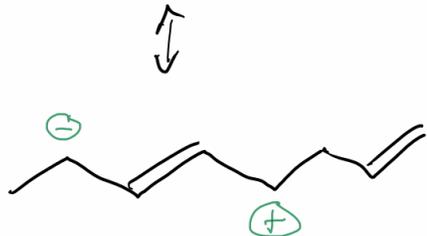
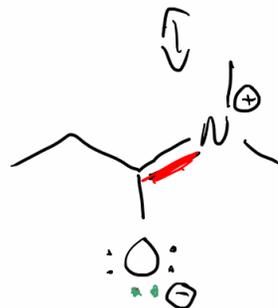
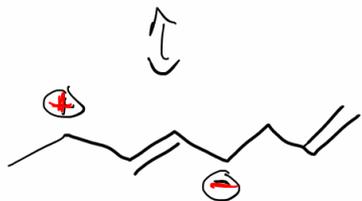
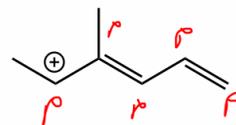
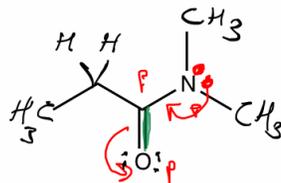
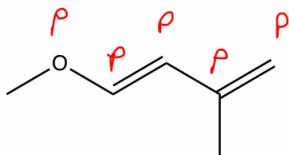
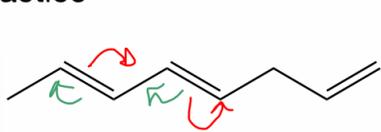


# Practice



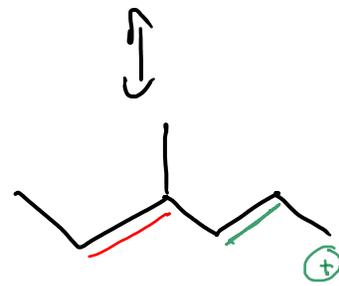
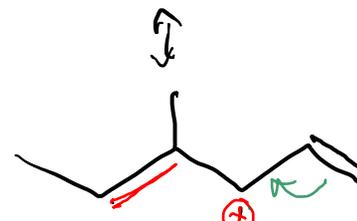
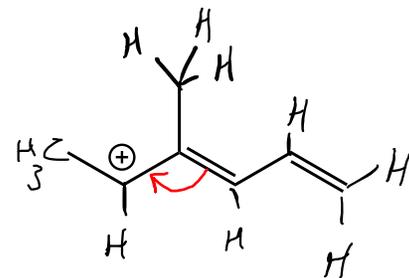
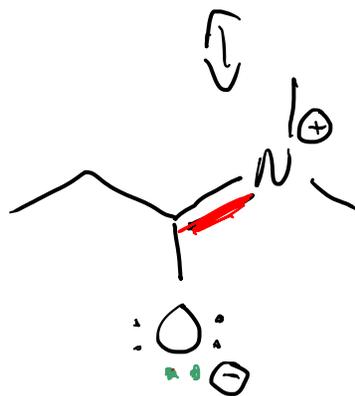
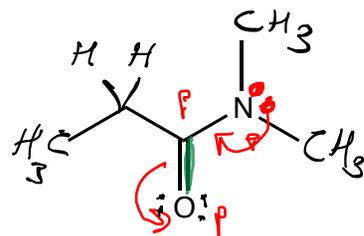
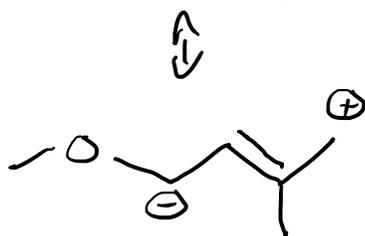
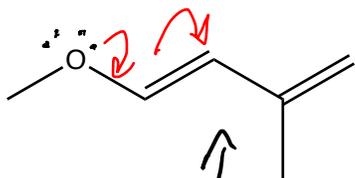
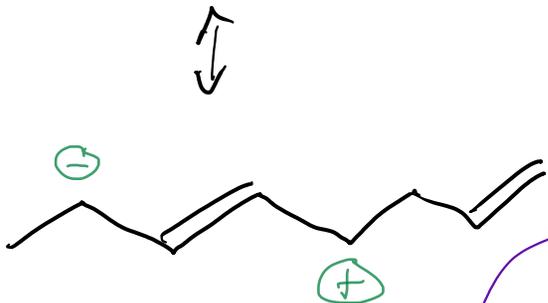
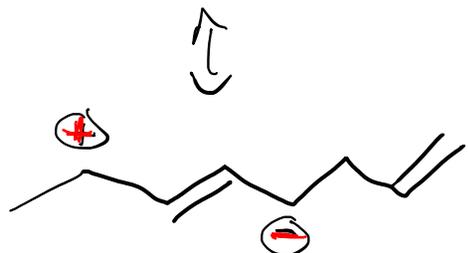
doesn't work  
can't put a pi bond here because of the 2 H atoms

