

Organic Chemistry I SN1 SN2 E1 E2 Decision Chart

Study Sheet: Substrate, Nucleophile, Solvent, and Heat Clues

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Organic Chemistry I | Study Guides

Overview

An Organic Chemistry I study sheet for students choosing between substitution and elimination mechanisms from substrate, nucleophile, solvent, and temperature clues.

What this document covers

- substrate class and carbocation stability
- nucleophile versus base strength
- polar protic and polar aprotic solvent clues
- heat and elimination bias
- stereochemistry and rearrangement checks

How to use it

- classify 24 reaction conditions by likely mechanism
- build a decision tree from substrate to product
- flag when rearrangements are possible
- predict substitution versus elimination products
- write two-sentence justifications for each choice

Common mistakes to avoid

- treating every strong base as SN2
- ignoring tertiary substrate limits
- missing solvent effects
- forgetting heat favors elimination
- predicting stereochemistry without mechanism