

Chemistry
Percent Composition

Name _____

Instructions: Calculate the percent composition of each element in the following compounds. Round your answer to the nearest tenth of a decimal place. Circle your final answer. SHOW ALL WORK.

Percent Composition from Mass

1) A sample of a compound analyzed in a chemistry laboratory consists of 5.34 g of carbon, 0.42 g of hydrogen, and 47.08 g of chlorine. What is the percent composition of this compound?

2) Find the percent composition of a compound containing tin and chlorine if 18.35 g of the compound contains 5.74 g of tin.

3) If 3.907 g of carbon combines completely with 0.874 g of hydrogen to form a compound, what is the percent composition of this compound?

Percent Composition from Chemical Formula

4) What is the percent composition for each element in sodium phosphate, Na_3PO_4 ?

5) What is the percent composition for each element in hydrogen peroxide, H_2O_2 ?

6) What is the percent composition for each element in carbon dioxide, CO_2 ?

Percent Composition as a Conversion Factor

Instructions: Calculate the mass of the element in the given mass of compound using percent composition. Round your answer to the nearest tenth of a decimal place. Circle your final answer. SHOW ALL WORK.

7) Mass of hydrogen in 350g of C_2H_6 .

8) Mass of nitrogen in 378g of HCN .

9) Mass of oxygen in 20.2g of H_2SO_4

10) Mass of oxygen in 100g of H_2O .