

Name _____

Date _____

Due Date _____

Mark _____/33

Correct and Hand in Again by _____**Chemistry 11****Hand In Assignment # 5 – Summary of Mole Conversions****This Assignment will be marked and you are allowed to do one set of corrections.**

1. Make the following conversions, clearly showing your steps. Include proper units in all of your work and in your answer. Express all molar masses to 1 decimal place.
 - a. 239.76 g of SeO_2 = ? molecules (4 marks)

Answer _____

- b. 0.6048 L of NO_2 (STP) = ? molecules (4 marks)

Answer _____

- c. 7.826×10^{21} molecules of CH_4 = ? L (STP) (4 marks)

Answer _____

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- d. 28.732 g of C_3H_8 = ? “H” atoms (4 marks)

Answer _____

2. Calculate the density of PCl_3 gas at STP. (4 marks)

Answer _____

3. The density of a gas is 2.589 g/L at STP. Calculate the molar mass of the gas. (4 marks)

Answer _____

4. What is the volume occupied by 0.2625 moles of solid silver if it has a density of 10.5 g/mL? (4 marks)

Answer _____

5. An oxide of nitrogen is known to be either NO, N_2O , NO_2 or N_2O_4 . The mass of 0.800 L of this gas at STP is found to be 1.643 g.

- a. Determine the molar mass of the gas. (4 marks)

Answer _____

- b. Give the molecular formula for the gas. (1 mark) Answer _____

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