This Class

2.3 Periodic Trends

3.1 Lewis Structures

3.2 VSEPR

Next Class

3.2 VSEPR

3.3 Molecular Polarity

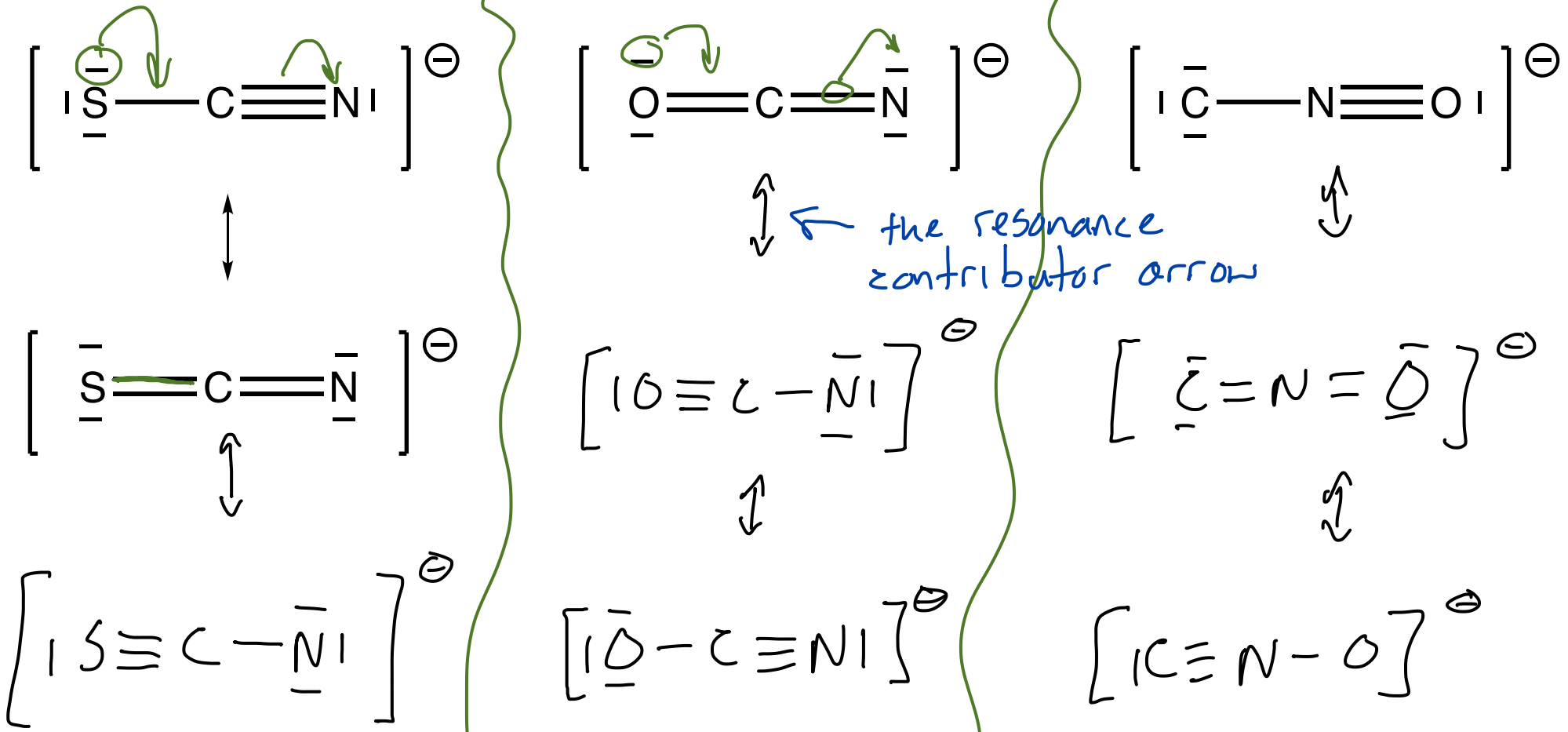
4.1 Symmetry elements and Operations

Test 1 Postponed to Oct 6

when there are 3 or more p orbitals in a row, a single Lewis structure isn't enough for us to model the molecule

