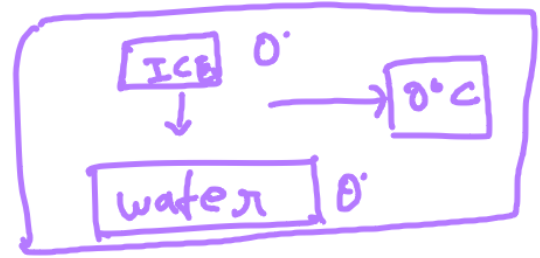


Change of State

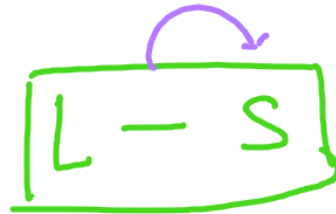
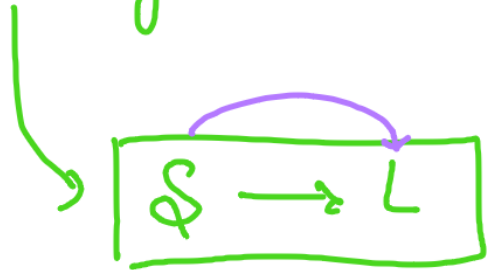


Heat Energy.

Pure \Rightarrow M.P. = F.P.

Impure \Rightarrow M.P. \neq F.P.

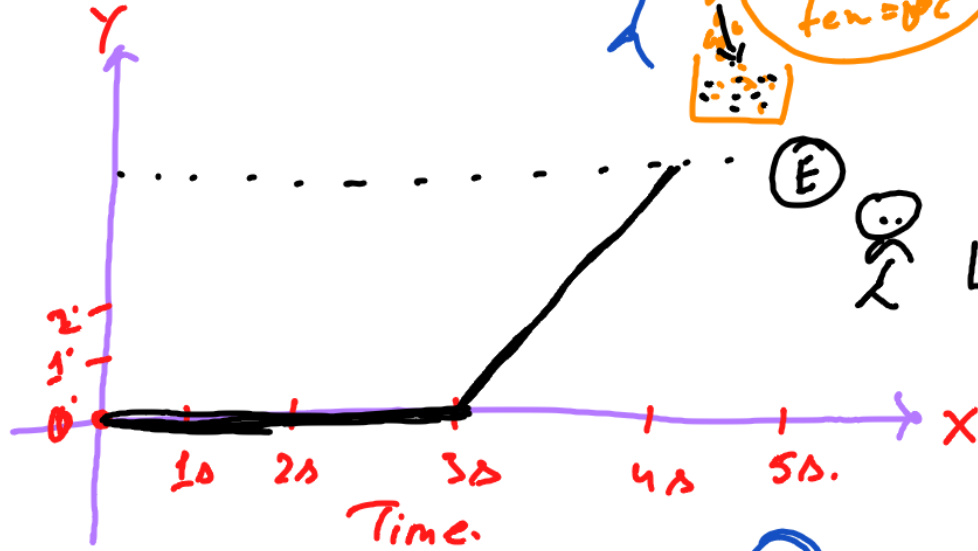
① Melting and Freezing :-



F.P. \rightarrow 0°C.

Melting of ICE (Graph).

