☐ **Calculating the mass percent composition from a chemical formula**
  o Calculate the following Percent Compositions:

1. What is the mass percent of Cl in CCl_4?

2. Calculate the mass percent of H in CH_3F.

3. **What is the mass percent of O in $Al_2(CO_3)_3$?**

☐ **Use mass percent as a conversion factor**
  o Convert the following quantities using mass percent:

1. In a reaction you need 35.00g Cl. How many grams of CCl_4 do you need to add to the reaction so that you provide the correct amount of Cl?

2. How many moles of H are present in 150.0g CH_3F?

3. Cisplatin is a very expensive cancer drug. It contains 65.08% Pt by mass. I found 1.500g of pure Pt in our stockroom and am looking to make some money to fund raise for our ACS student group, so I decide to make some Cisplatin and sell it to the drug company. (Completely hypothetical, this is not a real thing. I can't make that drug, and they wouldn't buy it from me if I did.) Anyway, how many grams of Cisplatin can I make?

4. Turns out, cisplatin costs about $500 per 50.00 mg dose. How much money will my Cisplatin be worth when I am done?

Balance the Following Reactions

1. $N_2 + H_2 \rightarrow NH_3$

2. $KClO_3 \rightarrow KCl + O_2$

3. $NaCl + F_2 \rightarrow NaF + Cl_2$

4. $H_2 + O_2 \rightarrow H_2O$

5. $Pb(OH)_2 + HCl \rightarrow PbCl_2 + H_2O$