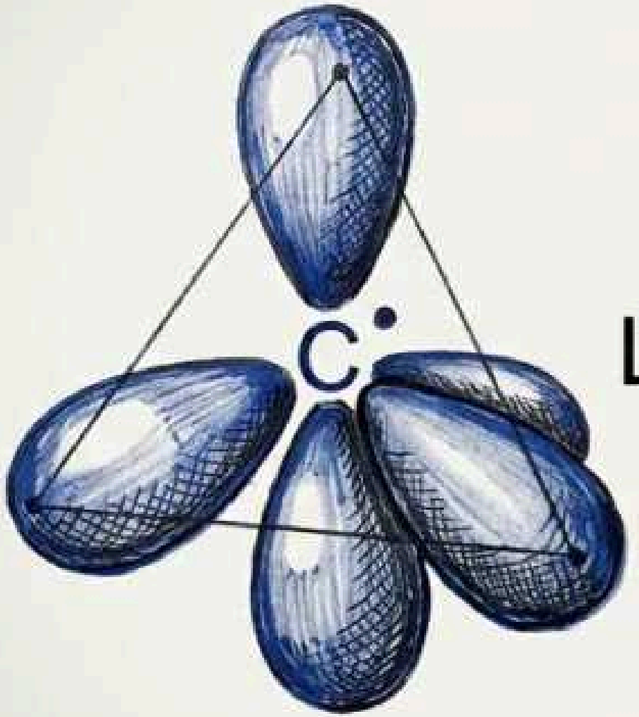
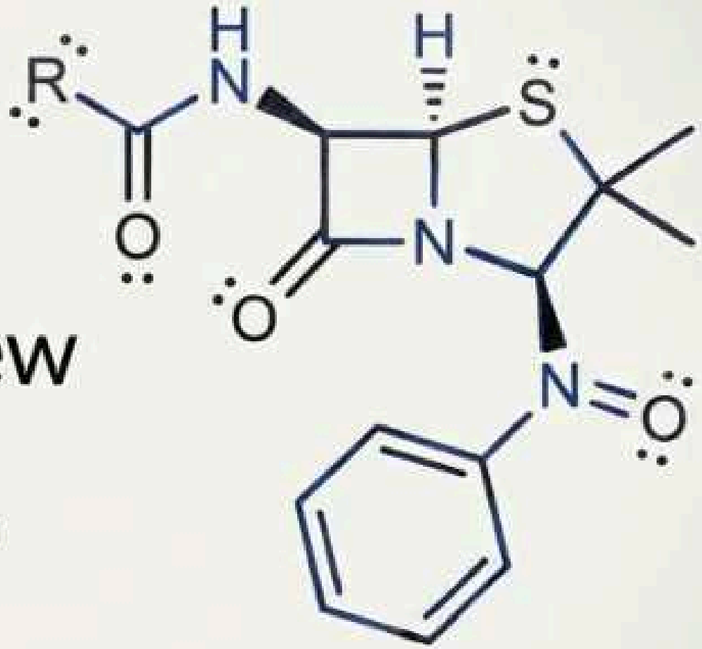


CHEM 210 B:
Organic Chemistry I

Lecture 0 - Course Overview

– Structure, Electron Flow, and Stability.



The Compensation Model: Paying it Forward

¶ 0.1

1. Be of service to humanity.



2. Tell us how you did it & what you learned.

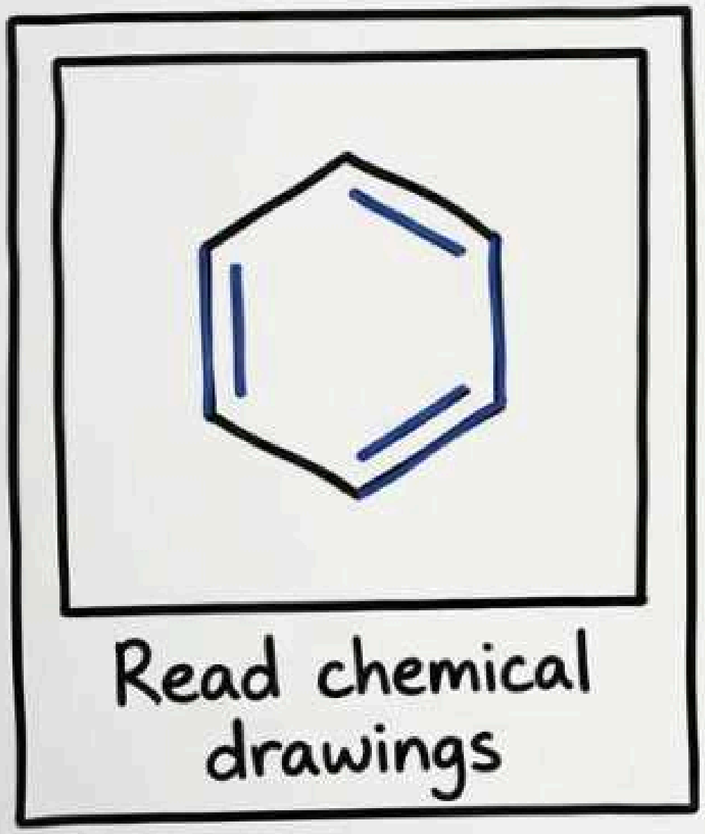
3. Contact garyanderson@mail.grokbot.com or X: @garyanderson.

