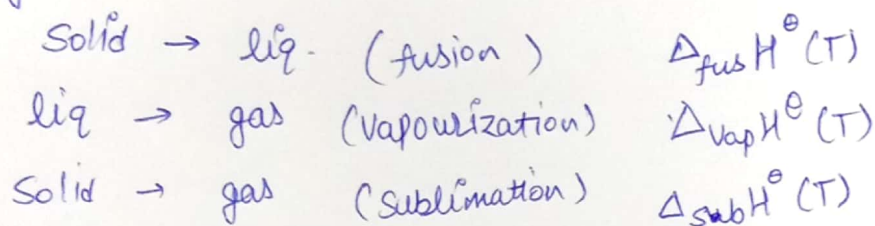


Important concept \Rightarrow

- \rightarrow The standard state of a substance at a specified temperature is its pure form at 25°C (298.15K) and 1 bar
- \rightarrow melting of a solid is endothermic, so all enthalpies of fusion are positive
- \rightarrow sublimation is direct conversion of a solid into its vapour.

phase change \Rightarrow



- \rightarrow phase transition generally happens at different temp. and pressure.
- \rightarrow $\Delta_f H^\ominus$ is the special case of $\Delta_r H^\ominus$, where one mole of each compound is formed from its constituent elements.

$$\Delta_r H^\ominus = \sum a_i \Delta_f H^\ominus(\text{products}) - \sum b_i \Delta_f H^\ominus(\text{reactants})$$

Here a, b represents the coefficients of the product and reactants in the balanced equation.