

_____

3. How does the sun compare with other stars in age and temperature?

_____

4. Name three different phenomena that occur on the sun's surface.

_____

5. How does the sun's volume compare with Earth's volume?

_____

6. What layers on the sun can be compared to the atmosphere of other planets?

_____

7. What two gases are the sun's major components?

_____

8. Describe how thermal energy moves in the convection zone.

_____

9. Which layer is most important for the sun’s survival? Describe why.

_____

10. Which layer is most important for human survival? Describe why.

_____

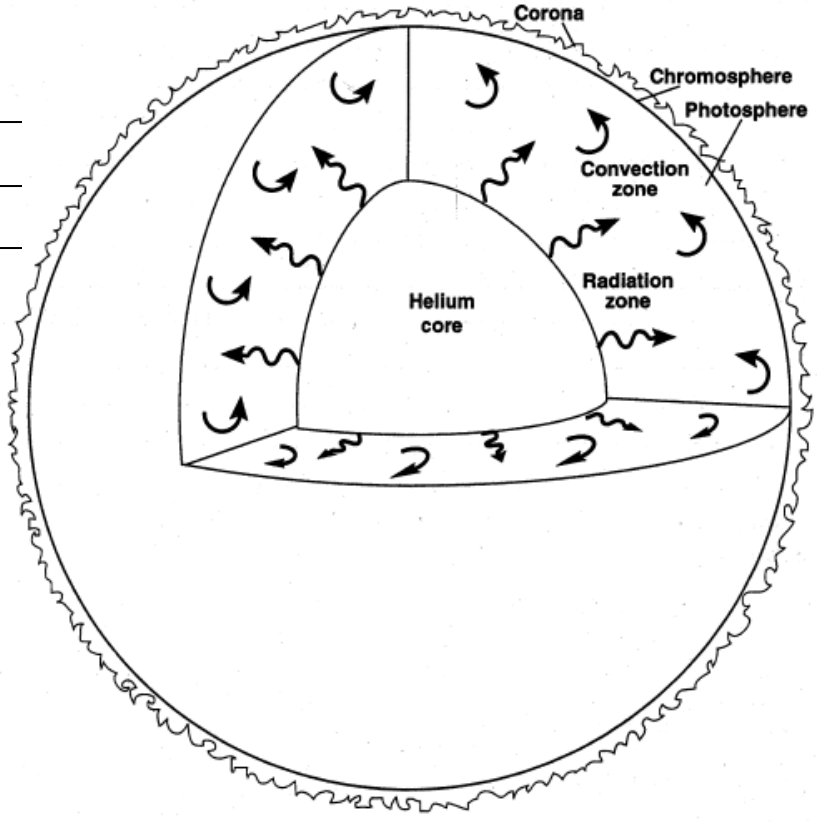
_____

_____

_____

_____

_____



NAME _____ DATE_____ CLASS _____

THE SUN

The information in two of the phrases following each term is true for that term. The information in the other phrase is not true for that term. Write the letters of the true phrases in the blank to the left.

_____ **1.** sun
- a. star of average brightness and size
- b. enormous ball of gas
- c. older than most stars

_____ **2** sunspot
- a. extremely hot area on sun's surface
- b. shows that the sun rotates
- c. appears as dark area on sun

_____ **3** solar flare
- a. disrupts radio signals on Earth
- b. violent eruptions of gas
- c. begins in the core of sun

_____ **4.** prominence
- a. also known as a coronal mass ejection (CME)
- b. megatons of protons and energy ejected from the sun
- c. forms loops through which matter flows

Answer the following questions in complete sentences.

1. What does the sun do that causes it to make so much heat and light?

2. Describe the process above.

3. How can the sun cause skin cancer?

4. What is the cycle of solar activity?

5. What causes the northern lights?

6. What is solar wind?

7. If solar wind could destroy all life, why doesn't it?

8. How is a coronal loop different from a prominence?