Molecule shapes

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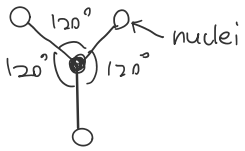
As the increase of the bonding pair - each bonding pair (also called pair of electron) spreads out as far as possible to each other due to repulsion of the same charge

- This is called VSEPR (valence shell electron pair repulsion theory)

eg:



As the increase of bonding pairs, the bonding angle changes and their name of electron geometry and molecule geometry changes.

Electron domain : how many pair electron surround atom

Electron geometry: the number of electron pairs around nucleus

Molecular geometry: number of bonding pair

eg:

electron geometry	molecular geometry
 linear	linear
 trigonal planar	trigonal planar
 trigonal planar	bent

maximum of bonding pair is six, as 3D have 6 surface

The molecular geometry of 3 bonding pair changes it names as 2 electron is surrounded with central atom, the electron geometry do not change its name as there is 3 pair of electron surround the central atom, the molecular geometry changes as the structure is arranged in different way.

The pair of electron on the valence shell of central atom will leads to smaller angle between 2 bonding pair because the repulsion of the pair electron on the valence shell and bonding pairs is stronger than the bonding pairs and bonding pairs.