

Video Practice for Topic I.7: Resonance and Delocalization Energy

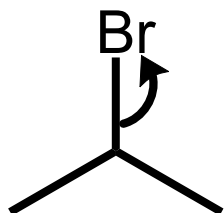
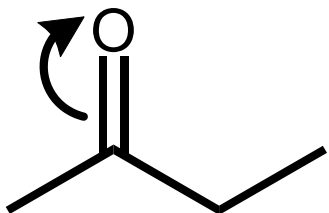
Recommended reading for this topic:

Lesson I.7 in *Organic Chemistry 1 Primer 2018*,
by Rhett C. Smith, Andrew G. Tennyson and Tania Houjeiry

Additional Videos and how to match videos to your course text book:
ProtonGuru.com

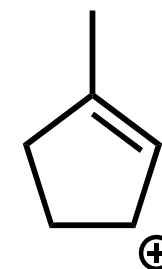
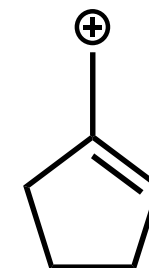
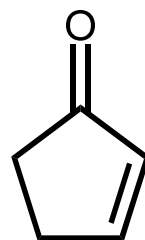
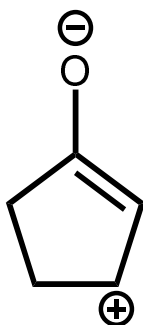
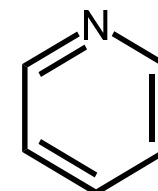
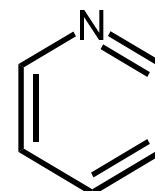
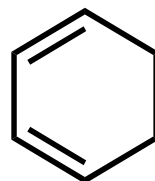
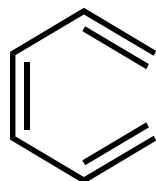
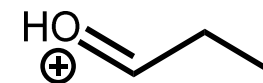
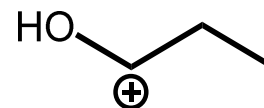
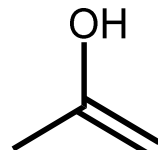
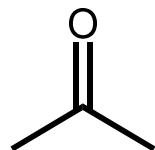
Resonance and Delocalization Energy

Indicate whether each proposed resonance arrow below is an allowed resonance arrow or not:



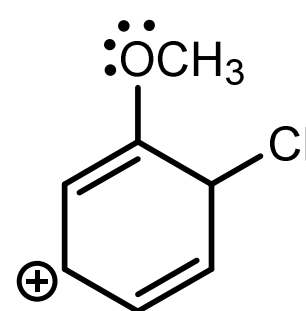
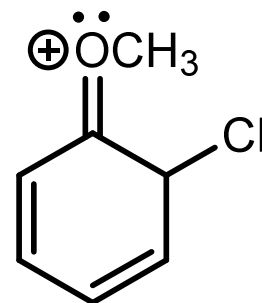
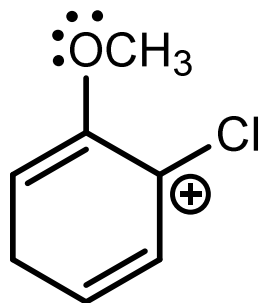
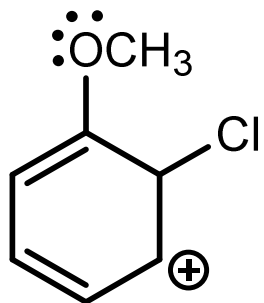
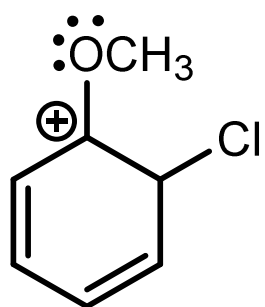
Resonance and Delocalization Energy

For each pair of compounds, indicate whether they are a legitimate pair of resonance contributors to the same structure or not.



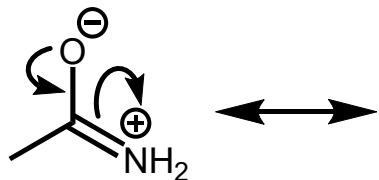
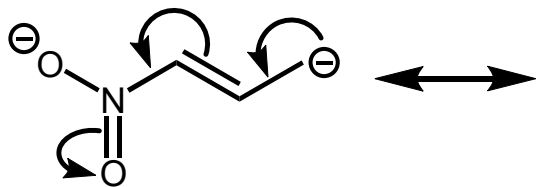
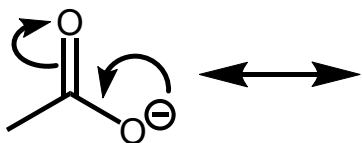
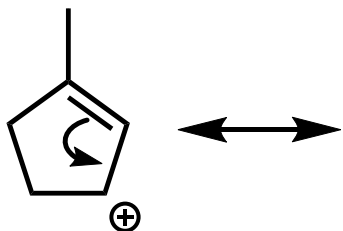
Resonance and Delocalization Energy

All of these are resonance contributors to the same structure except for which one?



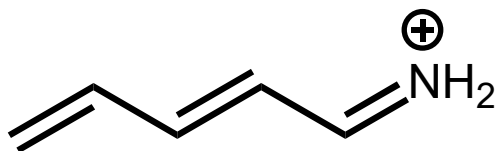
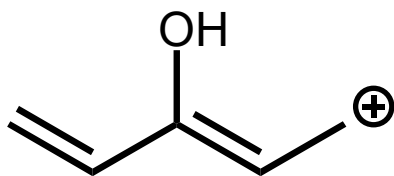
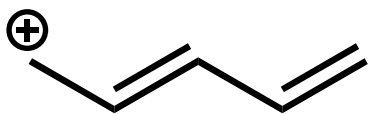
Resonance and Delocalization Energy

Given the curved arrows, provide the missing resonance contributor for each of these initial structures, being careful to show all non-zero formal charges.



Resonance and Delocalization Energy

For the structures below, provide all resonance contributors that are reasonable (atoms may have fewer than 8 electrons in their valence shells, but they may **not exceed an octet** of electrons).



Resonance and Delocalization Energy

For the structures below, provide all resonance contributors that are reasonable (meaning atoms may have fewer than 8 electrons in their valence shells, but they may not exceed an octet of electrons).

