

## Directed Reading A

### Section: Galaxies

1. A collection of stars, dust, and gas bound together by gravity is called

a(n) \_\_\_\_\_.

### TYPES OF GALAXIES

2. Which of the following is one of Edwin Hubble's contributions to science?

- a. He invented the telescope.
- b. He developed a way to classify galaxies.
- c. He founded the field of astronomy.
- d. He built the Hubble Space Telescope.

3. Most galaxies are classified by their

- a. shape.
- b. size.
- c. age.
- d. color.

4. Where are newly formed stars found in a spiral galaxy?

- a. spiral arms
- b. spiral halo
- c. center bulge
- d. outer rings

Each of the following statements is true of a spiral galaxy, an elliptical galaxy, or an irregular galaxy. Write S for a spiral galaxy, E for an elliptical galaxy, and I for an irregular galaxy in the space provided.

- 5. These galaxies contain mostly old stars. \_\_\_\_\_
- 6. The Milky Way is probably this type of galaxy. \_\_\_\_\_
- 7. Many of these galaxies may have their shape distorted by neighboring galaxies. \_\_\_\_\_
- 8. Most galaxies are this type of galaxy. \_\_\_\_\_
- 9. These galaxies are massive blobs of stars. \_\_\_\_\_
- 10. These galaxies are close companions of another galaxy. \_\_\_\_\_
- 11. These galaxies have a bulge in the center and spiral arms. \_\_\_\_\_

## Directed Reading A continued

### CONTENTS OF GALAXIES

12. Which one of the following statements is NOT true of nebulae?

- a. Nebulae are often found in spiral galaxies.
- b. Nebulae are often found in elliptical galaxies.
- c. Some types of nebulae glow.
- d. Some types of nebulae absorb light and hide stars.

13. All of the following are true of star clusters EXCEPT

- a. A globular cluster may have as many as 1 million stars.
- b. An open cluster may have only a few hundred stars.
- c. An open cluster may have as many as a few thousand stars.
- d. An open cluster usually has more stars than a globular cluster.

14. Large clouds of gas and dust are called \_\_\_\_\_.

15. A tight group of stars that looks like a ball is called

a(n) \_\_\_\_\_.

16. A group of stars that are closer together than the surrounding stars is called

a(n) \_\_\_\_\_.

17. What is a nebula?

\_\_\_\_\_

18. What is a globular cluster?

\_\_\_\_\_

19. What is an open cluster?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_