Percent Yield

1. In a laboratory experiment, 6.57 g of iron are reacted with an excess of hydrochloric acid. Hydrogen gas and 14.63 g of iron (III) chloride are obtained. Calculate the theoretical yield and percent yield of FeCl3.

\_\_\_\_\_ Fe + \_\_\_\_\_HCl → \_\_\_\_\_\_FeCl3 + \_\_\_\_\_H2

1. A chemist starts with 160.0 g of aluminum and burns it in oxygen to produce aluminum oxide. When the chemists performs the experiment in the lab, she only produces 260.0 g of aluminum oxide.
   1. Write a balanced chemical equation for the reaction.
   2. Calculate the theoretical yield
   3. Determine the percent yield from her experiment.