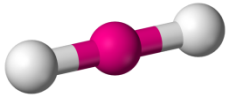
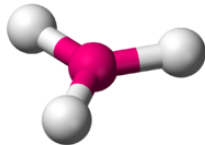
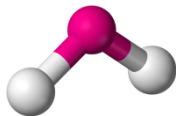
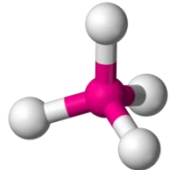
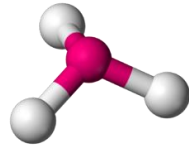
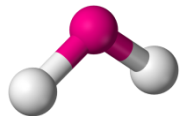
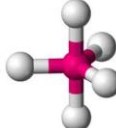

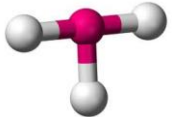
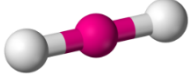

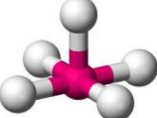
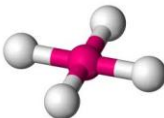
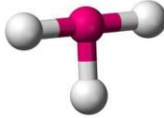


VSEPR

Predicting Molecular Geometry and Hybridization

Electron Groups	Bonding Groups	Lone Pairs	Electron Geometry (Hybridization)	Molecular Geometry (VSEPR class)	Approximate Bond Angles	Geometry Examples
2	2	0	Linear (sp)	Linear (AX_2)	180	
3	3	0	Trigonal Planar (sp^2)	Trigonal Planar (AX_3)	120	
	2	1		Bent (AX_2E)		
4	4	0	Tetrahedral (sp^3)	Tetrahedral (AX_4)	109.5	
	3	1		Trigonal Pyramidal (AX_3E)		
	2	2		Bent (AX_2E_2)		

Electron Groups	Bonding Groups	Lone Pairs	Electron Geometry (Hybridization)	Molecular Geometry (VSEPR class)	Approximate Bond Angles	Geometry Examples
5	5	0	Trigonal Bipyramidal (sp^3d)	Trigonal Bipyramidal (AX_5)	120 (in plane) 90 (above and below)	
	4	1		Seesaw (AX_4E)		
	3	2		T-Shaped (AX_3E_2)		
	2	3		Linear (AX_2E_3)	180	
6	6	0	Octahedral (sp^3d^2)	Octahedral (AX_6)	90	
	5	1		Square Pyramidal (AX_5E)		
	4	2		Square Planar (AX_4E_2)		
	3	3		T-Shaped (AX_3E_3)		
	2	4		Linear (AX_2E_4)		