272



$t = 3 \text{ sec}$
 $t_{\text{em}} = 0^\circ\text{C}$

E



A



$t = 0^\circ\text{C}$
 $\text{time} = 0 \text{ sec}$

B

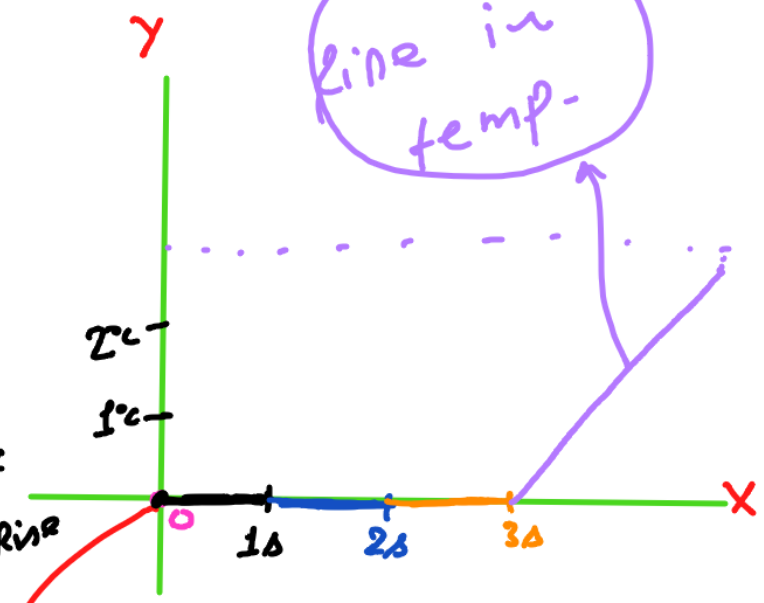


ICE =
 $t_{\text{m}} = 1 \text{ sec.}$
 $t_{\text{emp}} = 0^\circ\text{C}$

C



$t = 2 \text{ sec.}$
 $t_{\text{m}} = 0^\circ\text{C}$



$t = 4 \text{ sec}$
 $\therefore \text{temp} = \text{rise}$

origin

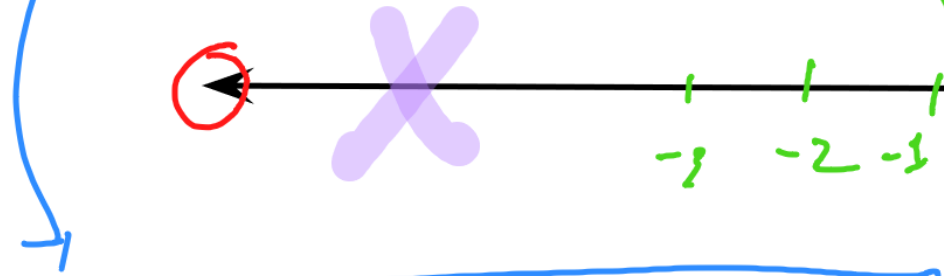
Change of State

Rise in temp X

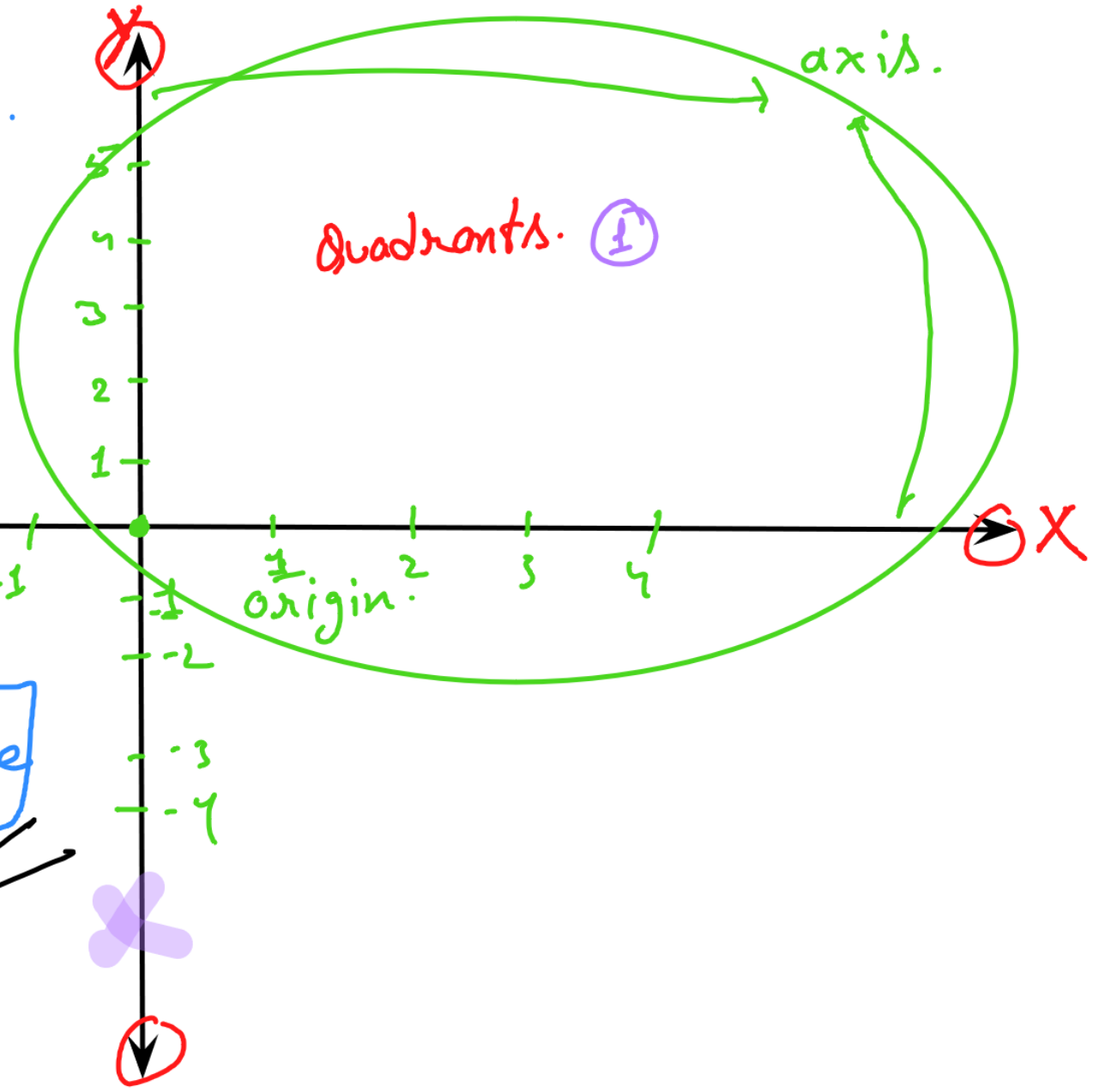
line in temp.

