Chemistry Hour\_\_\_\_\_ Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Dr. Wexler  
Stoichiometry Worksheet 1 (HS-PS1-7; HSN-Q.A.1)  
Date\_\_\_\_\_

Show all calculations:

1. Given the following balanced equation for a decomposition reaction: 2KClO3 🡪 2KCl + 3O2

How many moles of O2 will be produced by letting 12.00 moles of KClO3 react?

2. Given the following balanced equation for a synthesis reaction: 2K + Cl2 🡪2KCl

How many grams of KCl is produced from 25g of K and excess Cl2? (show all calculations). Hint: Use the GMMG plan.  
A. 25 grams K ÷ molar mass K = \_\_\_\_\_\_\_\_\_\_moles K

B. moles K to moles KCl, given 2KClO3 🡪 2KCl + 3O2

C. moles KCl x molar mass KCl = \_\_\_\_\_\_\_\_\_\_grams KCl