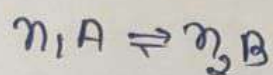


C<sub>sp</sub> = 5 Equilibrium Constant in term of concentration and pressure



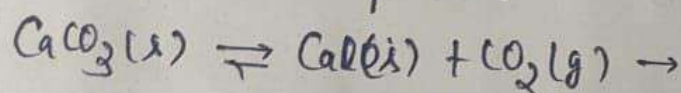
$$K_c = \frac{[B]^{n_2}}{[A]^{n_1}}$$

Eq. Const in term of molar Con.

$$K_p = \frac{(P_B)^{n_2}}{(P_A)^{n_1}}$$

Eq. Const in term of partial pressure of A, B

Note → Con. or pressure of solid substance not consider in Equilib<sup>m</sup>. Equation.



$$K_p = P_{CO_2}$$

$$K_c = [CO_2]$$

Relation b/w K<sub>p</sub> & K<sub>c</sub>

$$K_p = K_c (RT)^{\Delta n_g}$$

where  $\Delta n_g = \text{mole of gaseous prod} - \text{total gaseous mole of Reactant}$

$$K_p = K_c (RT)^{\Delta n_g}$$

→ value of RT > 1

$$\Delta n_g = 0$$

$$K_p = K_c$$

$$\Delta n_g > 0$$

$$K_p > K_c$$

$$\Delta n_g < 0$$

$$K_p < K_c$$