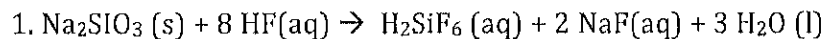


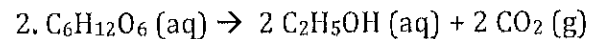
### Stoichiometry Worksheet



a. How many moles of HF are needed to react with 0.300 mol of  $\text{Na}_2\text{SiO}_3$ ?

b. How many grams of NaF form when 0.500 mol of HF reacts with excess  $\text{Na}_2\text{SiO}_3$ ?

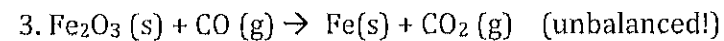
c. How many grams of  $\text{Na}_2\text{SiO}_3$  can react with 0.800 g of HF?



a. How many moles of  $\text{CO}_2$  are produced when 0.400 mol of  $\text{C}_6\text{H}_{12}\text{O}_6$  reacts in this fashion?

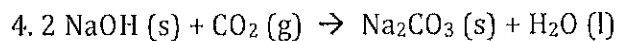
b. How many grams of  $\text{C}_6\text{H}_{12}\text{O}_6$  are needed to form 7.50 g of  $\text{C}_2\text{H}_5\text{OH}$ ?

c. How many grams of  $\text{CO}_2$  form when 7.50 g of  $\text{C}_2\text{H}_5\text{OH}$  are produced?



a. Calculate the number of grams of CO that can react with 0.150 kg of  $\text{Fe}_2\text{O}_3$

b. Calculate the number of grams of Fe and the number of grams of CO<sub>2</sub> formed when 0.150 kg of Fe<sub>2</sub>O<sub>3</sub> reacts



a. Which reagent is the limiting reactant when 1.85 mol NaOH and 1.00 mol CO<sub>2</sub> are allowed to react?

b. How many moles of Na<sub>2</sub>CO<sub>3</sub> can be produced?



a. What is the theoretical yield of C<sub>6</sub>H<sub>5</sub>Br in this reaction when 30.0 g of C<sub>6</sub>H<sub>6</sub> reacts with 65.0 g of Br<sub>2</sub>?

b. If the actual yield of C<sub>6</sub>H<sub>5</sub>Br was 56.7 g, what is the percent yield?