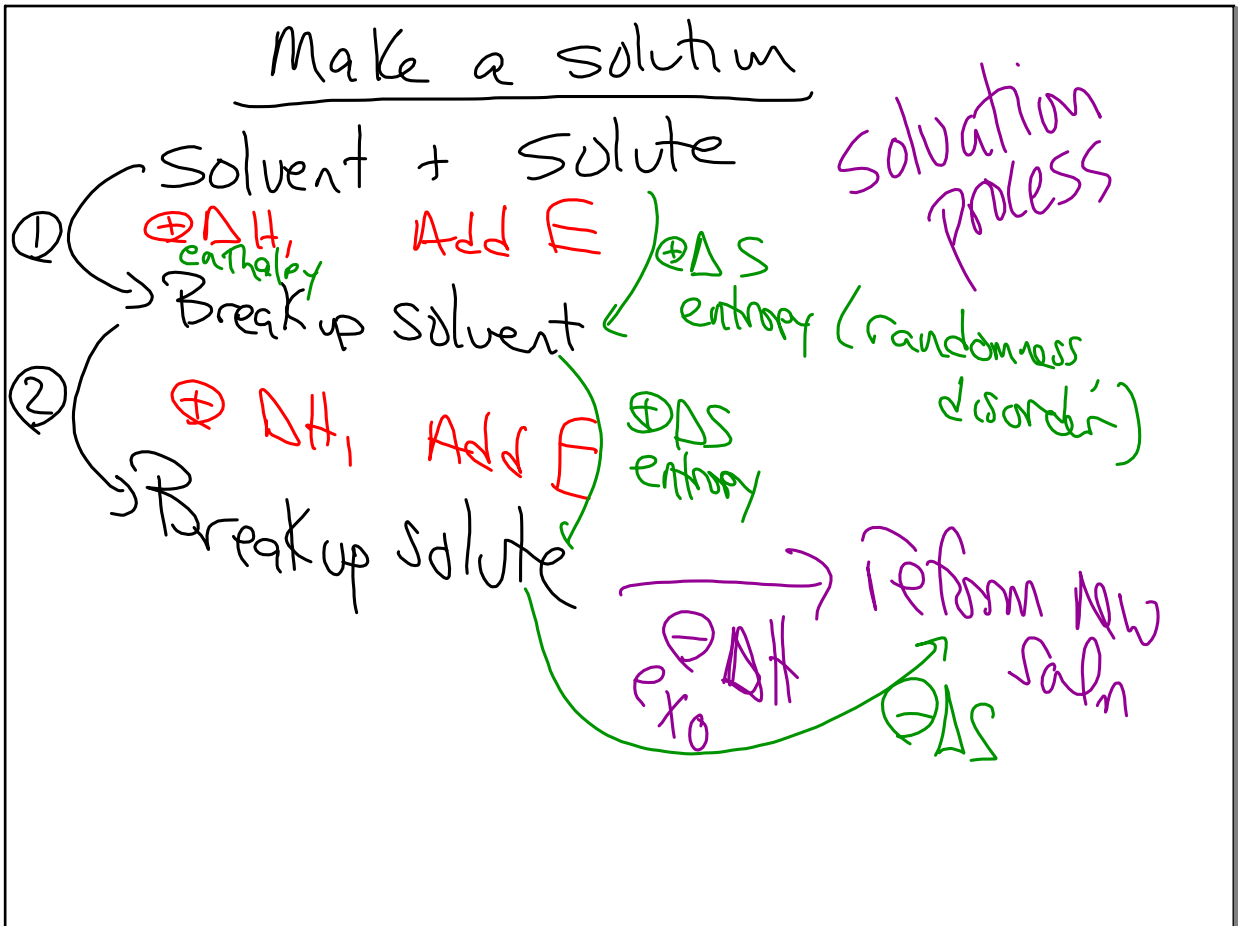


Jan 5-7:36 AM



Jan 5-8:12 AM

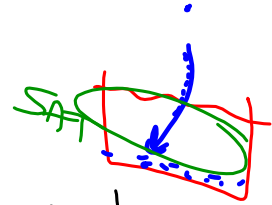
Solution Types

① Unsaturated

Solvent can hold more solute
"Vacancy" at the Inn

② Saturated

Solvent holds as much solute as it can.



Jan 5-8:18 AM

③ Super saturated

"SUPA SAT"

Solvent is holding MORE solute
than it can under std. conditions

SPECIAL CONDITIONS!
 $\uparrow P$, $\uparrow T$, $\uparrow V$
 (99%)

Jan 5-8:24 AM

Miscible - Mix

immiscible - don't mix

① Bonding

② T

③ P (g)

④ Concentration already possible

Factors that affect solubility

Jan 5-8:50 AM

MOLARITY measure of concentration

$$\frac{M}{l} = \frac{\text{moles of solute}}{\text{l of solution}}$$

solute + solvent

↑
MORE

Jan 5-8:56 AM

MOLARITY (M)

$$\frac{M}{l} = \frac{\text{Moles solute}}{l \text{ Solution}}$$

Solute + solvent

MOLALITY (m)

little m

$$\frac{m}{l} = \frac{\text{moles solute}}{Kg \text{ Solvent}}$$

just

Jan 5-8:58 AM

$$6M = \frac{6 \text{ moles solute}}{1 l \text{ soln}}$$

"Six MOLAR"

$$3m = \frac{3 \text{ mole solute}}{1 Kg \text{ solvent}}$$

Three molal

Jan 5-9:02 AM

Solute \rightarrow 36.5g $C_{10}H_8$ (Naphthalene)
 in solvent \rightarrow 425g Toluene C_7H_8 . $D = 1g/ml$

Find ^① molality + ^② Molarity
 \rightarrow Find $\frac{\text{moles Naphthalene}}{\text{Kg Toluene}}$

① $\frac{36.5g \text{ Nap}}{0.425 \text{ Kg Tol}} \Big| \frac{\text{Mole Nap}}{128 \text{ g Nap}} = 0.670_m \frac{\text{mole N}}{\text{Kg T}}$

Jan 5-9:03 AM

② Molality = $\frac{\text{moles Nap}}{\text{L solution} \rightarrow N + T}$

$\frac{36.5g \text{ Nap}}{461.5g \text{ soln}} \Big| \frac{\text{Mole Nap}}{128g \text{ Nap}} \Big| \frac{1g}{1000g} \Big| \frac{1000g}{1g} = 0.617m$

Jan 5-9:13 AM

13/28, 32, 44 c+d, 50 a

Jan 5-9:16 AM