**Pre-lab quiz: Precipitation, limiting reactants & percent yield**

1. Are any of these chemicals particular health hazards?2. How accurate are the burets you are using to dispense solutions?3. What do these abbreviations mean?

aq s l g

4. Change the cations of the two salts used in today's reaction. Your replacement cations must allow you to mix the aqueous reactants and produce two products, one soluble and one insoluble. Give three alternative cations for each reactant.

5. What salts (other than Na2(CO3)) might you add to an unknown solution that you suspected was CaCl2 to help you to confirm its identity? (HINT: You want to try several salts; some should produce precipitates and some should not. This pattern is the key to identity.)

6. What factor is likely to lead to the largest error in yield in this experiment?*Given this chemical reaction answer the remaining quiz questions:*

*Pb(NO3)2 (aq) + 2KI (aq) --> PbI2 (s) + 2K(NO3) (aq)*

7. Write the complete and net ionic equations for this reaction.8. Given 1.65 g of Pb(NO3)2 and 2.87 g of KI which is limiting and which is in excess?

9. What is the theoretical yield of lead iodide in grams?

10. If your actual yield is 2.10 g, calculate your percent yield.