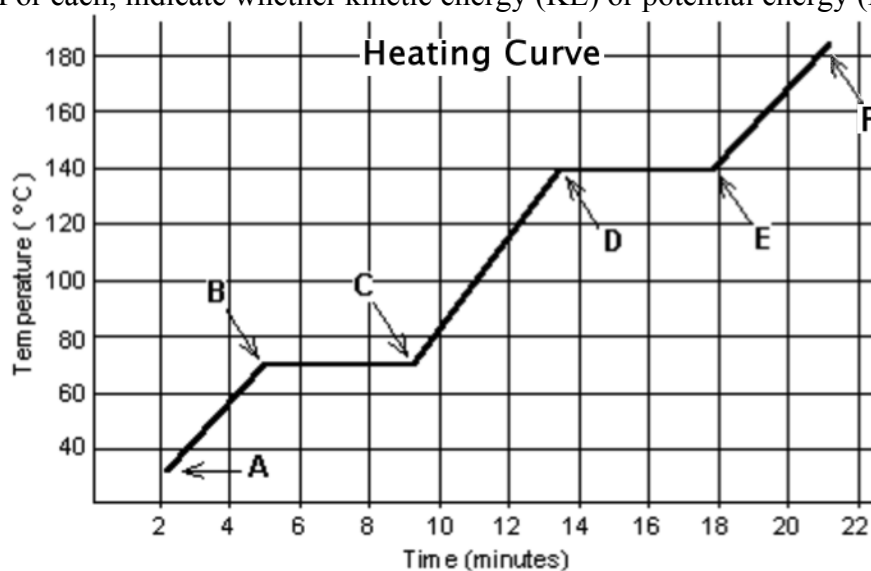


- 1) A phase change that absorbs energy is called (**endothermic, exothermic**). In this kind of phase change, bonds are (**broken, formed**). What are the three energy-absorbing phase changes?
- 2) A phase change that releases energy is called (**endothermic, exothermic**). In this kind of phase change, bonds are (**broken, formed**). What are the three energy-releasing phase changes?
- 3) What kind of energy changes during a phase change? Why does this type of energy change? Why does temperature not change during a phase change?
- 4) Where does the energy come from or go to?
- 5) The graph below was drawn from data collected as a substance (*not* water) was heated at a constant rate. Use the graph to answer the following questions. On the diagram, label the three phases, and the two phase changes. For each, indicate whether kinetic energy (KE) or potential energy (PE) is changing.



- 6) Looking at the info below, which of these three substances was likely used in this phase change experiment? Explain how you made your selection.

Substance	Melting point	Boiling point
Bolognium	20 °C	100 °C
Unobtainium	40 °C	140 °C
Foosium	70 °C	140 °C

- 7) On the back, sketch a *cooling curve* for one of the other substances and label it as in #5.