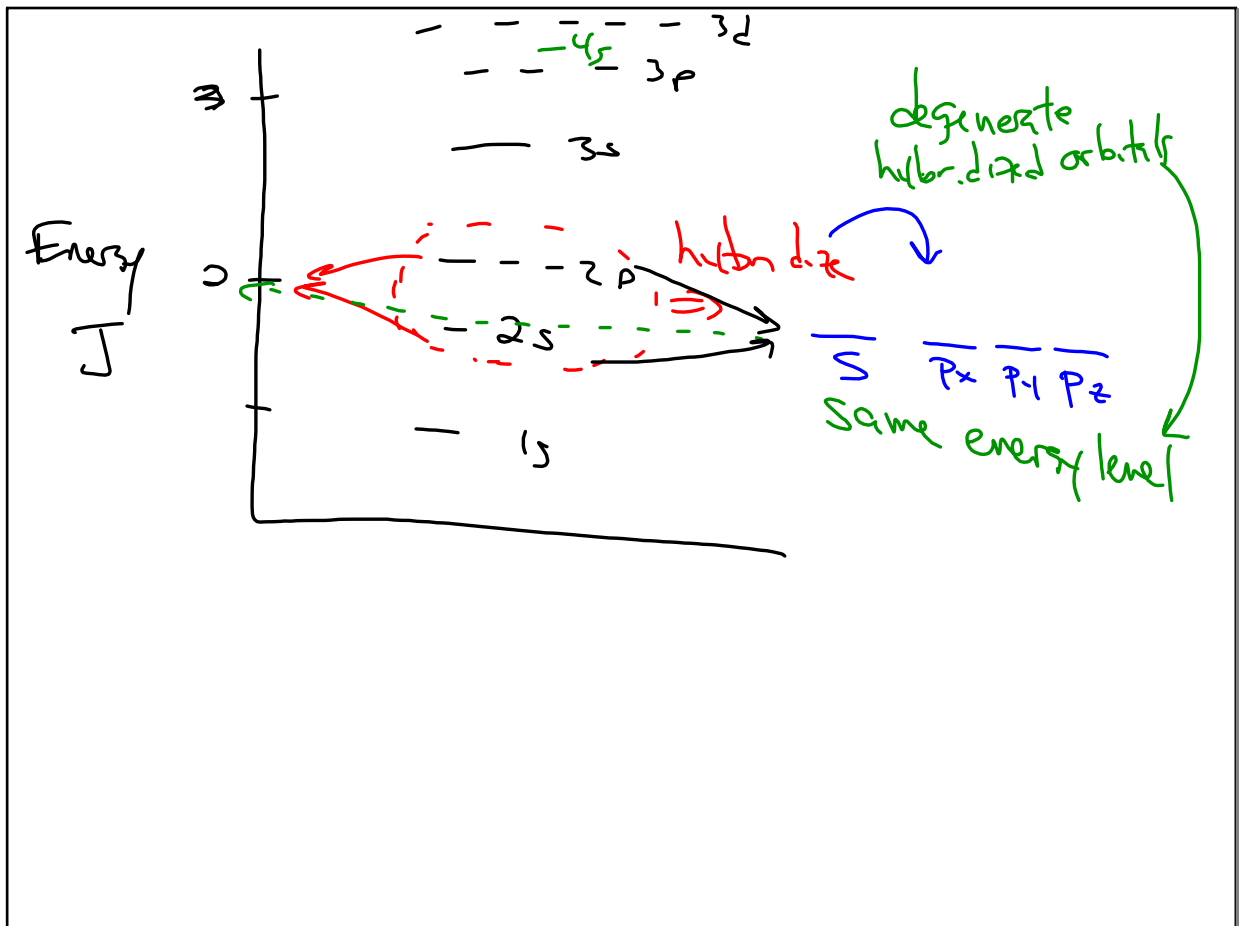


Nov 13-7:38 AM



Nov 13-8:04 AM

8/12 (D)

3 bonding sites
1 non-bonding site (lone pair of e⁻)

4 total sites

xx
P x

↑↓ ↑ ↑ ↑
s P

← lone pair of e⁻

Spots for bonding occur.

