In this experiment, sodium carbonate solution and calcium chloride solution will be heated and combined to determine which will be the limiting reactant. Both solutions will be consumed at 50 mL each. The product that is less in result will be the limiting reactant and the product with more will be that of excess. The two solutions will be separated through filtration and the residue will be heated to remove any remaining water. Once these are weighed, the calculations can be performed to determine the limiting reagent, theoretical yield and percent yield