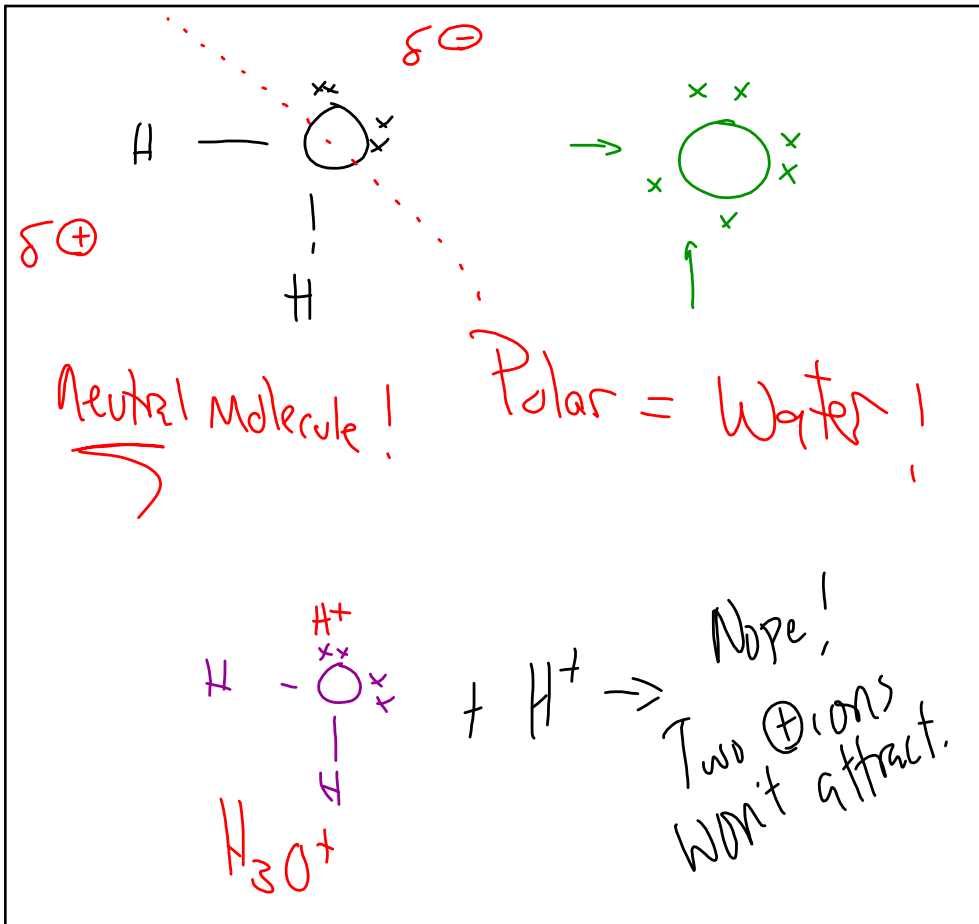
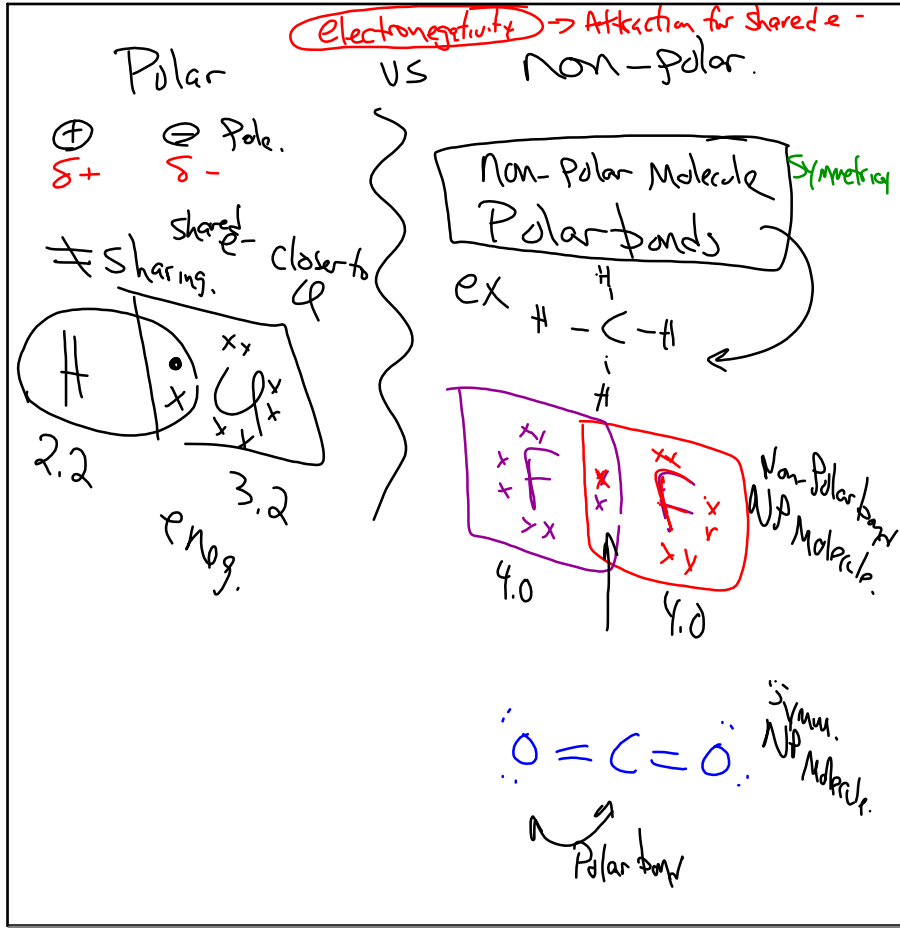


