Chemistry 1A **Experiment 15**

Lab Instructor:_____ Name:_____

SAMPLE DATA TABLES

PART 1: HEAT OF FUSION OF ICE

	Trial 1	Trial 2	Trial 3
1. Mass of empty calorimeter			
2. Mass of calorimeter plus water			
3. Mass of water in calorimeter			
4. Initial temperature of water in calorimeter (± 0.1°C)			
5. Temperature after ice has melted (± 0.1°C)			
6. Mass of calorimeter and contents after ice has melted			
7. Mass of ice			

PART 2: HEAT OF SOLUTION OF TWO SOLUTES

NH_4Cl	Trial 1	Trial 2	Trial 3
8. Mass of empty calorimeter			
9. Mass of calorimeter and water			
10. Mass of water in calorimeter			
11. Mass of solid used			
12. Initial temperature of water in calorimeter (± 0.1°C)			
13. Final temperature of solution in calorimeter (± 0.1°C)			
Na_2CO_3	Trial 1	Trial 2	Trial 3
8. Mass of empty calorimeter			
9. Mass of calorimeter and water			
10. Mass of water in calorimeter			
11. Mass of solid used			
12. Initial temperature of water in calorimeter (± 0.1°C)			
13. Final temperature of solution in calorimeter (± 0.1°C)			

ABOVE IS A SAMPLE DATA TABLE: these go in your lab book. Do not turn the above in as your data table. The above is a sample.

CALCULATIONS

Show all calculation setups, including units **in your lab book.** Keep the calculations for each trial separate.

SAMPLE RESULTS TABLE

Fill this out with the results of your calculations. THIS IS A SAMPLE

Part 1 Heat of fusion of ice in J/g	Trial 1	Trial 2	Trial 3
ΔH_{ice}			
Average ΔH_{ice}			
% error ΔH_{ice}			
% difference ΔH_{ice}			
Part 2: Heat of solution, NH_4Cl	**Trial 1**	**Trial 2**	**Trial 3**
$\Delta H_{solution}$			
Average $\Delta H_{solution}$			
% difference $\Delta H_{solution}$			
Part 2: Heat of solution, Na_2CO_3	**Trial 1**	**Trial 2**	**Trial 3**
$\Delta H_{solution}$			
Average $\Delta H_{solution}$			
% difference $\Delta H_{solution}$			

QUESTIONS:

Found on the pre-lab sheet

TURNING IT IN:

Attach these completed sheets to the lab pages which contain your observations, data tables, and calculations. Print out a cover sheet.