Chemistry I Worksheet
Stoichiometry Practice Problems

NAME _____

INSTRUCTIONS: Work the following stoichiometry problems. Write out the balanced equation and show how you set up the problem. Make sure I can find your answer. As usual, the only resource you may not use is *each other*; if you have a question, ask me.

1. How many grams of magnesium oxide can we make if we start with 12.30 g of magnesium metal?

2. I'm decomposing 14.42 g of sodium chlorate into sodium chloride and oxygen. How many grams of oxygen will I get?

3. I want to generate some hydrogen gas for a demonstration, and decide to generate it by reacting zinc metal with hydrochloric acid. How much hydrogen will I generate if I completely react 10.00 g of zinc?

4. How much lead(II) iodide will be produced when we react 5.16 g of lead(II) nitrate with excess sodium iodide?

5. How much water vapor is produced by the combustion of 3632 g of octane, C_8H_{18} ?