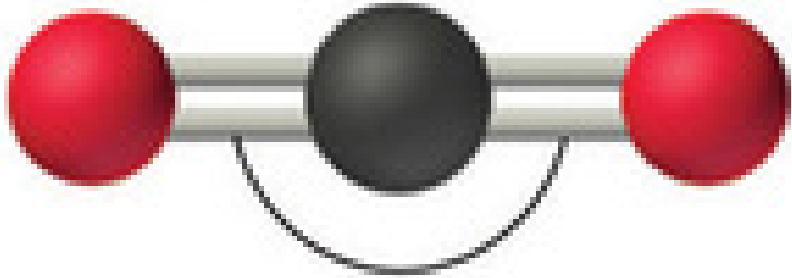


VSEPR YOGA

AP Chemistry Review
Relaxation Day

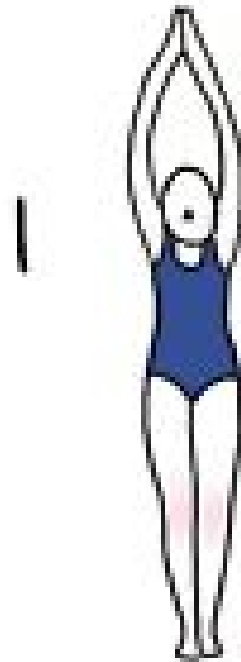
CO₂

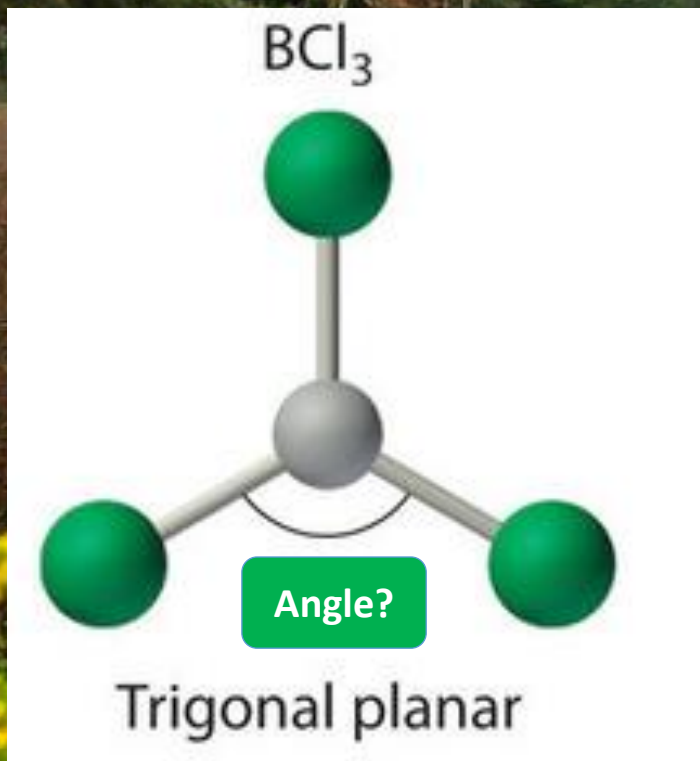


Angle?

