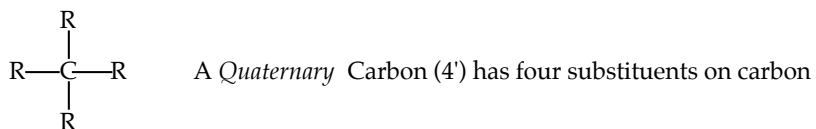
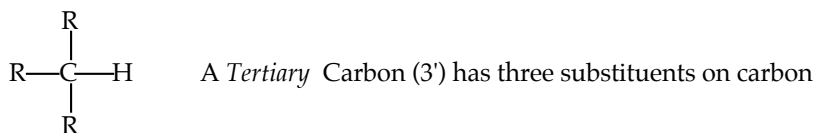
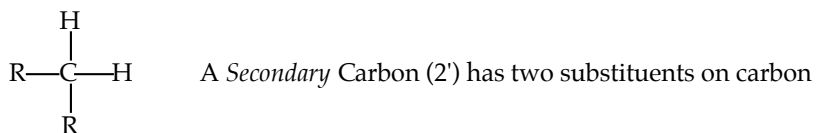
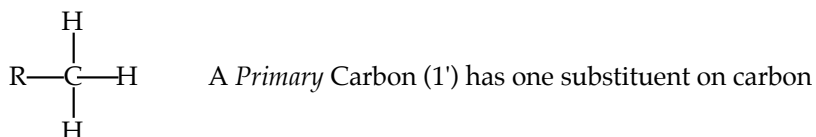


## General Information


### Alkane Names:

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

### Primary, Secondary, Tertiary & Quaternary Carbons:



## 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	$\begin{array}{c}   \\ -C-N- \\   &   \end{array}$