**Organic chemistry sheet 1**

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1. A compound is composed of 7.20 g carbon, 1.20 g hydrogen, and 9.60 g oxygen. Find the empirical formula for this compound.
2. A compound’s empirical formula is CH, and it weighs 104 g/mol. Give its molecular formula.

3- Combustion analysis gives the following percentages:

26.7% C, 2.2% hydrogen, 71.1% oxygen. If the molecular mass of the compound is 90 g/mol, determine its molecular formula.

1. A substance is decomposed and found to consist of 53.2% C, 11.2% H, and 35.6% O by mass. Calculate the molecular formula of the unknown if its molar mass is 90 g/mol.