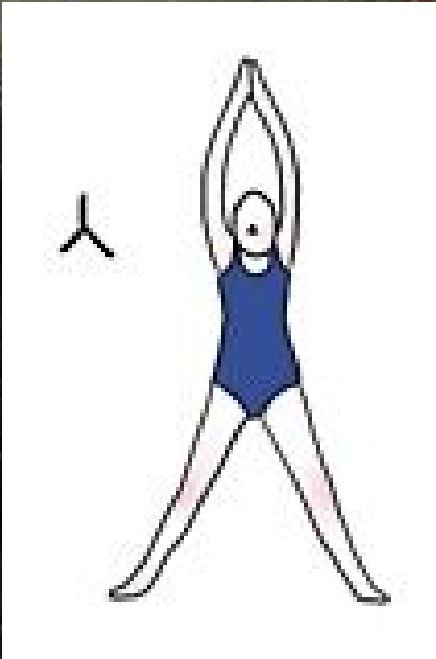
Linear

Hybridization:
sp

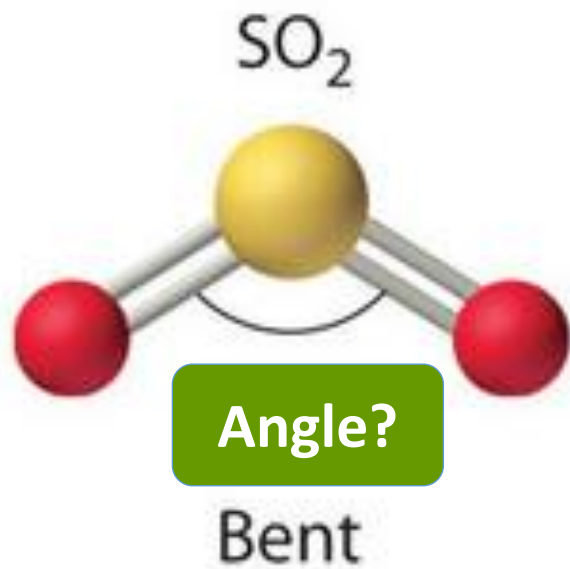




Hybridization:
 sp^2

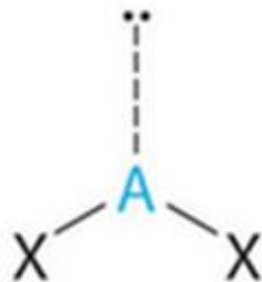


Hybridization:
 sp^2

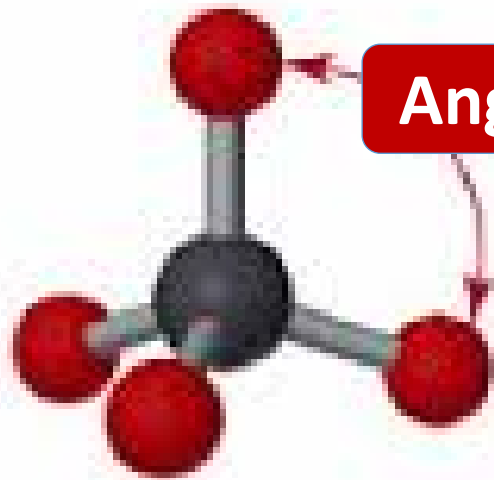


AX₂E

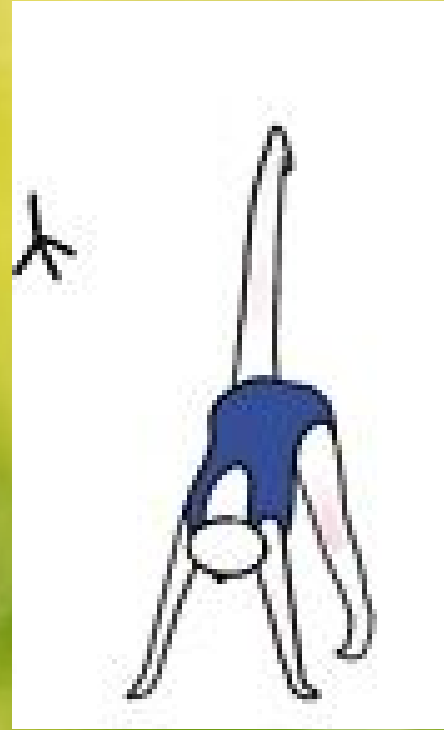
Bent (V-shaped)

