Sample Problem 1

48.6 g Mg reacts with 11.2 L O₂ at STP.

A What is the expected yield (theoretical yield) of MgO (in grams)

B Which reactant is the limiting reagent, and which is in excess?

C How much of the excess reagent remains after the reaction goes to completion?

D What is being oxidized? What is being reduced?

E. When you react Mg with O₂ in lab, you get 32.2 g. What is your percent yield?