

Solutions Cramsheet

1. Define solution.
2. What are the main parts of a solution and define them.
3. What are the units and abbreviations for the following concentration units?

Conc. Unit	Abbreviation	Equation	Units
Molarity	M	$\frac{\text{mol solute}}{\text{liter solution}}$	mol/L or M
Mole Fraction		_____	
Parts per million		_____	
Parts per billion		_____	
Molality		_____	
Mass percent		_____	

4. Complete the following: p. 276 #9ab, 10cd, 12, 18ac (You may continue on the back).

5. Describe how a particle of salt is dissolved by water. Use positive, negative, intermolecular forces, ions and lattice in your description.

6. Fill in the following chart:

As this variable INCREASES,	the solubility of a solid/liquid...	the solubility of a gas...	Real-life example?
Surface area			
Temperature			
Pressure			

7. Do polar or nonpolar substances dissolve in water? Why?

8. Complete the following: p. 277 #19, 20