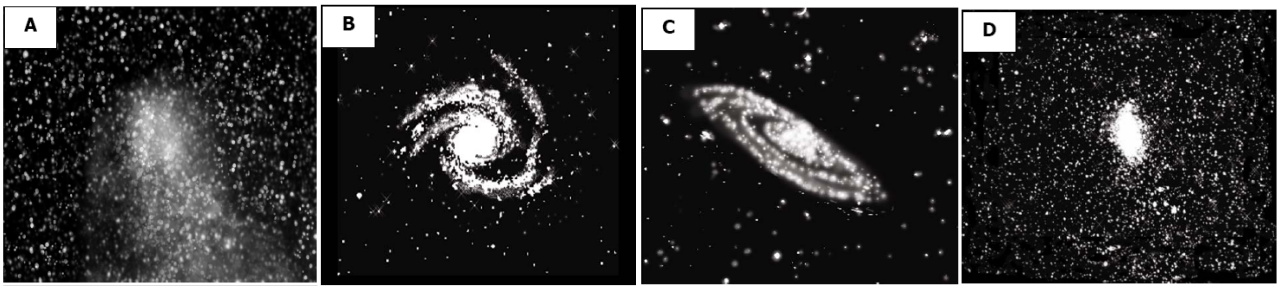
Name:

The Universe Test Review

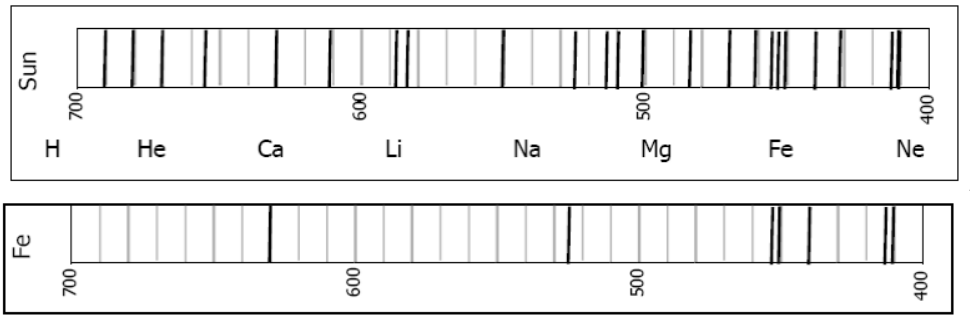
1. Which galaxy below is an elliptical galaxy? _____



2. Describe each term below and draw an example of each. Which galaxy above, A-D, goes in each section? Write the letter in the correct sections.

Galaxy	Elliptical Galaxy	Spiral Galaxy	Irregular Galaxy

3. Is Iron (Fe) an element present in the sun? _____



____ 4. A light-year is

A) 365 days. B) the distance light travels in a year. C) the distance from Earth to Proxima Centauri. D) the amount of light the sun produces in a year.

____ 5. What color are the hottest stars?

A) blue-white B) yellow C) red D) orange

____ 6. The Hertzsprung-Russell diagram shows that main sequence stars

A) are mostly hot and dim. B) are mostly cool and bright. C) increase in brightness as they increase in temperature. D) decrease in brightness as they increase in temperature.

____ 7. The Milky Way Galaxy is a

A) spiral galaxy B) cloud galaxy C) elliptical galaxy D) irregular galaxy

____ 8. The theory that astronomers have developed to describe the beginning of the universe is called the
A) expanding cloud theory. B) time warp theory. C) galactic expansion theory. D) big bang theory.

____ 9. One piece of evidence that supports the big bang theory is the observation that most galaxies are moving
A) toward our galaxy. B) toward one another. C) in random. D) away from one another.

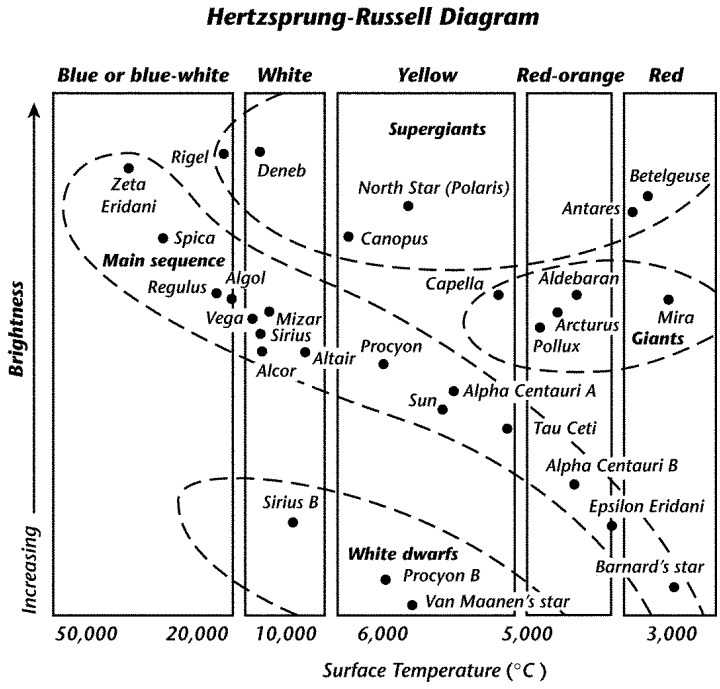
____ 10. The chemical composition of a star can be determined using a
A) refracting telescope. B) satellite. C) spectroscope. D) reflecting telescope.

11. The Hertzsprung-Russell diagram shows the relationship between a star's _____ and absolute magnitude.

12. A galaxy that does not have a regular shape is classified as a(n) _____ galaxy.

13. A(n) _____ galaxy has a characteristic pinwheel shape.

14. If a star is 20 light minutes away and it stops creating light, how long will it be before we stop seeing the light? _____



15. Using the figure, name a star that is red and on the main sequence. _____

16. Explain how Barnard's star and Mira are similar and how they are different. _____
_____

17. Describe three features of the star Deneb. _____ _____ _____

18. What is the Big Bang Theory?

19. Explain the two main pieces of evidence that support the Big Bang Theory.

20. How does red shift show that the universe is still expanding?

21. What does the Hertzsprung - Russell diagram show?

22. What is a light-year? How do scientists use light-years?

23. If the star is located 4.3 light years away, how long will it be before we see the light of the star?

24. Describe the characteristics of our sun.

25. Sketch the Milky Way Galaxy. Label the approximate location of our sun.

26. What can astronomers determine about stars from the light that they emit?

27. Draw and label the life cycle of a star.

28. What are two other words for brightness?

29. Determine the number of protons, neutrons and electrons for the element Sulfur. Use APE MAN.

30. How many ATOMS are in the following chemical formula: H_2SO_4

31. Describe the effect an unbalanced force has on the motion of an object.

32. What is acceleration?