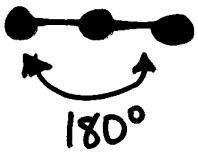
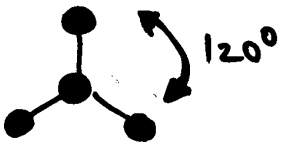
# Molecular Shapes and Names

**The names refer to where the atoms are located, not where the electrons are located!**

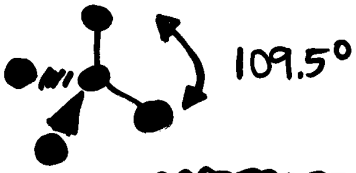

← **Linear**



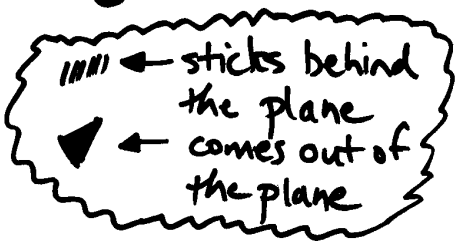

← **Linear**
(2 atoms around central atom)

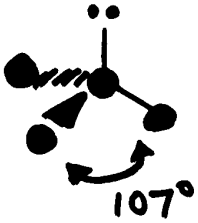



← **Trigonal Planar**
(3 atoms around central atom)

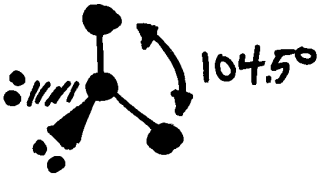



← **Tetrahedral** (pyramid has 4 faces)
(4 atoms around central atom)

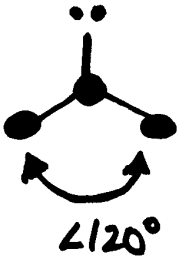


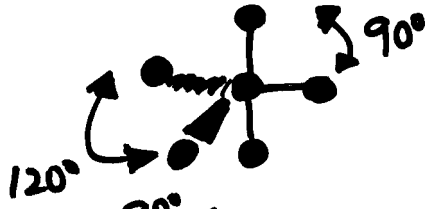

← **Trigonal Pyramidal**
(3 atoms & 1 pair of electrons around central atom)
*$e^-$ can go anywhere




← **Bent**
(2 atoms & 2 pairs of electrons around central atom)
*$e^-$ can go anywhere

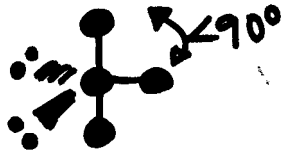



← **Bent**
(2 atoms & 1 pair of electrons around central atom)
*$e^-$ can go anywhere

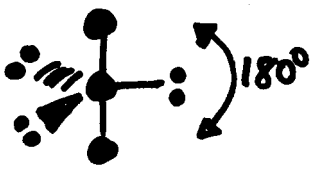



← **Trigonal Bipyramidal**
(5 atoms around central atom)

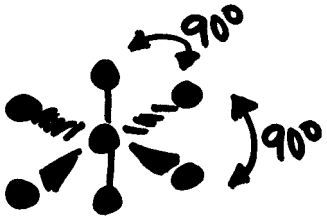

← **Seesaw, Irregular Tetrahedran, or Bi-sphenoid**
(4 atoms & 1 pair of electrons around central atom)
**$e^-$ must be around the middle, not top/bottom**



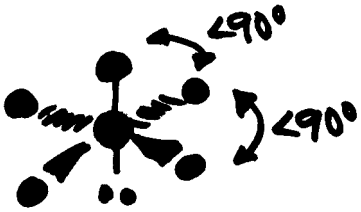

← **T- shaped (officially: T- shaped planar)**
(3 atoms & 2 pairs of electrons around central atom)
**$e^-$ must be around the middle, not top/bottom**



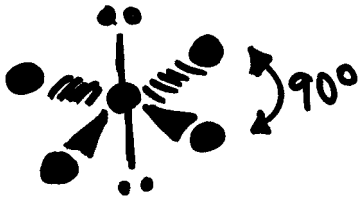

← **Linear**
(2 atoms & 3 pairs of electrons around central atom)
**$e^-$ must be around the middle, not top/bottom**




← **Octahedral** (pyramids have 8 faces)
(6 atoms around central atom)




← **Square Pyramidal**
(5 atoms & 1 pair of electrons around central atom)




← **Square Planar**
(4 atoms & 2 pairs of electrons around central atom)
**$e^-$ must be opposite each other**