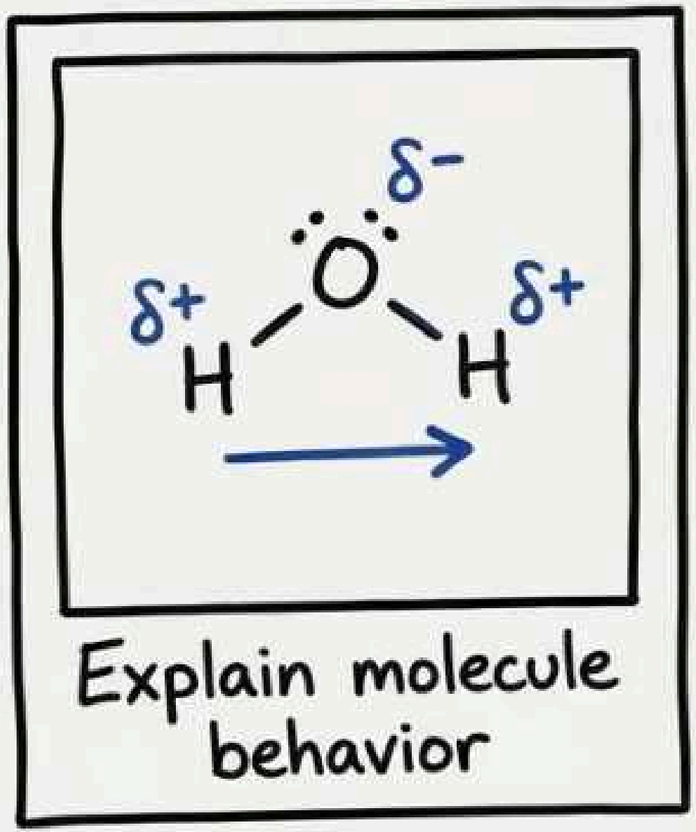


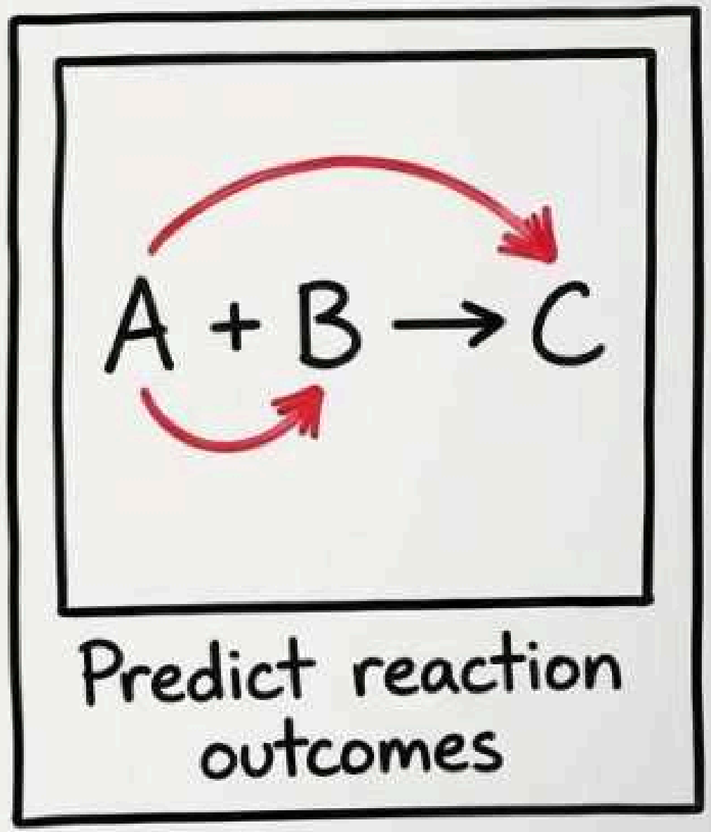
Welcome to Anderson Academy: CHEM 210 B (Brief)

