

The heating curve shown above is a plot of temperature vs time. It represents the heating of substance X at a constant rate of heat transfer. Answer the following questions using this heating curve.

- 1. What part of the curve represents a mixed solid/liquid phase of substance X?
- 2. What part of the curve represents a mixed liquid/vapor phase of substance X?
- 3. What is the melting temperature (point) of substance X? _5
- 4. What is the boiling temperature (point) of substance X? 55°(
- 5. In what part(s) of the curve would increasing kinetic energy be displayed?
- 6. In what part of the curve would the molecules of X have the lowest kinetic energy? ______
- 7. In what part of the curve would the molecules of X have the greatest kinetic energy?

8. Label the graph below (substance Y) with solid, liquid, gas, vaporization, melting, freezing.

