

Pure Substances

Pure Substance

- Single Component System

Water H_2O

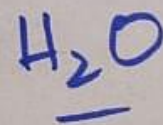
(1)

- Chemical Composition is same throughout the mass

Homogeneous Material

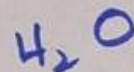
- Can/May exist in more than one phases

Water



Pure Substance

Milk



+ Starch

+

Calcium

+

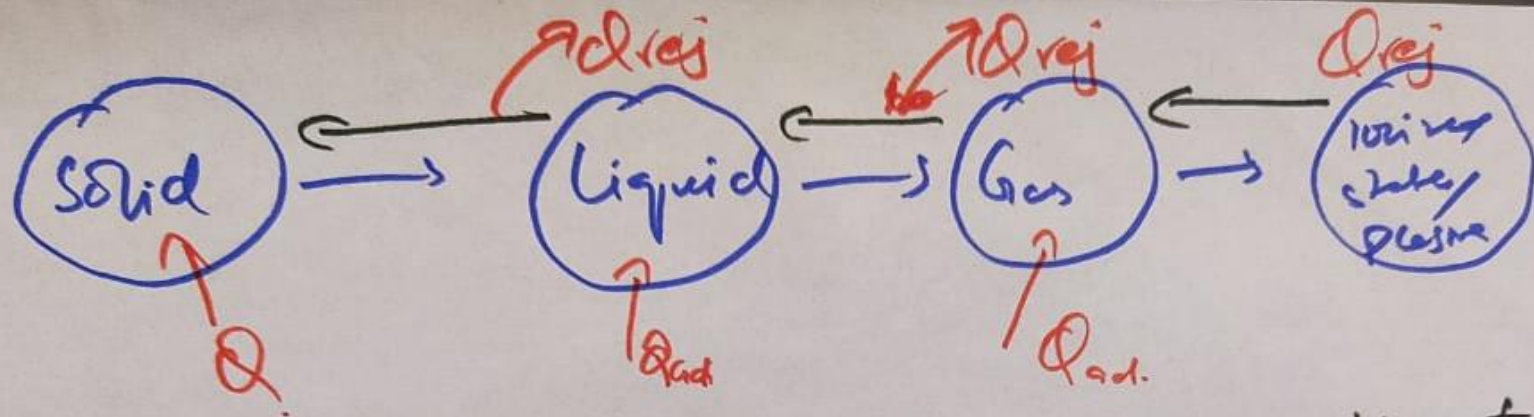
Protein

+

!

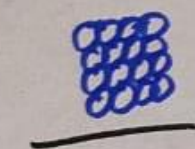
(Not a

Mixture Pure Substance)



Sensible Heat / Latent Heat

⇒ Sensible heat associated with change in temperature (Change in K.E)



Solid

→ Liquid

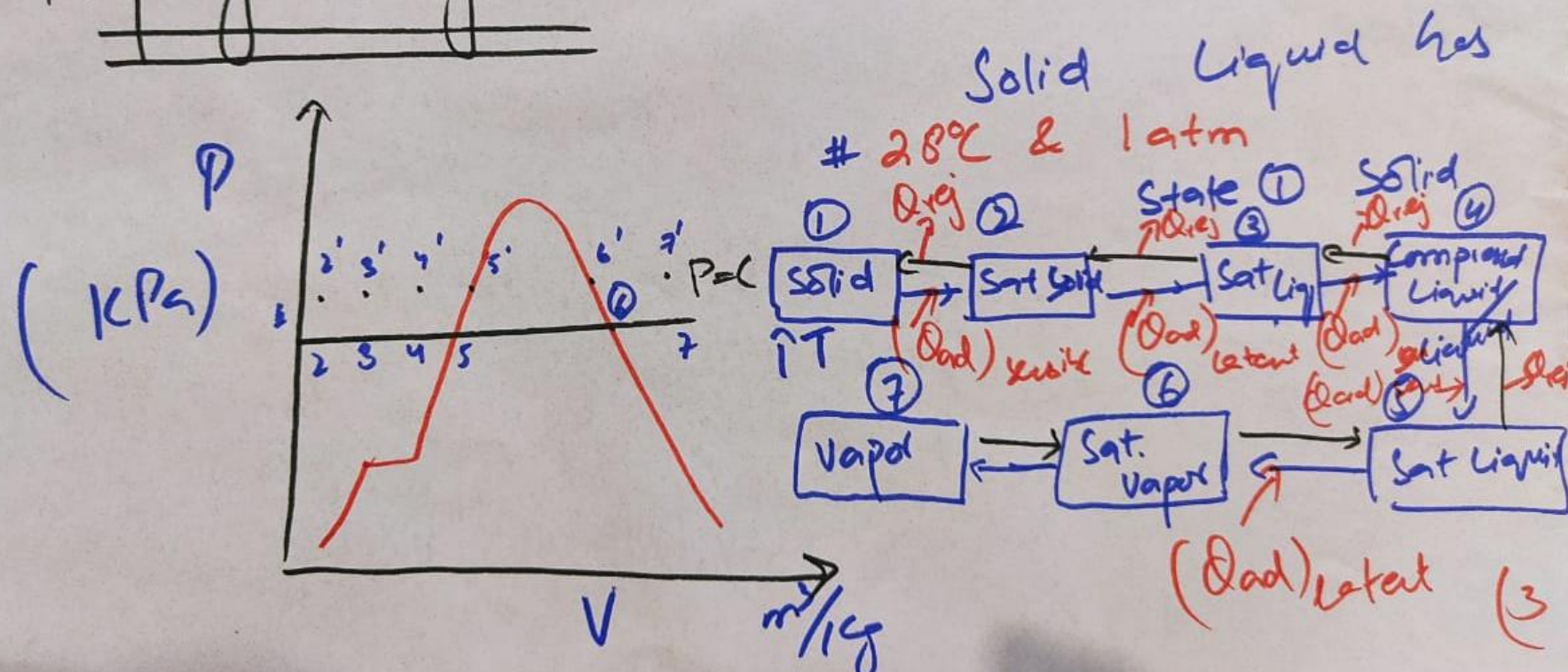
⇒ Latent heat is the amount of thermal energy to change the phase.

