Gravimetric Stoichiometry

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Bauxite ore contains aluminum oxide, which is decomposed using electricity to produce aluminum metal. What mass of aluminum metal can be produced from 100g of aluminum oxide?
2. Determine the mass of oxygen required to completely burn 10.0g of propane.
3. Calculate the mass of lead (II) chloride precipitate produced when 2.57g of sodium chloride in solution reacts in a double replacement reaction with excess aqueous lead (II) nitrate.
4. Predict the mass of hydrogen gas produced when 2.73g of aluminum reacts in a single replacement reaction with excess sulfuric acid.
5. What mass of copper(II) hydroxide precipitate is produced by the reaction in solution of 2.67g of potassium hydroxide with excess aqueous copper(II)nitrate?