

7. PERCENT COMPOSITION

CH30S

UNIT 1 – ELEMENTS & COMPOUNDS

1

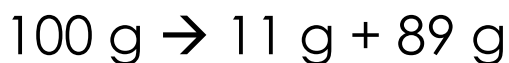
LAW OF DEFINITE PROPORTIONS



Joseph-Louis Proust

In other words...

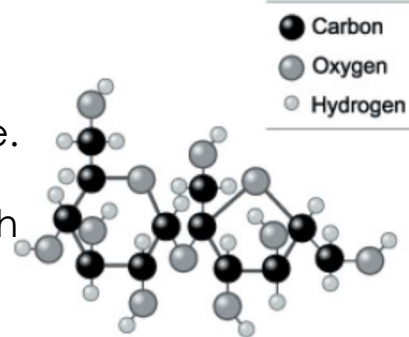
- Waters **mass** composition is ALWAYS 11% H : 89% O
- Waters **mole** composition is ALWAYS 2 moles H : 1 mole O



2

Sucrose is the form of sugar found in soda & candy. Excess sucrose in your diet has been linked to obesity, diabetes, and heart disease.

Determine the % composition by mass of each element in a mole of sucrose.

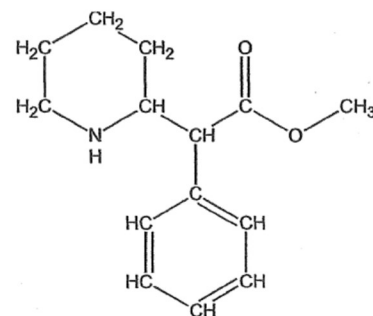


1. Determine the formula.
2. Calculate the molar mass.
3. Find proportions.

3

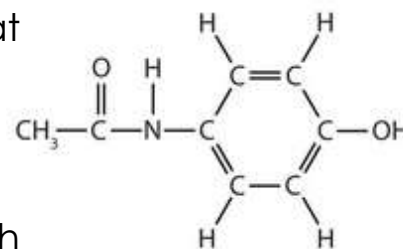
Ritalin© is a medication used to treat Attention Deficit Hyperactivity Disorder (ADHD). It has the molecular structure shown here.

Determine the % composition by mass of each element in a mole of Ritalin.



4

Acetaminophen is an analgesic molecule that reduces pain by inhibiting the transmission of pain signals to your brain.



Determine the % composition by mass of each element in a mole of acetaminophen.