Percent Composition Worksheet #2

1. A sample of a compound is analyzed and found to contain 0.90 g of calcium and 1.60 g of chlorine. The sample has a mass of 2.50 g. Find the percent composition of the compound.

2. Find the percentage composition of a pure substance that contains 7.22 g nickel, 2.53 g phosphorus, and 5.25 g oxygen.

3. A scientist analyzes a 50.0 g sample and finds that it contains 13.3 g of potassium, 17.7 g of chromium, and another element. Later the scientist learns that the sample is potassium dichromate, K2Cr2O7. Potassium dichromate is a bright orange compound that is used in the production of safety matches. What is the percentage composition of potassium dichromate?

4. Sulfuric acid, H2SO4, is an important acid in laboratories and industries. Determine the percentage composition of sulfuric acid.

5. A mining company intends to extract manganese metal from its ore, MnO2

a) What is the percent composition of this manganese ore?

b) Use your answer from part (a) to calculate the mass of pure manganese that can be extracted from 250 kg of this ore.