Title:
Percent Yield and Steel Wool Fun!

Purpose:
To calculate the percent yield for a specific reaction.

Intro Material:
What is percent yield?

Materials:
Steel Wool, Bunsen Burner, tongs, balance

Procedure and Data:
1) Record the mass of a piece of steel wool. _____g
2) Using the tongs, hold the steel wool in the flame until the reaction stops.
3) Record the mass of the iron (III) oxide which was produced. _____g

Calculations / Questions:
1) Write a balanced equation for this reaction.

2) Use stoichiometry to determine how many grams of iron (III) oxide should have formed.

3) Calculate the percent yield for this process.

4) Calculate the percent error for this process?

5) Use stoichiometry to calculate how many grams of oxygen gas reacted.

6) Assuming STP (standard temperature and pressure), what volume of oxygen gas reacted with the steel wool?

7) Which of the two reactants was completely consumed during today's reaction?