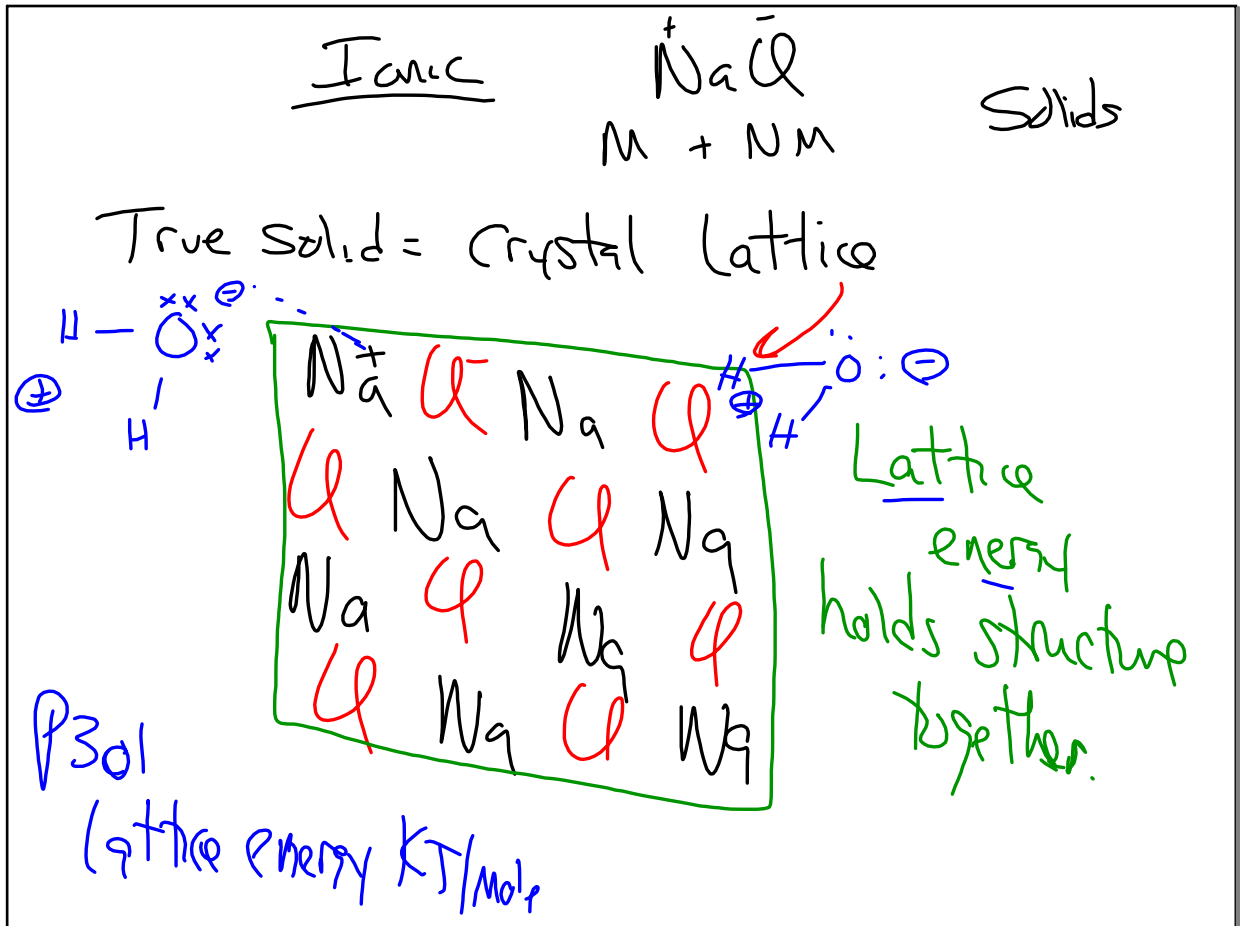
Nov 21-7:22 AM



Nov 21-7:34 AM



Nov 21-7:39 AM



Nov 21-7:49 AM

P307

N-N 1.47 Å

N=N 1.24 Å

N≡N 1.10 Å

Angstrom  
10<sup>-10</sup>  
10 m

internuclear distance

Nov 21-7:57 AM

Metallic Bonding ^ "metal bonding"

Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>+2</sup>	Sr <sup>+2</sup>	Ba <sup>+</sup>
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8 total val e- = stable!

Nov 21-8:01 AM

# Drawing Covalent Lewis Structures

(H<sup>x</sup>)

⋮

Rules for  
Drawing  
Valence e-

Nov 21-8:12 AM

- ① Add up all valence e<sup>-</sup>
- ② Metal or lower **eneg** element in middle  
The one who gives away e<sup>-</sup> most easily.
- ③ Attach all others starting with sb's  
 $26 - 6 = 20^{e-}$  remaining  
 have 3 sb's      single bond 2e-
- ④ Fix periphery → stable (Cl)  
 $20 - 3(6) = 2$  remaining
- ⑤ Fix central atom  
 $2 - 2_{fix P} = 0$

