

Extra Chemistry Problems: Empirical Formulas:

Don't forget the steps for empirical formulas:

1) Change grams to moles (no diatomics!!! Oxygen is 16 g for one mole, etc...)

2) Divide by the smallest number of moles

3) Use the ratio you got from dividing by the smallest to write your formula

1. Calculate the empirical formula for a compound made of 3.06 g hydrogen, 31.63 g phosphorus, and 61.31 g oxygen.

2. Calculate the empirical formula for a compound consisting of 20.22 g aluminum and 79.78 g of chlorine.

3. A compound consists of 36.51 g of sodium, 25.4 g of sulfur and 38.09 g of oxygen, what is its empirical formula?

Answer Key:

1. H_3PO_4

2. AlCl_3

3. Na_2SO_3