

Calculations in Chemistry Assignment

Determine the molar mass for the following molecules/compounds (6 marks)

- a) NaCl
- b) H₂O
- c) Fe₂O₃

Determine the mass of the following samples (6 marks)

- a) 2 moles Co
- b) 5 moles H₂

Determine the number of moles in the following samples (6 marks)

- a) 54.2 g N₂
- b) 202.2 g MgO

Determine how many particles in the following samples. Be sure to specifically name the type of particle you have in each case. (8 marks)

- a) 1.32 moles Si
- b) 712.4 g AuCl

A certain sample of gas weighing 22.8 grams contains 6.22 grams of carbon and an unweighted quantity of oxygen. What is the percent composition of the gas? (3 marks)

A sample of zinc sulfide having a mass of 3.04 grams was analyzed and found to contain 1.00 grams of sulfur and the remainder zinc. What percent of zinc is contained in the sample? (2 marks)