Chemistry \rightarrow Nomenclature.

Hex - 1,4, chlorodiene

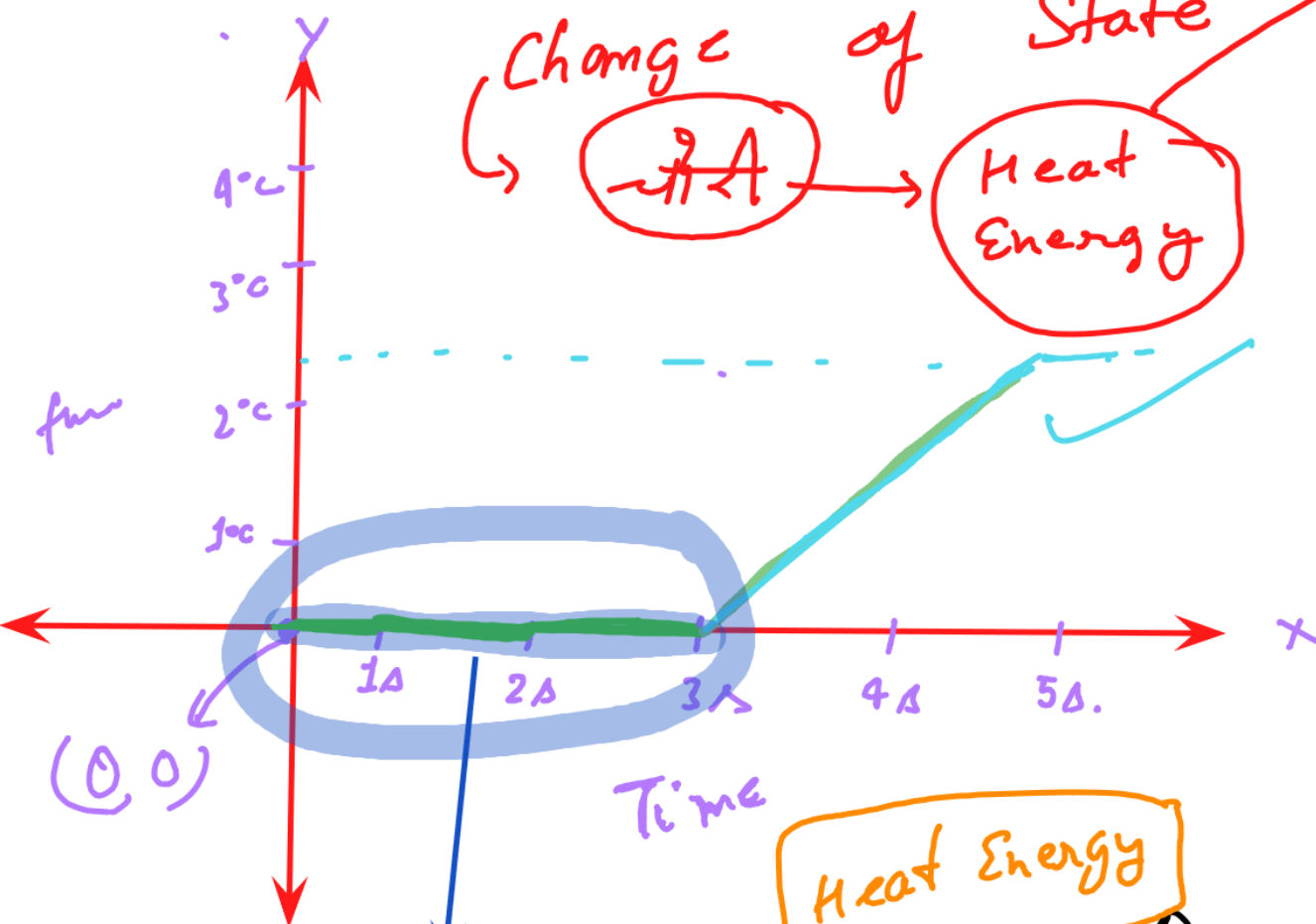


1,2, chloro - Hex diene



[line, Ray, line Segment]





Change of State
~~HA~~ → Heat Energy

Latent Heat Energy



3 sec

0 sec - 3 sec

X temp. rise.

