

SECTION

1

Study Guide

Matter

Chapter

2

Directions: *Unscramble the words in parentheses to fill in this section summary.*

(1) _____ (tramet) is anything that takes up space and has mass. The four states of matter are (2) _____ (dlois), (3) _____ (quildi), (4) _____ (sga), and (5) _____ (slampa). All matter is made of (6) _____. (sartpicle). In a liquid, the particles are moving (7) _____ (strafe) than they do in a solid, but (8) _____ (lowsre) than they do in a gas. Particles in a gas have more (9) _____ (ygreen) than particles in a solid or liquid. Honey and tar have higher (10) _____ (sssicitivo) than water because they are slower to flow. The attractive forces of water molecules for each other creates (11) _____ (rufaces) _____ (stenino) that allows needles to float and water striders to walk on water. Because of surface tension, water droplets are (12) _____ (dorun). A liquid takes the (13) _____ (heaps) of its container, but a gas (14) _____ (lifsl) its container completely.

Directions: *Explain what is needed for plasma to exist, and where it can be found.*

15. _____

Directions: *List three amorphous solids*

16. _____

Directions: *List five crystalline solids.*

17. _____

SECTION

1

Reinforcement

Matter

Directions: Match the terms in Column II with the descriptions in Column I by writing the letter of the correct term in the blank at the left.

Column I

- _____ 1. Tar is hard to pour because it doesn't flow easily.
- _____ 2. Energy from hot cocoa melts a marshmallow placed in it.
- _____ 3. Like diamond, soot is made of carbon, but its atoms are arranged in a random manner.
- _____ 4. Table salt changes to a liquid at 808°C.
- _____ 5. Aluminum atoms are arranged in a repeating cubic pattern.
- _____ 6. This sheet of paper is an arrangement of shaking particles.
- _____ 7. A thermometer indirectly measures the average kinetic energy of particles.
- _____ 8. Water changes to ice at 0°C.
- _____ 9. The three physical states are liquid, solid, and gas.
- _____ 10. A pin can float on the water in a cup.

Column II

- a. amorphous solid
- b. crystalline solid
- c. freezing point
- d. heat
- e. matter
- f. temperature
- g. melting point
- h. viscosity
- i. solid
- j. surface tension

Directions: Answer the following questions on the lines provided.

11. Why does water fill the bottom of a glass, rather than cling to the sides?

12. Why do beads of water often form on a slippery surface, such as a freshly waxed car?

13. What causes surface tension in water?

14. Explain why certain bugs can walk on water.

15. When does water begin entering the gaseous state?
