## **Stoichiometry Practice**

(Hint: Make sure the equations are balanced before doing any calculations)

1. How many grams of oxygen are required to burn 0.750 g of Mg?

$$Mg + O_2 = MgO$$

2. What mass of  $H_2O_2$  can be prepared from 2.00 g of  $BaO_2$ ?

$$BaO_2 + H_2SO_4 = BaSO_4 + H_2O_2$$

3. What mass of carbon will burn in  $47.3 \text{ g of } O_2$ ?

$$C + O_2 = CO_2$$

4. How many grams of Fe must have reacted if 47.0 grams of  $H_2$  are produced in the reaction:

$$Fe + H_2O = Fe_3O_4 + H_2$$

5. If 20 grams of zinc are mixed with 20 grams of NaOH, what is the limiting reactant:

$$Zn + NaOH = Na_2ZnO_2 + H_2$$

6. To prepare 50.0 g of  $Ca(OH)_2$  from excess Ca, how much  $H_2O$  must be used?

$$Ca + H_2O = Ca(OH)_2 + H_2$$

7. 14.0 g of HCl reacts with excess  $O_2$ . a) What mass of  $H_2O$  is produced? b) What mass of  $Cl_2$  is produced? c) How much  $O_2$  will be used?

$$HC1 + O_2 = H_2O + Cl_2$$