6.3 Solution Concentration

Definitions

- Concentration
- Dilute
- Concentrated

- Parts per million
- Mole
- Molar concentration

Percent Concentration

- $\frac{1}{2}$ V/V Percent volume by volume \rightarrow concentration = volume of solute/volume of solvent
- % W/V Percent weight by volume \rightarrow concentration = mass of solute/volume of solvent
- % W/W Percent weight by weight \rightarrow concentration = mass of solute/mass of solvent

Very Low Concentrations

- ppm = 1 mg/L
- also ppb and ppt (see table 1 on page 282)

Molar Concentration

• molar concentration = number of moles/volume

Calculations Involving Concentrations

- use the equations above to solve
- you might need $C_1V_1 = C_2V_2$
- Check the summary on page 290

Homework

Practice: 1-8, 11-17, 19-22Section Questions: 1-10