Skill Practice 42

Moles and Reactions

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: \_\_\_\_\_

Practice

1. Consider the reaction in which 410 g of Ca(NO3)2 react with just the right amount of lithium metal in a single replacement reaction.
2. How many grams of lithium are required?
3. How many grams of each product can be produced?
4. When 250 g of Na2SO4 reacts with plenty of Ca3P2 according to the following balanced equation, how many grams of Na3P will be produced?

3 Na2SO4 + Ca3P2 🡪 2 Na3P + 3 CaSO4

1. Consider the following combustion reaction: 2 C4H10 + 13 O2 🡪 8 CO2 + 10 H2O. If 75.3 g of C4H10 react with plenty of O2, what mass of CO2 and H2O can be produced?
2. Consider the following balanced equation: 3Ca(NO3)2 + 2AlCl3 🡪 2Al(NO3)3 + 3CaCl2. If 210.5g of calcium nitrate react, what is the mass of each product that can be produced?
3. When 53.6 g of calcium carbonate react with plenty of aluminum fluoride, how many grams of each product can be produced?