Name $\qquad$

## 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 $\mathrm{KNO}_{3}$ 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, $\mathrm{HNO}_{3}$, 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, $\mathrm{CaCO}_{3}$ are dissolved in 120.0 g solution. What is the percent by mass?
6. A water solution of Potassium Sulfate, $\mathrm{K}_{2} \mathrm{SO}_{4}$, has a mass percent of $24.0 \%$, determine its molarity if the solution has a density of $1.12 \mathrm{~g} / \mathrm{mL}$.
