**SI WORKSHEET 6**

1. CaCO3🡪 CaO + CO2
   1. If 150 grams of the **product with Calcium** was produced how many grams of CaCO3 did you start with?

= 268 g CaCO3

1. C10H20 + 15O2 🡪 10CO2 + 10H2O.
   1. If of Oxygen are present, how many grams of CO2 is produced?

= 0.48 g CO2

1. 2C10H18 + 29 O2 🡪 20CO2 + 18H2O
   1. If 50 grams of cyclodecene are reacted with excess oxygen how much of each product is produced in grams? If the reaction had a 75% yield, how many grams of each product was actually produced?

= 318g CO2\*.75 = 239 g

= 117.4 g H2O \*.75=88 g

1. Al2(SO4)3 + NaClO4 🡪
   1. If 100 grams of each reactant is present, how much of the excess reagent remains at end of reaction? How much of each product is produced (in grams) if there’s a 70% yield?

= Ty=88.6 g Al(ClO4)3\*.7=Ay=62 g

= Ty= 58 g Na2SO4\*.7= Ay=40.6 g produced

1. C6H12O6 + C2H5OH 🡪 C8H16O6 + H2O 5-6 ON NEXT SI SHEET!!
   1. If there are 20 ml of ethanol and 50 grams of glucose, how many water molecules can you produce? (density of ethanol =0.789 g/ml)
2. CaC2O4 + Na3PO4 🡪
   1. A student performs this reaction with 75 grams of Calcium oxalate and 125 g of Sodium phosphate and produces 45 g of the calcium-containing product and the student determines the percent yield to be 65%. Is the student correct? If not, what should the student have received for percent yield?