Prelab Example

Name: Cheli Fossum

Partner:

Experiment 1 - Mass, Volume and Graphing

Purpose and Overview:

In this experiment, older and newer pennies will be weighed and their average masses will be compared. The standard deviation of each set of pennies will be calculated, and we will determine whether the difference in mass of the two sets of pennies is significant. The linear dimensions of a milk carton will be measured to determine its volume, and that will be compared to the volume printed on the container. The volume of liquids in two graduated cylinders will be measured and checked by the instructor. Finally, the circumference and diameter of four different beakers will be measured, a graph of circumference vs. diameter will be made, and the slope of the graph will be determined.

Procedure Reference: Chem 1A Lab Manual, pp. 1-10.

Outline of Procedure:

Part 1

Weigh four pennies dated 1981 or earlier.
Weigh four pennies dated 1983 or later.
Calculate average mass and standard deviation for each set of pennies. Is there a significant difference?)

Part 2

 Measure length, width, and height of a soy milk container to ± 0.1 cm.
Calculate V, compare to listed volume.)
Read volumes of graduated cylinders in hood. Report to instructor.

Part 3 1. Find 4 different beakers. Measure circumference and diameter of each. (2. Make a table of c and d, and draw a graph of

c vs. d. Calculate the slope of the graph.)

<u>Data:</u>

Part 1

]	Pre-1981 pennies				Post-1983 pennies				
<u>]</u>	<u>Date</u>	Mass		Da	<u>ate</u>		Mass		
-			_g				g	,	
-			_g				g		
-			_g				g		
_			_g				g	•	
Part 2									
Milk ca	rton dimension	S							
ł	neight:	_cm	width:	cm	d	epth:	cm		
Volume printed on milk carton:mL							_quarts		
Volume of liquid in 10-mL graduated cylindermL									
Volume of liquid in 50-mL graduated cylindermL									
Part 3									
]	Beaker size (mL) circu			<u>ence (cr</u>	<u>n)</u>	<u>diameter (c</u>	<u>em)</u>		
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[Note that no calculations are included in the prelab. Save those for the "Calculations" section of the lab report.]
