

Purpose:

Figure out the empirical formula of a compound.

WARMUP :

Copy this table

NAME	Molecular Formula	Empirical Formula
Propane	C_3H_8	C_3H_8
hydrogen peroxide	H_2O_2 (with two circles around the O's)	H_1O_1
	N_3H_6	N_1H_2
	Cr_2O_4	Cr_1O_2
	K_2H_2	K_1H_1
	$C_{10}H_{20}$	C_5H_{10} C_1H_2

Molecular formula definition:

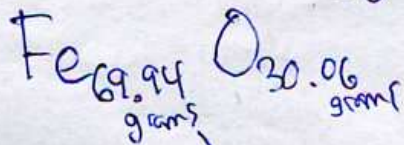
The number of atoms in one molecule of each element type

Empirical formula definition:

The molecular formula after you divide by the largest common factor.

How To FIND EMPIRICAL FORMULA

① Write formula as grams

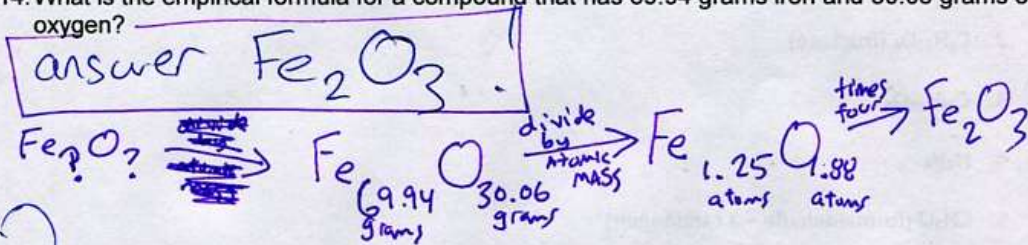


② Divide by atomic mass

③ Divide or multiply both sides by various numbers to get a whole number formula.

use the notes above to solve homework problem 14, below.

14. What is the empirical formula for a compound that has 69.94 grams iron and 30.06 grams of oxygen?



15. Find the empirical formula of a compound containing 32.0 g of bromine and 4.9 g of magnesium.