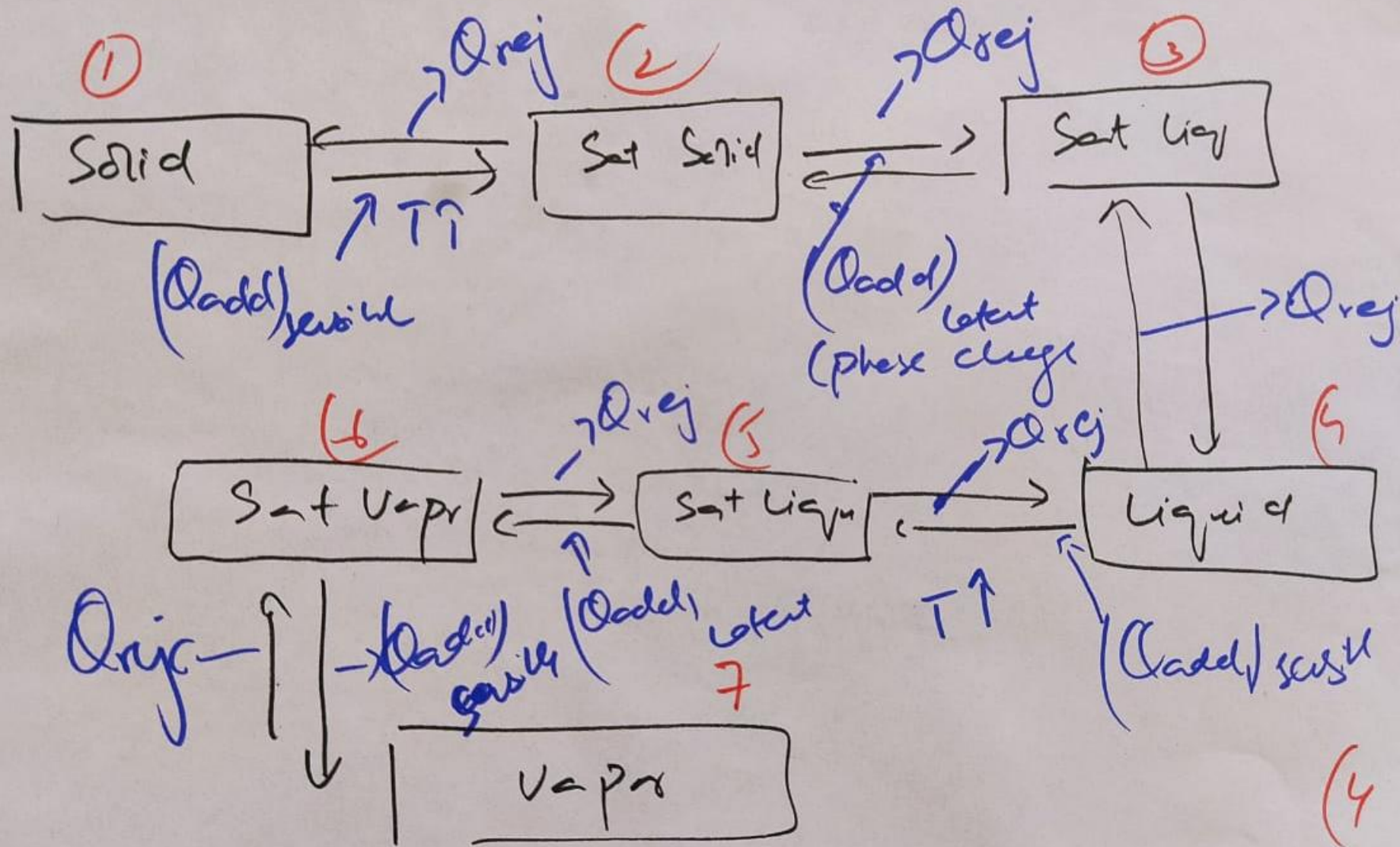
To break this bond (Energy is needed)