Length: 1 Overview + 6 Short Lectures ≈ 1 Hour Total

Outcomes:

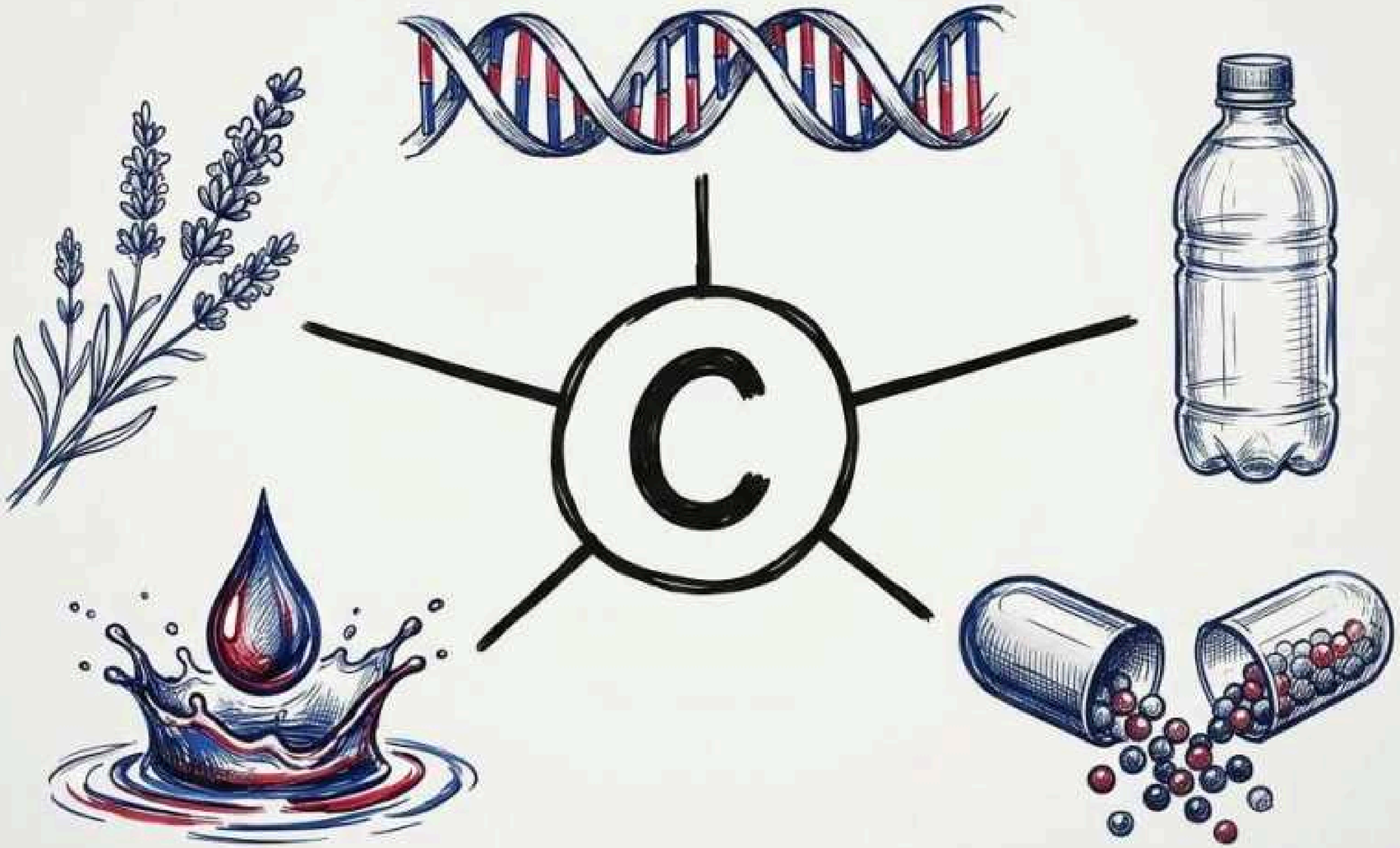






The Science of Carbon

Limitless possibilities through chains, rings, and branching frameworks.



