Name _____ Class _____ Date _____

Skills Worksheet

Section Review

Changes of State

USING VOCABULARY

For each pair of terms, explain how the meanings of the terms differ.

1. *boiling* and *melting*

2. *condensation* and *evaporation*

UNDERSTANDING CONCEPTS

3. Describing Describe how the motion and arrangement of particles in a substance change as the substance freezes.

4. Comparing How are boiling and evaporating similar? How are they different?

CRITICAL THINKING

5. Making Inferences Imagine that bubbles begin to form in a sample of liquid, but the temperature did not change. What must have happened to cause this change?

6. Analyzing Ideas When a solid melts, its density does not change very much. So, why do a liquid and a solid have such different physical properties?

INTERPRETING GRAPHICS

Use the two pictures below to answer the next question.

7. Analyzing Processes Describe two ways by which the particles in the picture above on the left could end up like the particles in the picture above on the right.

MATH SKILLS

8. Making Calculations If the volume of a substance in the gaseous state is 1,000 times the volume of that substance in the liquid state, how much space would 18 mL of that substance in the liquid state take up if it evaporated? Show your work below.