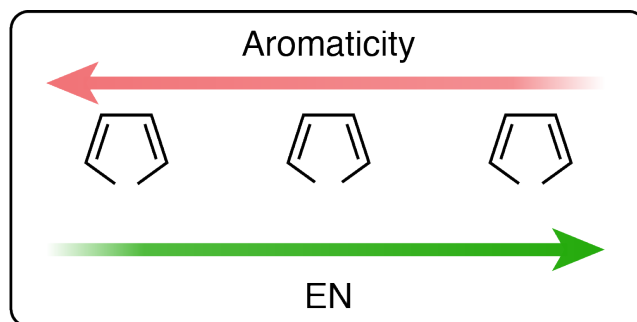
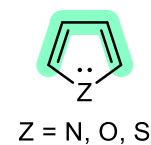


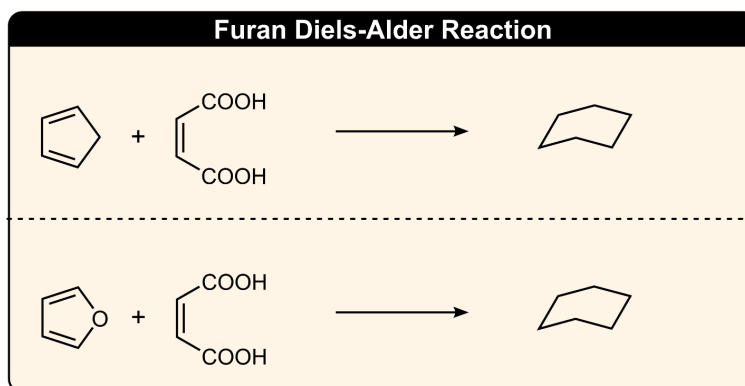
CONCEPT: ADDITION REACTIONS OF FURAN

- Pyrrole, furan, and thiophene can be considered as _____ bridged by a heteroatom.
- A 5-membered heterocycle's ability to react like a diene depends on how _____ it is.
 - Heterocyclic aromatic resonance stabilization ___ when the heteroatom's EN ___.

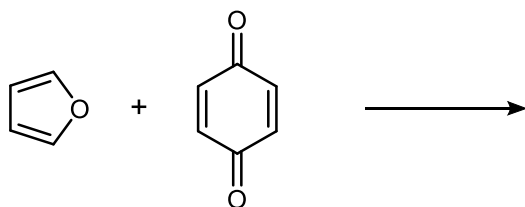


Diels-Alder Reaction of Furan

- Being the least aromatic 5-membered heterocycle, furan acts the _____ like a diene.
 - Furan can undergo the Diels-Alder reaction like cyclopentadiene.



EXAMPLE: Draw the structure of the major product for the following reaction. Include stereochemistry.



PRACTICE: Write an appropriate synthetic sequence for the following compound starting from furan.

