

Extra Credit: Complete the following table:

Shown: suffix across row carbon down column	-ane (C_nH_{2n+2})	-ene (C_nH_{2n})	-yne (C_nH_{2n-2})	-an -ol (C_nH_{2n+2}) -H +OH	-yl -amine (C_nH_{2n+2}) -H +NH ₂	-an -oic acid (C_nH_{2n+2}) -CH ₃ +CO ₂ H
1C meth-	CH ₄ methane	XXXX	XXXX	CH ₃ OH methanol (methyl alcohol)	CH ₃ NH ₂ methylamine	HCO ₂ H methanoic acid (formic acid)
2C eth-	C ₂ H ₆ ethane	C ₂ H ₄ ethene (ethylene)	C ₂ H ₂ ethyne (acetylene)	C ₂ H ₅ OH ethanol (ethyl alcohol)	C ₂ H ₅ NH ₂ ethylamine	CH ₃ CO ₂ H ethanoic acid (acetic acid)
eth- based structures	$\begin{array}{c} \text{H} & \text{H} \\ & \\ \text{H}-\text{C} & -\text{C}-\text{H} \\ & \\ \text{H} & \text{H} \end{array}$	$\begin{array}{c} \text{H} & & \text{H} \\ & \diagdown & / \\ & \text{C}=\text{C} & \\ & / & \diagdown \\ \text{H} & & \text{H} \end{array}$	H-C≡C-H	$\begin{array}{c} \text{H} & \text{H} \\ & \\ \text{H}-\text{C} & -\text{C}-\text{O}-\text{H} \\ & \\ \text{H} & \text{H} \end{array}$	$\begin{array}{c} \text{H} & \text{H} & \text{H} \\ & & \\ \text{H}-\text{C} & -\text{C}-\text{N} \\ & & \\ \text{H} & \text{H} & \text{H} \end{array}$	$\begin{array}{c} \text{H} & & \text{O} \\ & & // \\ \text{H}-\text{C} & -\text{C} & \\ & & \backslash \\ \text{H} & & \text{O}-\text{H} \end{array}$
3C prop-						
4C but-						
5C pent-						

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6C hex-						
7C hept-						
8C oct-						
9C non-						
10C dec-						