Name: Date: Period:

Practice: Ideal Gas Law

1. What pressure (in kPa) is exerted by 0.874 moles of Oxygen gas (O2) contained in an 8.67 L vessel at 9 ºC?
2. How many moles of Chlorine gas (Cl2) would occupy a 0.684 mL flask at 21 ºC and 72.8 atm of pressure?
3. What volume is occupied by 0.472 moles of gas at 853 mmHg and 13 ºC?
4. At what pressure (in atm) is a gas if 0.0756 moles are contained in a 0.0284 L container at 8 ºC?
5. At what temperature is a gas if 0.00375 moles are in a 0.803 L vessel at 103.8 kPa? Give your answer in both K and ºC.
6. Calculate the volume of 1.35 moles of an ideal gas at 68 ºC and 1.25 atm.
7. Calculate the pressure (in mmHg) of 154 moles Carbon Monoxide (CO) in a 4.75 L tank at 38 ºC.
8. Calculate the number of moles of a 0.0586 L sample of hydrogen gas (H2) at 686 mmHg and

-26 ºC.

1. Calculate the temperature of 22.3 moles N2 in a 9.68 L flask at 1.78 atm. Give your answer in both K and ºC.