Lone pair no open parking spots at Del Boca Vista.

H
|
H - C - - - H
|
H

Tetrahedral $\approx 109.5^\circ$
4 bonding sites.

Nov 13-8:08 AM

$\begin{matrix} & H & \\ & \diagup & \diagdown \\ H & - C & - H \\ & | & \\ & H & \end{matrix}$

Tetrahedral
4-0
 109.5°

$\begin{matrix} & H & & H \\ & \diagup & & \diagdown \\ H & - P & = & H \\ & | & & \\ & H & & \end{matrix}$

Trig bipyramidal
3-1
Polar

$\begin{matrix} & H & & H \\ & \diagup & & \diagdown \\ H & - & & - H \\ & \diagdown & & \diagup \\ & H & & H \end{matrix}$

$\begin{matrix} & H & & H \\ & \diagup & & \diagdown \\ H & - & & - H \\ & \diagdown & & \diagup \\ & H & & H \end{matrix}$

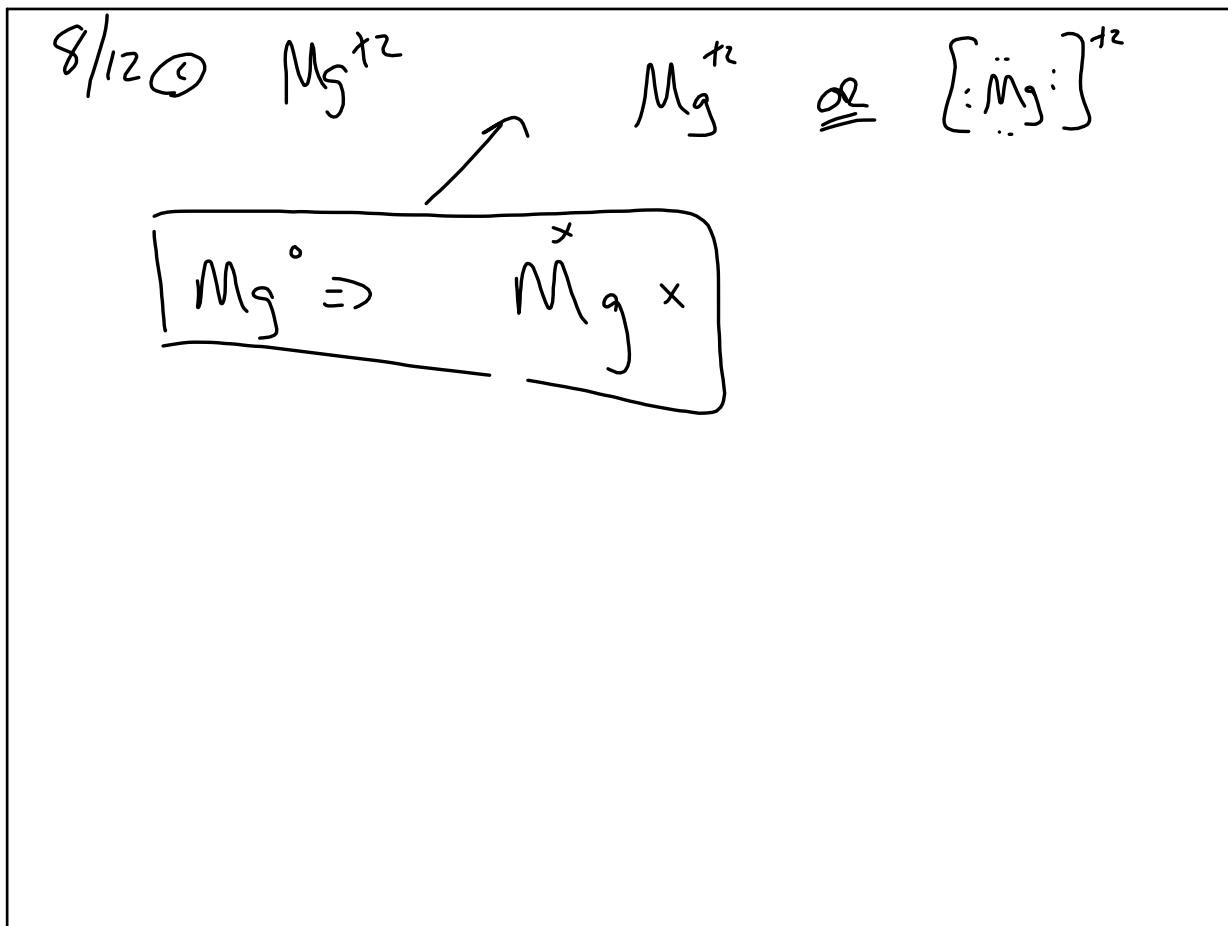
repel other e⁻ lone pair
 $> 109.5^\circ$
 $< 109.5^\circ$
 $\sim 109.5^\circ$

