Eudiometry Data Sheet

Student Name:

Partner Name:

Date	Instructor's Initials	Grade

Part One			
Atmospheric Pressure = 102.8 kPa			
	Trial 1	Trial 2	Trial 3
Mass of Calcium Carbonate	0.120 g	0.128 g	0.132 g
Volume of Gas Column	31.38 mL	33.01 mL	33.70 mL
Height of Water Column	41.6 cm	37.5 cm	36.0 cm
Temperature of Water	25.0 °C	26.0 °C	24.0 °C
Density of Water			
Vapor Pressure of Water			

Calculate the pressure of the carbon dioxide gas evolved for all three trials. Make sure to apply the corrections for both the water vapor and hydrostatic pressure.

Calculate the moles reacted for all three trials.

Calculate the actual number of moles reacted for all three trials.

Calculate the percent yield for each trial and report an average.

Eudiometry Data Sheet

Part Two			
	Trial 1	Trial 2	Trial 3
Mass of Unknown Mixture	0.122 g	0.118 g	0.125 g
Volume of Gas Column	16.31 mL	15.75 mL	16.03 mL
Height of Water Column	70.3 cm	71.2 cm	69.6 cm
Temperature of Water	25.0 °C	26.0 °C	25.0 °C
Density of Water			
Vapor Pressure of Water			

Calculate the pressure of the carbon dioxide gas evolved for all three trials. Make sure to apply the corrections for both the water vapor and hydrostatic pressure.

Calculate the number of moles reacted for each trial.

Use the average percent yield from Part One to determine the actual number of moles.

Convert the actual number of moles to mass for each trial.

Calculate the %mass of calcium carbonate in your unknown mixture for each trial and report an average.