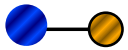
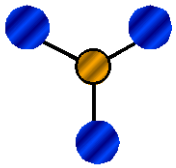
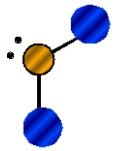
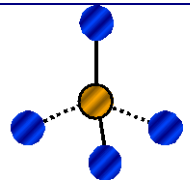
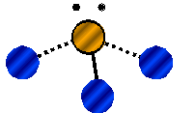
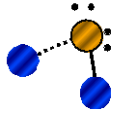
MOLECULAR SHAPES (Honors Chemistry; Podcast Bonding 6)

"clouds"					
2	 Linear Triatomic, Usually nonpolar CO_2, HCN		Linear Diatomic  Polarity depends upon electronegativity difference Polar if >0.5 Nonpolar if <0.5		In molecules where the outside molecules are different, shapes that tend to be nonpolar usually become polar.
3	 Trigonal Planar: BF_3, SO_3, NO_3^- 120˚ Usually nonpolar	 Bent, 12O˚ Usually polar NO_2^-		Remember to count the number of "clouds" of electrons, not the actual number of electrons. A double or triple bond counts as one effective pair.	Also: If there ever is a two molecule atom (diatomic) that molecule's polarity depends upon the electronegativity difference of the atoms
4	 Tetrahedral; 109˚: Usually nonpolar CH_4, CF_4	 Pyrimidal: 107˚ Usually polar: NH_3, PCl_3	 Bent: 104.5˚ Usually polar: H_2O, OF_2		