pure repel other e⁻
 4 sites
 2 bonding
 2 non bonding

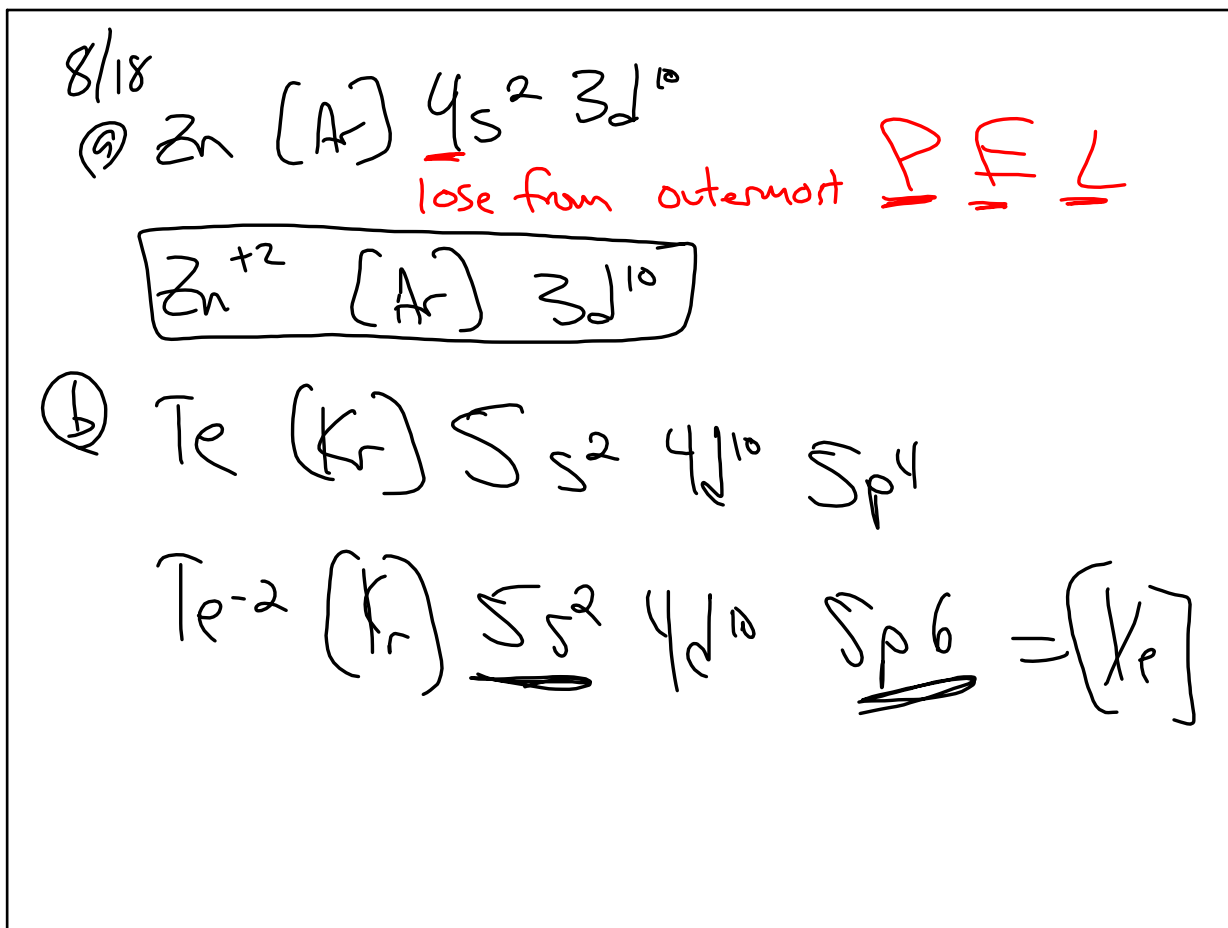
VSEPR - Valence shell electron pair repulsion

Chap 9 p 347 + 350 SSSS
Shape sheet.

