

Chem12 Solutions : Quiz-80

- 1) Define : Solution - _____
- 2) Define : Solute - _____
- 3) Define : Saturated Solution - _____
- 4) Write the dissociation equation for $\text{MgCl}_2(\text{s})$ _____
- 5) Write the equation for a saturated solution of Silver Sulfate (assume equilibrium)

- 6) Which is more soluble : a polar substance or a non-polar substance? (circle one)
- 7) Which will conduct electricity : an ionic compound or a polar substance? (circle one)
- 8) A student adds 3.0 grams of NaCl to 1.5 L of water. The solubility is _____ g/L. The solubility is _____ mol/L.
- 9) Write the net ionic equation for the reaction between $\text{Fe}_2(\text{SO}_4)_3(\text{aq})$ and $\text{MgS}(\text{aq})$. _____
- 10) Find the concentration in mol/L of $\text{OH}^-(\text{aq})$ if 3.0 L of 2.0 M NaOH solution is mixed with 2.0 L of 5.0 M $\text{Sr}(\text{OH})_2$.

Answers : 1) It is a homogeneous mixture., 2) It is the smaller component of a solution., 3) It is a solution with the maximum amount of solvent dissolved., 4) $\text{MgCl}_2(\text{s}) \rightarrow \text{Mg}^{2+}(\text{aq}) + 2\text{Cl}^-(\text{aq})$, 5) $\text{Ag}_2\text{SO}_4(\text{s}) \leftrightarrow 2\text{Ag}^+(\text{aq}) + \text{SO}_4^{2-}(\text{aq})$, 6) polar substance, 7) ionic compound, 8) 2.0, 0.034, 9) $2\text{Fe}^{3+}(\text{aq}) + 3\text{S}^{2-}(\text{aq}) \rightarrow \text{Fe}_2\text{S}_3(\text{s})$, 10) 5.2M.