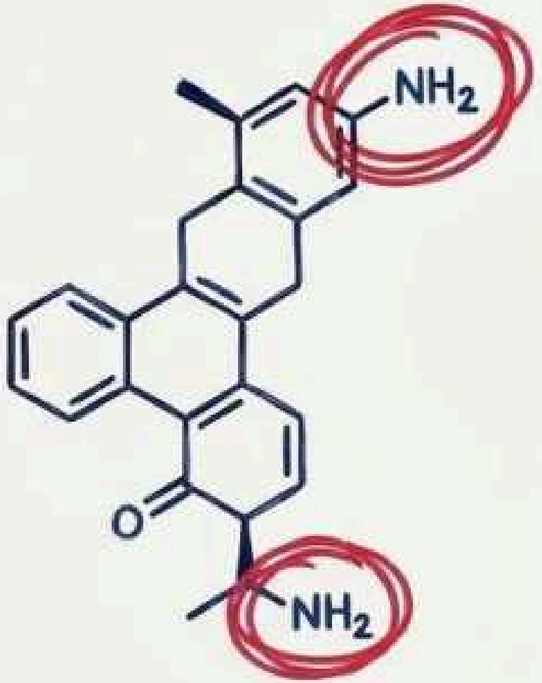
¶ 0.4

A Gateway Subject to Making Sense of Matter

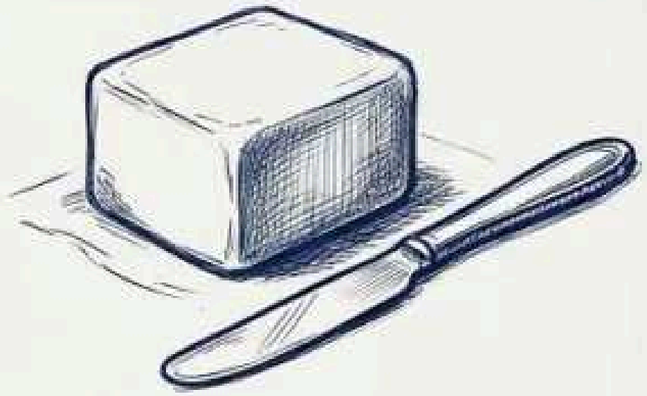
Explaining physical states and the fine line between medicines and toxins.



Cure



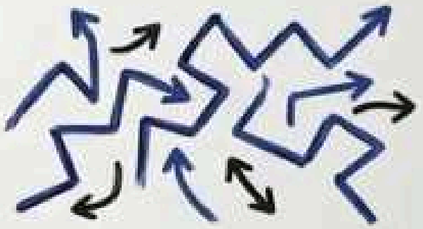
Poison







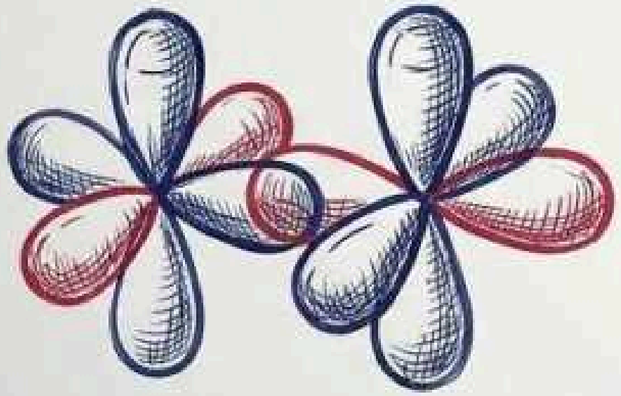
Solid
(Tightly Packed Chains)



Liquid
(Kinked, Loosely Packed)

The Map: Lectures 1 - 3

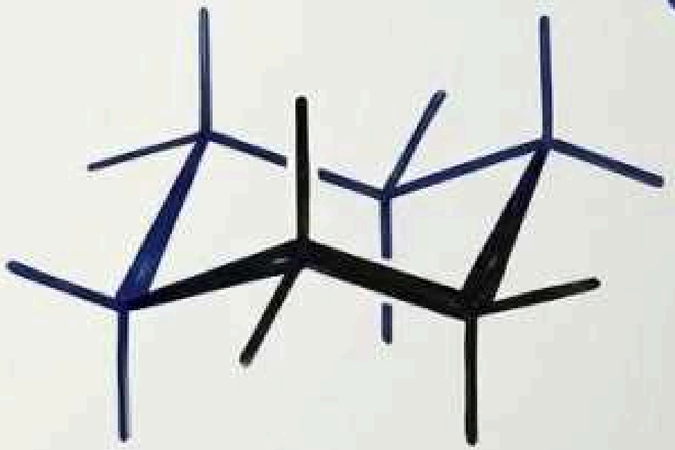
Stop 1:
Lec 1: Structure & Bonding (Hybridization & electron sharing)



