

Empirical & Molecular Formula

Name: _____

Show set up and all work (including units) in order to receive full credit.

1) Determine the empirical formula of a compound which is found to contain 1.203 g of Ca and 2.128 g of Cl.

2) What is the empirical formula of a compound which contains 4.433 grams of phosphorus and 5.717 grams of oxygen?

3) What is the empirical formula of a compound which contains 26.56% potassium, 35.41% chromium, and 38.03% oxygen?

4) What is the molecular formula of a compound having an empirical formula of CH and a molar mass of 78.11 g?

5) What is the molecular formula of the molecule that has an empirical formula of CH₂O and a molar mass of 120.12 g?

6) A compound submitted to a local chemistry lab for identification was found to contain 63.50% Ag, 8.25% N, and 28.25% O.

a) What is the empirical formula?

b) The true molar mass of the compound was found to be 513 g/mol. What is the molecular formula?