Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Determining the Composition of a Mixture using Limiting Reactant Stoichiometry

Lab Report

1. Write the equation for the reaction.
2. Which component of the mixture was the limiting reagent? Justify your choice.
3. Create a table and list all the mass measurements recorded in your lab notebook.
4. For each trial, calculate the percent composition by mass of each component of the mixture by following the moles of the limiting ion in the precipitate.
   1. Be sure to use the proper mole ratios (formula of the compound as well as the ratio in the chemical equation). Show all your work and label it well. This can be done as one long algebraic mathematical equation.
5. Compare and contrast the results for both trials and the results from the other group. Explain any similarities and differences using chemical concepts and models (not math).