Ms. Kropac
SCH 3U

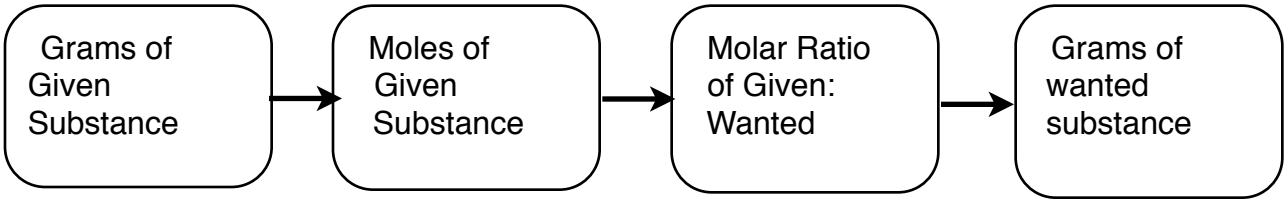
Extra Stoichiometry Practice

Reminder:

Start: Read the question carefully
1)Write the unbalanced equation
2)Balance the equation and determine the molar masses
3)Convert mass to given amount (moles)

$$\frac{\text{Ratio of Given}}{\text{Ratio of Required}} = \frac{n_{given}}{n_{required}}$$

4) Convert amount of given substance to amount of required substance
5) Convert amount of required substance to required values (mass or atom #)



1) Solid aluminum reacts with oxygen to produce aluminum oxide. Given 25.0g of Al, how much Al_2O_3 is produced?
2) How much magnesium is required to produce 4.03 g of magnesium oxide. Solid magnesium reacts with oxygen gas.
3) If 3.2 g of barium chloride ($BaCl_2$) is reacted with excess potassium sulfate(K_2SO_4), what mass of solid barium sulfate is produced?
4) What mass of oxygen gas is required to produce a complete combustion 34.95g of propane, C_3H_8?
5) Bauxite ore contains aluminum oxide(Al_2O_3), which is decomposed using electricity to produce aluminum metal and oxygen. What mass of aluminum metal can be produced from 125g of aluminum oxide?

Answers
1) 47.3g of aluminum
2) 2.43 g of magnesium
3) 14.8 g of barium sulfate
4) 126.8 g of oxygen
5) 66.2 g of aluminum