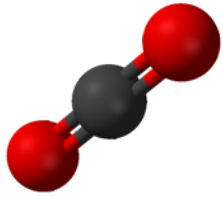
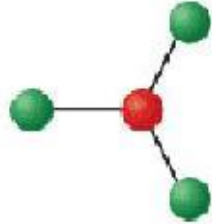
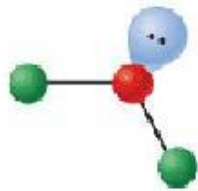
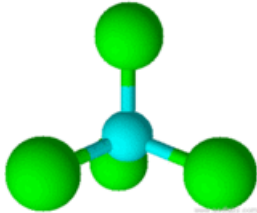
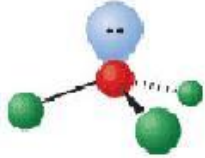
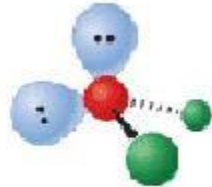
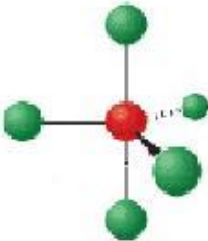
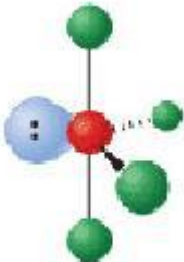
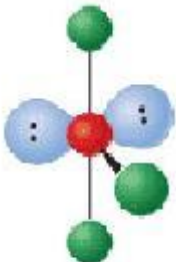
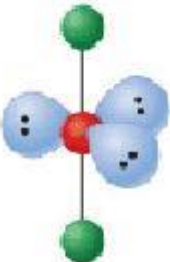
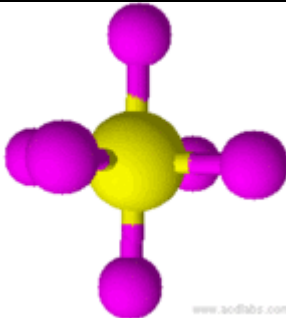
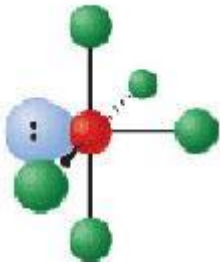
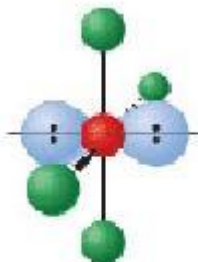


## Molecular Geometry Summary

Hybrid	sp	sp <sup>2</sup>		sp <sup>3</sup>		
<b>Total # of atoms bonded to central atom + lone pairs</b>	2	3		4		
<b># atoms bonded to central atom</b>	2	3	2	4	3	2
<b>Lone pairs on central atom</b>	0	0	1	0	1	2
<b>Shape</b>	Linear	Trigonal Planar	Bent	Tetrahedral	Trigonal Pyramidal	Bent
<b>Mnemonics</b>	Love Live	To To	Be Be	The The	Play Perfect	Boy Brother
<b>Bond Angle</b>	180	120	105	109.5	107	105
<b>Example Molecule</b>	CO <sub>2</sub>	AlCl <sub>3</sub>	O <sub>3</sub>	CH <sub>4</sub>	NH <sub>3</sub>	H <sub>2</sub> O
<b>Diagram</b>		 Trigonal planer	 Bent	 Tetrahedral	 Trigonal Pyramidal	 Bent

Also note, if the molecule contains only 2 atoms total, the shape must be linear.

$dsp^3$				$d^2sp^3$		
5				6		
5	4	3	2	6	5	4
0	1	2	3	0	1	2
Trigonal bipyramidal	Irregular tetrahedron or "Seesaw"	T-Shaped	Linear	Octahedron	Square pyramid	Square planar
Toy That	In Ignores	Toy The	Land Life	On Of	Square Strange	Ships Siblings
90 & 120	90 & 120	90 & 120	90 & 120	90	90	90
$PCl_5$	$TeCl_4$	$ClF_3$	$XeF_2$	$SF_6$	$BrF_5$	$XeF_4$
 <p>Trigonal-bipyramidal</p>	 <p>Seesaw</p>	 <p>T-shaped</p>	 <p>Linear</p>	 <p>Octahedral</p>	 <p>Square Pyramidal</p>	 <p>Square Planer</p>