## Chemistry Stoichiometry Practice

Name:

Hour:

Balance the following equations and then answer the question that follows.

1. \_\_\_\_  $F_{2(g)}$  + \_\_\_\_  $AlCl_{3(aq)}$   $\longrightarrow$  \_\_\_\_  $AlF_{3(aq)}$  + \_\_\_\_  $Cl_{2(g)}$  How many grams of fluorine gas are needed to produce 100.00g of  $AlF_3$ ?

2. \_\_\_\_\_ (NH<sub>4</sub>)<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub>  $\longrightarrow$  \_\_\_\_\_ Cr<sub>2</sub>O<sub>3</sub> + \_\_\_\_\_ H<sub>2</sub>O + \_\_\_\_ N<sub>2</sub> How many grams of Cr<sub>2</sub>O<sub>3</sub> are produced when 25.00g of (NH<sub>4</sub>)<sub>2</sub>Cr<sub>2</sub>O<sub>7</sub> is decomposed?

3. \_\_\_\_\_  $H_2SO_4$  + \_\_\_\_ NaOH  $\longrightarrow$  \_\_\_\_\_  $H_2O$  + \_\_\_\_ Na $_2SO_4$  How many grams of NaOH are needed to neutralize 15.00g of  $H_2SO_4$ ?

4.  $C_6H_6 + C_9C_2 \rightarrow CO_2 + H_2O$ How many molecules of  $CO_2$  gas can be produced of 156.24g of benzene,  $C_6H_6$ , is burned?

5. \_\_\_\_Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub> + \_\_\_\_BaCl<sub>2</sub>  $\longrightarrow$  \_\_\_\_BaSO<sub>4</sub> + \_\_\_\_AlCl<sub>3</sub> How many grams of BaCl<sub>2</sub> are needed to produce 25.00g of BaSO<sub>4</sub>?