

Directed Reading B *continued*

For each description, write whether it applies to mass or to weight.

_____ **17.** is always constant no matter where the object is located

_____ **18.** is measured using a spring scale

_____ **19.** is expressed in grams (g), kilograms (kg), or milligrams (mg)

_____ **20.** is expressed in newtons (N)

_____ **21.** is less on the moon than on Earth

Skills Worksheet

Directed Reading B**Section: Physical Properties** (pp. 84–89)**IDENTIFYING PHYSICAL PROPERTIES**

- _____ 1. A characteristic of matter that can be observed or measured without changing the identity of the matter is a
- matter property.
 - physical property.
 - chemical property.
 - volume property.
- _____ 2. Some examples of physical properties are
- color, odor, and reactivity.
 - color, odor, and speed.
 - color, odor, and mass.
 - color, odor, and anger.

Match the correct example with the correct physical property. Write the letter in the space provided.

- | | |
|-----------------------------------------------------------------|-------------------------|
| _____ 3. Aluminum can be flattened into sheets of foil. | a. state |
| _____ 4. Water is frozen into ice. | b. solubility |
| _____ 5. Copper can be pulled into thin wires. | c. thermal conductivity |
| _____ 6. Your hand grows warm from holding a cup of hot liquid. | d. malleability |
| _____ 7. Flavored drink mix dissolves in water. | e. odor |
| _____ 8. An onion gives off a very distinctive smell. | f. ductility |
| _____ 9. A golf ball has more mass than a table tennis ball. | g. density |

10. Density is the _____ that describes the relationship between mass and volume.

11. The amount of matter in a given space, or volume, is called _____.

12. What is the equation for density?

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13. What do D , V , and m stand for in the equation for density?

14. The units for density consist of a mass unit divided by a(n) _____ unit.

15. What happens to the density of a given substance if you increase the amount of the substance that you have?

16. What are two reasons why density is a useful physical property for identifying substances?

17. Why would 1 kilogram of lead be less awkward to carry around than 1 kilogram of feathers?

18. What will happen to a solid object made from matter with a greater density than water when it is dropped into water?

19. How will knowing the density of a substance help you determine whether an object made from that material will float in water?

20. If you pour different liquids into a graduated cylinder, the liquids will form layers based upon differences in their _____.

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21. If you pour different liquids into a graduated cylinder, which layer of liquid will settle on the bottom?

22. If you pour different liquids into a graduated cylinder, where will the layer of liquid with the lowest density be found?

PHYSICAL CHANGES: NO NEW SUBSTANCES

23. A change that affects only the physical properties of a substance is known as a(n) _____.

24. What kind of changes are changes of state, such as melting and freezing?

Identify which of the following activities represent physical changes by writing *PC* in the space provided. Put an *X* beside activities that do not.

_____ **25.** sanding a piece of wood

_____ **26.** baking bread

_____ **27.** crushing an aluminum can

_____ **28.** melting an ice cube

_____ **29.** dissolving sugar in water

_____ **30.** molding a piece of silver

31. When a substance undergoes a physical change, its _____ does not change.

32. What is changed when matter undergoes a physical change? Give an example to explain your answer.