PCl<sub>3</sub>  
5 + 3(7) = 26

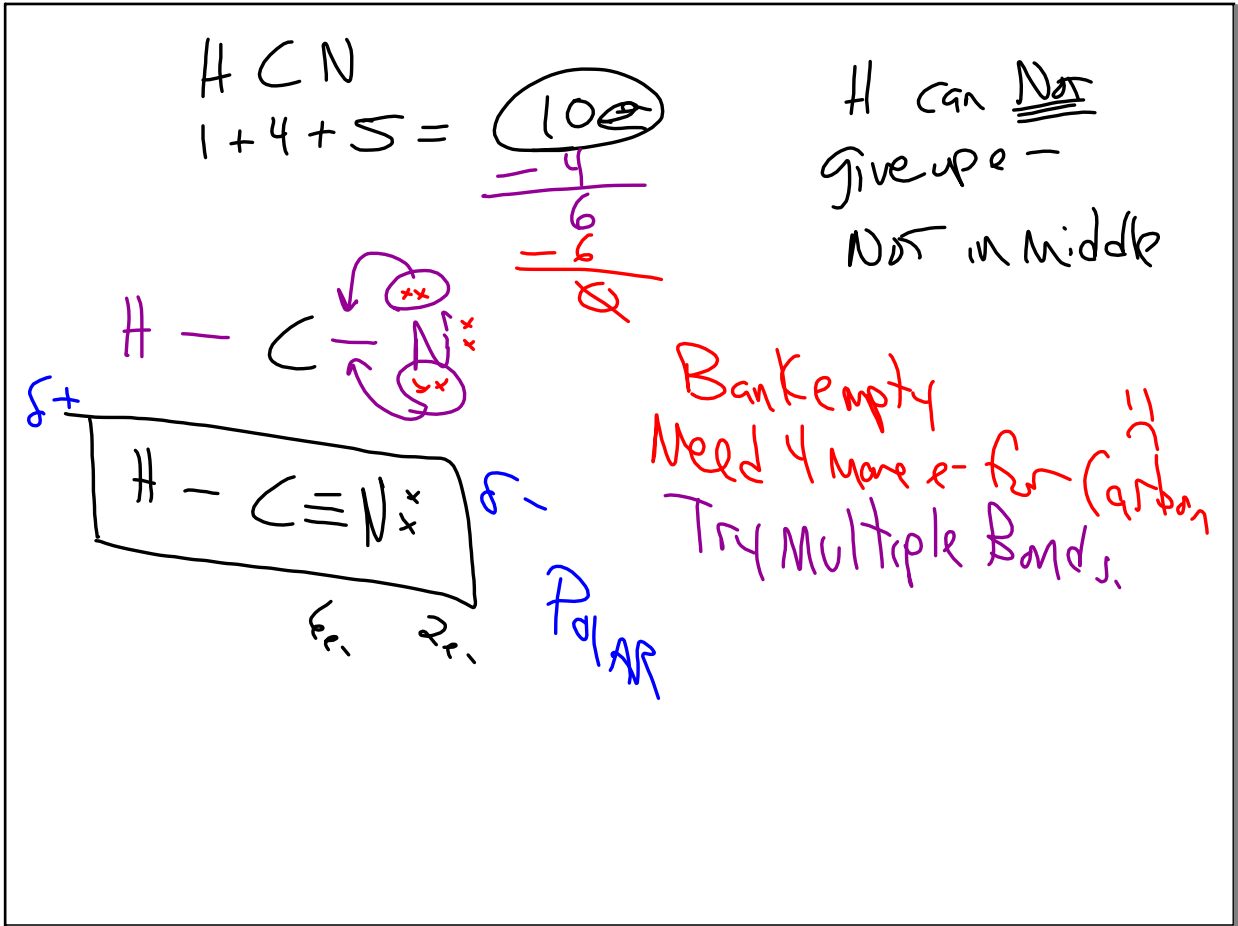
P is more metallic

3 bond sites  
1 non-bond site (lone pair e<sup>-</sup>)