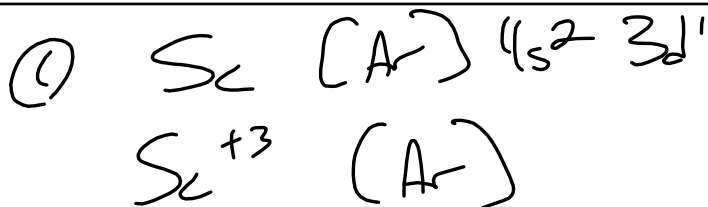
Nov 13-8:16 AM



Nov 13-8:22 AM



Nov 13-8:35 AM



Nov 13-8:41 AM

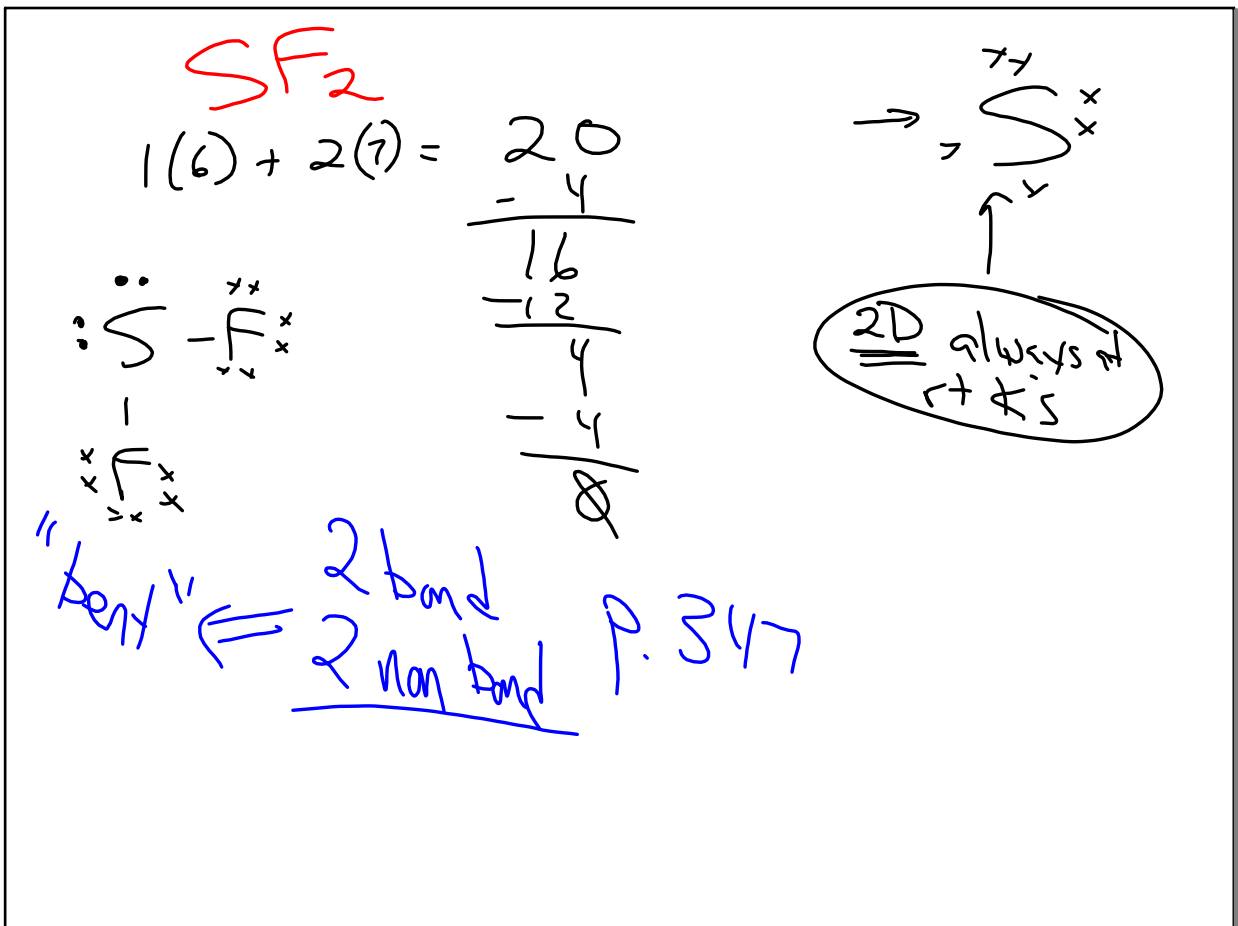
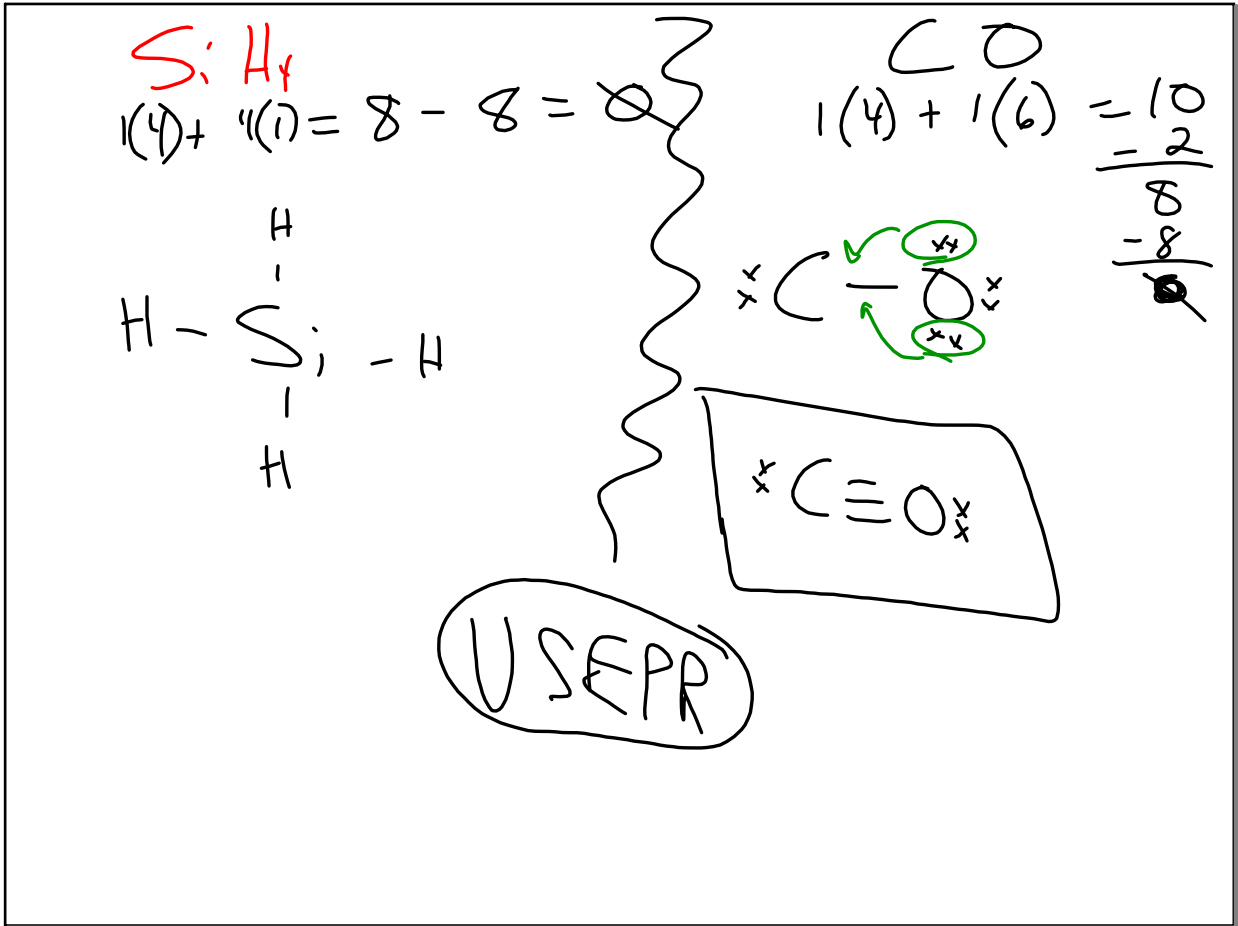
Lewis structure rules

