

Phase Diagram

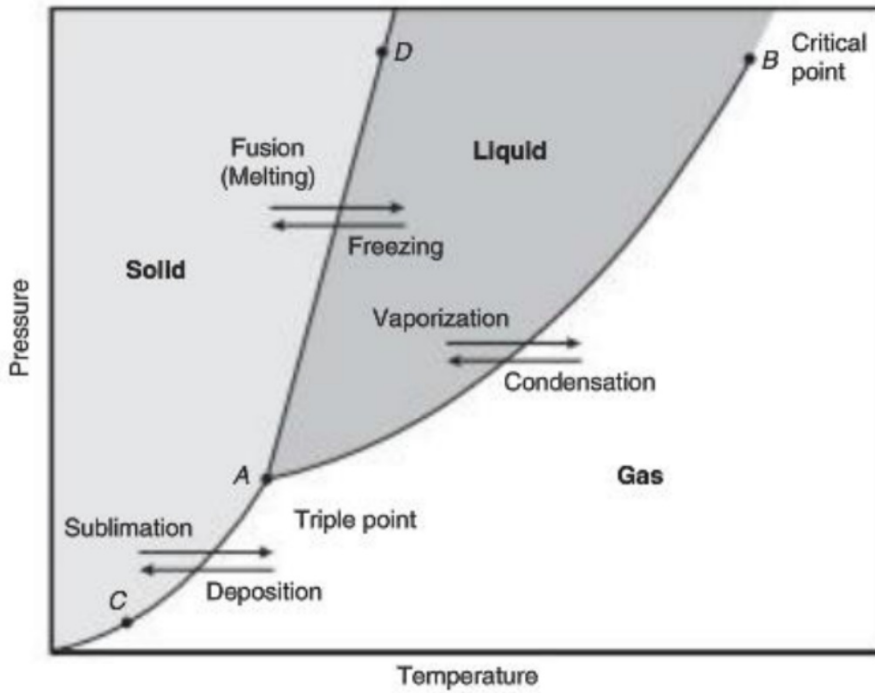
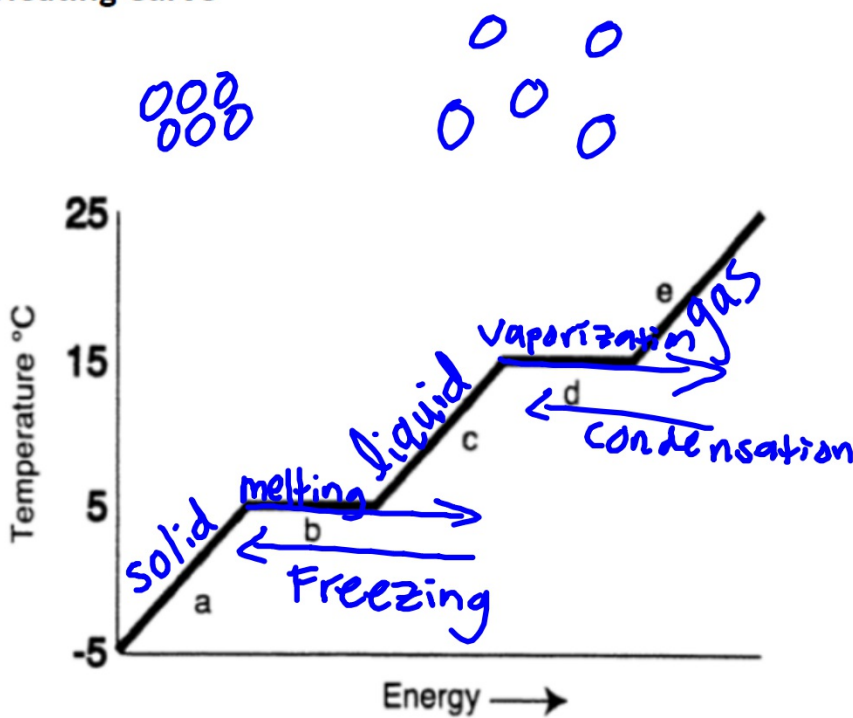


Figure 12.4 A phase diagram.

Heating Curve

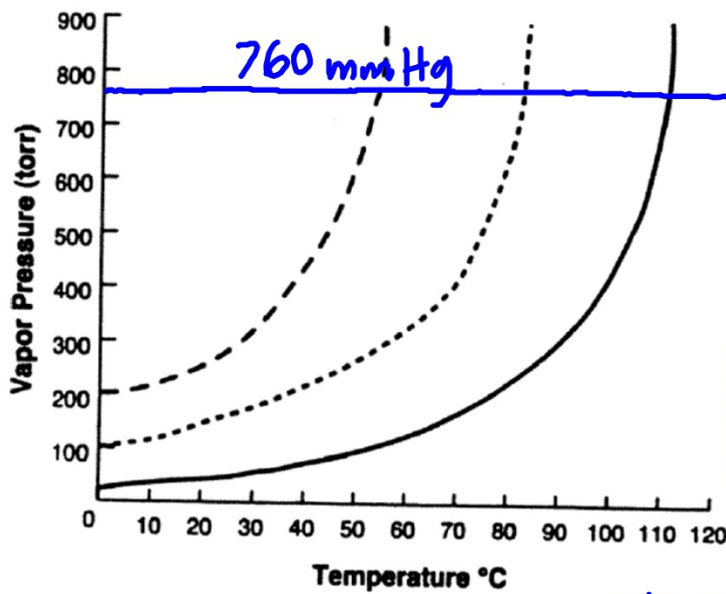


1. During what point (a, b, c, d, or e) do solid and liquid coexist?
B
2. What is the melting point of this substance?
5°C
3. What is the boiling point of this substance?
15°C

4. Why does temperature remain constant during a phase change?

Added E goes in to breaking IMF's.

Boiling Point Curve



Boiling occurs when
vapor pressure
equals
atmospheric
pressure



1. Does boiling point increase or decrease as ~~vapor~~ ^{atmospheric} pressure decreases?
decreases
2. Which substance has the strongest intermolecular forces? Explain your reasoning.

Liquid C b/c it has the highest boiling point, thus requires the most E to overcome its IMFs.