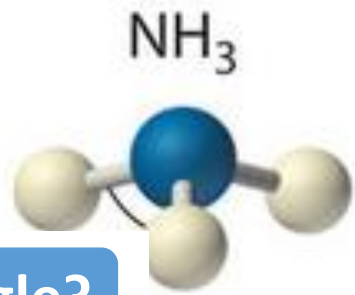


Hybridization:
 sp^3



A tetrahedral
molecule

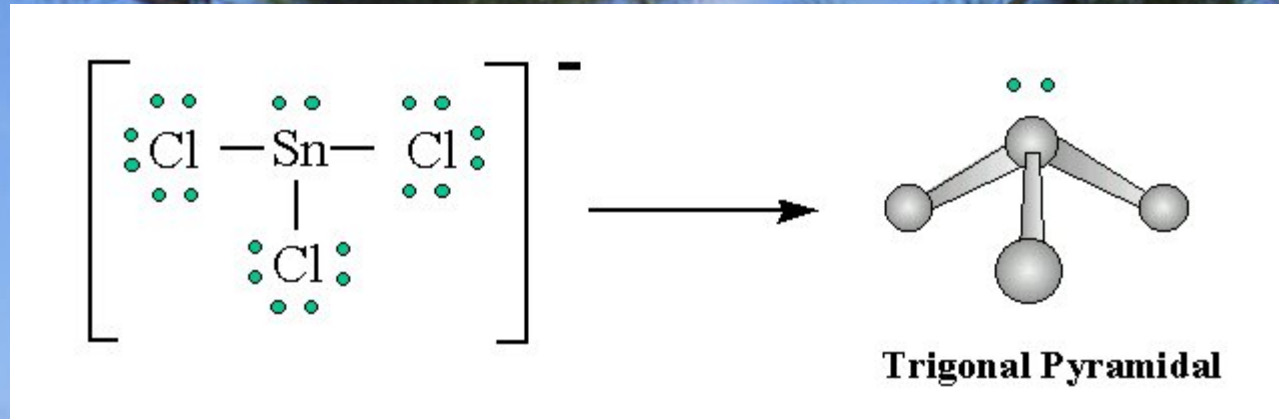


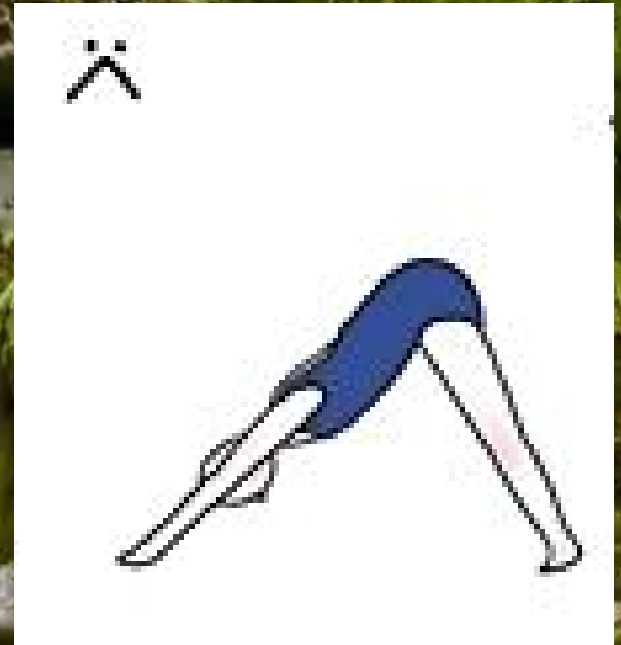
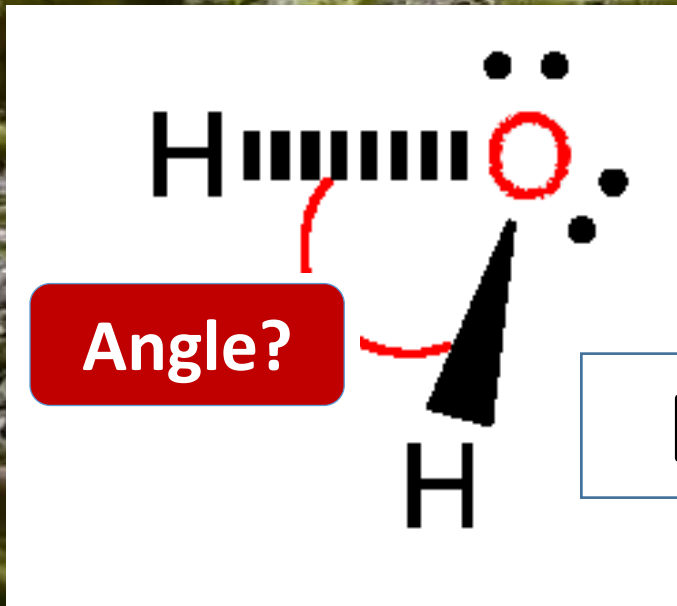


Angle?