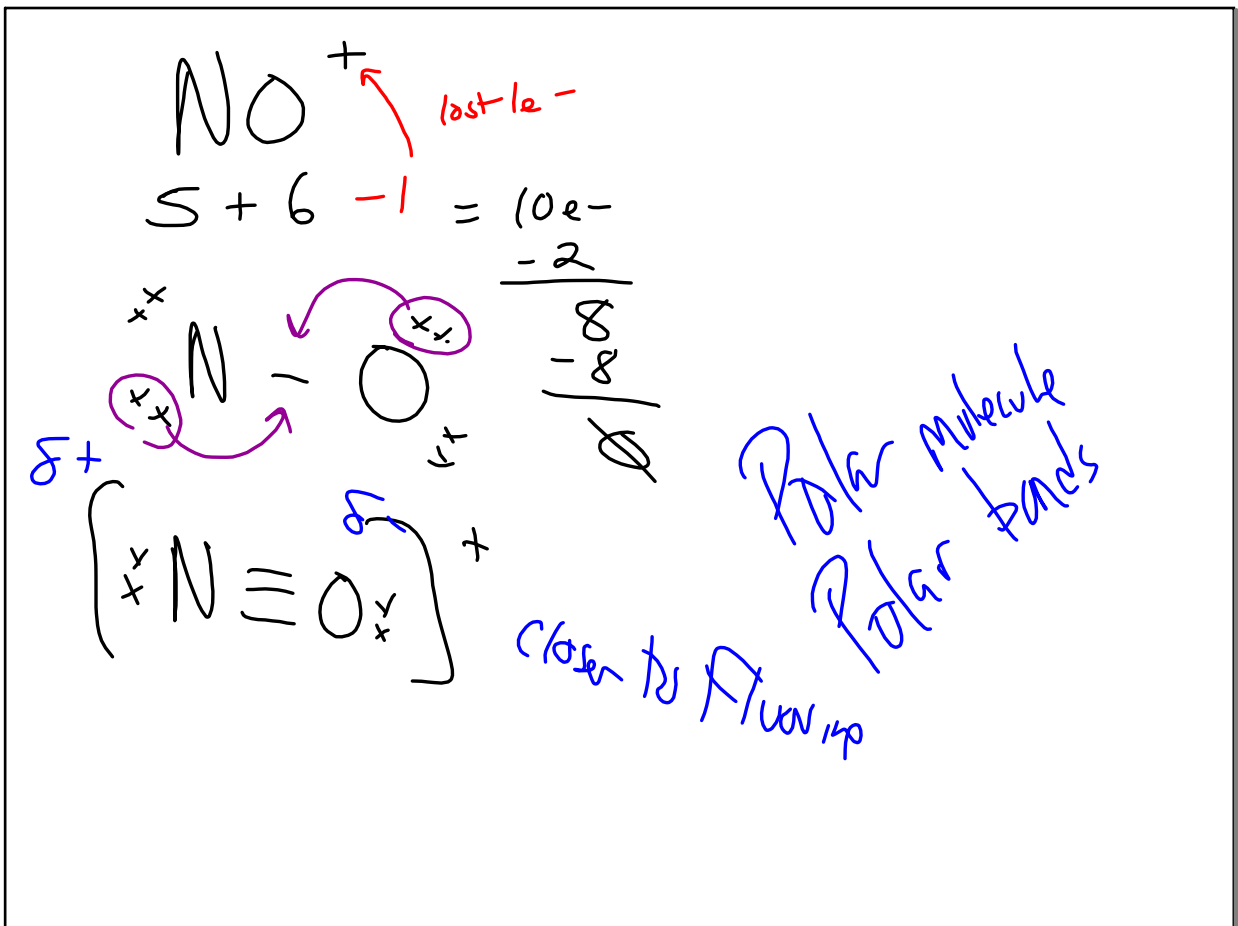
4/2n

P347 + 56/ Shapes.