Stop 2:
Accids, Bases & Reaction Language (Curved arrows)



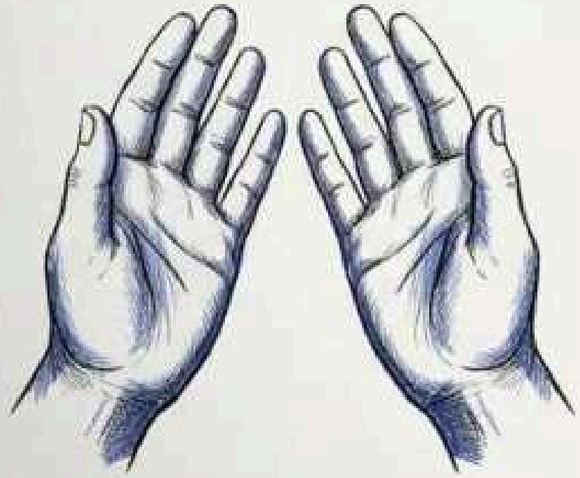
Stop 3:
Lec 3: Alkanes & Cycloalkanes (3D shapes)



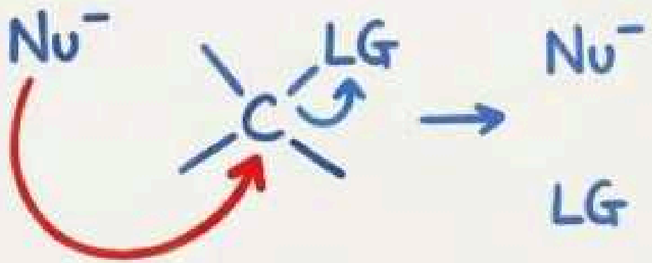
The Map: Lectures 4 - 6

¶0.6

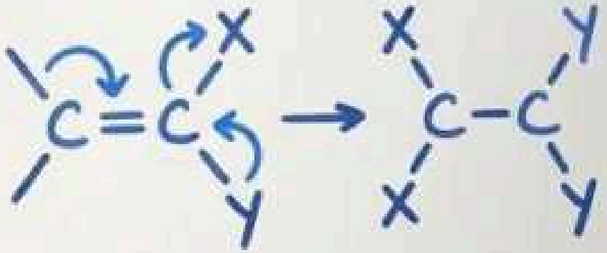
Lec 4:
Stereochemistry
(Mirror images)



Lec 5:
Substitution &
Elimination
(Core reaction families)



Lec 6:
Alkenes,
Alkynes
& Addition

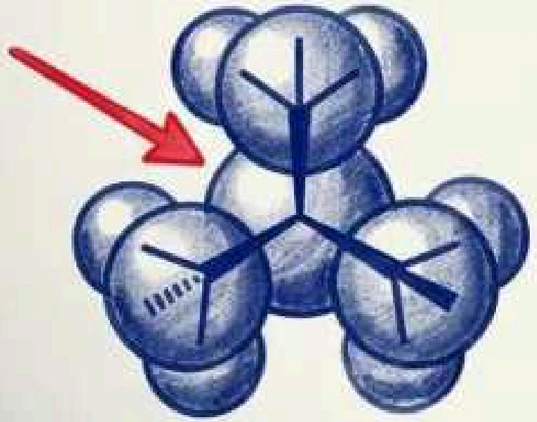


Three Big Ideas of Organic Chemistry

¶ 0.7

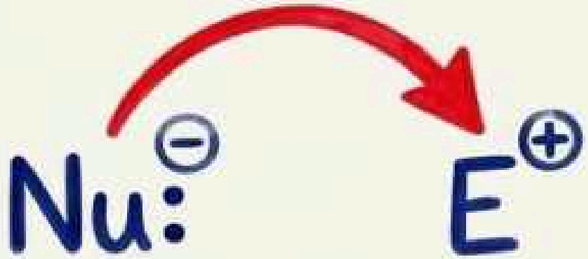
1. Structure Determines Behavior

(The arrangement of atoms in space)