Trigonal pyramidal

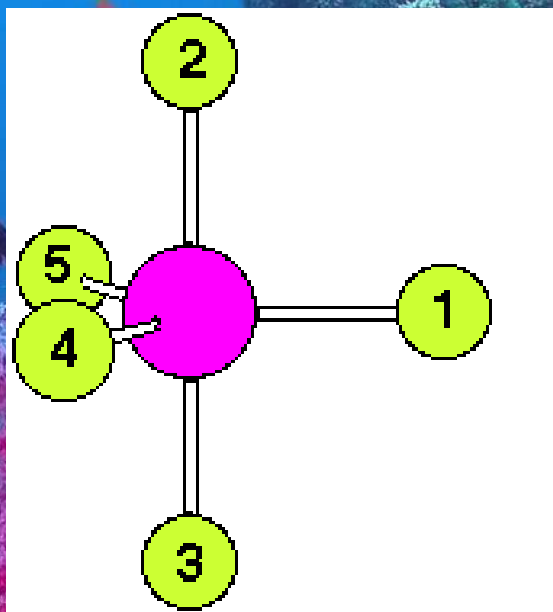
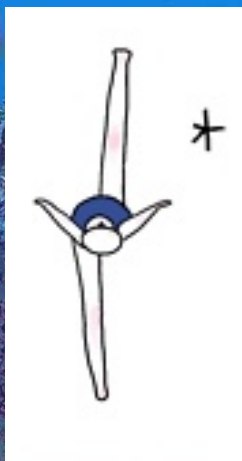
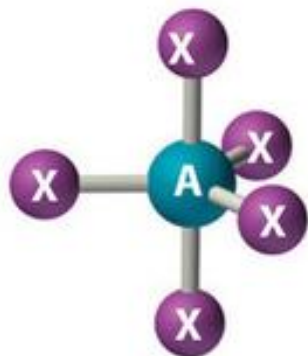
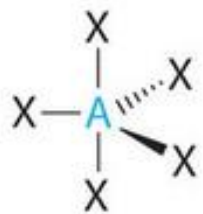
Hybridization:
sp³





Hybridization:
 sp^3

Trigonal bipyramidal

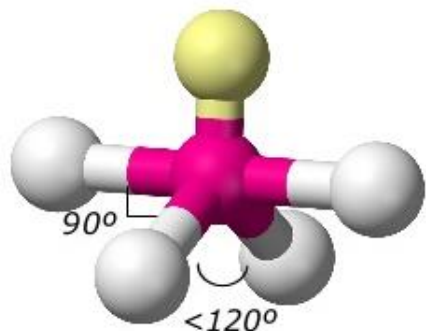


1: leg behind
2: your head
3: your other leg
4 and 5: your arms
in front

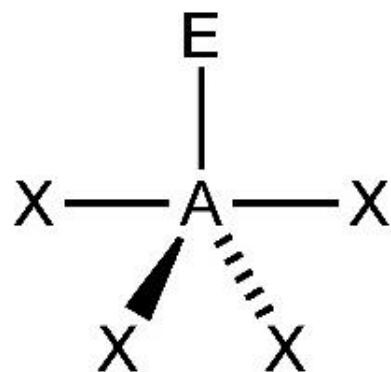
Angle(s)?

