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Chapter 8- Stars, Galaxies and the Universe (page 218-241)

Section 1-Stars (pages 220-223)

1. What is the relationship between color and temperature to scientists?
2. HHow do scientists determine what type of elements (gases) a star is made from?
3. What is a spectrum?
4. What instrument do astronomers use to break a star’s light into a spectrum?
5. Why are *emission lines* like fingerprints for an element?
6. What does a star’s absorption spectrum show?
7. What two characteristics are stars classified by today?
8. Which color are the hottest stars and which class do they belong?
9. Which color are the coolest stars and which class do they belong?
10. Which magnitude numbers designate dimmer stars?
11. Which magnitude numbers designate brighter stars?
12. What is the name of the brightest star in the night sky, and what is its magnitude?

Section 1-Stars-continued (pages 224-226)

1. What is apparent magnitude?
2. What is absolute magnitude?
3. What is a light year?
4. Why do scientists use light years (time) as the measurement to stars and not actual distance measurements (i.e. kilometers)?
5. What is parallax?
6. Why do we see different constellations at different times of year?
7. Why do all the stars we see seem to rotate around the North Star?
8. Why is the actual motion of stars hard to see?

Section 2-(pages 228-233)

1. Describe the beginning of a star’s “life cycle.”
2. Name all the ways a star may be classified.
3. Name the second stage of a star’s life cycle and describe what process is occurring.
4. What is a red giant, and how does it differ from a red super giant?
5. What is a white dwarf?
6. What is the H-R diagram?
7. Where do most stars lie on the H-R diagram?
8. What is a super nova?
9. What is a neutron star?
10. What is a pulsar?
11. What is a black hole?

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Chapter 8- Stars, Galaxies and the Universe (page 218-241)

Chapter 8-Section 3 Galaxies (pages 234-237)

1. What are galaxies?
2. What scientist categorized galaxies by their shape?
3. Describe the appearance of a *spiral galaxy*.
4. Describe the appearance of an *elliptical galaxy*.
5. Describe the appearance of an *Irregular galaxy*.
6. Name the galaxy Earth is a part of and the shape of that galaxy.
7. What is a nebula?
8. What is a globular cluster?
9. What is an open cluster?
10. What are quasars?

Chapter 8-Section 4 Formation of the Universe (pages 238-241)

1. What is cosmology?
2. What is the big bang theory?
3. What is *cosmic background radiation*?
4. What is one way scientists calculate the age of the universe?

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