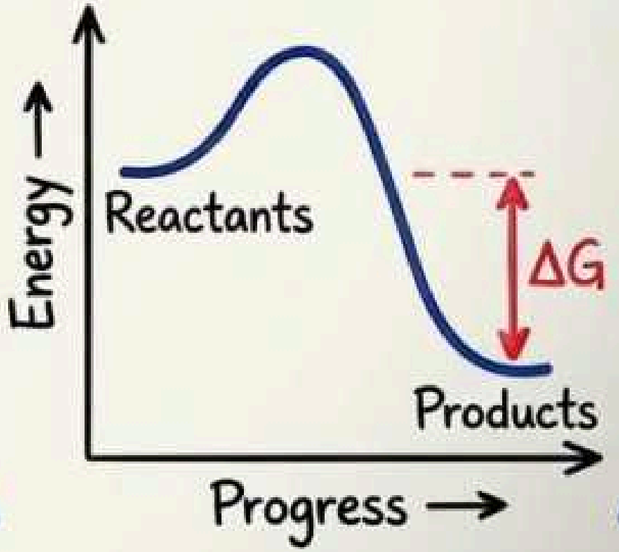
2. Electrons Move Rich to Poor

(The universal mechanism)



3. Stability Explains Outcomes

(Nature favors the stable species)