Hybridization:
N/A

Seesaw

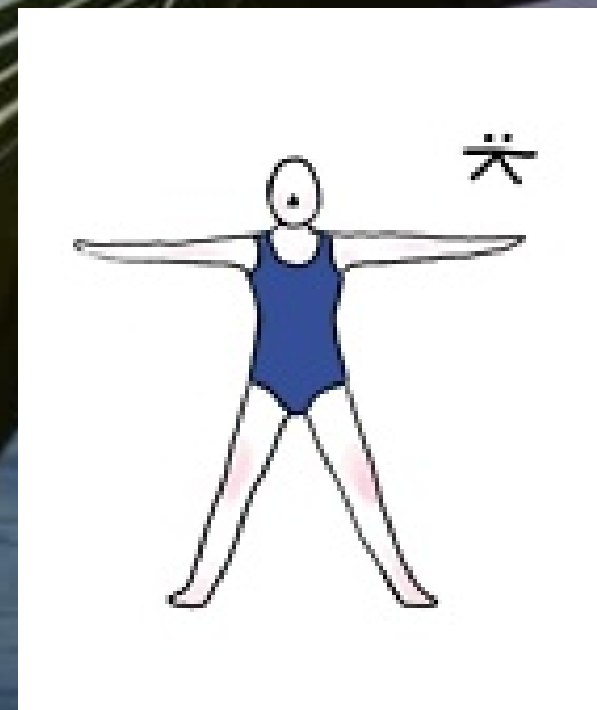


3-D structure



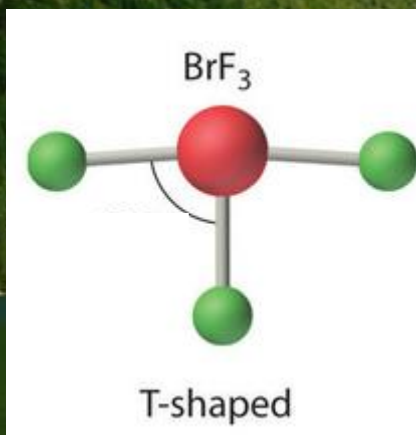
VSEPR diagram

Example:
SF₄

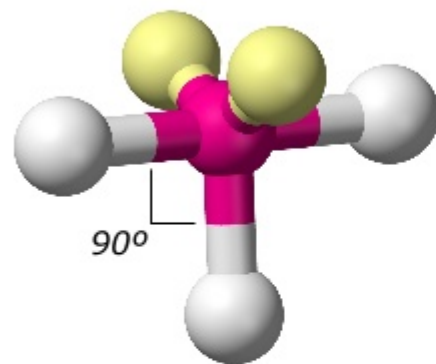


Angle(s)?

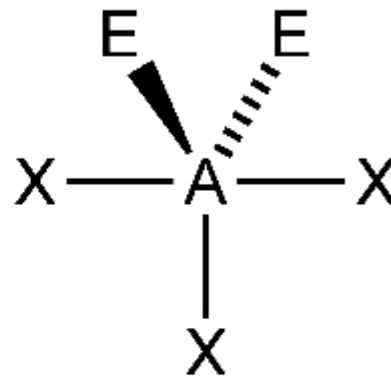
Hybridization:
N/A



T-shape



3-D structure

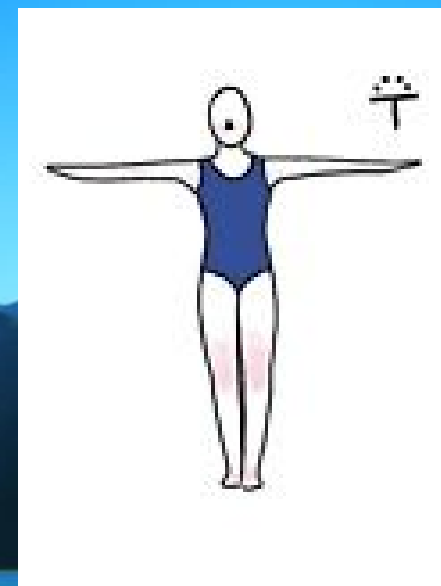


VSEPR diagram

Examples:

ClF₃, BrF₃

GENERAL FORMULA:
AX₃E₂



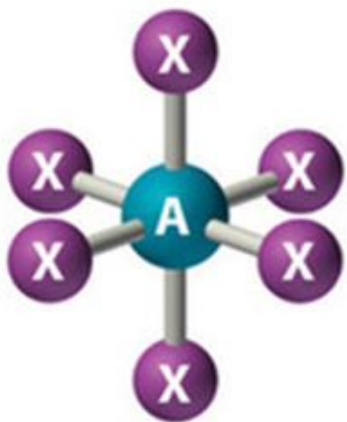
Angle?

