PRACTICE PROBLEMS

1. Recall that liquid sodium reacts with chlorine gas to produce sodium chloride. You want to produce 581 g of sodium chloride. How many grams of sodium are needed?

2. You eat 180.0 g of glucose (90 M&Ms). If glucose, $C_6H_{12}O_6$, reacts with oxygen gas to produce carbon dioxide and water, how many grams of oxygen will you have to breath in to burn the glucose?

3. Calculate the number of moles of sodium chloride that should be produced when 4.80 grams of sodium react with chlorine gas.

4. Find the number of grams of copper that will completely react with 1.90 moles of silver nitrate to form copper (II) nitrate and metallic silver.

5.   What mass of SO_2 was used up in the reaction with an excess of oxygen gas if 12.4g of sulfur trioxide is formed? $2\ SO_2 + O_2 \rightarrow 2\ SO_3$

6.   Lead(II) sulfide, PbS, reacts with oxygen gas to produce lead(II) oxide and sulfur dioxide.
If 0.500 moles of O_2 were consumed using this chemical reaction, how many grams of lead(II) oxide would be produced?