Change of State

change in temp

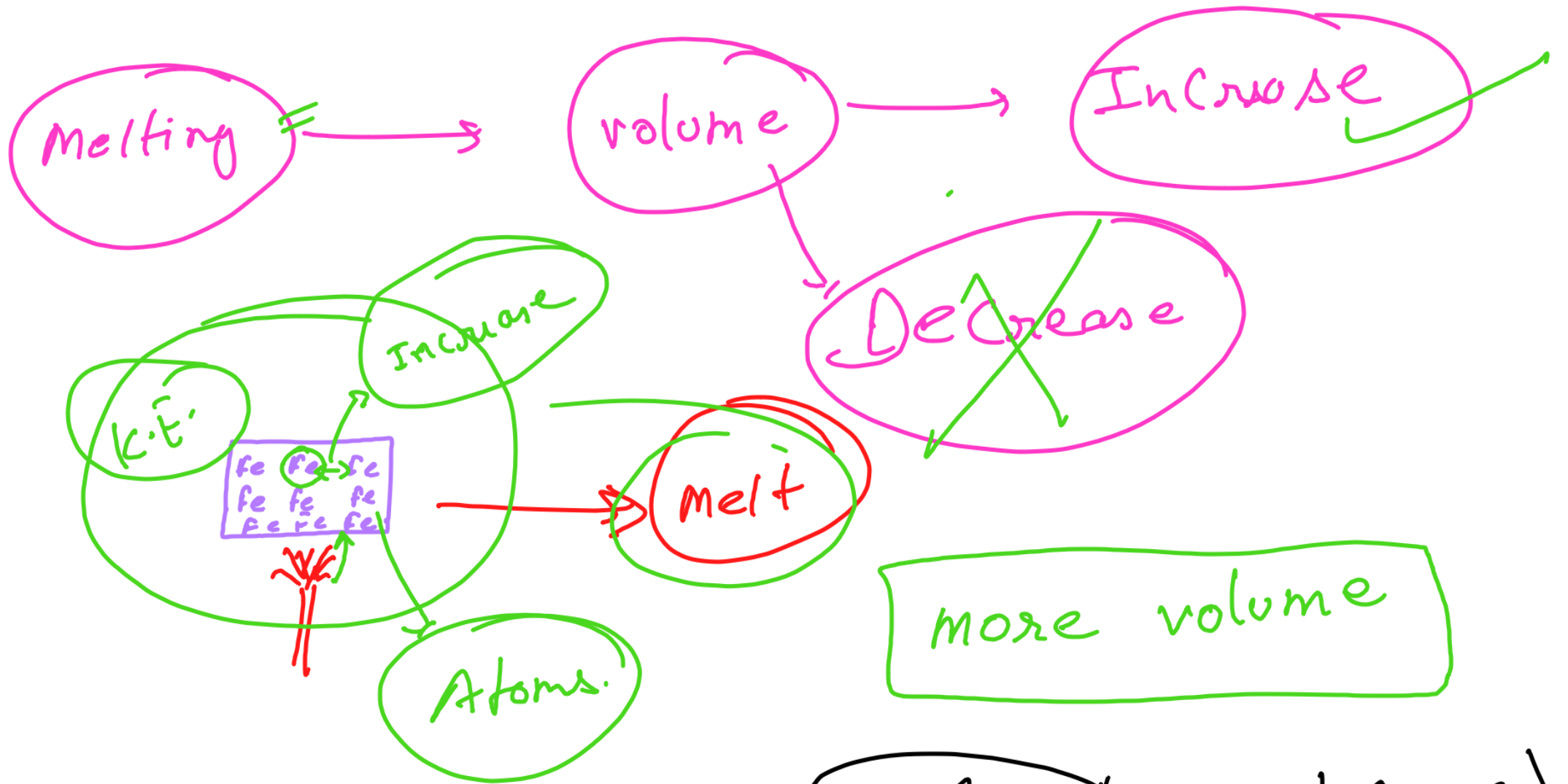
L · M · C

Heat Energy

$$Q = m \cdot C \cdot \Delta T$$

$$Q = 0$$

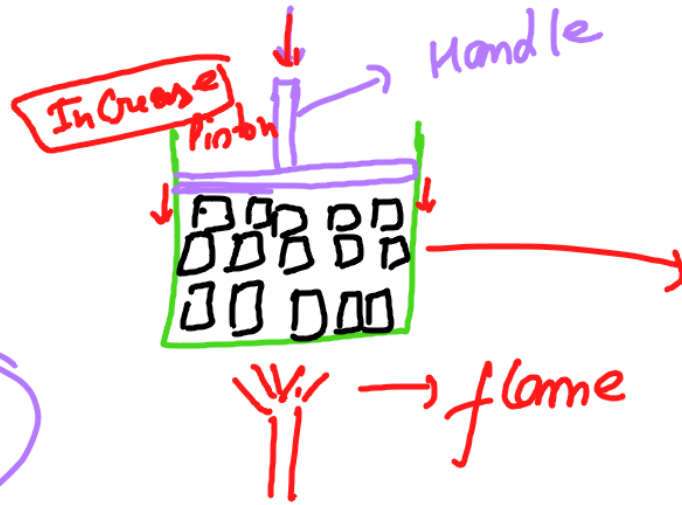
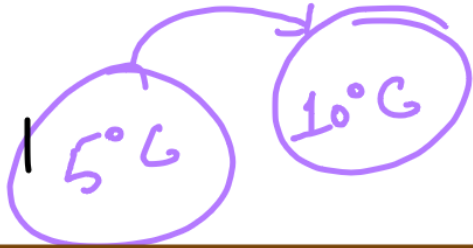
