SNC2DI Lab : Measuring Masses in Chemical Reactions

You are required to write up a formal lab report for this activity. It is due _____

The main question to be answered in your lab is "Does the total mass of a substance change when it goes through a chemical reaction"? You will follow the procedure as outlined in "2.7 Investigation Measuring Masses in Chemical Changes". The only change to the procedure is that you will substitute Iron (III) Nitrate in place of Iron (III) Chloride solution as one of the reactants.

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1. **Purpose**

Restate the question being investigated in your experiment.

2. **Hypothesis**

In this section you should state your hypothesis and identify what the variables are in your experiment.

3. **Materials**

Make a detailed list of all the materials (and equipment) that you use in this lab

4. **Procedure**

You may put "see handout 2.7 Investigation Measuring Masses in Chemical Changes".

5. **Observations**

You can use the table below to record your observations and measurements, but you must re-create your own for your formal lab report.

Reactants		**Products**	
Description before mixing	Mass (g)	Description after mixing	Mass (g)
Sodium Hydroxide			
Iron (III) Nitrate			

6. **Discussion**

Answer the following questions

1. Why was a stopper used on the Erlenmeyer flask?
2. What was evidence a chemical reaction occurred?
3. Compare your before and after mass results. Did the mass go up, down or stay the same? Did your groups experiment support the Law of Conservation of Mass?
4. Compare your results with those of other groups. Were you results accurate? Explain
5. Write the word equation and a skeleton equation for the reaction that took place in this experiment.

7. **Conclusion**

Did you succeed in accomplishing you purpose? Was your hypothesis correct? Identify at least two sources of error. For each source of error give the cause of the error, evidence of the error and the effect of the error.