



## Determining Concentration by Precipitation Lab #21

Using your knowledge of solution chemistry and stoichiometry, the concentration of a solution can be obtained by reacting it with a known solution and obtaining a precipitate.

**Materials:**

0.50 M KI solution       $\text{Pb}(\text{NO}_3)_2$  solution of unknown concentration  
250 mL beaker          Other materials to be determined by the student

**Procedure:**

Obtain 50 mL of KI solution and 50 mL of  $\text{Pb}(\text{NO}_3)_2$ . Pour them into the 250 mL beaker. The remainder of the lab procedure is to be determined by the student.

**Calculations:**

Determine the mass of solid product formed.

Calculate the molarity of  $\text{Pb}(\text{NO}_3)_2$  solution.