1) Calculate the percent composition for each element in the following compounds:

a)	sodium bromide	d)	silicon tetrachloride
b)	potassium bicarbonate	e)	aluminum sulfate
c)	iron (III) chloride	f)	silver nitrate

2) Calculate the percent composition for each element in the following compounds:

a)	zinc chloride	d)	ammonium sulfite
b)	ammonium acetate	e)	cobalt (III) nitrate
c)	MgP_2O_7	f)	iodine trichloride

3) Calculate the percent of iron in each of the following:

a)	iron (II) oxide	c)	iron (III) oxalate
b)	ioron (III) oxide	d)	$K_4Fe(CN)_6$

4) Which of the following has the highest percentage of chlorine by mass?

a)	potassium chloride	c)	carbon tetrachloride
b)	barium chloride	d)	lithium chloride

- 5) A 6.20 grams sample of phosphorous was reacted with oxygen to form an oxide with a mass of 14.20 g. What is the percent composition of the compound?
- 6) A sample of ethylene chloride was analyzed to contain 6.00 g of C, 1.00 g of H, and 17.75 g of Cl. What is the percent composition ethylene chloride?
- 7) Examine the following formulae. Which has the:
 - a) higher percentage of hydrogen: H_2O or H_2O_2 ?
 - b) lower percentage of nitrogen: NO or N_2O_3 ?
 - c) higher percentage of oxygen: NO_2 or N_2O_4 ?
- 8) Examine the following formulae. Which has the:
 - a) lower percentage of chlorine: NaClO₃ or KClO₃?
 - b) lower percentage of sulfur: KHSO₄ or K₂SO₄?
 - c) higher percentage of chromium: Na_2CrO_4 or $Na_2Cr_2O_7$?
- 9) The compound XYZ₃ has a molar mass of 100.09 g/mol and a percent composition of 40.04% X, 12.00% Y and 47.96% Z. What is the compound?
- 10) The compound X₂(YZ₃)₃ has a molar mass of 282.23 g/mol and is made up of 19.12% X, 29.86% Y, and the rest is Z. What is the compound?