

Solids, Liquids, and Gases ▪ Chapter 3 Pre-Assessment

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

- _____ 1. Anything that has mass and takes up space is called
 - a. a solution.
 - b. an element.
 - c. matter.
 - d. thermal.
- _____ 2. A pure substance made of two or more elements chemically combined in a set ratio is called a(n)
 - a. atom.
 - b. compound.
 - c. solution.
 - d. mixture.
- _____ 3. Every chemical or physical change in matter includes a change in
 - a. state.
 - b. energy.
 - c. color.
 - d. melting point.
- _____ 4. A change in state from solid to liquid is an example of
 - a. a physical change.
 - b. a chemical change.
 - c. oxidation.
 - d. electrolysis.

Solids, Liquids, and Gases ▪ Section 3.1 Quiz

Fill in the blank to complete each statement.

1. Solids, liquids, and gases are defined mainly by whether or not they hold their _____ and _____.
2. The particles in a solid move back and forth slightly but stay _____ in their positions.
3. Particles in a liquid are packed closely together but can _____ and move past each other.
4. Two characteristic properties of liquids are _____ and _____.
5. The particles in a gas have _____ energy of motion than the particles in a liquid or a solid.

Solids, Liquids, and Gases ▪ Section 3.2 Quiz

If the statement is true write true. If the statement is false, change the underlined word or words to make the statement true.

- _____ 1. A substance's state of matter is determined by the balance between the motions and attractive forces of its particles.
- _____ 2. When a substance loses thermal energy, the freedom of motion of its particles increases.
- _____ 3. The change from a gas to a liquid is called vaporization.
- _____ 4. The boiling and melting points of a substance depend on the pressure of the air above the substance.
- _____ 5. Vaporization and evaporation are opposite processes.

Name _____ Date _____ Class _____

Solids, Liquids, and Gases ▪ Section 3.3 Quiz

Fill in the blank to complete each statement.

- 1. When working with a gas, it is helpful to know three measurements: _____, _____, and _____.
- 2. The pressure of a gas is the force of its outward push divided by _____.
- 3. When the temperature of a gas increases at constant pressure, its volume _____.
- 4. Charles's law shows that the volume of a gas is _____ to its Kelvin temperature under constant pressure.
- 5. Robert Boyle's experiments show that gas _____ is inversely proportional to _____ at constant temperature.