

Table 1: Electron-pair geometry and molecular geometry if central atom has all atoms attached.






Sum of Lone Pairs and Bonding Regions	Electron-Pair Geometry	3D Picture of Molecule	Faces	Bond Angle(s)
2	linear		0	180°
3	trigonal planar		2	120°
4	tetrahedral		4	109.5°
5	trigonal bipyramidal		6	90°, 120°
6	octahedral		8	90°

Table 3: Molecular geometry depends on the total number of bonding regions and lone pairs around the central atom, as well as the number of lone pairs and bonding regions. The table is organized by the sum of lone pairs and bonding regions.

Sum of Lone Pairs and Bonding Regions	Bonding Regions =	Bonding Regions +	Lone Pairs	Molecular Geometry	Bond Angle
2	2	0	0	linear	180°
3	3	0	0	trigonal planar	120°
4	2	1	1	bent	109.5°
	4	0	0	tetrahedral	
5	3	1	1	pyramidal	120°, 90°
	2	2	2	bent	
	5	0	0	trigonal bipyramidal	
6	4	1	1	see saw	90°
	3	2	2	t-shaped	
	2	3	3	linear	
	6	0	0	octahedral	
	5	1	1	square pyramidal	
	4	2	2	square planar	
3	3	3	3	t-shaped	
	4	2	2	linear	