

Changes of State

Understanding Main Ideas

Complete the table by writing whether there is a gain or loss of thermal energy for each change of state and whether the movement of particles increases or decreases.

Change of State	Thermal Energy	Movement of Particles
1. Melting		
2. Freezing		
3. Vaporization		
4. Condensation		
5. Sublimation		

Building Vocabulary

From the list below, choose the term that best completes each sentence.

melting point melting sublimation
boiling point freezing vaporization
evaporation boiling condensation

- The temperature at which a liquid boils is called its _____.
- The change in state from gas to liquid is called _____.
- The change in state from liquid to gas is called _____.
- Gas bubbles forming throughout the liquid during a change in state is called _____.
- Liquid changing to gas only at the surface is called _____.
- The change in state from solid to liquid is called _____.
- The change in state from liquid to solid is called _____.
- In most pure substances, melting occurs at a specific temperature, called the _____.
- In _____, particles pass directly from solid to gas.

Solids, Liquids, and Gases ▪ Chapter Test

Solids, Liquids, and Gases

Multiple Choice

Write the letter of the correct answer on the line at the left.

1. All of the following are measurements used when working with a gas except
 - a. area.
 - b. volume.
 - c. temperature.
 - d. pressure.
2. A liquid has a
 - a. constant temperature.
 - b. definite shape.
 - c. crystal structure.
 - d. definite volume.
3. The change from a gas to a liquid is called
 - a. evaporation.
 - b. condensation.
 - c. melting.
 - d. sublimation.
4. Which of the following is NOT a characteristic of crystalline solids?
 - a. particles arranged in repeating patterns
 - b. becomes softer and softer as temperature rises
 - c. made up of crystals
 - d. has a distinct melting point
5. Boyle's law states that as the pressure of a gas increases, its
 - a. volume increases.
 - b. temperature increases.
 - c. volume decreases.
 - d. temperature decreases.
6. Which of the following is NOT an example of vaporization?
 - a. water rising into dry air that moves over the ocean
 - b. bubbles forming as water boils
 - c. wet pavement drying after a rain shower
 - d. water droplets forming on a mirror
7. A substance which takes the shape and volume of its container is a
 - a. solid.
 - b. liquid.
 - c. gas.
 - d. crystal.
8. Because of surface tension, a liquid
 - a. resists flowing.
 - b. forms a crystalline solid.
 - c. takes the shape of its container.
 - d. forms droplets.