Lewis Structures: Resonance

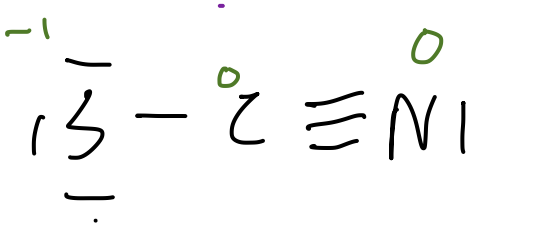
Section 3.1.1

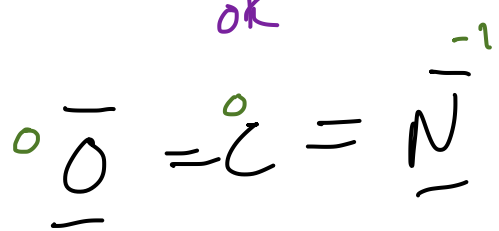


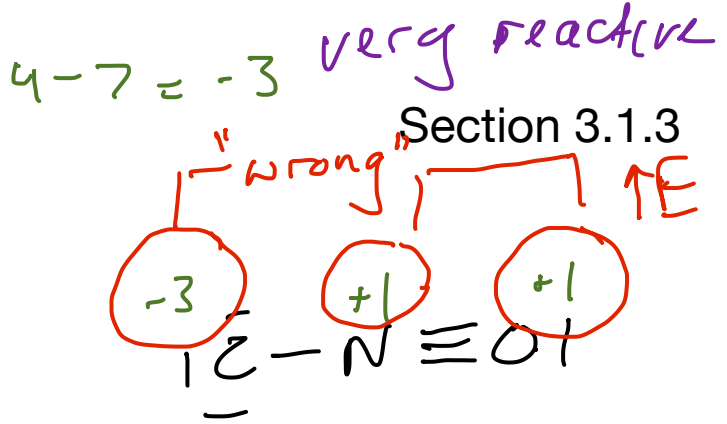
lone pair e⁻'s + π bonds can be moved to better model the delocalized e⁻'s

