Name: _____ Section: _____

Data and Calculations for Experiment 6

1. Weight of empty beaker _____
2. Weight of beaker and sodium sulfate _____
3. Weight of sodium sulfate

   Show Calculation _____

4. Moles of sodium sulfate

   Show Calculation _____

5. Moles of strontium chloride
   moles $SrCl_2$ = (5 mL)(10^{-3}/m)(0.5 M)

   Show Calculation _____

6. Write a balanced MOLECULAR equation for the reaction:

7. Write a balanced NET-IONIC equation for the reaction:

8. Weight of empty filter paper _____
9. Weight of filter paper and dried precipitate (first time) _____

   Weight of filter paper and dried precipitate (second time) _____

   Weight of filter paper and dried precipitate (third time) _____
10. Weight of precipitate

    Show Calculation _____

Name: _____ Section: _____

11. Determine the theoretical yield (in grams) of strontium sulfate. What is your limiting reactant and excess reactant?

    Limiting Reactant: _____ Excess Reactant: _____

    Show Calculation (theoretical product yield) _____

12. Determine the percentage yield of your reaction.

    Show Calculation _____

13. What would have resulted from using half as much $SrCl_2(aq)$?

    Show Calculation _____

14. What would have resulted from using twice as much $SrCl_2(aq)$?

    Show Calculation _____

15. Briefly describe how you could have improved your percentage yield in this experiment.

16. In your own words, write a cohesive, well-written summary of the background material and underlying chemical principles pertinent to this experiment. If additional space is needed, please use the back of this page. (For additional guidelines on writing this introduction, please refer to the **Moorpark College Chemistry Department Laboratory Report Rubric** found in the lab manual and department website.)