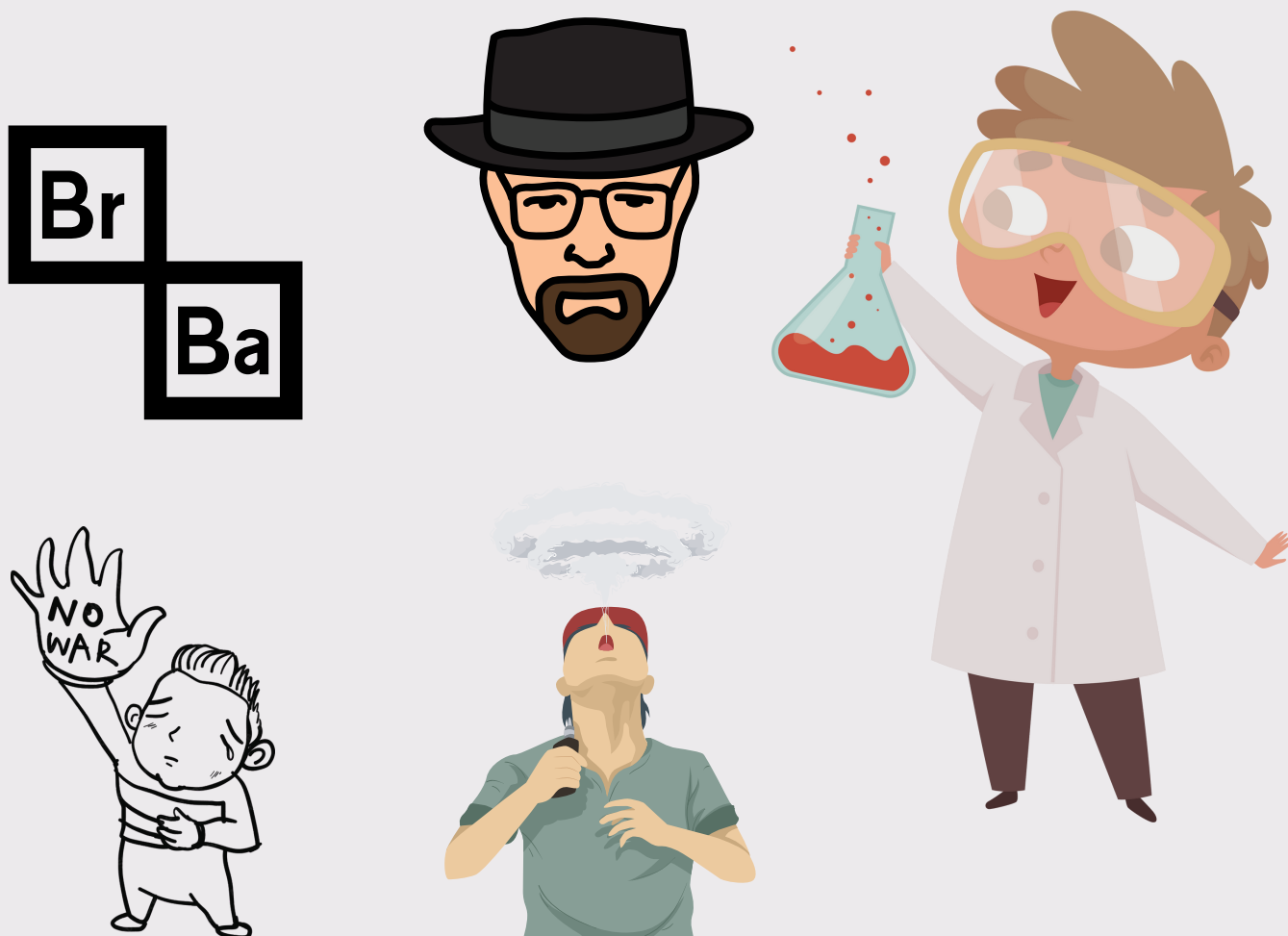


K-Chemistry

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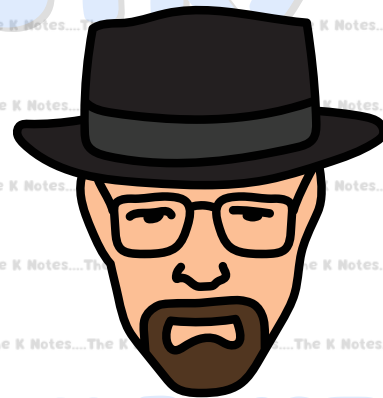
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- Volume of any Gas = Volume of its container
- Find number of moles of gas mixture
= number of moles of Gas 1 + number of moles of Gas 2 + ...
mole fraction of gas 1 = no of gas moles₁ / total no of moles of all gases
partial pressure of gas 1 = mole fraction of gas 1 x total pressure

