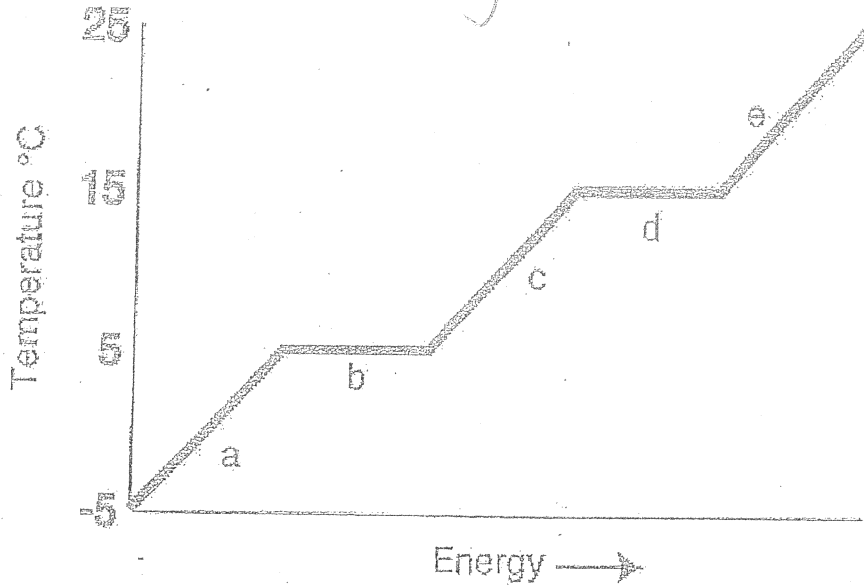


FREEZING AND BOILING POINT GRAPH

Name _____

Heating Curve



Answer the following questions using the chart above.

1. What is the freezing point of the substance? _____
2. What is the boiling point of the substance? _____
3. What is the melting point of the substance? _____
4. What letter represents the range where the solid is being warmed? _____
5. What letter represents the range where the liquid is being warmed? _____
6. What letter represents the range where the vapor is being warmed? _____
7. What letter represents the melting of the solid? _____
8. What letter represents the vaporization of the liquid? _____
9. What letter(s) shows a change in potential energy? _____
10. What letter(s) shows a change in kinetic energy? _____
11. What letter represents condensation? _____
12. What letter represents crystallization? _____

Convert the following temperatures

a) $26\text{ }^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

b) $156\text{ K} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

c) $26\text{ K} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

d) $333\text{ }^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

e) $100\text{ K} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

f) $100\text{ }^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

g) $-35\text{ }^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

h) $-2\text{ }^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

i) $273\text{ }^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

j) $-273\text{ }^{\circ}\text{C} = \underline{\hspace{2cm}}\text{ K}$

k) $1590\text{ K} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

l) $2\text{ K} = \underline{\hspace{2cm}}\text{ }^{\circ}\text{C}$

2) If the temperature of a sample of water increases from 10 K to 50 K, what is the increase in temperature difference in degrees Celsius?

3) The freezing point of ethanol is $-115\text{ }^{\circ}\text{C}$ and its normal boiling point $78\text{ }^{\circ}\text{C}$. What is the freezing and normal boiling point in degrees Kelvin?

4 Label:

B.P., F.P., M.P., solid, liquid, gas

