Percent Composition:

1) $H_2C_2O_{4(aq)}$ = 90.03459 g/mol

$$\mathbf{C} = \frac{12.0112 \times 2}{90.0345} \times 100 = \mathbf{26.6809\%}$$

$$\mathbf{H} = \frac{1.00797 \times 2}{90.0345} \times 100 = \mathbf{2.23904\%}$$

$$\mathbf{O} = \frac{15.9994 \times 4}{90.0345} \times 100 = \mathbf{71.0880\%}$$

2) $C_{23}H_{40}N_7O_{17}P_3S$ = 811.599 g/mol

$$\mathbf{C} = \frac{12.0112 \times 23}{811.599} \times 100 = \mathbf{34.0387\%}$$

$$\mathbf{H} = \frac{1.00797 \times 40}{811.599} \times 100 = \mathbf{4.96783\%}$$

$$\mathbf{N} = \frac{14.0067 \times 7}{811.599} \times 100 = \mathbf{12.0807\%}$$

$$\mathbf{O} = \frac{15.9994 \times 17}{811.599} \times 100 = \mathbf{33.5129\%}$$

$$\mathbf{P} = \frac{30.9738 \times 3}{811.599} \times 100 = \mathbf{11.4492\%}$$

$$\mathbf{S} = \frac{32.064 \times 1}{811.599} \times 100 = \mathbf{3.9507\%}$$

3) Hg_2Cl_2 = 472.09 g/mol **84.980% Hg, 15.020% Cl**

4) $(NH_4)_2Cr_2O_7$ = 252.065 g/mol **11.1136% N, 3.19908% H, 41.256% Cr, 44.4313% O**

5) $Fe_2(O_2)_3$ = 207.690 g/mol **53.779% Fe, 46.2209% O**