Date:_____ Name:_____

TA: _____

Experiment 1A: Making Measurement and Working in the Chemistry Lab

Chemistry 11

Safety:
• Calcium hydroxide and limewater are skin irritants. Wash any spills on skin or clothing with water

Purpose: To familiarize with techniques of working with common equipment in the chemistry lab and understanding the role of measurement and precision in using that equipment

Pre-Lab Theory: All measurements have uncertainty depending on the equipment used and the ability to take readings. The most common method of expressing uncertainty is using significant figures. Precision is how consistent measured values are and accuracy is how close a value is to an accepted value.

Hypothesis: If _____ then _____

_____

Apparatus and Materials:

See page. 2 of Essential Experiments for Chemistry

Procedure:

See pages 2-5 of Essential Experiments for Chemistry

Data:

Table 1: Length of Stickie (cm)

Length of Stickie

Table 2: Thickness of Book (cm)

Thickness of this Book (cm)	*Number of Sheets of Paper*

Table 3: Mass of Pins (g)

Mass of 1 Pin (g)	*Mass of 30 Pins (g)*

Table 4: Mass of Pins (g)

Mass of 100 mL Beaker = _____ g	
Mass of Beaker + 25mL Water (measured in Beaker)	*Mass of 25 mL water (measured in Beaker)*
Mass of Beaker + 25mL Water (measured in Graduated Cylinder)	*Mass of 25mL Water (measured in Graduated Cylinder)*
Mass of Beaker + 25mL Water (measured in Volumetric Pipet)	*Mass of 25mL Water (measured in Volumetric Pipet)*

List the masses of 100 mL beakers used by all other laboratory groupings:

Part IV: Result of blowing exhaled air into the lime water solution:

Sample Calculations: *if required*

Mass of 25 mL water (measured in Beaker) = Mass of Beaker + 25mL Water (measured in Beaker) - Mass of 100 mL Beaker

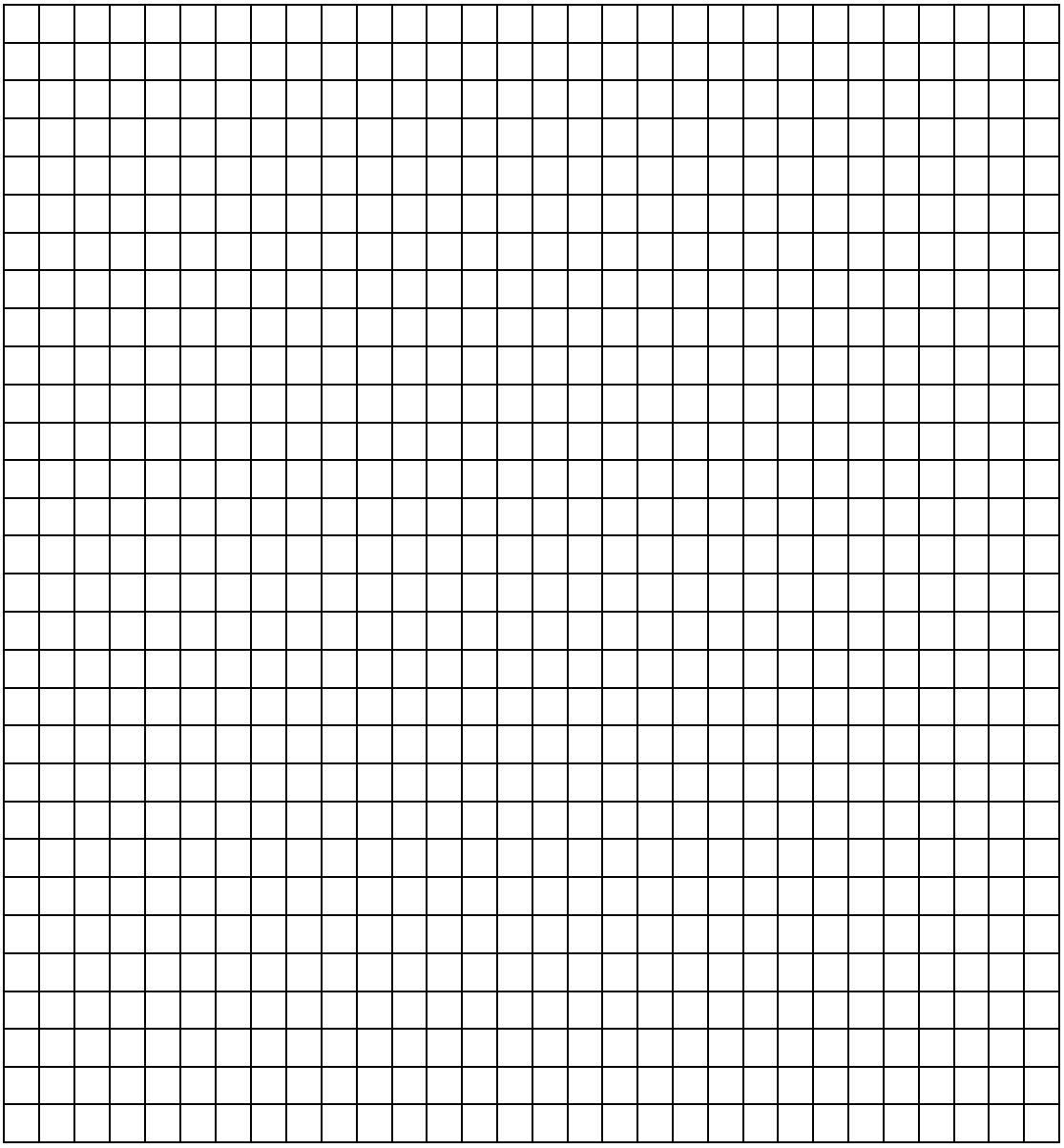
Analysis of Results:

Follow-Up Questions:

Conclusion (Answer conclusion questions):

Graph(s)

Title of the Graph



Questions:

Conclusion:
The purpose of this lab was to … and the hypothesis was: if the

The result(s) from the lab

Possible explanation of the result(s)

Possible errors that distorted the lab results

Was the hypothesis supported?

How could the lab be improved? Or another question