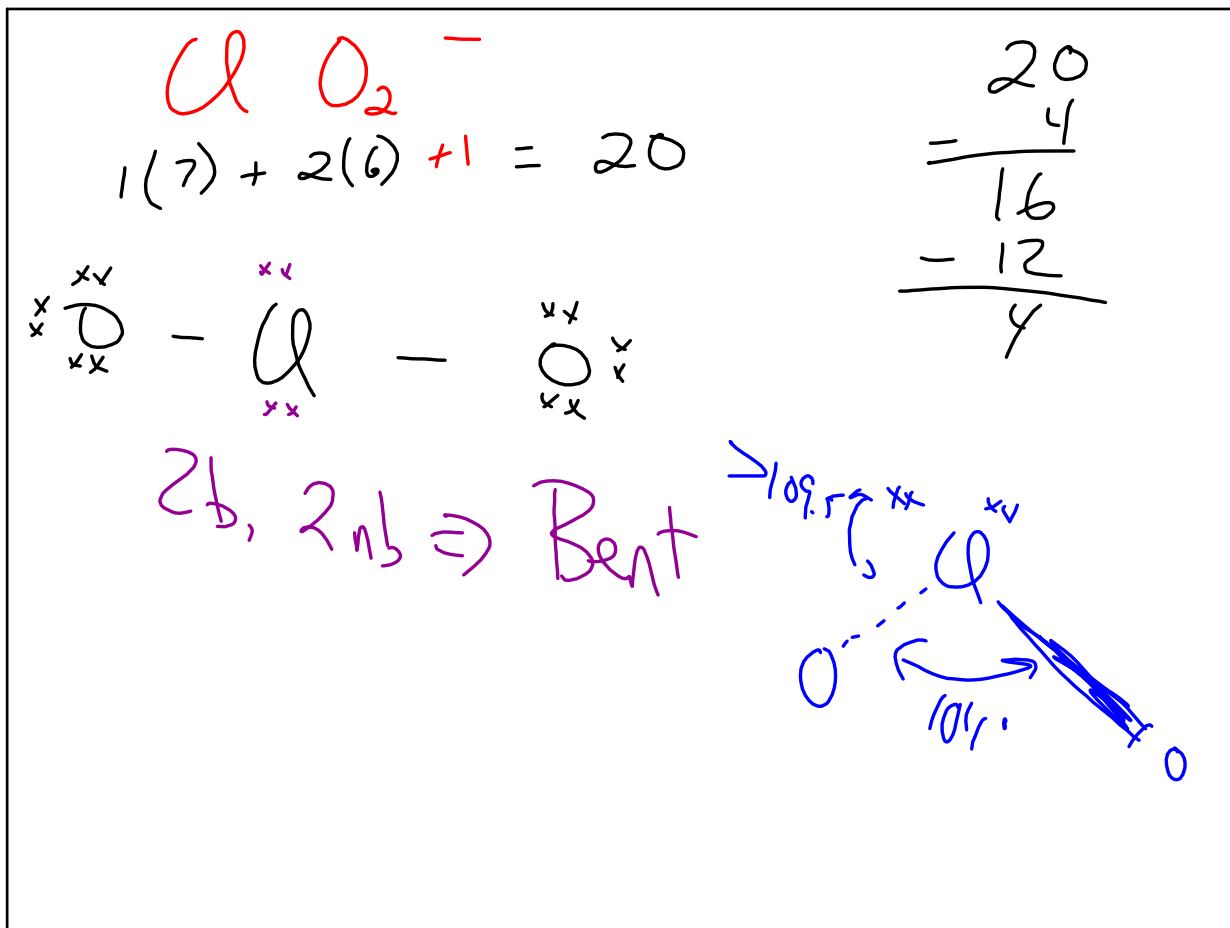
- ① Bank $\rightarrow \Sigma$ valence e^-
- ② Central Atom (Middle?) \Rightarrow "Giver"
Most Metallic
- ③ Attach with single bonds. \sim 1st element except (H)
(H's off of O's)
- ④ Subtract from bank
- ⑤ Fix periphery
- ⑥ Fix central atom

If extra e^-
 extra go on central atom
 - Can have $>$ octet on central atom.