Gases Problems

- Type 1, No change in conditions $PV=nRT$



1. P in at unit
2. T in K unit
3. V in dm³ unit
4. n in mol

- Type 2, Change in conditions

1. $P_1 V_1 = P_2 V_2$
2. $P_1 T_2 = P_2 T_1$
3. $V_1 T_2 = V_2 T_1$
4. $P_1 n_2 = P_2 n_1$
5. $P_1 V_1 T_2 = P_2 V_2 T_1$

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$$PV = nRT$$

$$d = m/V$$

$$PV = \frac{m}{M} RT \quad PM = dRT$$



Change units



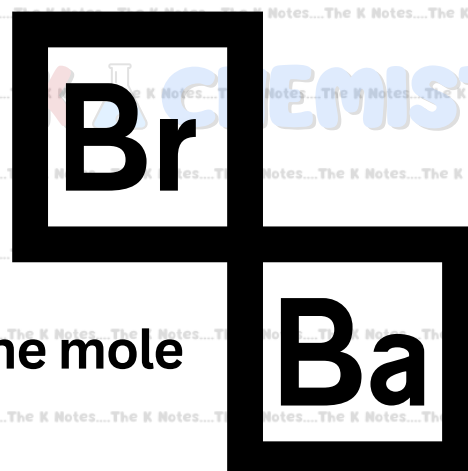