|| ΔT x-axis ||



Note :- ICE → water (volume decrease).
 ↳ H-Bonding

Melting

① Pressure :-



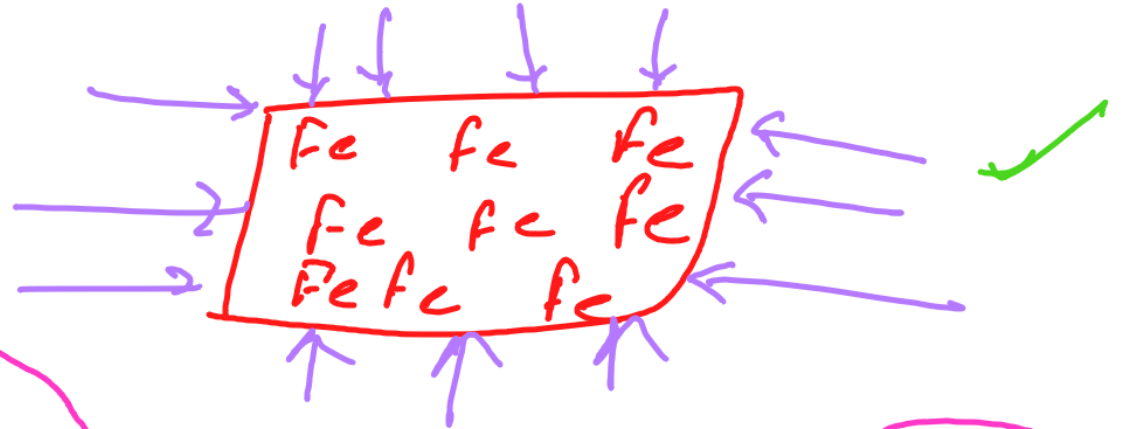
melt

* Pressure \uparrow
* Melting point \uparrow

② Impurities :-

↓
[Melting Point]