Hybridization:
N/A



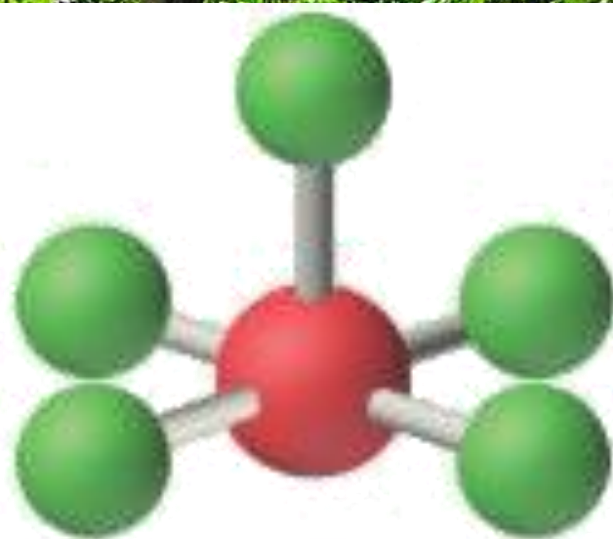


Octahedral



Angle?

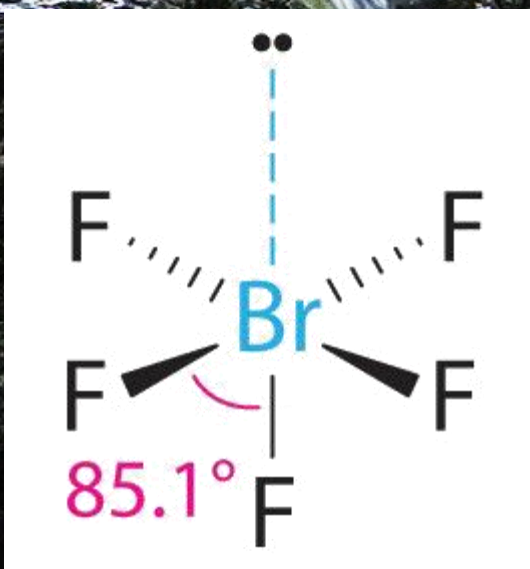
Hybridization:
N/A

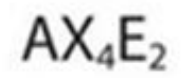


Molecular geometry
(square pyramidal)

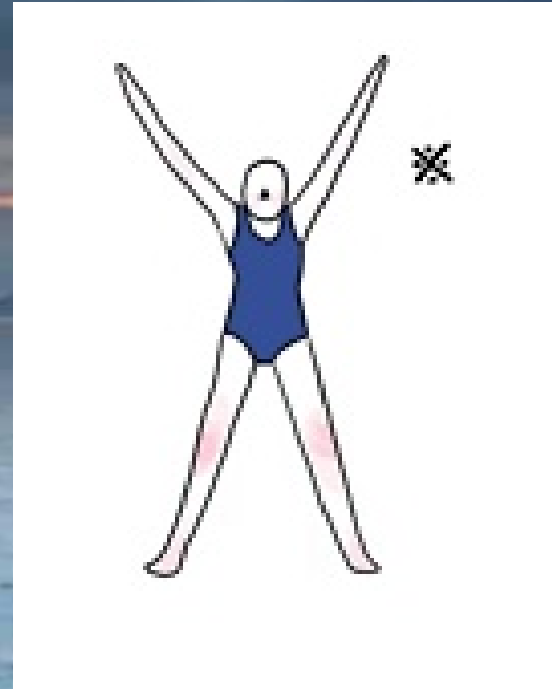
Angle?

Hybridization:
N/A





Square planar



Angle?

