Name _____ Date _____ Class _____

Solids, Liquids, and Gases • *Guided Reading and Study*

States of Matter

This section explains how shape, volume, and the motion of particles are useful in describing solids, liquids, and gases.

Use Target Reading Skills

A definition states the meaning of a word or phrase by telling about its most important feature or function. After you read the section, reread the paragraphs that contain definitions of Key Terms. Use all the information you have learned to write a definition of each Key Term in your own words.

solid _____

_____

crystaline solid _____

_____

amorphous solid _____

_____

liquid _____

_____

fluid _____

_____

surface tension _____

_____

viscosity _____

_____

gas _____

_____

Solids

1. Which state of matter has a definite volume and a definite shape?

   _____

2. Is the following sentence true or false? A solid will keep its volume and its shape in any position and in any container.

   _____

Name _____ Date _____ Class _____

States of Matter *(continued)*

3. Why do solids have a definite shape and a definite volume?

_____

_____

_____

_____

4. Complete the table about types of solids.

Solids			
Type of Solid	**Description**	**Examples**	**Melting Temperature**
a.	Made up of crystals	**b.**	Specific
c.	Particles not arranged in a regular pattern	**d.**	Not distinct

5. Circle the letter of each sentence that is true about particles in a solid.
   - **a.** They are completely motionless.
   - **b.** They stay in about the same position.
   - **c.** They vibrate back and forth.
   - **d.** They move around one another freely.

Liquids

6. Which state of matter has no definite shape but does have a definite volume? _____

7. Is the following sentence true or false? A liquid's volume does not change no matter what shape its container has.

_____

8. A substance that flows is called a(n) _____.

9. What causes surface tension?

_____

_____

_____

10. Circle the letter of the term that means the resistance of a liquid to flowing.
    a. amorphous
    b. solid
    c. viscosity
    d. surface tension

11. Is the following sentence true or false? Liquids with high viscosity flow quickly. _____

Gases

12. Which state of matter has neither definite shape nor volume?

_____

13. If you put a gas into a container with a top, what will the gas do?

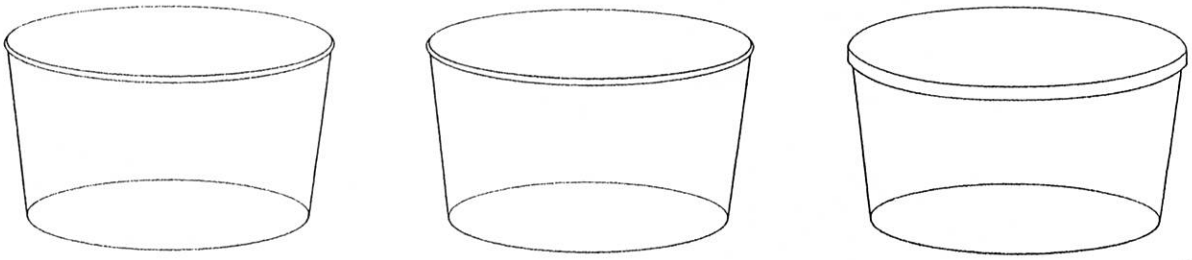
_____

_____

14. Is the following sentence true or false? Like a liquid, a gas is a fluid.

_____

15. In the containers below, draw how the particles are arranged in the three states of matter.



Solid *Liquid* *Gas*