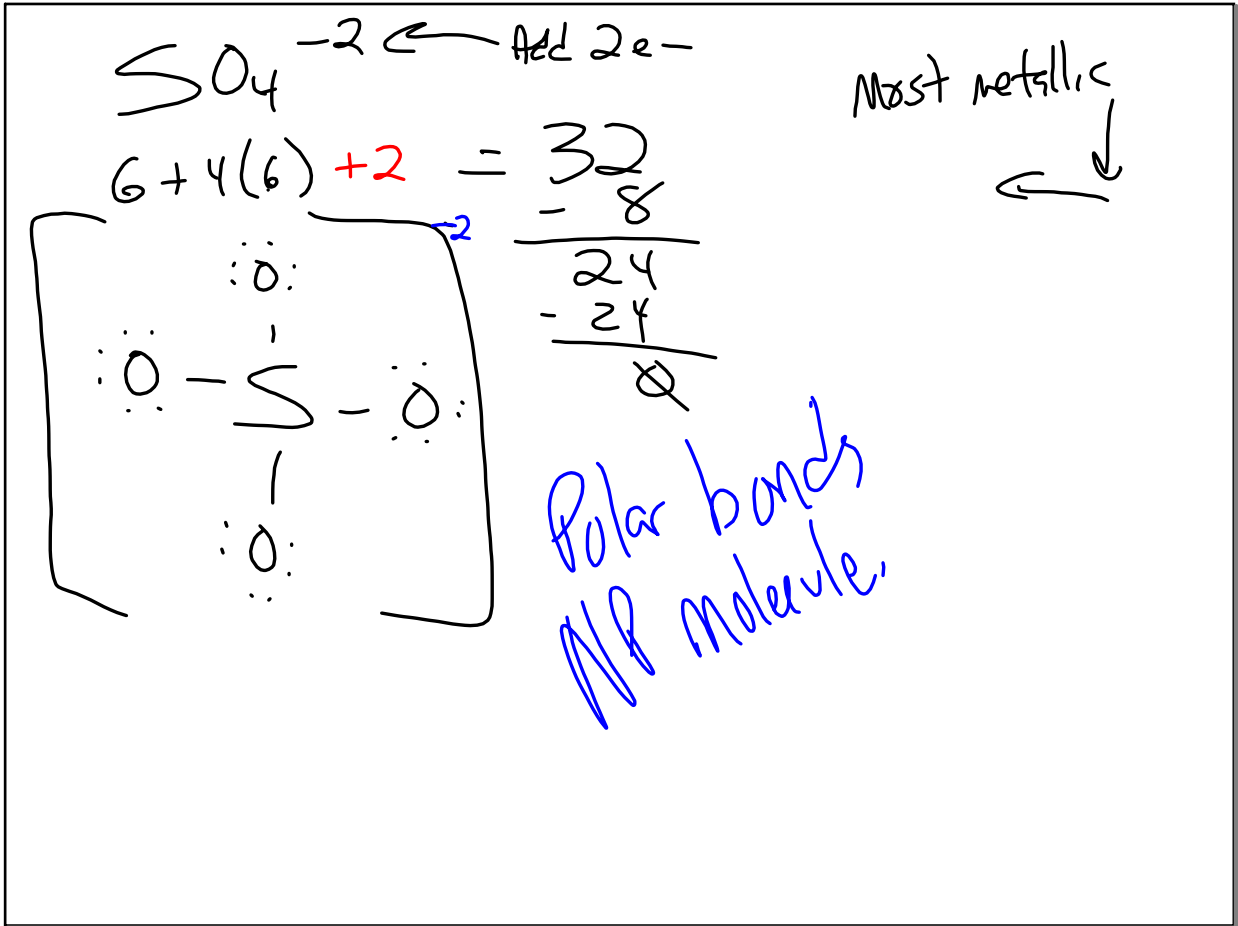
Nov 21-8:14 AM



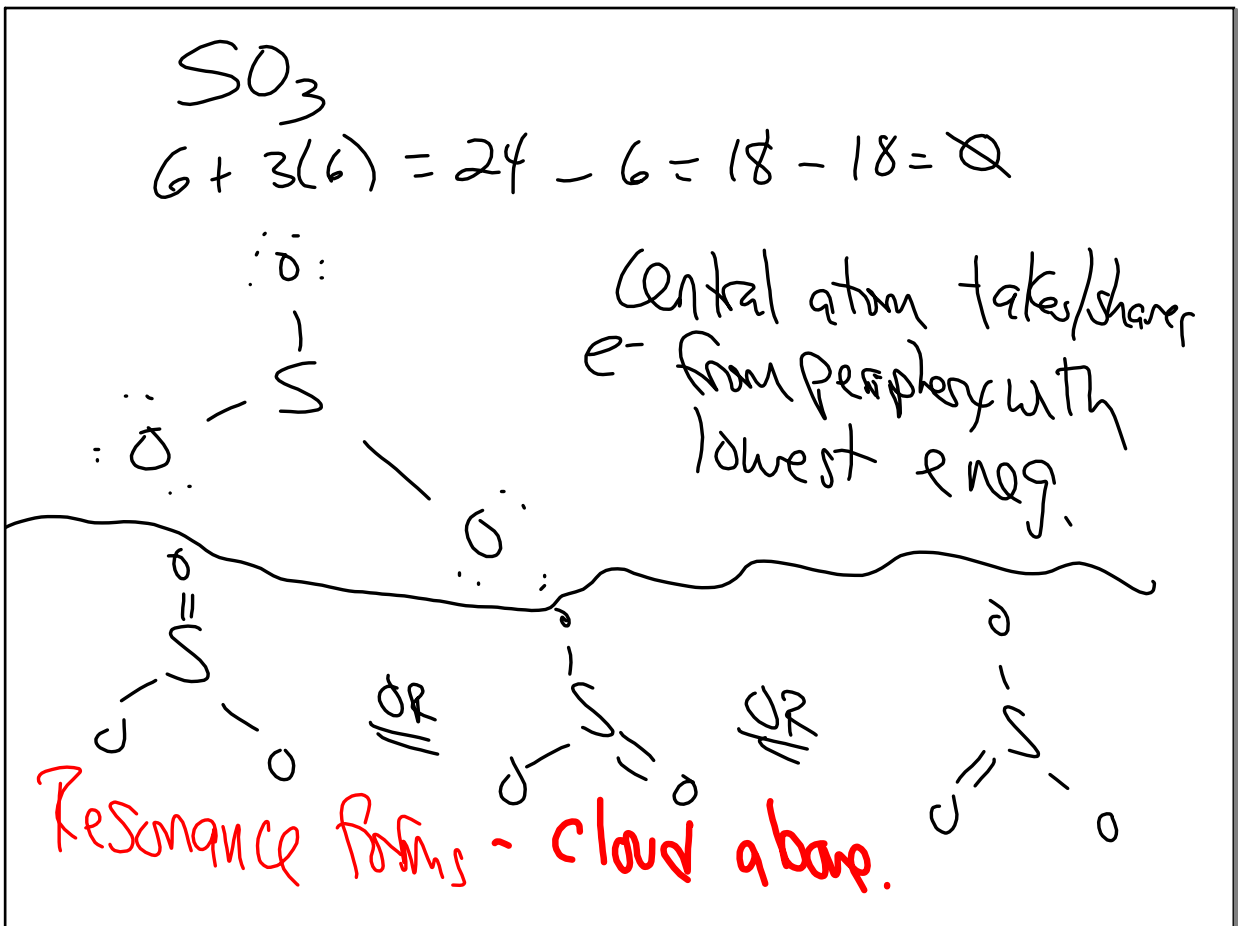
Nov 21-8:26 AM



Nov 21-8:30 AM



Nov 21-8:34 AM



Nov 21-8:39 AM

HW

Lab Tues

Mon PS 8-1 # 1-17, 21, 23, 24  
27

Nov 21-8:42 AM