Ground Rules & Scope

¶0.8

Language & Units

Language: Words & Simple Drawings

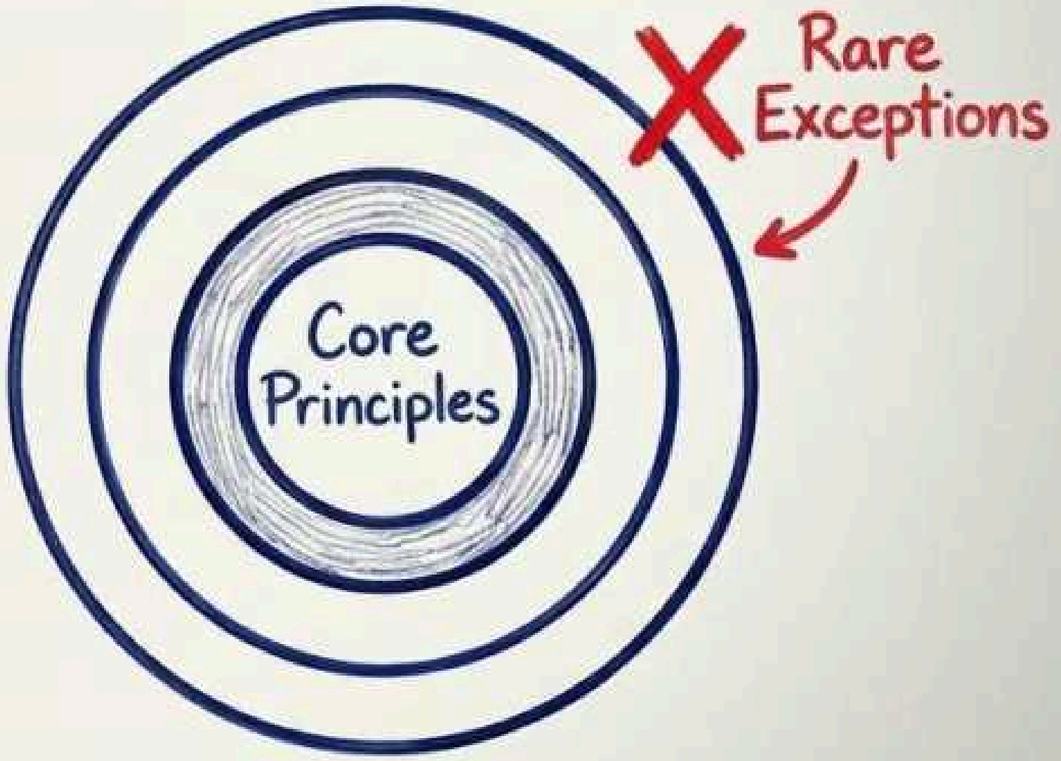
Units: Energy = kJ/mol | Temp = °C

$$\Delta G = \Delta H - T\Delta S$$

kJ/mol °C

Scope

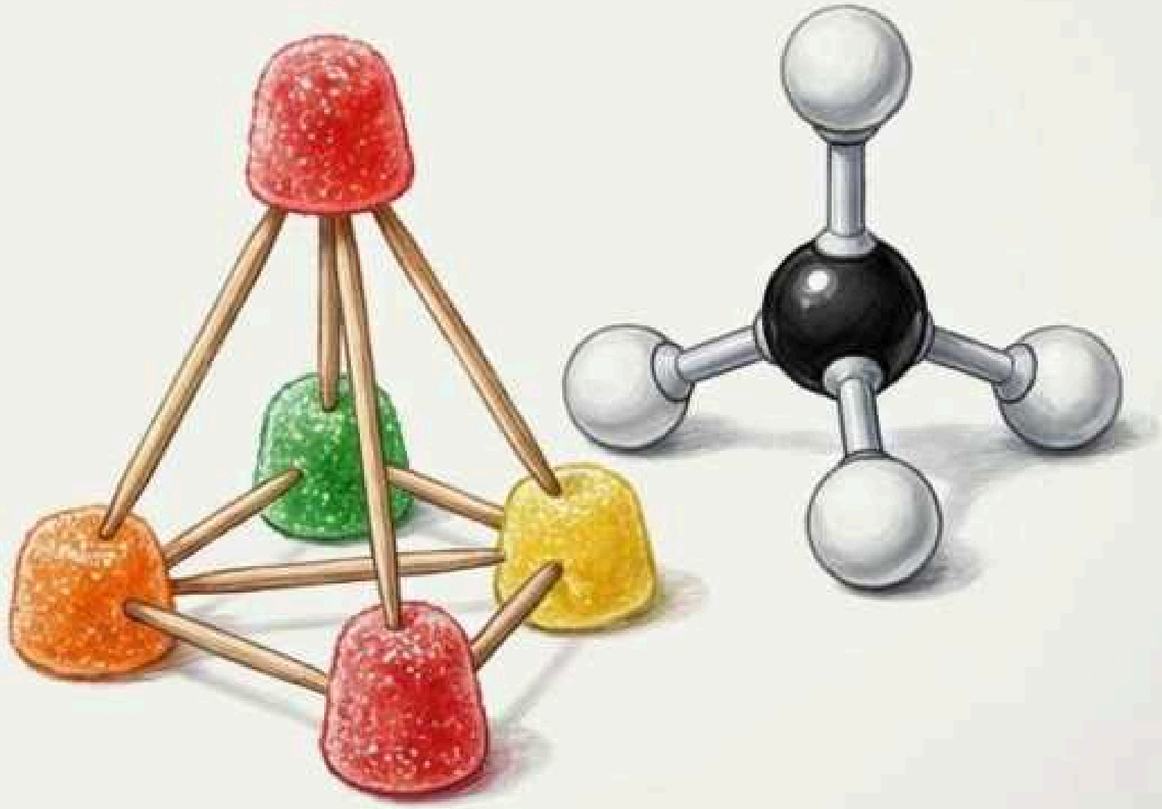
Scope: The core first-year foundation, excluding rare exceptions.



