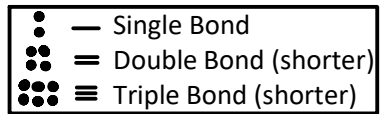
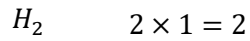


# C11 - 1.4 - Lewis/VESPR Bonding

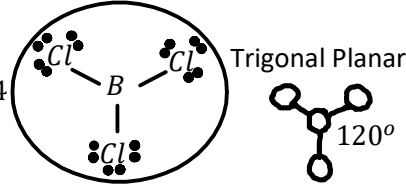
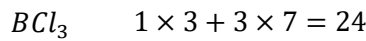
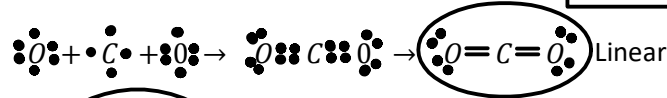
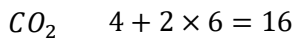
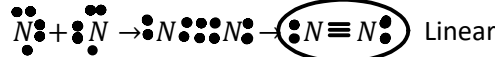
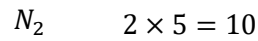
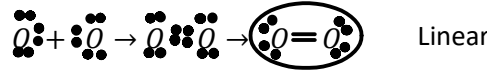
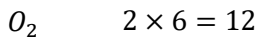
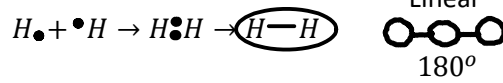


Atom want a full outer shell (2,8,8,18\* electrons). A combination of electrons (8\* Octet Rule) and bonds.

Single Bonds = 2 electrons.  
Double Bond = 4 electrons.  
Triple bond = 6 electrons.

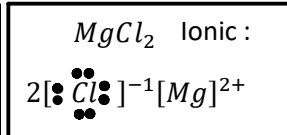
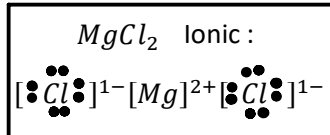
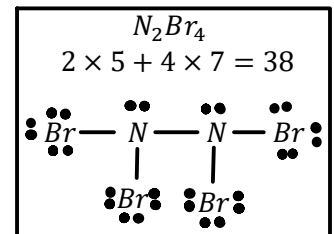
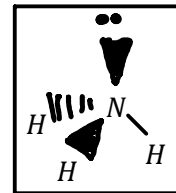
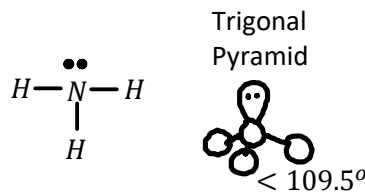
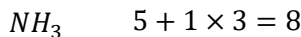
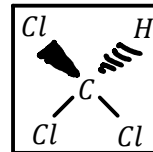
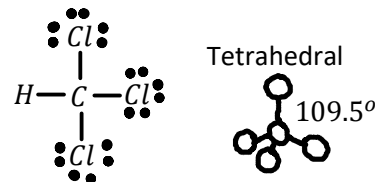
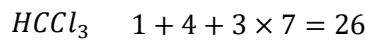
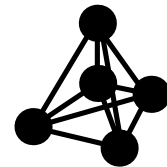
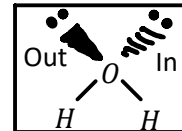
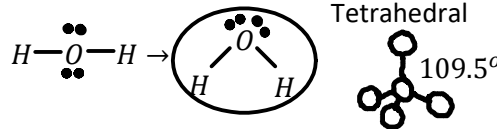
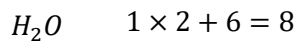
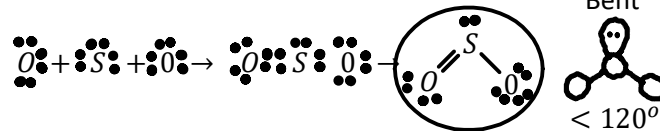
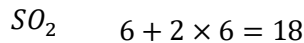


Valence Electrons :

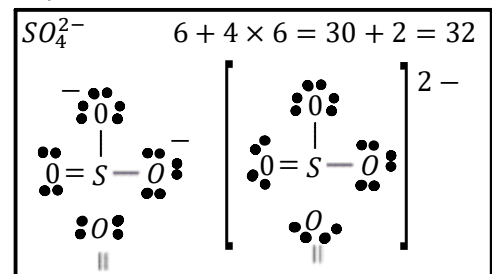
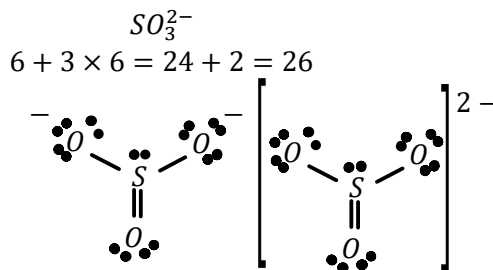
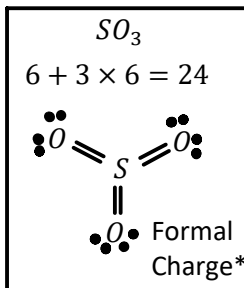


Exceptions to Octet Rule

phosphorous, sulfur and chorine can have more.  $3s^2 3p^6 3d^{10}$



Ionic : No Vesper. It will stack to form a crystal lattice



Formal Charge  
= # original valence  $e^-$  (of part)  
- # Bonds - Lone  $e^-$