Sem 2 – Unit 4 – WS #7 Name: _____

Per: _____

(pg 469-479)

30.0 grams of potassium chlorate is decomposed to produce oxygen gas and potassium chloride. This reaction was done at 800 torr and a temp of 40.0 Celsius.

Write a balanced equation

Set up a mass/mole problem and convert from grams of potassium chlorate to moles of oxygen gas.

Now using that answer and the info from the problem and the ideal gas law solve for the liters of oxygen gas that would be produced when 30.0 grams of potassium chlorate is decomposed.

20.0 g of magnesium metal is reacted with an excess of hydrochloric acid to produce hydrogen gams and magnesium chloride. If the reaction is done at 25.0 Celsius and 780 mmHg and the gas is collected by bubbling it through water. Calculate the partial pressure of the hydrogen gas .

Now solve for the volume of gas that would be produced.

List the 5 assumptions of the kinetic molecular theory.

1

2

3

4

5

What is the formula for Kinetic Energy.

Under what conditions to gases stop acting “ldeally”

Answer questions 1-10 from page 485

1

2

3

4

5

6

7

8

9

10