**E2 Reaction Considerations:**

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**When analyzing highly substituted haloalkanes for a possible E2 reaction:**

1. **You need to identify the most stable possible alkene (most highly substituted, *trans* over *cis*) that could be made (Zaitsev product).**

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1. **Given the Zaitsev product you have identified, verify which anti-periplanar H atom(s) can be removed during the reaction to determine whether the product is E or Z.**
2. **You often need to rotate bonds to identify the particular H atom and configuration that reacts to give the alkene product.**

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**Putting it all together:**

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**E2 Reaction of cyclohexane derivatives:**

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**When analyzing highly substituted haloalkanes for a possible E2 reaction:**

1. **You need to identify the most stable possible alkene (most highly substituted, *trans* over *cis*) that could be made (Zaitsev product).**
2. **Given the Zaitsev product you have identified, verify which anti-periplanar H atom(s) can be removed during the reaction to determine if that product can be made.**
3. **You often need to flip chairs in cyclohexane derivatives to identify the particular H atom and configuration that reacts to give the alkene product.**

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**Rule:**

**Classic Examples:**

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**SN2 Reactions of Cyclohexanes:**

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**Rule:**

**Substitution vs. Elimination Examples:**

**Methyl Haloalkanes (CH3X)**

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**Primary (1°) Haloalkanes**

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**Secondary (2°) Haloalkanes**

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**Tertiary (3°) Haloalkanes**

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