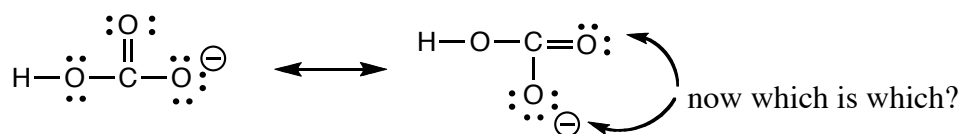


Notes on Resonance Homework

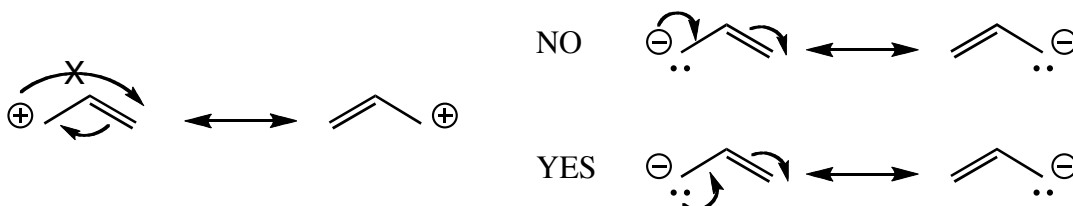
- MUST**
- Draw complete Lewis Structures (show all lone pairs, formal charges)
 - Use curved arrows to show electron "movement" and \longleftrightarrow arrows between structures
 - Rank all resonance forms. If equivalent, say so!
 - Explain ranking

Goal: learn to recognize and draw good resonance forms

- DON'T**
- Have more than 8 electrons on 2nd row elements! (C, N, O)
 - Have +2 or -2 charge on an atom (highly unstable; poor contributor)
 - Move atoms (only electrons move)



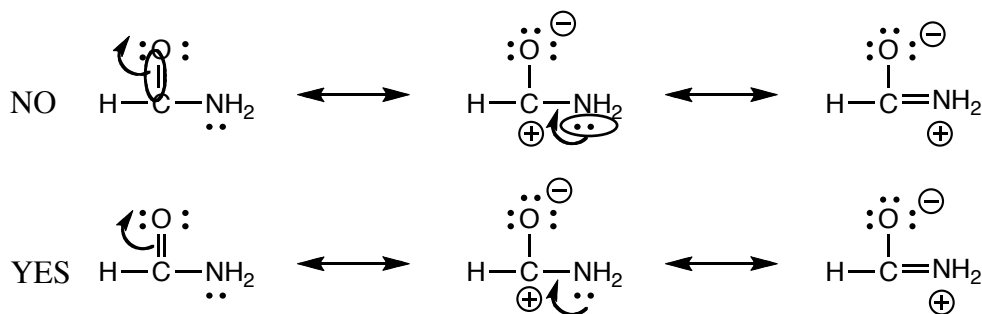
- DON'T**
- Use arrows to move charges (arrows show electron movement; start at bond or lone pair)



- DON'T**
- Omit H's unless it is a line drawing (if you draw "C" you have to draw attached "H" atoms!)



- HINTS**
- Don't show formal charge math (wastes time)
 - Don't circle the electrons being moved (adds clutter; makes it hard to read)



- **When do I stop?!** If the structure under consideration is charged, then the most significant resonance is that which delocalizes the charge. Once you've done that, you can probably stop. Otherwise, look for the best resonance contributors (filled octets, minimum number of charges, negative charge on more electronegative atom, etc.).