Freezing Point



Matka kulfi → Salty

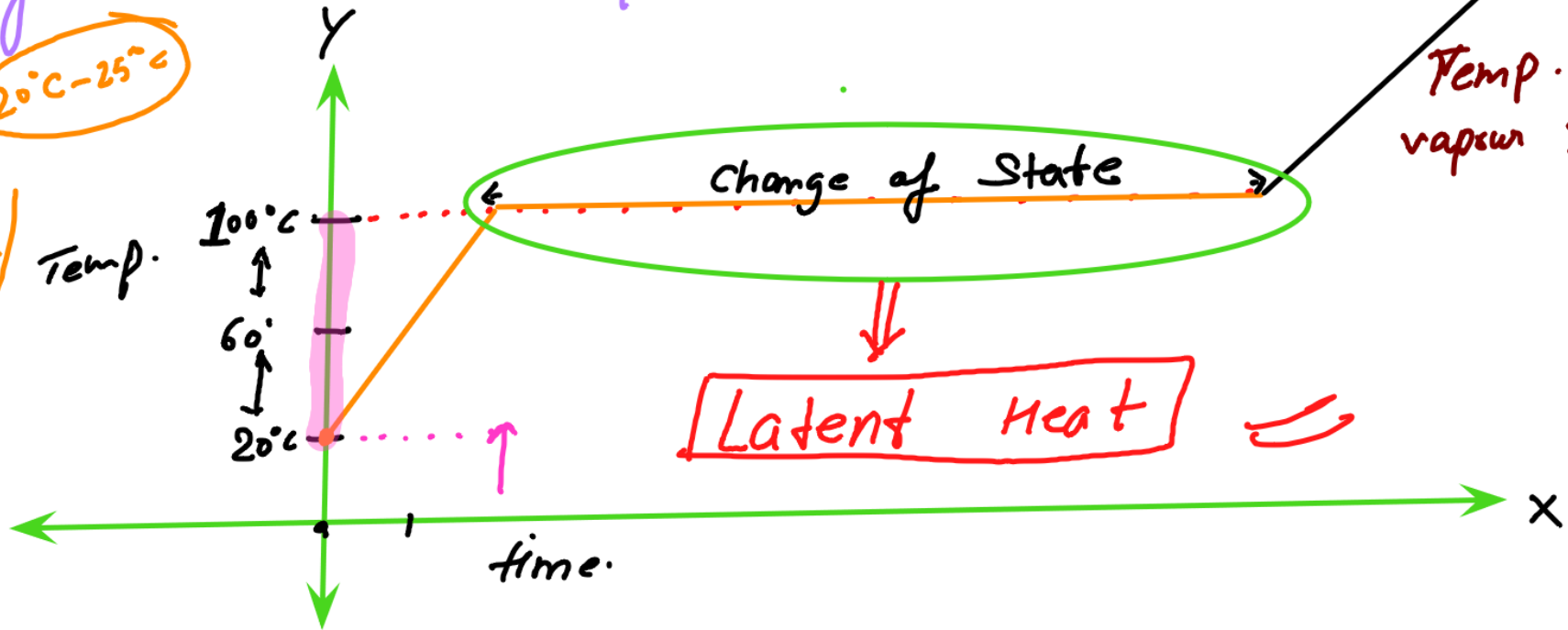
PLC

25th

Vaporisation or Boiling :-

Boiling Point \Rightarrow Liquid \rightarrow Vapour.

Temp. $20^{\circ}\text{C} - 25^{\circ}\text{C}$



Effect of Pressure on Boiling Point

* Pressure Increases.
* Boiling Point Increases.



Space

H_2O H_2O H_2O H_2O

Vapour

pressure

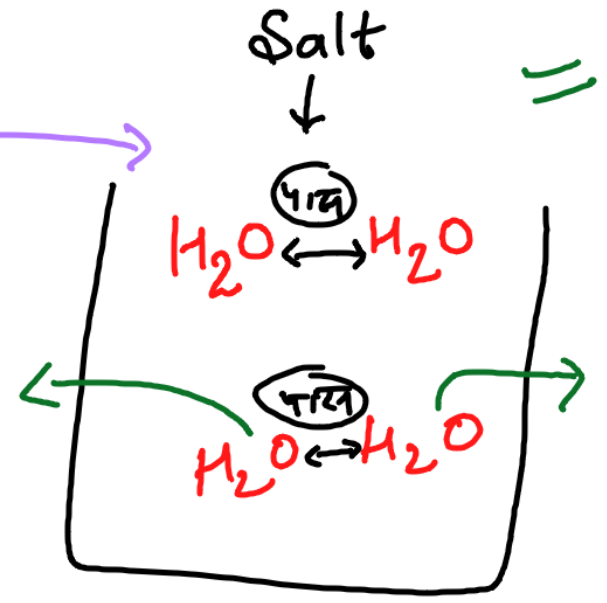
Boiling become
Hard task if
pressure increases

Effect of Impurities on Boiling point.