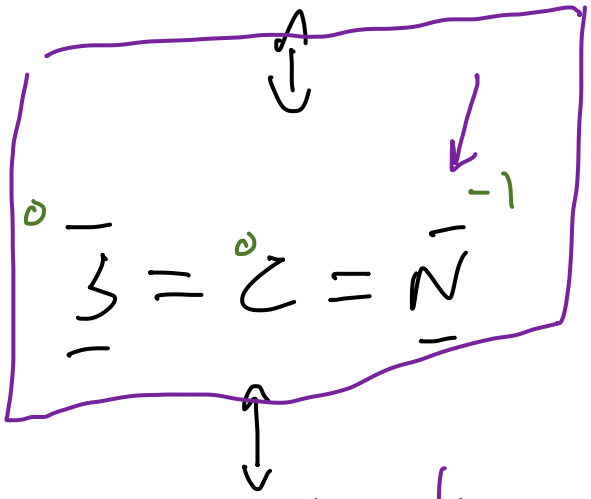
Lewis Structures: Formal Charge

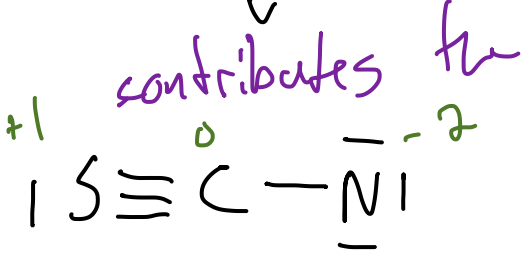
Section 3.1.3

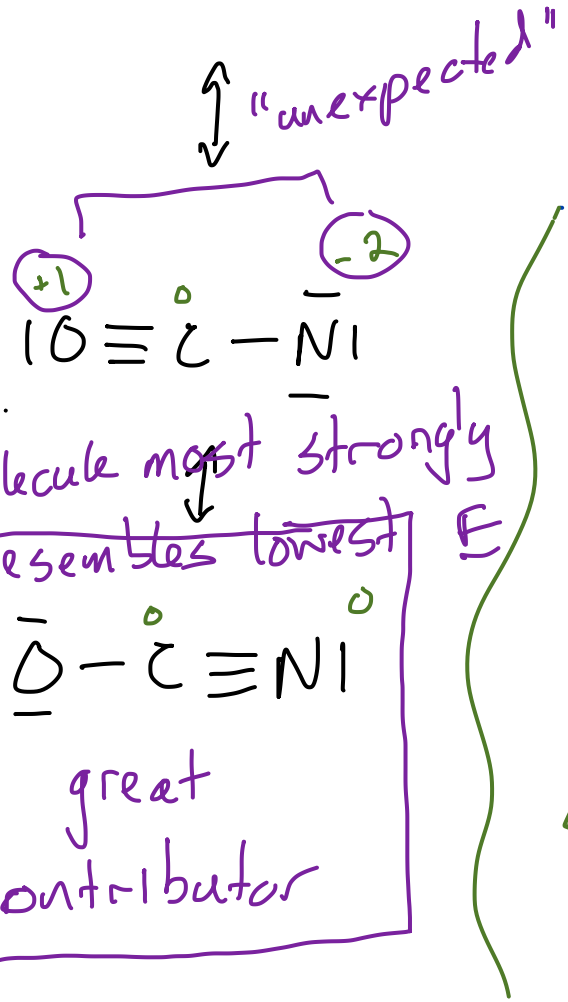


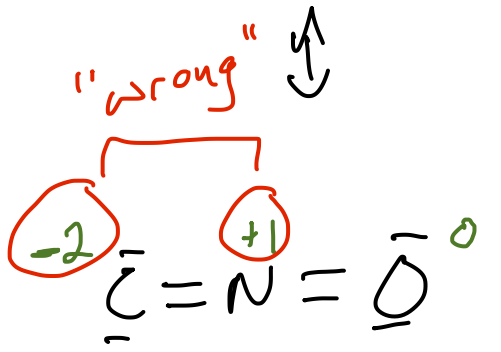


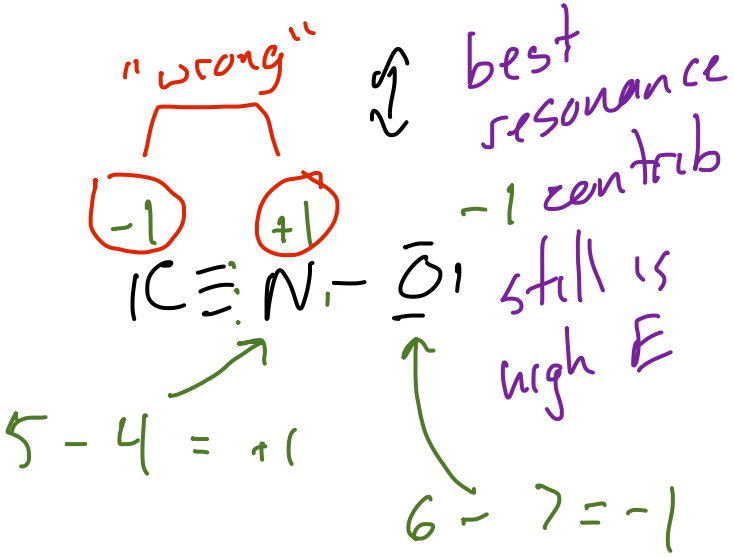






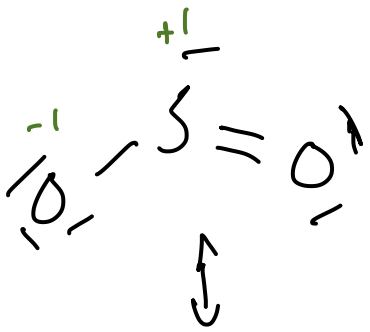


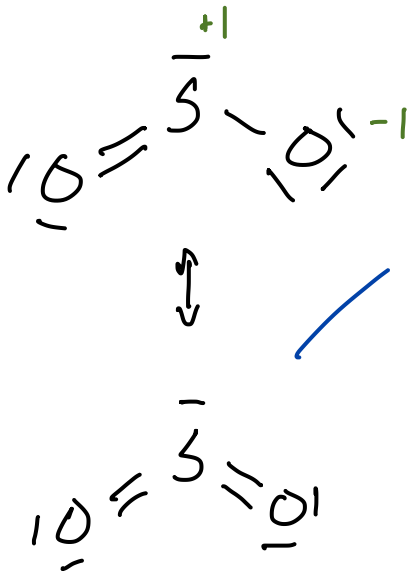




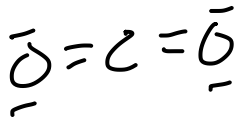
unexpected or large formal charges mean high E

