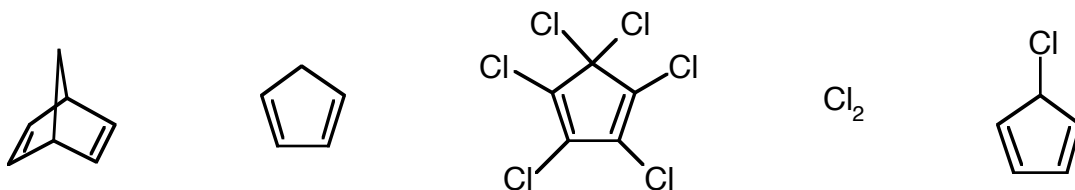


Names: _____
Chem 226/ Fall 2008

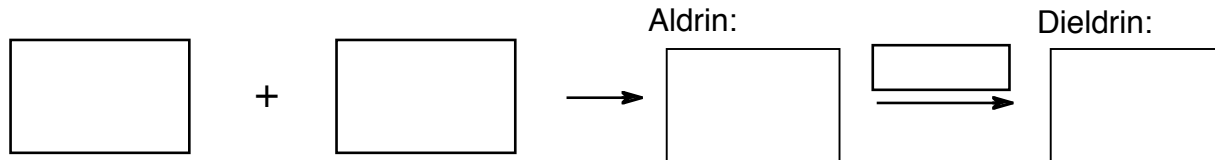
Section _____
Dr. Rusay

Diels Alder: Post Lab Questions

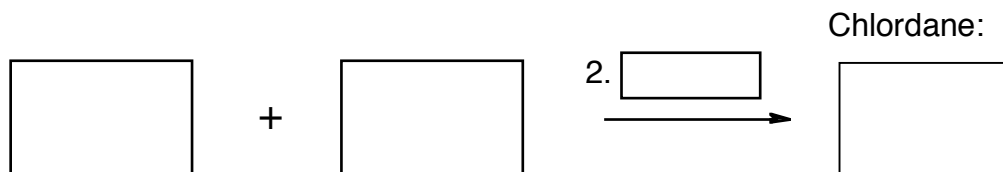
Initially the Diels Alder reaction was utilized to commercially produce insecticides in the 1930's. A large number of highly chlorinated insecticides were produced. Questions that relate to several of those compounds, Aldrin, Dieldrin, Chlordane, and Heptachlor follow. Draw structures for each of the products and complete the missing information for the respective reactions. The five compounds/ molecules listed below will assist you in your answers.



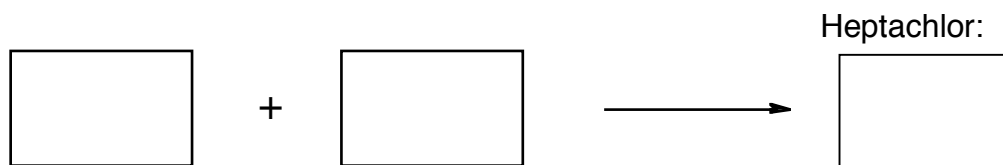
1.



2.



3.



4. Show the electron movements for the formation of the bonds in Heptachlor through the use of arrows from the starting materials as in the example for ethene and cyclopentadiene.

5. a) Briefly describe (1) what these pesticides were / are used for, and (2) why they have been banned from use in most countries. b) A number of the banned products are being exported and sold in developing countries. Choose whether you believe that this practice is acceptable and ethical, or unacceptable and unethical. Support your choice with three reasons why.