Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour\_\_\_\_\_\_

**More, MORE Mole Practice**

Sig Fig Practice:

Round the following numbers to three sig figs:

1. 4.506 g \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. 124901 mL \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ c. 0.03702 L \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Round the following numbers to four sig figs:

1. 1077.9 kg \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. 0.00359087 cm \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ c. 10 g \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. How many moles of magnesium is 3.01 x 1022 atoms of magnesium?
3. How many molecules are there in 4.00 moles of glucose, C6H12O6?
4. How many moles are 1.20 x 1025 atoms of phosphorous?
5. How many molecules are in 0.400 moles of dinitrogen pentoxide?
6. How many moles in 28.55 grams of CO2?
7. What is the mass of 5.00 moles of iron (I) oxide?
8. Find the number of moles of argon in 452 g of argon.
9. Find the grams in 1.26 x 10-4 mol of HC2H3O2.
10. Determine the volume, in liters, occupied by 0.030 moles of a gas at STP.
11. How many moles of argon atoms are present in 11.2 L of argon gas at STP?
12. What is the volume of 0.05 mol of neon gas at STP?
13. How many moles is of 1.2 liters of water vapor at STP?
14. How many oxygen molecules are in 3.36 L of oxygen gas at STP?
15. Find the mass in grams of 2.00 x 1023 molecules of fluorine gas.
16. Determine the volume in liters occupied by 14.70 g of nitrogen gas at STP.
17. Find the mass, in grams, of 1.00 x 1023molecules of nitrogen gas.

17. Find the percent composition of nitrogen in N2I6.

18. A 12.4 g sample of lithium bromide is found to contain 4.5 g of lithium by mass. Calculate the percent

 of the sample that is bromide.