degree C to degree K , add 273

degree K to degree C , subtract 273



atm to mmHg X760

mmHg to atm /760

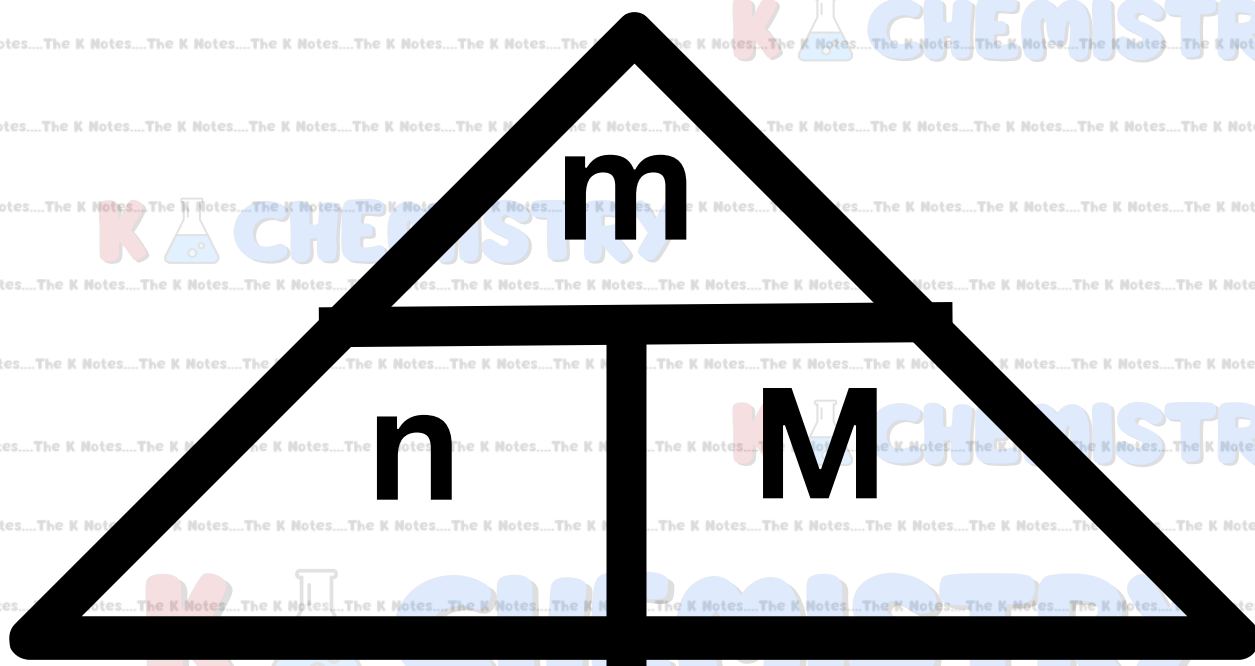


Molar volume means volume of one mole

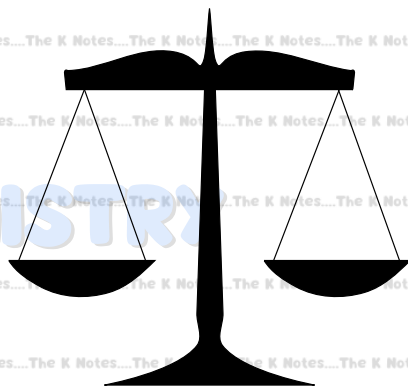


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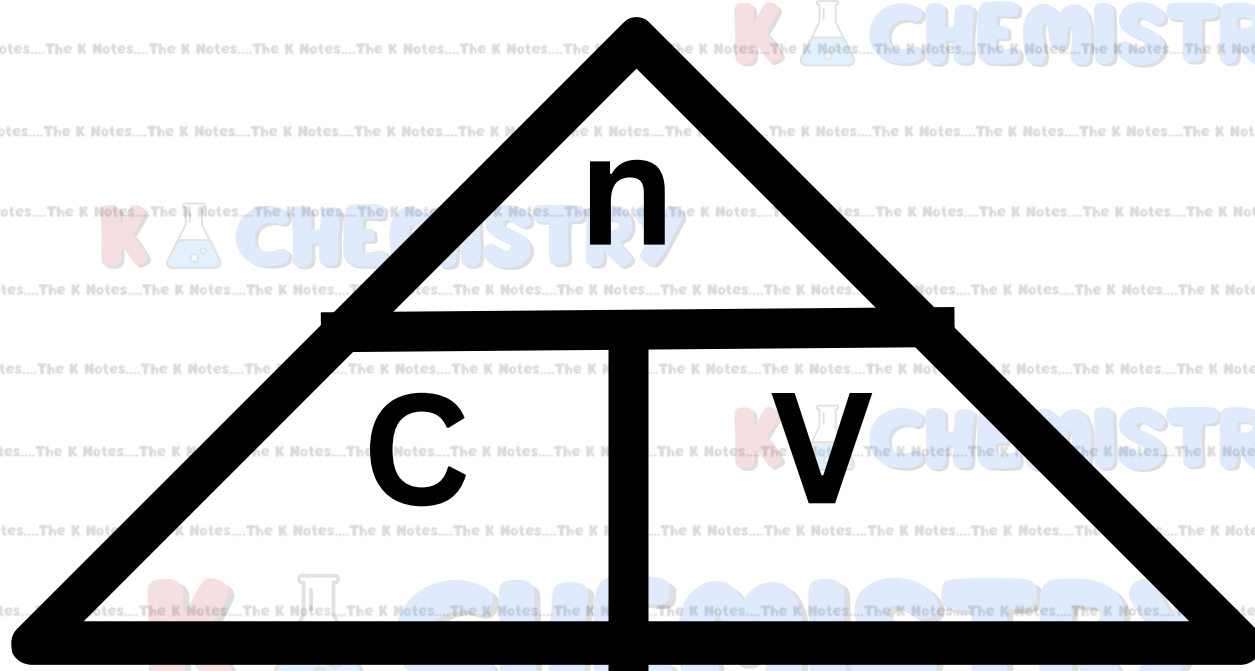
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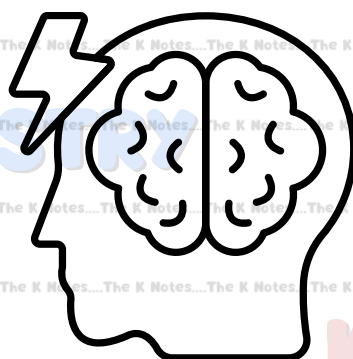
in masses/solid



