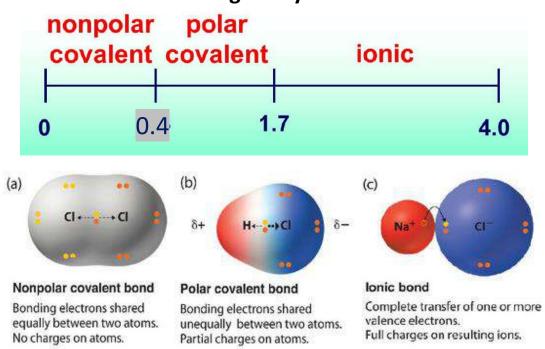
## Molecular Geometry

# of bonding groups/domains on 'central' atom	# of lone pair electrons on 'central' atom	Example	Molecular Geometry	Bond Angle
2	0	$CO_2$	linear	180
3	0	CH <sub>2</sub> O	trigonal planar	120
2	1	$\overline{\mathrm{SF}_2}$	bent	less than 120
4	0	 CH <sub>4</sub>	tetrahedral	109.5
3	1	NH <sub>3</sub>	trigonal pyramidal	less than 109.5
2	2	H <sub>2</sub> O	bent	less than 109.5

## **Electronegativity Difference**



0 to 0.39 = nonpolar covalent bond 0.40 to <1.7 = polar covalent bond >1.7 = ionic bond