Name\_\_\_\_\_

Honors Chemistry

## Concentrations of solutions

1. Calculate the molarity of .40 mol of NaCl dissolved in 1.6 L solution.

2. Calculate the molarity of 20.2 g of Potassium Nitrate KNO<sub>3</sub> in enough water to make 250.0 mL of solution.

3. How many grams are needed to make 2.0 L of 2.0 M nitric acid, HNO<sub>3</sub>, solution?

4. You must prepare 300.0 mL of .750 M NaBr solution using 2.00 M NaBr stock solution. How many milliliters of stock solution should you use?

5. 24 g of Calcium Carbonate, CaCO<sub>3</sub> are dissolved in 120.0 g solution. What is the percent by mass?

6. A water solution of Potassium Sulfate,  $K_2SO_4$ , has a mass percent of 24.0 %, determine its molarity if the solution has a density of 1.12 g/mL.