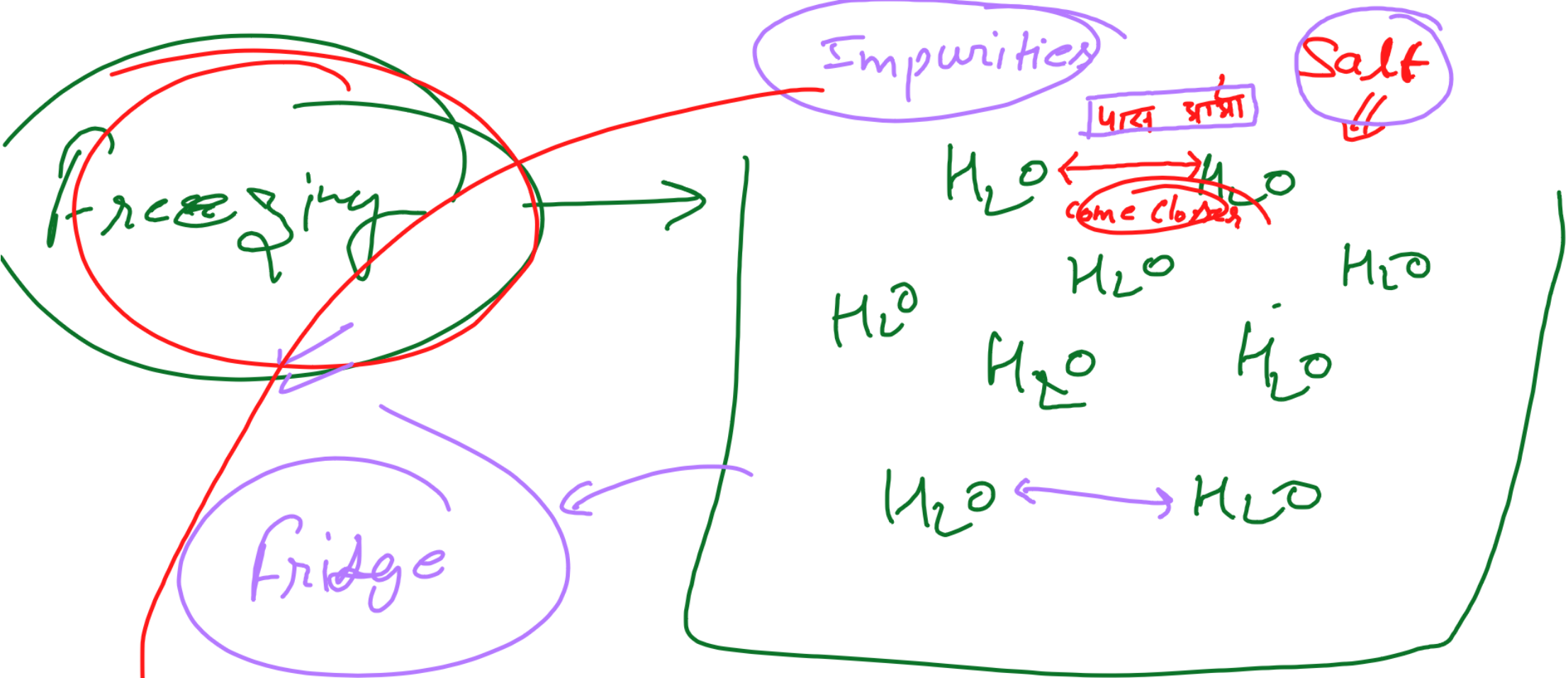
⇒ Impurities add.
⇒ Boiling Point **Increases**

पल आधा 2

दूर जाधा 1



Boil → **vapour**



Helps in freezing of

Freezing => आठ पल्ले आता
 Solid