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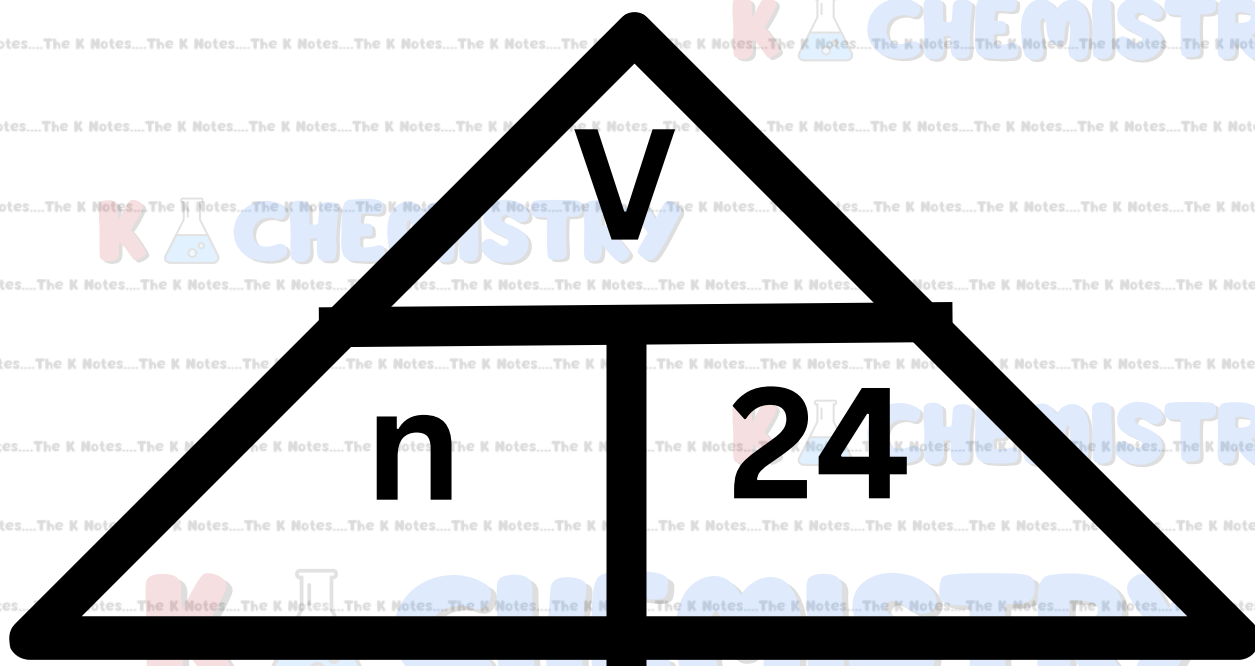


in concentration
of aqueous solutions

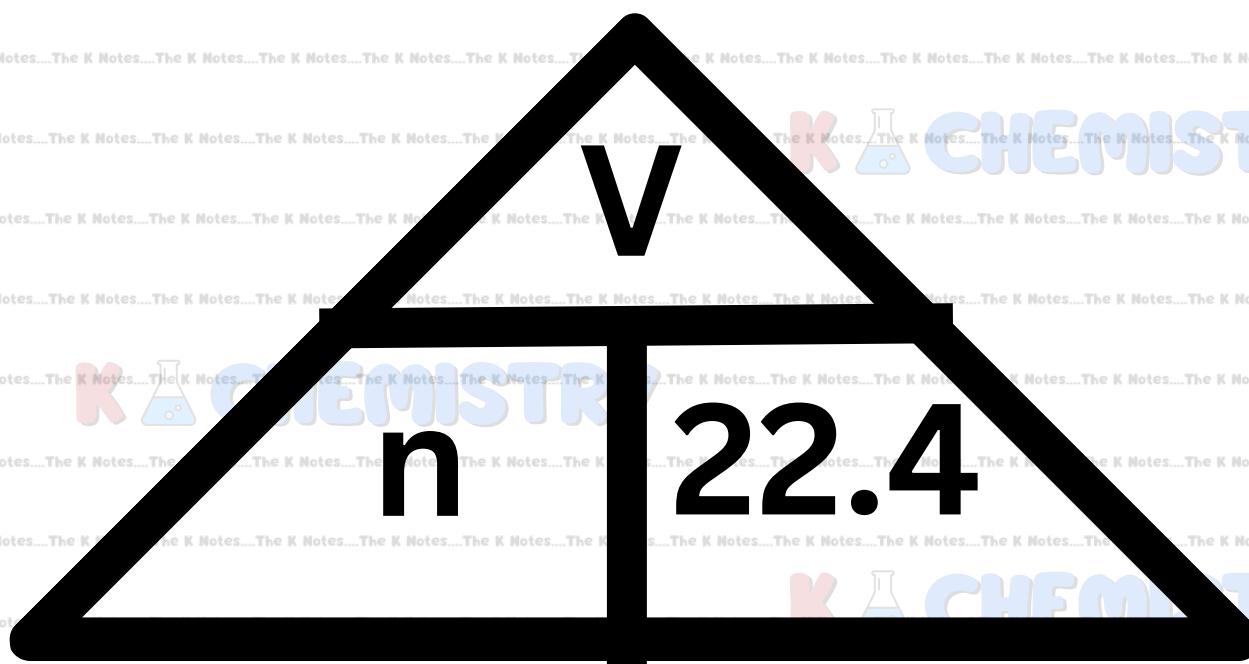


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in gases at RTP



in gases at STP



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see you next part