**SN2 vs SN1 vs E2 vs E1**

**Bimolecular Conditions**

\[ \text{SN}_2 / E_2 \]

- Good nuc / Strong base in high concentration

\[ \text{rate} = k [\text{Alkyl Halide}] [\text{Nuc}/\text{Base}] \uparrow \]

**Unimolecular Conditions**

\[ \text{SN}_1 / E_1 \]

- Poor nuc / Weak base in low [\( \cdot \)]

\( \text{(discourages } \text{SN}_2 \text{)} \)

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**Alkyl Halide**

1°

- \( \text{SN}_2 \) more than \( \text{E}_2 \)
  - No \( \text{SN}_1 \) or \( \text{E}_1 \) (cr)

2°

- Bulkier base
- Stronger base
- Higher temp

\( \{ \text{promotes } \text{E}_2 \text{ over } \text{SN}_2 \} \)

- Get both \( \text{SN}_1 \) \& \( \text{E}_1 \)

3°

- Get \( \text{SN}_1 \) \& \( \text{E}_1 \) \& \( \text{E}_2 \)

- No \( \text{SN}_2 \)

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The *bulkier* the base/nuc & the bulkier the alkyl halide, the greater the amount of elimination in all cases.