## **QUANTITIVE CHEMISTRY**

- 1. Mass percentage  $\%(w/w) = \frac{Mass\ of\ solute}{Total\ Mass\ of\ solution} \times 100$
- 2. Volume Percentage %  $v/v = \frac{Volume \text{ of solute}}{Total \text{ volume of soltion}} \times 100$
- 3. Percent mass/Volume  $\%(w/v) = \frac{Mass\ of\ solute}{Total\ Volume\ of\ Solution} \times 100$
- 4.  $ppm(w/w) = \frac{Mass\ of\ solute}{Total\ mass\ of\ Solution} \times 10^6$
- 5.  $ppb(w/w) = \frac{Mass\ of\ solute}{Total\ mass\ of\ Solution} \times 10^9$
- 6.  $Mole fraction = \frac{Mole count of solute}{Mole number of solution}$
- 7.  $Molarity = \frac{Moles of Solute}{Liters of solution}$