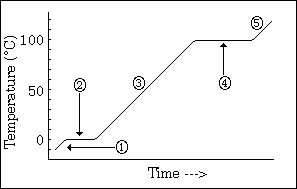
**Heating Curve Worksheet Name**:  **Class**: **Date**:



1) In which section do the particles have the **least** kinetic energy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) What is the name of the process occurring in section (2)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3)     What is the name of the process happening during section (4)?

4)     What would be the name of the process happening during section (4) if time were going the other way?

5)     What is the melting point (temperature) of this substance?

6)     At what temperature would this sample finish boiling?

7)     The temperature at which a substance in the liquid state freezes is the same as the temperature at which the substance

a.     Melts b.     Sublimes c.     Boils d.     Condenses

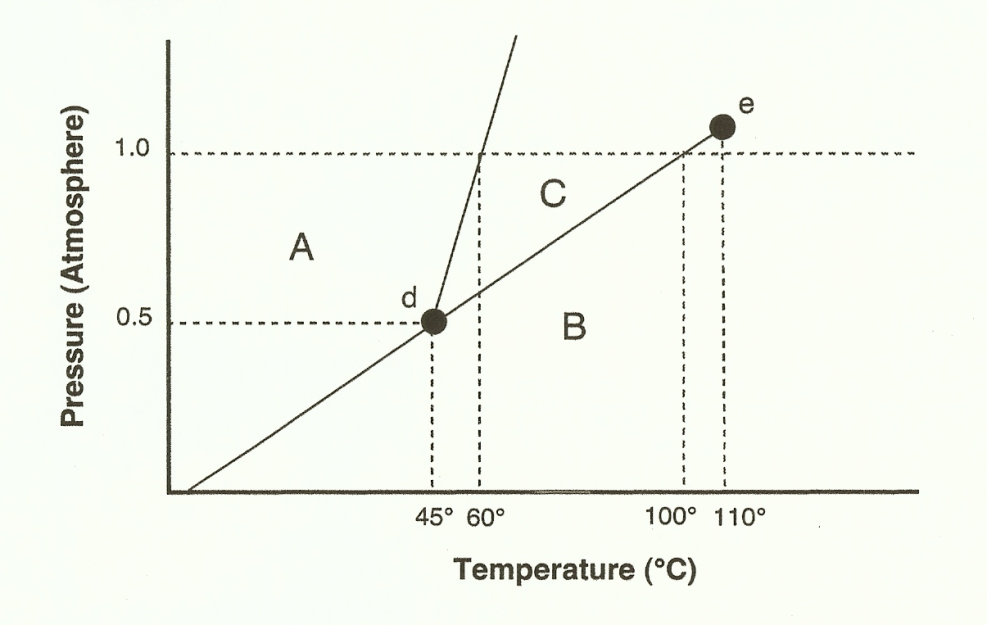
8) What state would this substance be in at room temperature (25 C)?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9) What state would the substance be in at 60 C? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10) In which section do the particles have the **most** kinetic energy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Phase Diagram Worksheet**

Answer the questions below in relation to the following generic phase diagram.

****

1. Which section represents the solid phase? \_\_\_\_\_\_\_\_

2. What section represents the liquid phase? \_\_\_\_\_\_\_\_

3. What section represents the gas phase? \_\_\_\_\_\_\_\_

4. What letter represents the triple point? \_\_\_\_\_\_\_\_ In your own words, what is the definition of a triple point?

5. What is this substance’s normal melting point?\_\_\_\_\_\_\_\_\_

6. What is this substance’s normal boiling point? \_\_\_\_\_\_\_\_\_

7. At what temperature and pressure do all three phases coexist?

Temperature: \_\_\_\_\_\_ ºC Pressure: \_\_\_\_\_ atm

8. Take your pen or pencil and darken the line where sublimation occurs. What does sublimation mean?

9. Take your pen or pencil and put a star on the line where melting occurs. What other process occurs on this line? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. Take your pen or pencil and put zigzags on the line where evaporation occurs. What other process occurs on this line? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_