SO_2

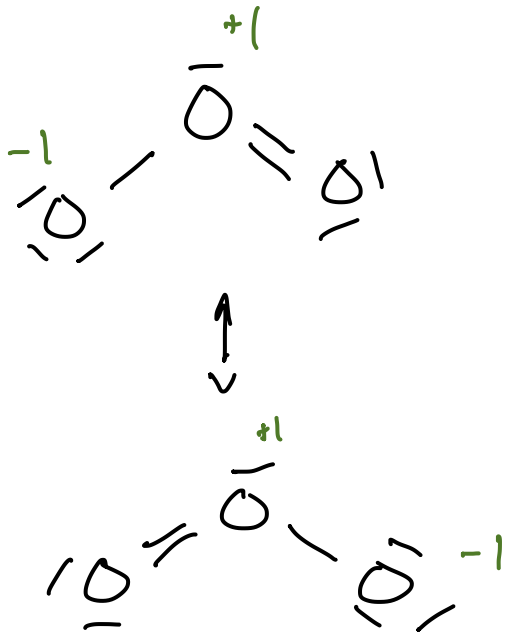




vs



O_3

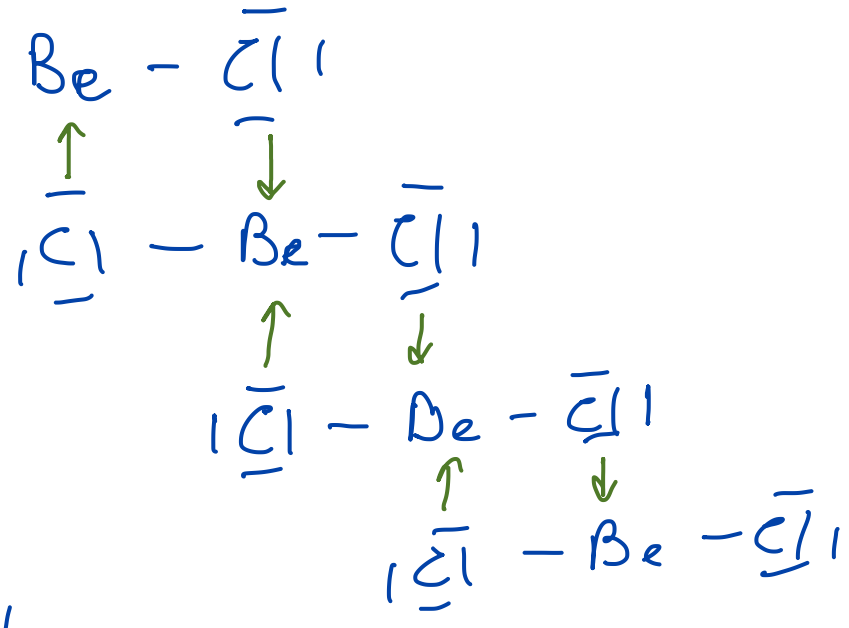


$n=3$ and higher (n values) atoms can accommodate more than 8 e^-'s in their valence shells

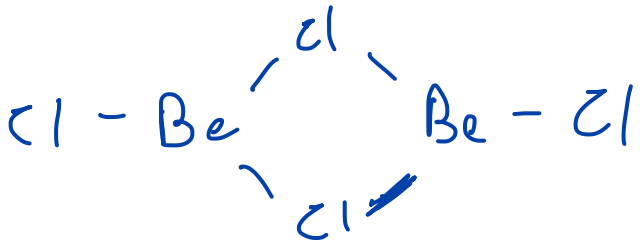
charge separation is a sign of high E

linear network solid

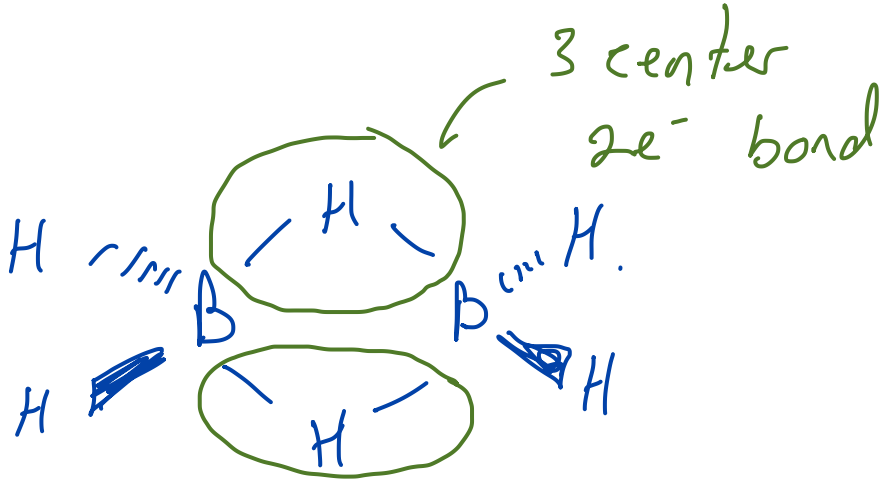
$BeCl_2$

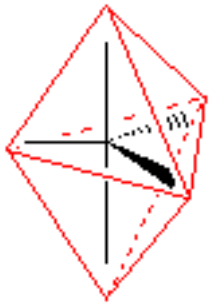
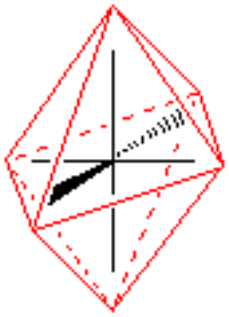
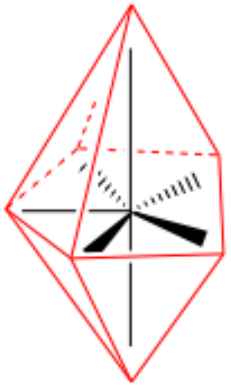
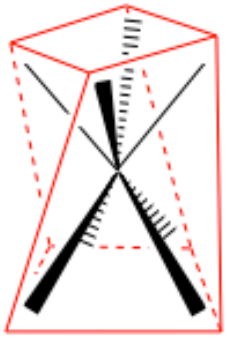


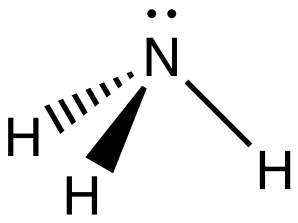
as a gas

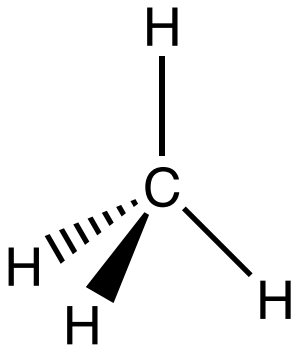


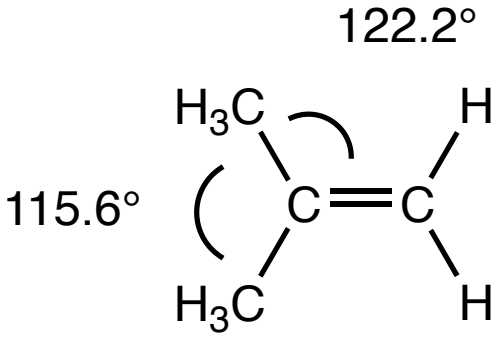
Cl is donating lp e^- to two Be atoms

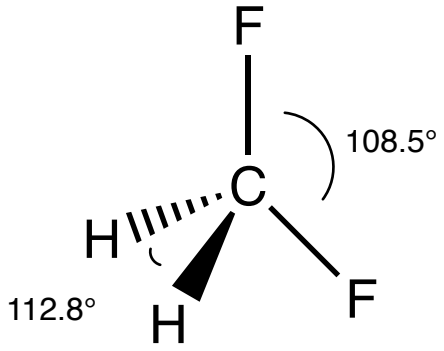


1	2	3	4
			
5	**6**	**7**	**8**
			

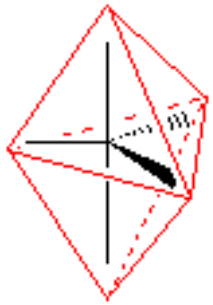


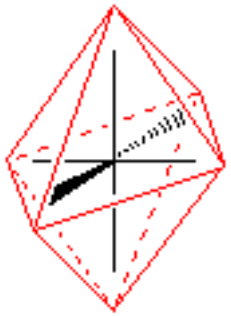


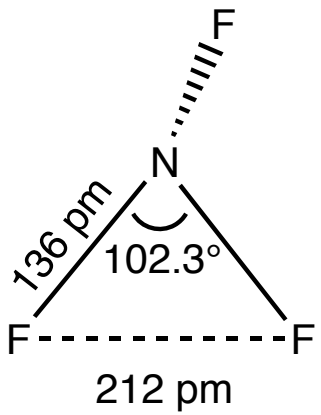




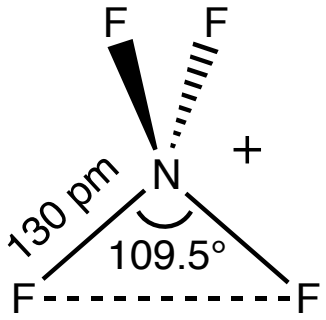
http://www.uwosh.edu/faculty_staff/gutow/P-Chem_Web_Posters/AndyNickWebsite/CH2F2/CH2F2.html







NF_3



NF_4^+