CHEMISTRY
HOMEWORK 8a. Name: _____

NOTES: Temperatures for gas problems always use absolute (Kelvin) units. R=0.082 L Atm/mol K
Standard Temperature and Pressure (abbreviated S.T.P.) means 760 mmHg (=1 atm.) at 0^oC (= 273 K).

1. REVIEW: How many moles are in each of the following?
a. 6.20 g of sodium sulfite? b. 77.4 g of potassium carbonate?

2. At what temperature will 6.21 g of oxygen gas exert a pressure of 5.00 atm. in a 10.0 L container?

3. A helium sample is placed in a rigid 5.00 liter container at atmospheric pressure and 30^o C. The temperature is then reduced to -150^o C. What pressure does the gas exert under these conditions?

4. What volume does 35.0 moles of N_2 gas occupy at S.T.P.?