

Let's Do Science: Molecule Building!!

Name: _____

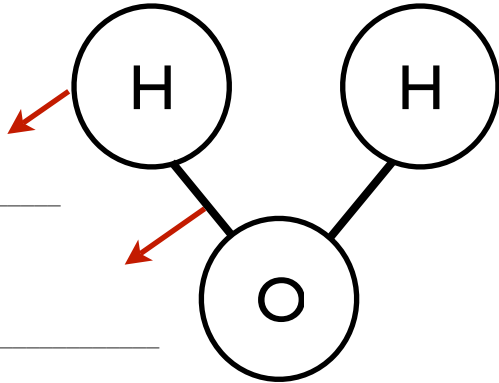
Date: _____

How many of each atom are in each molecule? Write your answer in the appropriate box.

Molecular Name	Common Name	Hydrogens	Oxygens	Carbons	Other
H_2O	water	2	1	0	0
CO_2	carbon dioxide	0	2	1	0
CH_3COOH	Vinegar	4	2	2	0
$CaCO_3$	Calcium carbonate	0	3	1	calcium (1)
$C_6H_{12}O_6$	sugar	12	6	6	0
$NaCl$	salt	0	0	0	sodium (1) Chloride (1)

What is a bond? A bond is the part of the molecule that connects two atoms together. Label the bond and the atom. Answer the following questions about the characteristics of your molecules.

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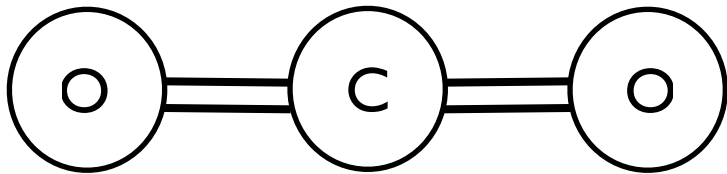


Write the molecular name of the molecule pictured: Water (H₂O)

What is common name of the molecule pictured? water

How many bonds are in this molecule? two

What atoms make up this molecule? hydrogen and oxygen



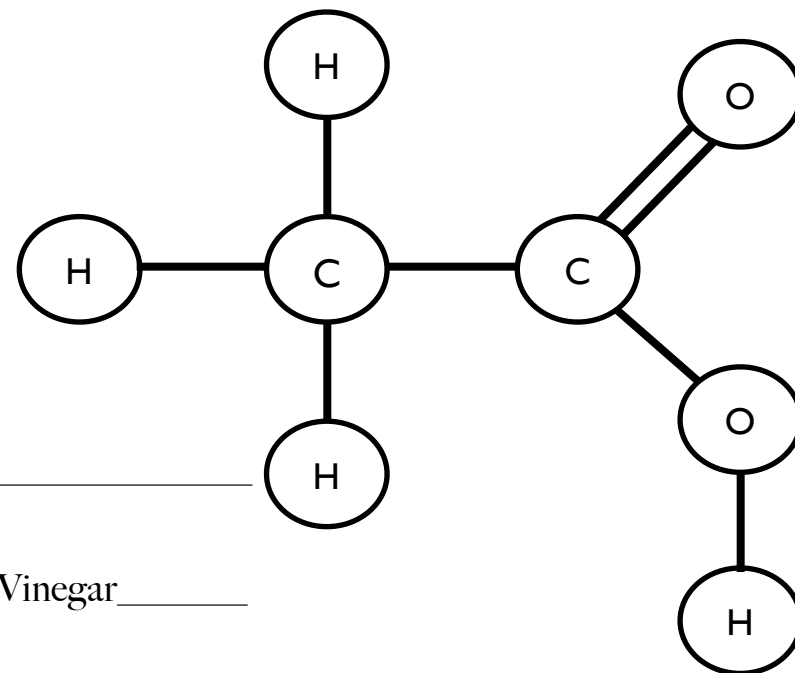
Write the molecular name of the chemical pictured: CO₂

What is common name of the molecule pictured? carbon dioxide

How many bonds are in this molecule? four (two double bonds)

What atoms make up this molecule? carbon and oxygen

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Write the molecular name of the chemical pictured: CH₃COOH

What is common name of the molecule pictured? Vinegar

How many bonds are in this molecule? Eight

What atoms make up this molecule? Hydrogen, oxygen, carbon

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Write the molecular name of the chemical pictured:

