Chemistry 1 Evaluation A- Stoichiometry

Name

Date

Block____

For the following problems, SHOW ALL WORK.

1. Given the reaction,

 $2H_{2(g)}$ + $O_{2(g)}$ \rightarrow $2H_2O_{(g)}$

to produce 0.800 moles of $H_2O_{(g)}$,

a.) how many moles of H_2 are needed?

b.) how many liters of O_2 are needed?

c.) how many molecules of O_2 are needed?

2. Given the reaction

 $NH_{3(g)}$ + $O_{2(g)}$ \rightarrow $NO_{(g)}$ + $H_2O_{(g)}$

how many grams of NH_3 will be required to react with 63g of O_2 ?

3. Given the following reaction

 $C_4H_{10(g)} + O_{2(g)} \rightarrow CO_{2(g)} + H_2O_{(g)}$

determine the number of liters of carbon dioxide produced when 36.0 liters of oxygen gas is used.