Nа	me:	Section:
Da	ta and Calculations	
1.	Unknown sample number	
2.	Mass of test tube:	
3.	Mass of test tube and sample before heating:	
4.	Mass of test tube and sample after heating:	
5.	Mass of sample in the tube before heating:	
6.	Mass of residue in test tube after heating:	
7.	Mass of oxygen gas released:	
8.	Volume of oxygen gas at room temperature:	
9.	Atmospheric pressure:	
10.	Vapor pressure of water:	
11.	Temperature of water:	
Qι	nestions (to be completed while in the laborator	ry)
1.	Calculate the pressure of the collected oxygen g water).	as (i.e. correct for the vapor pressure of
2.	How much volume would the gas in question #1	occupy at STP?
3.	Determine the moles of oxygen gas collected frogas.	om the experimental mass of the oxygen

Na	me: Section:
4.	Use questions #2 and #3 to determine the molar volume (i.e. how many Liters/mole the gas would occupy at STP).
5.	Determine the % error of your molar volume from that of an ideal gas.
6.	Along with oxygen gas, potassium chloride is also formed from the potassium chlorate. Write a balanced equation for the reaction. Also describe the purpose of the MnO ₂ . Do you suspect that this "filler" is necessary for this particular reaction? Briefly explain why or why not.
7.	Calculate the number of grams of potassium chlorate in your original sample.
8.	Determine the mass percent of $KClO_3$ in your original sample. (Remember that the sample was not pure $KClO_3$ but has varying amounts of other compounds)
9.	What would happen if you didn't remove the stopper from the hot test tube?

Name: _	Section:
Post-lab	Questions
oxyg	mple of an unknown metal chlorate weighing 1.725 g is heated until all of the en is driven off. The residue remaining in the container weighs 0.859 g. Calculate ercentage of oxygen in this metal chlorate.
	mL of oxygen gas are collected by displacement of water at 33 °C and 742 torr e the vapor pressure of water at this temperature is known to be 37.8 torr.
A. V	What is the pressure of the oxygen gas?
В. Г	Determine the volume of the oxygen gas at STP.