Hybridization:
N/A



VSEPR YOGA


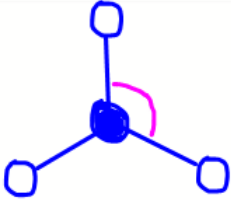
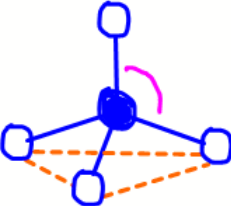
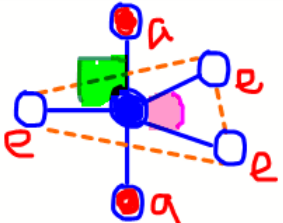
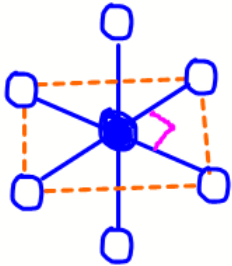
The diagram illustrates ten yoga asanas in two rows, each with a corresponding Sanskrit symbol:

- 1. Urdhva Dhanurasana (Upward Bow) - ॥
- 2. Virabhadrasana I (Warrior I) - ८
- 3. Virabhadrasana II (Warrior II) - ८
- 4. Adho Mukha Svanasana (Downward Dog) - ८
- 5. Urdhva Dhanurasana (Upward Bow) - ८
- 6. Adho Mukha Svanasana (Downward Dog) - ८
- 7. Sarvangasana (Shoulder Stand) - ८
- 8. Virabhadrasana I (Warrior I) - ८
- 9. Virabhadrasana II (Warrior II) - ८
- 10. Virabhadrasana III (Warrior III) - ८

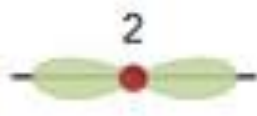

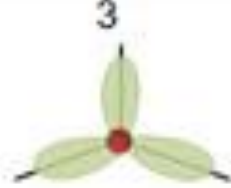

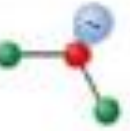







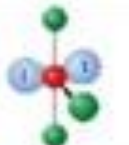
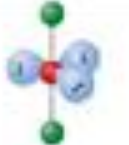
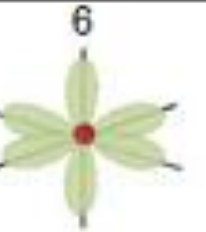


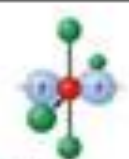
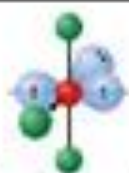



Yoga Flow (Vinyasa)

- 1. Mountain pose**
- 2. Linear to Mini Back Bend**
- 3. Trigonal Planar**
- 4. Forward Fold- Half-way lift/flat back-Forward Fold**
- 5. Bent to Trigonal Pyramidal**
- 6. Plank**
- 7. Baby Cobra or Sphinx***
- 8. Trigonal Pyramidal**
- 9. Linear**
- 10. Tetrahedral**
- 11. Square Planar**
- 12. Seesaw**
- 13. T-shape**
- 14. Chair to Seated**
- 15. Square Pyramidal**

Total no. of electron pairs = bond pairs + lone pairs	Basic Shape	Diagram	Bond angle
2	linear		180°
3	trigonal planar		120°
4	tetrahedral		109.5°
5	trigonal bipyramidal	 <p style="margin-left: 150px;">axial equatorial</p>	120° 90°
6	octahedral		90°

hybridization

Number of Electron Dense Areas	Electron-Pair Geometry	Molecular Geometry				
		No Lone Pairs	1 lone Pair	2 lone Pairs	3 lone Pairs	4 lone Pairs
2 	Linear	 Linear				
3 	Trigonal planar	 Trigonal planar	 Bent			
4 	Tetrahedral	 Tetrahedral	 Trigonal pyramidal	 Bent		
5 	Trigonal bipyramidal	 Trigonal bipyramidal	 Sawhorse	 T-shaped	 Linear	
6 	Octahedral	 Octahedral	 Square pyramidal	 Square planar	 T-shaped	 Linear

sp

sp²

sp³

N/A

N/A