Solutions Unit

1. ***Solutions*** are the best examples of ***homogeneous mixtures***. (Air, salt water, etc.)

2. A ***solute*** is the substance being dissolved, while the ***solvent*** is the substance that dissolves the solute. (Water is the solvent in Kool-Aid, while sugar is the solute.)

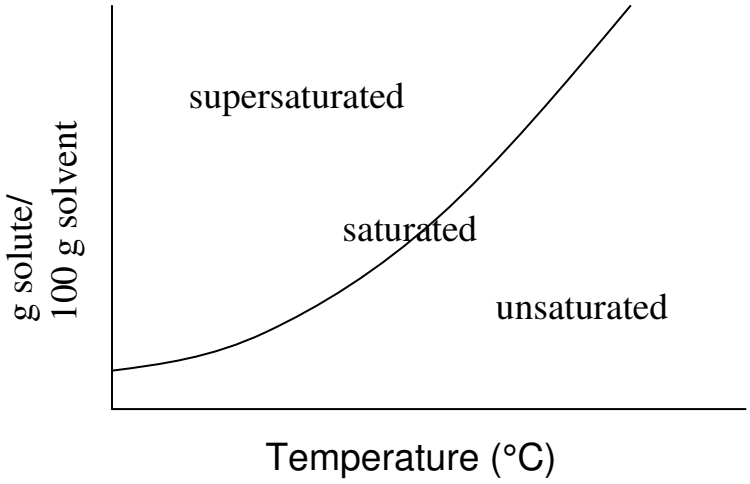
3. Use Table F to predict the solubilites of compounds.

4. Remember substances tend to be soluble in solvents with similar properties….
   "Like dissolves like"

5. As temperature increases, solubility increases for most solids.

6. At low temperatures and high pressures solubility *increases* for most gases.

7. Use *Table G* to determine whether a solution is ***saturated***, ***unsaturated***, or ***supersaturated***.



8. ***Molarity*** is a way to measure the *concentration* of a solution. Molarity is equal to the number of moles of solute divided by the number of liters of solution. The formula is on the back of the reference tables.

9. ***Percent by mass*** = mass of the part / mass of the whole x 100%

10. ***Parts per million (ppm)*** = grams of solute / grams of solution x 1,000,000

11. Solutes raise the boiling points and lower the melting points of solvents.

12. Liquids ***boil*** when their vapor pressure is equal to the atmospheric pressure.

13. The ***normal boiling point*** of a substance is the temperature at which it boils at 1 atm of pressure. (Take note of Table H)

USE THE REFERENCE TABLES!!!