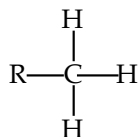


General Information

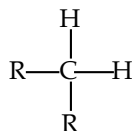
Alkane Names:

Number of carbons (n)	Name	Formula (C_nH_{2n+2})	Number of carbons (n)	Name	Formula (C_nH_{2n+2})
1	methane	CH ₄	14	tetradecane	C ₁₄ H ₃₀
2	ethane	C ₂ H ₆	15	pentadecane	C ₁₅ H ₃₂
3	propane	C ₃ H ₈	20	eicosane	C ₂₀ H ₄₂
4	butane	C ₄ H ₁₀	21	heneicosane	C ₂₁ H ₄₄
5	pentane	C ₅ H ₁₂	22	docosane	C ₂₂ H ₄₆
6	hexane	C ₆ H ₁₄	23	tricosane	C ₂₃ H ₄₈
7	heptane	C ₇ H ₁₆	30	triacontane	C ₃₀ H ₆₂
8	octane	C ₈ H ₁₈	31	hentriacontane	C ₃₁ H ₆₄
9	nonane	C ₉ H ₂₀	32	dotriacontane	C ₃₂ H ₆₆
10	decane	C ₁₀ H ₂₂	40	tetracontane	C ₄₀ H ₈₂
11	undecane	C ₁₁ H ₂₄	50	pentacontane	C ₅₀ H ₁₀₂
12	dodecane	C ₁₂ H ₂₆	60	hexacontane	C ₆₀ H ₁₂₂
13	tridecane	C ₁₃ H ₂₈			

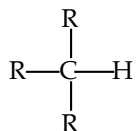
Primary, Secondary, Tertiary & Quaternary Carbons:



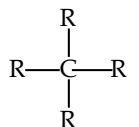
A *Primary* Carbon (1') has one substituent on carbon



A *Secondary* Carbon (2') has two substituents on carbon



A *Tertiary* Carbon (3') has three substituents on carbon



A *Quaternary* Carbon (4') has four substituents on carbon

Common Functional Groups:

Name of Functional Group	Structure
Alkane	$\begin{array}{c} & \\ -C & -C- \\ & \end{array}$ and $\begin{array}{c} \\ -C-H \\ \end{array}$ bonds
Alkene	$\begin{array}{c} \diagup & \diagdown \\ C & =C \\ \diagdown & \diagup \end{array}$
Alkyne	$-C \equiv C-$
Arene	Aromatic ring, eg: 
Haloalkane	$\begin{array}{c} \\ -C-X \\ \end{array}$ X = halogen (F, Cl, Br, I)
Alcohol	$\begin{array}{c} \\ -C-OH \\ \end{array}$
Ether	$\begin{array}{c} & & \\ -C & -O- & C- \\ & & \end{array}$
Aldehyde	$\begin{array}{c} & O \\ -C & -C-H \\ & \end{array}$
Ketone	$\begin{array}{c} & O & \\ -C & -C- & C- \\ & & \end{array}$
Carboxylic acid	$\begin{array}{c} & O \\ -C & -C-OH \\ & \end{array}$
Ester	$\begin{array}{c} & O & \\ -C & -C-O- & C- \\ & & \end{array}$
Acid halide	$\begin{array}{c} & O \\ -C & -C-X \\ & \end{array}$ X = halogen (F, Cl, Br, I)
anhydride	$\begin{array}{c} & O & & O & \\ -C & -C-O- & C- & C- \\ & & & \end{array}$
Amide	$\begin{array}{c} & O \\ -C & -C-N- \\ & & \end{array}$
Amine	$\begin{array}{c} \\ -C-N- \\ & \end{array}$