can't charge the charge of the molecule

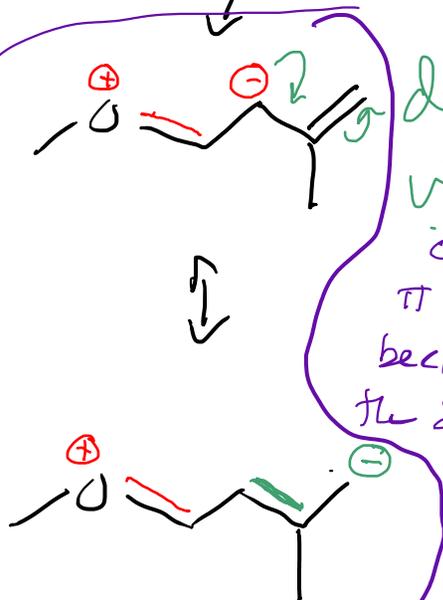
Strategies of p orbitals

- move  $\pi$  bonds towards  $\pi$  bonds
- move  $\pi$  bonds towards empty p orbitals.
- move lp e-'s towards  $\pi$  bonds
- move lp e-'s towards empty p orbitals

Practice

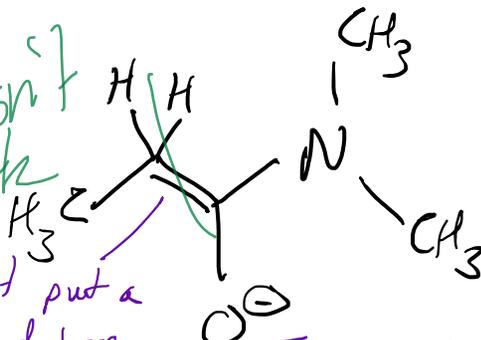


most important



doesn't work  
can't put a pi bond here because of the 2H atoms

can't charge the charge of the molecule

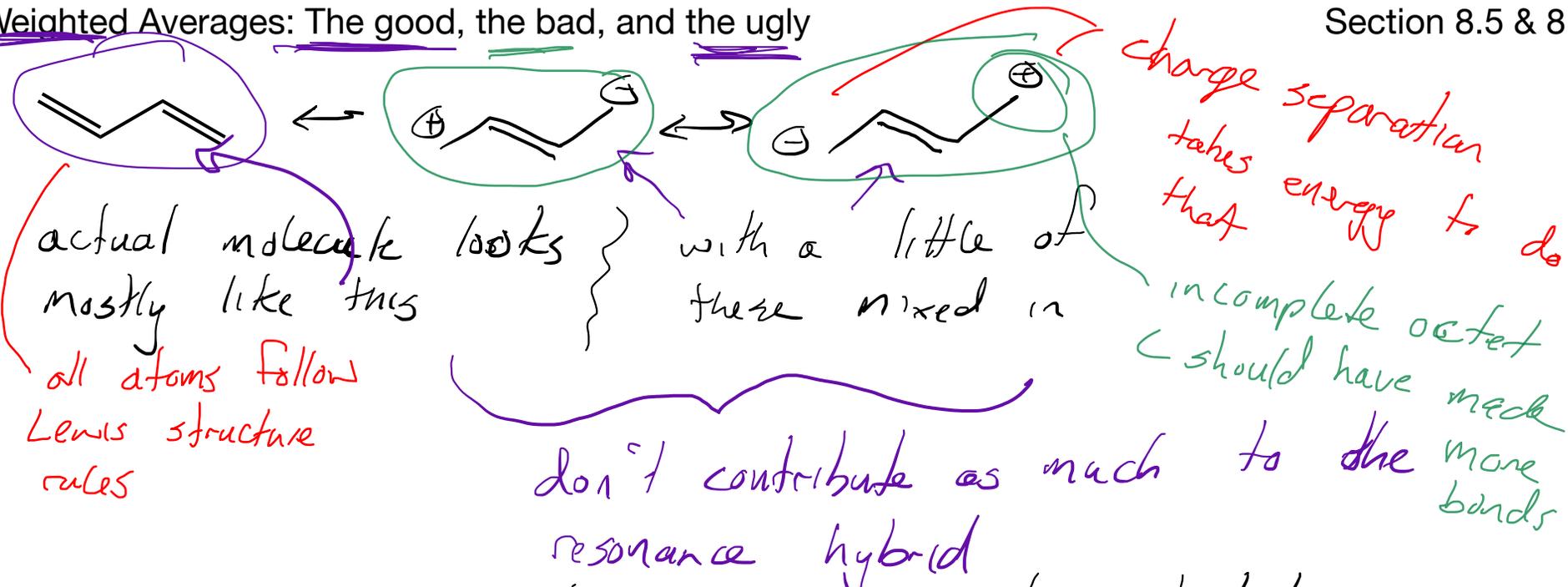


too many bonds



2+ charges

# Weighted Averages: The good, the bad, and the ugly



The "better" the contributor the more it contributes to the resonance hybrid.

Creating charge separation

Creating atoms with incomplete octets

Putting the "wrong" charge on an atom

least eneg atom with  $\ominus$

most eneg atom with  $\oplus$

all three problems would create a structure that would be an insignificant contributor to the resonance hybrid  
don't draw it