

Name _____

Reporting Sheet: Lab 2: STOICHIOMETRY.**Data Analysis**

In the space below, assume your sample is Na_2CO_3 . Use the original unknown mass to calculate the hypothetical mass of NaCl that would have been synthesized. This calculation can be accomplished using the following steps:

- a) (3 pts) Convert the mass of unknown, assumed to be Na_2CO_3 , to moles of Na_2CO_3 using the *molar mass* of Na_2CO_3 .

_____ moles of Na_2CO_3

- b) (2 pts) Convert the moles of Na_2CO_3 consumed to the moles of NaCl formed using the *balanced chemical equation*.

_____ moles of NaCl

- c) (3 pts) Convert the moles of NaCl to grams of NaCl using the *molar mass* of NaCl .

_____ grams of NaCl

2) (5 pts) Now assume your sample is NaHCO_3 . Use the original unknown mass to calculate the hypothetical mass of NaCl that would have been formed. Use the method outlined above:

_____ grams of NaCl

- 3) (2 pts) Fill in the spaces in the following statement.

My unknown was labeled _____. If this unknown was Na_2CO_3 , then I would expect to have formed _____ grams of NaCl as a product. If this unknown was NaHCO_3 , then I would expect to have formed _____ grams of NaCl as a product. Since my reaction formed _____ grams of NaCl , then this unknown is _____.

Note: If your actual mass of NaCl is not clearly one of the predicted amounts, then make a suggestion in the space below of why this may be the case.

GRADING (Lab 2)

- Notebook Preparation

- lab activity entered into Table of Contents (1 pts) _____ pts
- header information on ALL pages (1 pts)..... _____ pts
- Purpose in notebook (2 pts) _____ pts

-Prelab Activity

- Complete table as requested in lab notebook (12 pts)..... _____ pts
(Including calculations of molar masses)
- Balanced Chemical Reactions in lab notebook (4 pts)..... _____ pts

- Data collection

- Mass of unknown clearly noted in lab notebook (3 pts) _____ pts
- Unknown label clearly noted in lab notebook (2 pt)..... _____ pts

- Data Analysis

- Reporting Sheet Calculations (15 pts) _____ pts

Total point (40 pts) _____ pts