Chemistry Practice Quiz: Empirical & Molecular Formulas **Name**_____

1. Determine the percent composition of each of the following compounds.

a. manganese oxide (MnO)

b. propanol (C_3H_8O)

c. calcium phosphate ($Ca_3(PO_4)_2$)

2. Determine the empirical formula for a sample of a compound having the following percent composition 94.07% sulfur and 5.93% hydrogen

3. Determine the empirical formula for a sample of a compound having the following percent composition 80.68% mercury, 12.87% oxygen, and 6.45% sulfur

4. Caffeine is a compound found in natural coffees and teas and in some colas. Determine the empirical and molecular formula for caffeine, using the following composition: 49.47% carbon, 28.85% nitrogen, 16.48% oxygen, and 5.20% hydrogen. The molar mass of caffeine is 194.19 g/mol.