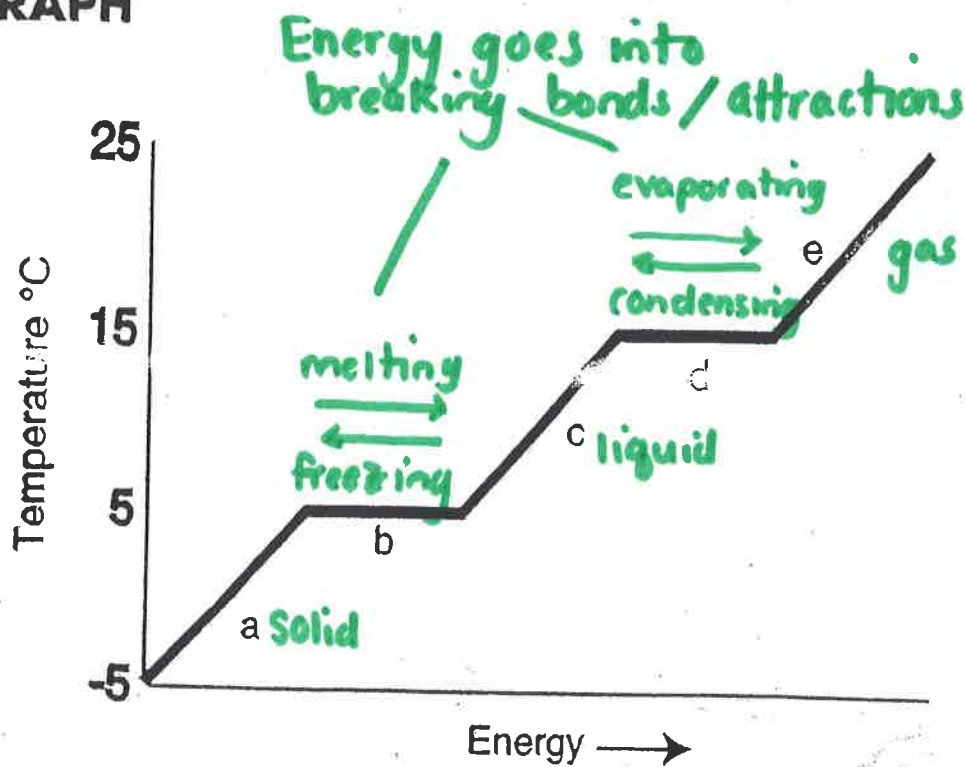


JOINT GRAPH

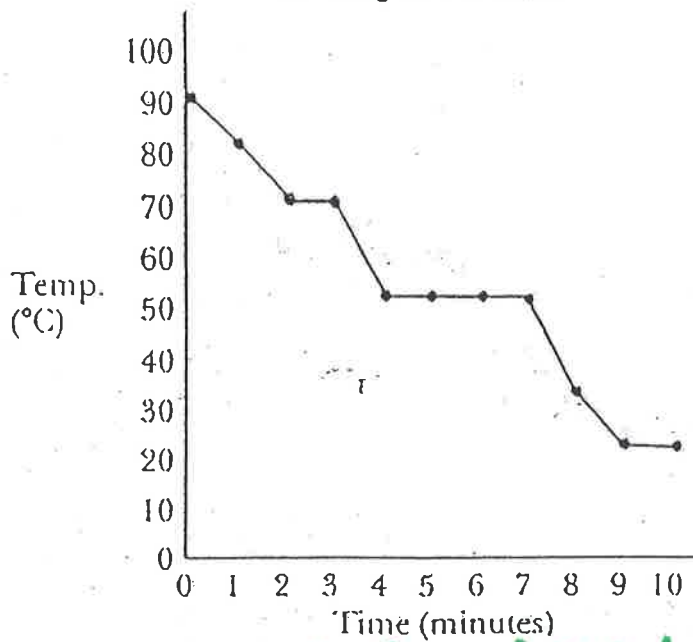


Answer the following questions using the chart above.

- What is the freezing point of the substance? 1 temp. B
- What is the boiling point of the substance? D
- What is the melting point of the substance? B
- What letter represents the range where the solid is being warmed? A-B
- What letter represents the range where the liquid is being warmed? C-D
- What letter represents the range where the vapor is being warmed? E
- What letter represents the melting of the solid? B
- What letter represents the vaporization of the liquid? D
- What letter(s) shows a change in potential energy? B, D
- What letter(s) shows a change in kinetic energy? A, C, E
- What letter represents condensation? D
- What letter represents crystallization? B

Directions: Using the graph, answer the questions that follow it.

Cooling of Substance Z



1. The title of the graph is Cooling of Substance Z
2. The two variables are Time and Temperature
3. The unit for time is min and for temperature is °C
4. At 3 minutes it was 70 °C.
5. At 9 minutes it was 23 °C.
6. At 70°C the time was 2-3 minutes.
7. At 30°C the time was 8 minutes.
8. At what temperature did substance Z level off for 4 minutes?
50°C
9. What was the starting temperature of substance Z? 90°C
10. The total temperature loss for substance Z was 90 - 23 = 67°C