Sensible Heat
 → Temp change

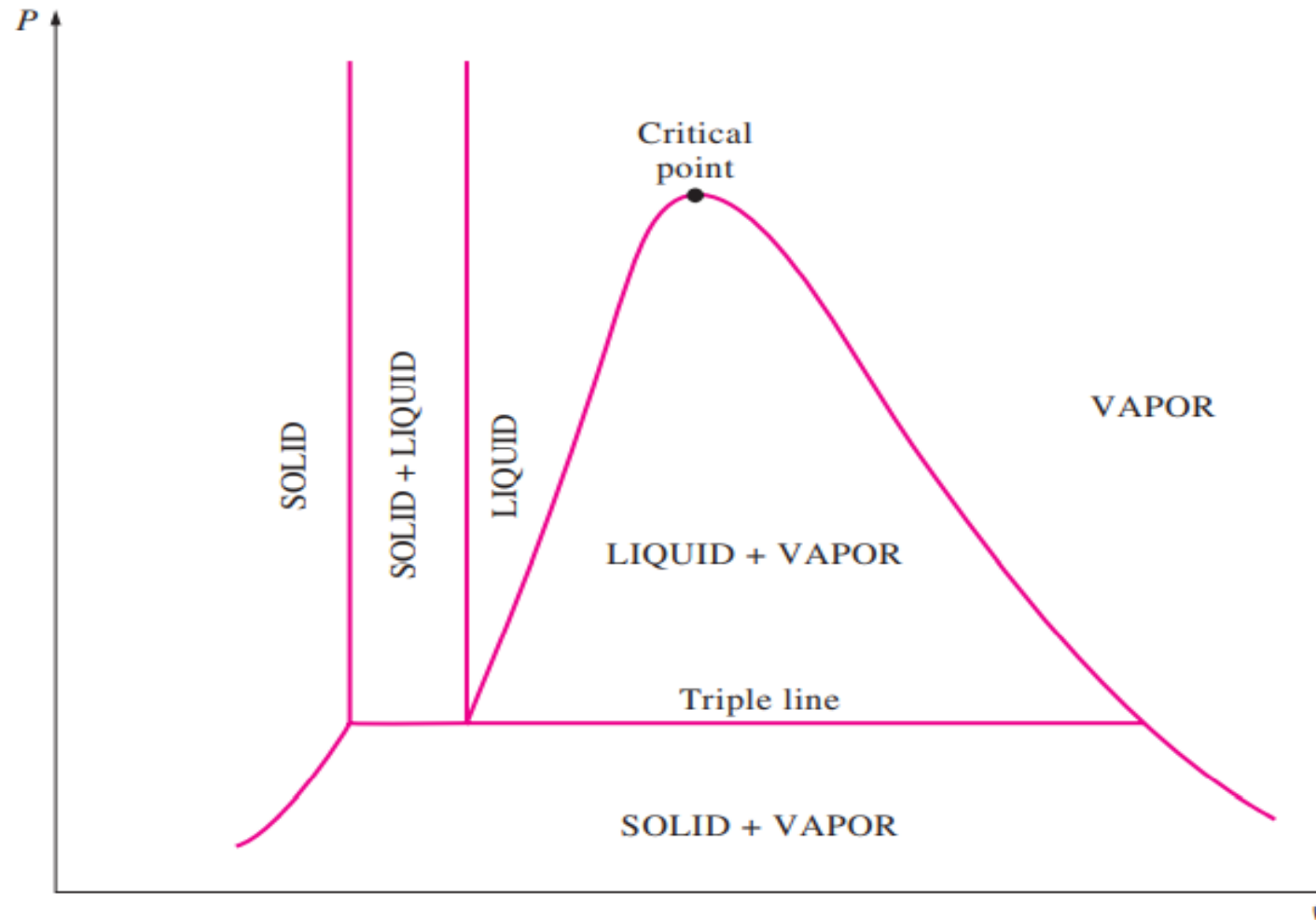
Latent Heat
 → Added or removed
 at constant Temperature
 & Pressure.

Property Diagram:





PV Diagram of a Pure Substance



- Book Chapter 3
- PAGE # 111 TO 124