_____ $C_6H_{12}O_6$ _____

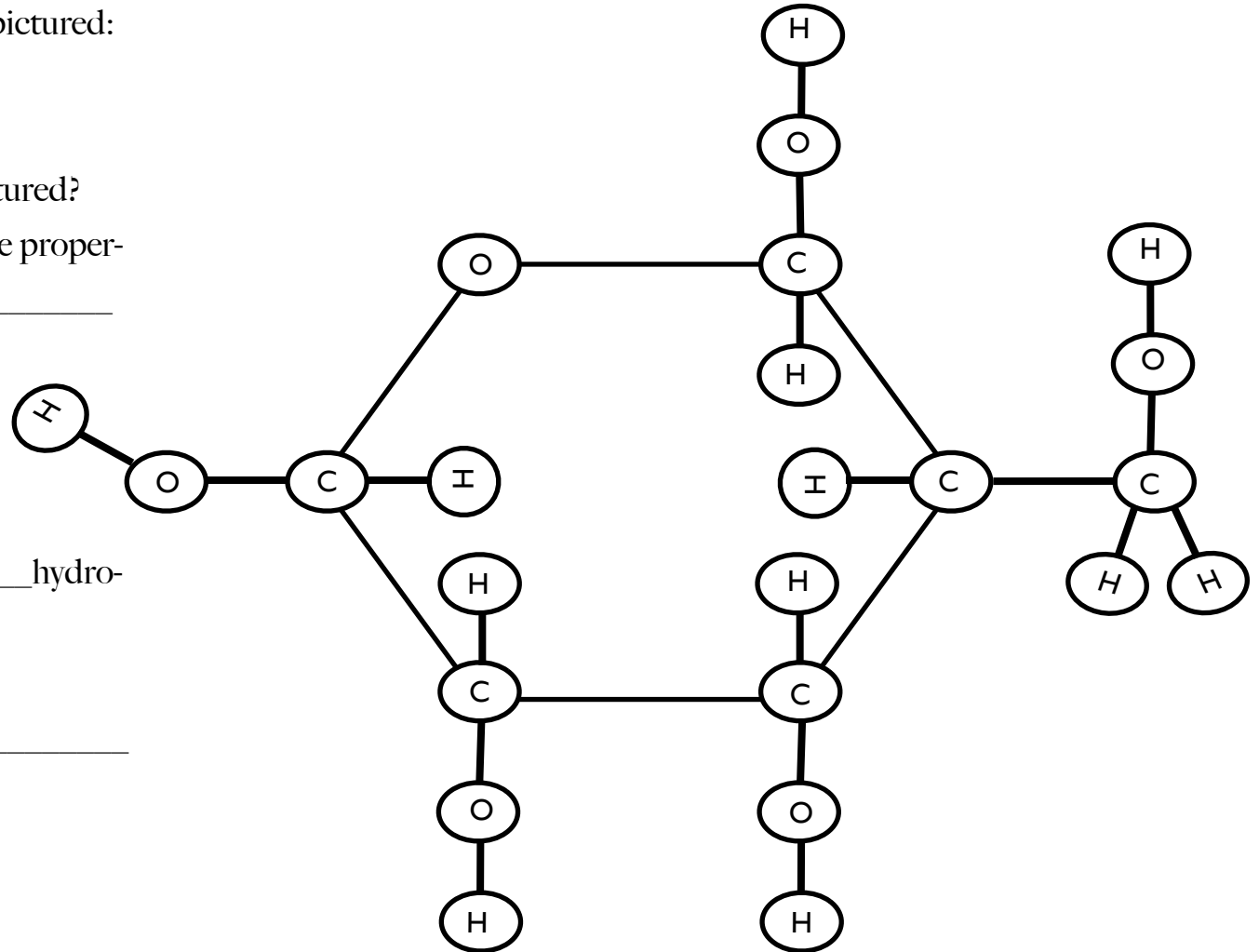
What is common name of the molecule pictured?

_____ sugar! (glucose to be more proper-
the kind of sugar we find in our body) _____

How many bonds are in this molecule?

_____ 24 _____

What atoms make up this molecule? _____ hydro-
gen, oxygen, carbon _____



Let's Do Science: Molecule Building!!

This is how scientists write a chemical reaction.

Do you remember how we saw a chemical reaction when we combined 1) vinegar and chalk, 2) vinegar and sand, 3) vinegar and crab shell, 4) vinegar + cone snail shell? The bubbles that we saw were carbon dioxide (CO_2) being released from the calcium carbonate (CaCO_3)! Use this model to replicate the chemical reaction with the materials you were given in class.

