

## Lesson Review

Select the term that does not belong in each group.

1. condensation, solid, gas, liquid
2. solid, gas, liquid, freezing
3. gain energy, lose energy, gas particles, condensation
4. water vapor, helium, milk, air
5. evaporation, gain energy, liquid, melt
6. freezing, melting, reacting, condensing
7. gain heat, melt, evaporate, freeze
8. iron, mercury, zinc, copper

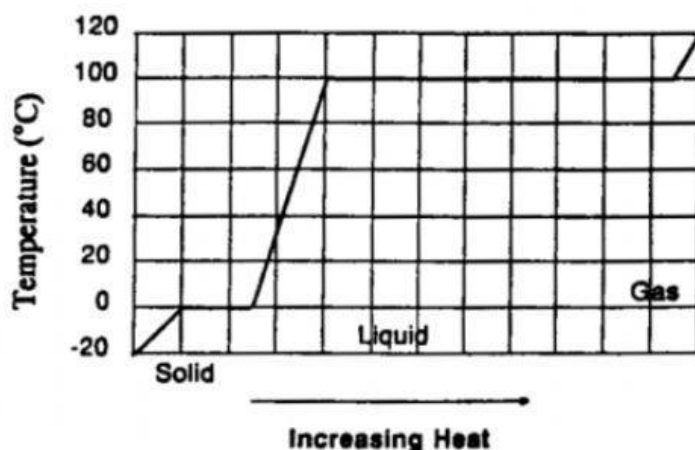
## Skill Challenge

**Skills:** interpreting a graph, analyzing, inferring

The graph below is called a phase-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.

Drag and drop

Temperature    Increasing Heat    increasing    increasing    decreasing    decreasing  
remains the same    remains the same    freezing    vaporization    condensation    melting  
the heat is being used to break bonds    the heat is raising the temperature



1. What is being measured along the vertical axis of the graph?  
\_\_\_\_\_
2. What is being measured along the horizontal axis? \_\_\_\_\_

3. Between the temperatures of -20°C and 0°C, what is happening to the temperature of the ice as heat is added? \_\_\_\_\_
4. What is happening to the temperature of the ice at 0°? \_\_\_\_\_  
What is happening to the ice? \_\_\_\_\_
5. Between what temperatures is the temperature of the water steadily increasing? Between \_\_\_\_ and \_\_\_\_
6. What is happening to the temperature of the water as it changes into 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? \_\_\_\_\_