

Formula: Formaldehyde: CH <sub>2</sub> O			
List of atoms in the formula	A	N	<ul style="list-style-type: none"> <li>Note 1: N= 8 for all elements, except for hydrogen N=2</li> <li>Note 2: Find A for each atom by its group number in the periodic table.</li> <li>Note 3: For anion add number of negative charge. For cation subtract number of positive charges.</li> <li>Note 4: For skeleton: <ul style="list-style-type: none"> <li>Symmetrical if possible.</li> <li>H and halogens are terminal.</li> <li>Element with fewest valance electrons in center. Also, the least electronegative atom is the central atom.</li> <li>No O-O bonds (expect for O<sub>2</sub> &amp; O<sub>3</sub>).</li> </ul> </li> </ul>
C	4	8	
H	1	2	
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O	6	8	
(+ or - ) Charge	0		
	Total A:	Total N:	
	12	20	
S = Number of valence electrons to share = Total (N) – Total(A) = 12 – 20 = 8			
Number of lone pairs electrons = Total (A) – (S) = 12 – 8 = 4			
Skeleton:		Skeleton + Shared Electrons	
<pre>       O      / \     H   C   H   </pre>		<pre>       O      / \     H   C   H       ••       ••       ••   </pre>	
Skeleton + Available Electrons		Final Structure	
Using lone pairs electrons: <pre>       ••      ••     ••    ••   H••C••H   </pre>		<pre>       ••      ••     ••    ••   H—C—H   </pre>	