

CONCEPT: ORBITAL DIAGRAMS: 6-ATOM 1,3,5-HEXATRIENE

- Conjugated polyenes are famous for their unique ability to *resonate*, reacting in multiple locations.
- They can participate in many types of reactions due to the symmetry of their molecular orbitals.

EXAMPLE: Predict the LCAO Model of 6-carbon 1,3,5-hexatriene. Identify bonding, non-bonding and antibonding orbitals. Determine the HOMO and LUMO orbitals.

