A-Level Chemistry Organic Mechanisms Guide

Level: A-Level **Subject:** Chemistry

A concise guide to approaching organic mechanisms and synthesis questions.

Core Principles

- Curly arrows show movement of electron pairs.
- Nucleophiles donate electron pairs.
- Electrophiles accept electron pairs.
- Reaction conditions are often essential for marks.
- Mechanisms should include charges and lone pairs where relevant.

Mechanisms to Review

- Nucleophilic substitution
- Electrophilic addition
- Nucleophilic addition
- Elimination
- Electrophilic substitution
- Acylation where required by specification

Practice Task

Choose one mechanism from your specification. Draw it from memory, then check every curly arrow, charge and intermediate.

Answer Guidance

Use this section for self-marking or tutor-led feedback. Award partial credit for correct method, clear reasoning and accurate use of terminology.

Self-Check

1. Are all curly arrows starting from an electron pair or bond?
2. Are charges shown correctly?
3. Are conditions included?
4. Does the final product match the reaction?