Name _____ Class _____ Date _____

How does matter change state?

Lesson Review

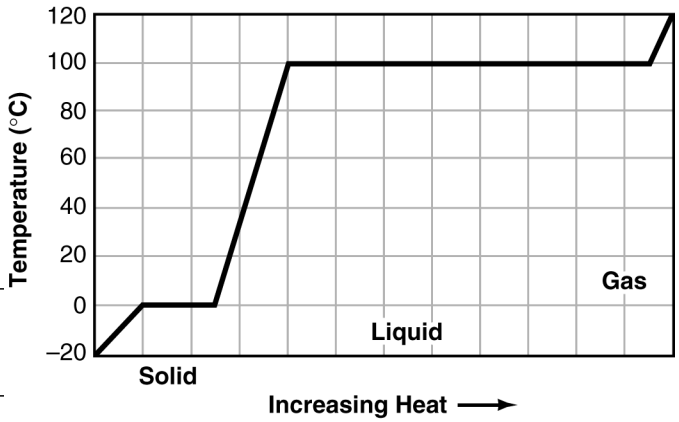
Circle the term that does not belong in each group.

1. condensation, ice, gas, liquid
2. solid, water vapor, liquid, freezing
3. gain energy, lose energy, gas particles, condensation
4. dry ice, water, moth balls, iodine
5. evaporation, gain energy, leave liquid, melt
6. freezing, melting, reacting, condensing
7. gain heat, melt, evaporate, state of matter
8. solid, water, sublimation, gas

Skill Challenge

Skills: *interpreting a graph, analyzing, inferring*

The graph on the right is called a state-change diagram. It shows what happens to water as it changes from ice to liquid water and then to steam. Study the graph. Then, answer the questions that follow.



1. What is being measured along the vertical axis of the graph? _____
2. What is being measured along the horizontal axis? _____
3. What happens to the temperature of the ice when heat is first added? _____
4. What happens to the temperature of the ice right after the ice reaches 0°C? What is happening to the ice at this time? _____

   _____
5. The temperature of the liquid water steadily increases between what two temperatures on the graph? _____
6. What happens to the temperature of the water as it changes to steam? What is happening to the heat during this time? _____
7. During the times when the temperature is not changing, what do you think is happening to the heat that is being added to the water? _____