

**Solids, Liquids, and Gases** ▪ *Reading/Notetaking Guide***States of Matter** (pp. 90–95)

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

**Use Target Reading Skills**

*As you read, complete the outline about the states of matter. Use the red headings for the main ideas. Use the blue headings for subtopics when possible. Add supporting ideas to the subtopics.*

States of Matter
I. Solids
A. Particles in a Solid
1. Packed closely together
2. Locked in position and vibrate
3. Solid has definite shape and volume
B. Types of Solids
1. Crystalline
2.
II. Liquids
A.
B.
III.

**Solids, Liquids, and Gases** ▪ *Reading/Notetaking Guide***Solids** (pp. 91–92)

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.  
\_\_\_\_\_
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.

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**States of Matter** *(continued)*

**Liquids** (pp. 93–94)

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. \_\_\_\_\_

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**Gases** (p. 95)

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

\_\_\_\_\_

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

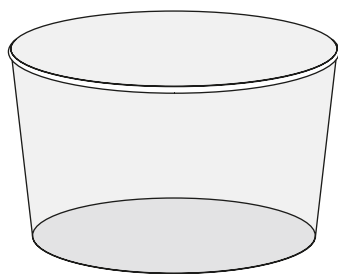
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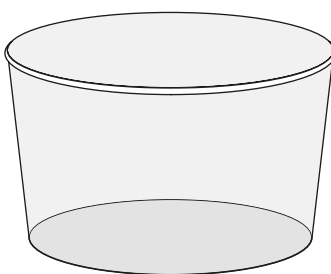
14. Is the following sentence true or false? Like a liquid, a gas is a fluid.

\_\_\_\_\_

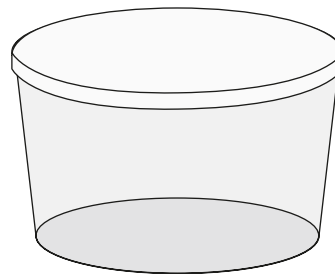
15. In the containers below, draw how the particles are arranged in the three states of matter.



*Solid*



*Liquid*



*Gas*