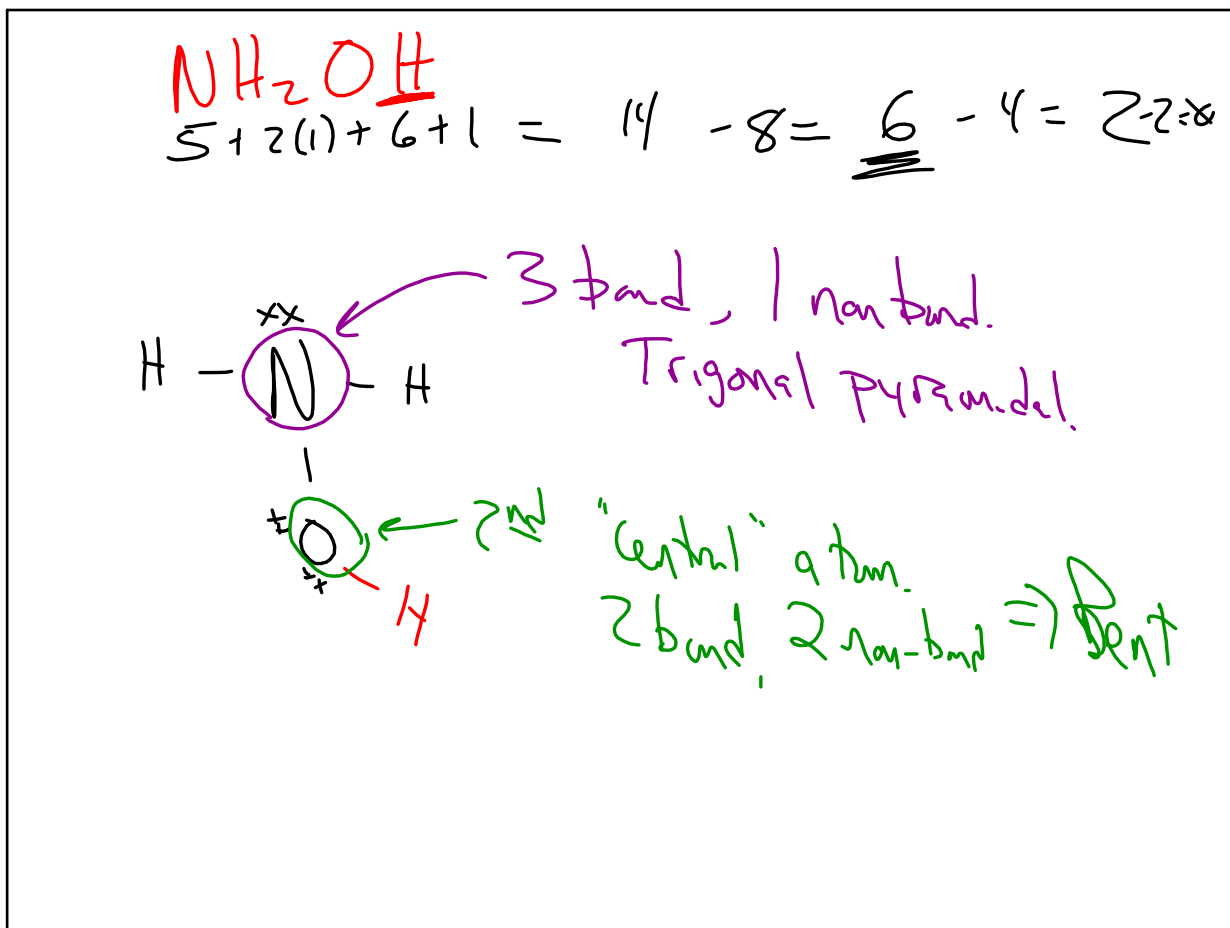
If not enough e^-
 ④ Try double bonds
 ⑤ Try triple bonds

