Empirical and Molecular Formula Notes

Definition of Empirical Formula:
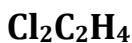
Cl₂C₂H₄

$Cl_2C_2H_4$

Draw a picture of the molecule

Empirical formula for **Cl₂C₂H₄** $Cl_2C_2H_4$ is:

How do you figure out (determine) the empirical formula when given mass percent information?

Steps:
First assume you have _____ g of the substance if the information is in percent because _____

Then:

1.

2.

3.

When working reading sample problems on the video, circle any words you are unsure of. If you are still unsure in class, please ask Mrs. Irwin

Sample Problem: Determine the empirical and molecular formulas of a compound that gives the following percentages on analysis (in mass percent):

71.65% C l   24.27% C   4.07% H

The molar mass is known to be 98.96 g/mol.

Steps:

1:
Determine

2:

3:

The empirical formula is:

Figure out the molecular formula: