MOLARITY & DILUTION
NOTES

MOLARITY

- **A way to calculate concentration of a solution**
- Molarity $= \dfrac{mol\ solute}{L\ solution}$
- **Example #1:**
  - 23.0 g of NaOH dissolved in enough water to make 500. mL of solution. What is the molarity?

ANOTHER EXAMPLE

- **Example #2:**
  - 1 L of 2.0 M NaOH needed. How do you prepare this solution?

DILUTION

- **A solution in concentrated form (stock solution) is mixed with water to obtain a solution of lower concentration**
- $M_{conc} V_{conc} = M_{dil} V_{dil}$ OR $M_1 V_1 = M_2 V_2$

- **Example:**
  - Need 250. mL of a 3.50 M HCl solution. Stock solution is 12.0 M HCl. How would you prepare this solution?

"Do what you oughta….add acid to watta"