Nov 13-8:43 AM

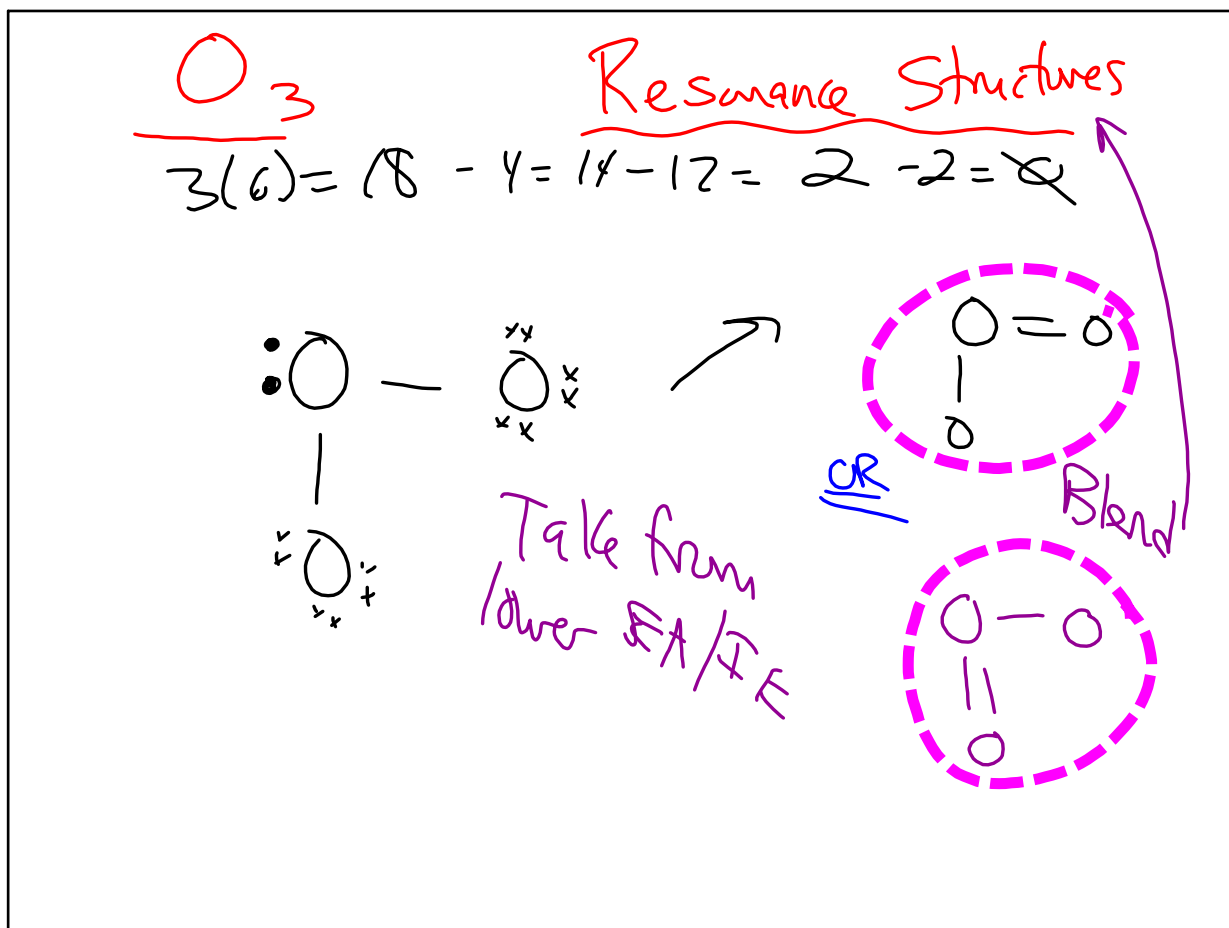




Nov 13-9:02 AM



Nov 13-9:07 AM



Nov 13-9:12 AM

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Nov 13-9:17 AM