Name _____ Section_____
Earth Science Test Date _____
Study Guide

Chapter 19 Stars, Galaxies, and the Universe

Section 1: Stars

1. Explain how a star's colors indicates it's temperature.

2. Explain what scientists use to determine a stars composition. How does it work? What does a spectrum show?

3. What kind of spectrum would you see with a white light?

4. What factors can determine the brightness of a star?

5. Explain the difference between apparent and absolute magnitude.

6. What type of magnitude would a really bright star have? A really dim star?

7. How far is a light-year?

8. Explain how parallax can be used to determine the distance to a star.

9. Why do stars appear to move across the sky?

Section 2: Life cycle of Stars

1. Explain what happens during nuclear fusion inside a star.

2. Stars can be classified by size, _____, brightness, ____, temperature, _____, and age.

3. Describe the different types of stars. (Supergiant, medium, etc)

4. The H-R diagram shows the relationship between a star's _____ and _____.

5. Where does the sun appear in the H-R diagram?

6. Explain the life cycle of a star that starts “life” like the sun and a star that starts “life” with a high mass.

8. Describe a supernova, neutron star, pulsar, and black hole

Section 3: Galaxies

1. Identify the three types of galaxies.

2. Explain each of the following:

   Nebula

   Star cluster

   Quasars

Section 4: Formation of the Universe

1. What is cosmology?

2. Describe the steps leading up to the Big Bang.

3. What evidence do scientist have that helps support the Big Bang Theory?

4. What do scientists think will happen to the universe?