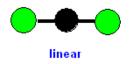
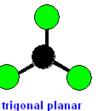
## **Summary:**

## **There are 5 ELECTRON Geometries:**

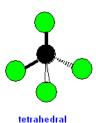
**LINEAR**: 2 e<sup>-</sup> groups around central atom





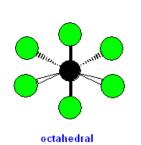
TRIGONAL PLANAR: 3 e groups around central atom

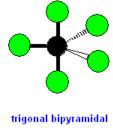
**TETRAHEDRAL**: 4 e<sup>-</sup> groups around central atom



TRIGONAL BIPYRAMIDAL: 5 e- groups around central atom

OCTAHEDRAL: 6 e groups around central atom





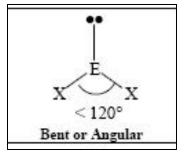
These electron geometries are also the MOLECULAR geometries

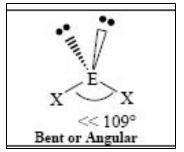
For molecules where all e groups are bonding groups.

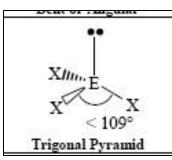
## **Summary:**

# There are 6 additional MOLECULAR Geometries. These occur when one or more of the e<sup>-</sup> groups are lone-pair e<sup>-</sup>

Bent: 3 e<sup>-</sup> groups around central atom- 1 is a lone-pair 4 e<sup>-</sup> groups around central atom- 2 are a lone pair

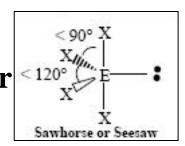




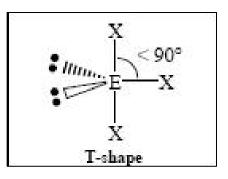


Trigonal Pyramidal: 4 e<sup>-</sup> groups around central atom- 1 is a lone-pair

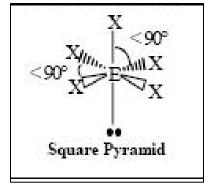
Seesaw: 5 e<sup>-</sup> groups around central atom- 1 is a lone-pair



#### T-Shaped: 5 e<sup>-</sup> groups around central atom- 2 are a lone-pair



# **Square Pyramidal:** 6 e<sup>-</sup> groups around central atom- 1 is a lone-pair



# Square Planar: 6 e<sup>-</sup> groups around central atom- 2 are a lone-pair

