

**CHM 110 Practice Set 4**  
**Basic Chemical Calculations**

**Basic mass/mole calculations: Solve each problem. Show your work, and write your final answer for each in the provided blank.**

1) What is the mass in grams of 0.750 moles of metallic aluminum?

\_\_\_\_\_ g aluminum

2) What is the mass in grams of 3.14 moles of potassium carbonate?

\_\_\_\_\_ g potassium carbonate

3) Calculate the moles of chromium in a 75.0 gram sample of chromium metal.

\_\_\_\_\_ mol chromium

4) Calculate the moles of  $\text{Ca}(\text{NO}_3)_2$  in a 250. gram sample of calcium nitrate

\_\_\_\_\_ mol calcium nitrate

5) Calculate the mass percent of *nitrogen* in calcium nitrate,  $\text{Ca}(\text{NO}_3)_2$ .

\_\_\_\_\_ % N