MOLE CONVERSION PRACTICE (moles #5):
R.P., GRAMS, LITERS, MOLES - two step problems

- *Show all work and circle all answers.*
- *Check sig.figs, units, and chemical formulas.*
- *When applicable, specify the type of representative particle in the problem.*

1) How many grams are in 128.66 L of radon gas at STP?

2) How many r.p. of aluminum oxide are contained in 3.20 g?

3) Convert 7.1×10^{21} particles of calcium nitrate to grams of calcium nitrate.

4) How many liters of space would 44.00 g of nitrogen gas occupy at STP?

5) How many grams of potassium iodide are equal to 5.88×10^{21} r.p.?

6) 1200 L of chlorine gas at STP would contain how many particles?

7) How many grams of neon gas are in 55.4 L of neon gas at STP?

8) Convert 3.264×10^{22} representative particles of chlorine to liters at STP.

9) What is the mass, in grams, of 4.7×10^{18} r.p. of sodium sulfate?

10) How many grams are contained in 500.0 L of dinitrogen pentoxide at STP?

11) Convert 1.20 g of copper(I) sulfide to r.p. of copper(I) sulfide.

12) How many representative particles are in a 6.17 g sample of lithium sulfide?

13) 3.33×10^{17} r.p. of carbon dioxide gas would occupy how many liters of space under STP conditions?

14) How many grams of zinc acetate are in 1.9×10^{24} r.p. of zinc acetate?

15) Convert 75.00 L of fluorine gas to g of fluorine gas at STP.