Stoichiometry CW #6: Mass to Mass Problems

Name: Period: 2 3 4

Directions: Solve these mass to mass stoichiometry problems. **Show your work and all units to receive credit!**

1. **Fe2O3 (s) + C(s) → Fe(s) + CO2(g)**
   1. How many grams of iron are produced from the reaction of 50.00 grams of iron (III) oxide with excess carbon?
   2. How many grams of carbon dioxide are produced from the reaction of 30.00 grams of carbon with excess iron (III) oxide?
2. **HClO4 (aq) + P4O10 (l) → H3PO4(aq) + Cl2O7(l)**
   1. How many grams of dichlorine heptoxide are produced from the reaction of 250.0 grams of perchloric acid with excess tetraphosphorous decoxide?
   2. How many grams of phosphoric acid are produced from the reaction of 250.0 grams of tetraphosphorous decoxide with excess perchloric acid?