What You Need to Start

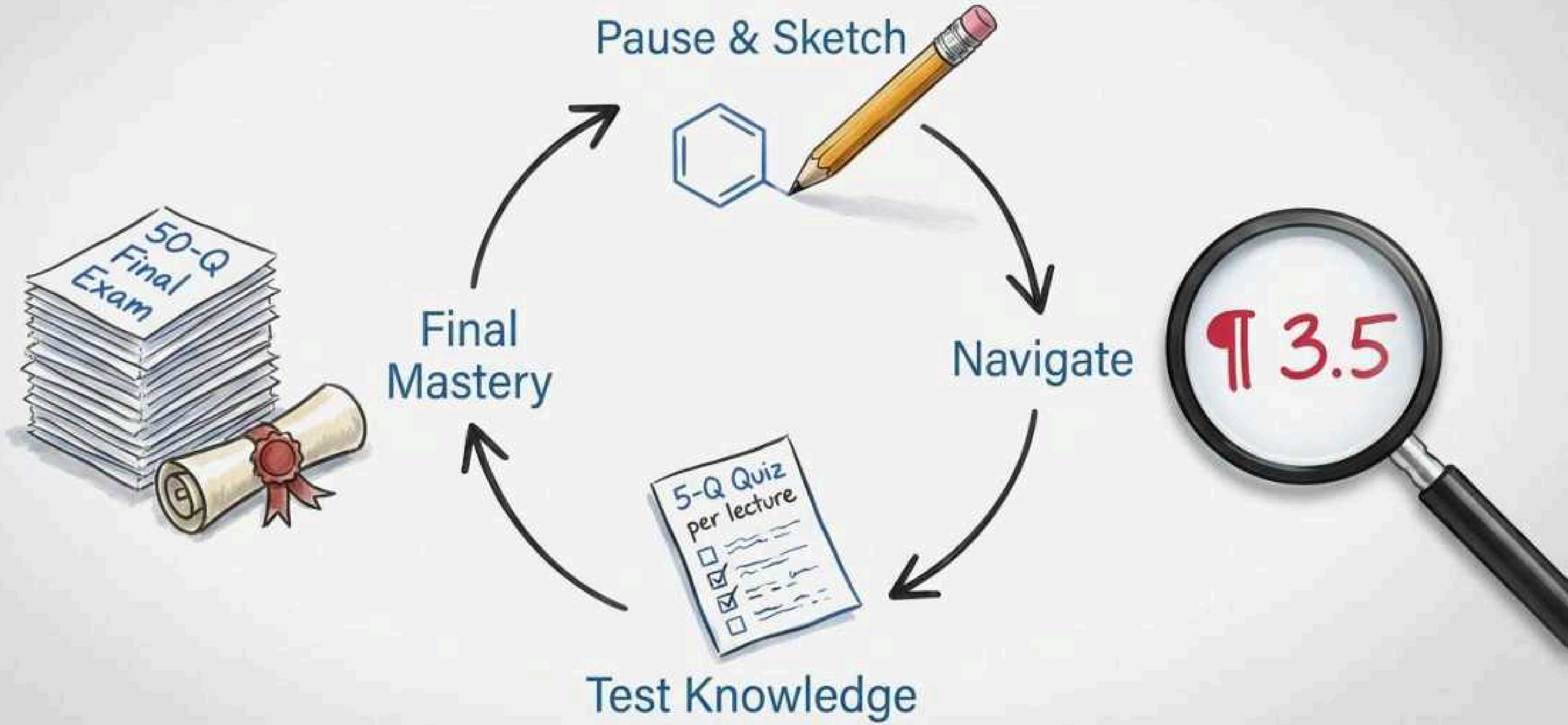
¶0.9

- ☑ Required: Chemistry 101 B & 102 B (Atoms, periodic table, basic equilibrium).
- ☑ Required: No laboratory access needed.
- ☑ Highly Recommended: Build 3D models.



How to Study Well

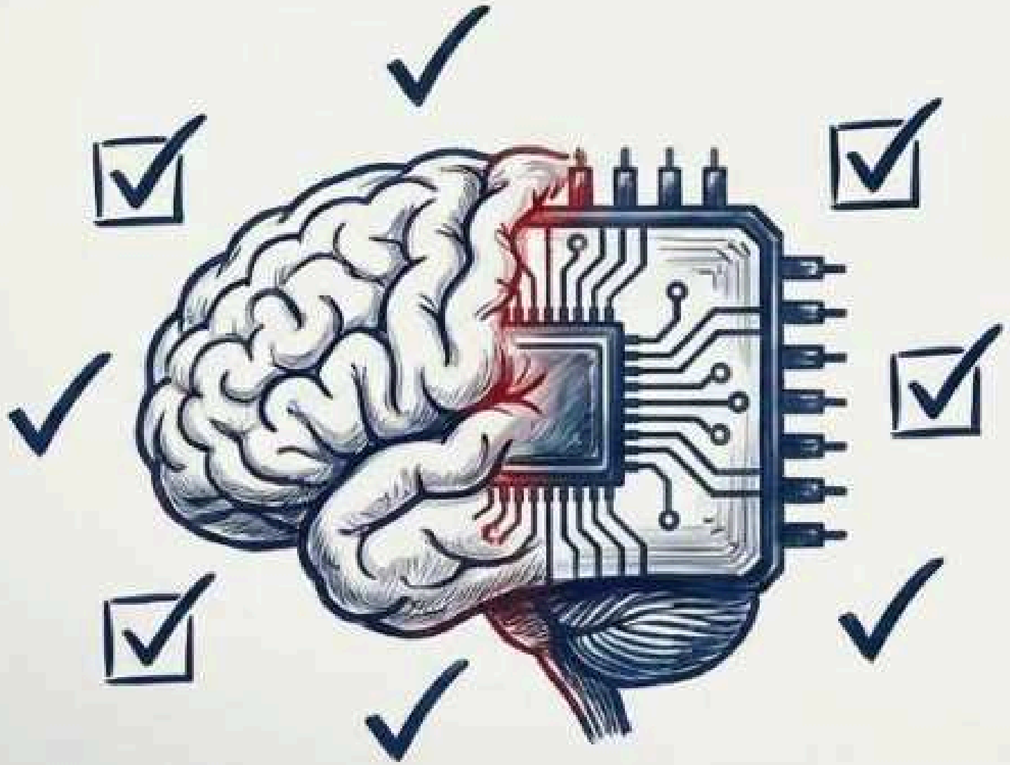
¶ 0.10



Development & Accuracy

¶0.11

- Developed by AI under human direction.
- Checked against standard references.
- Spot an error? Use the numbered paragraphs to report the exact place.



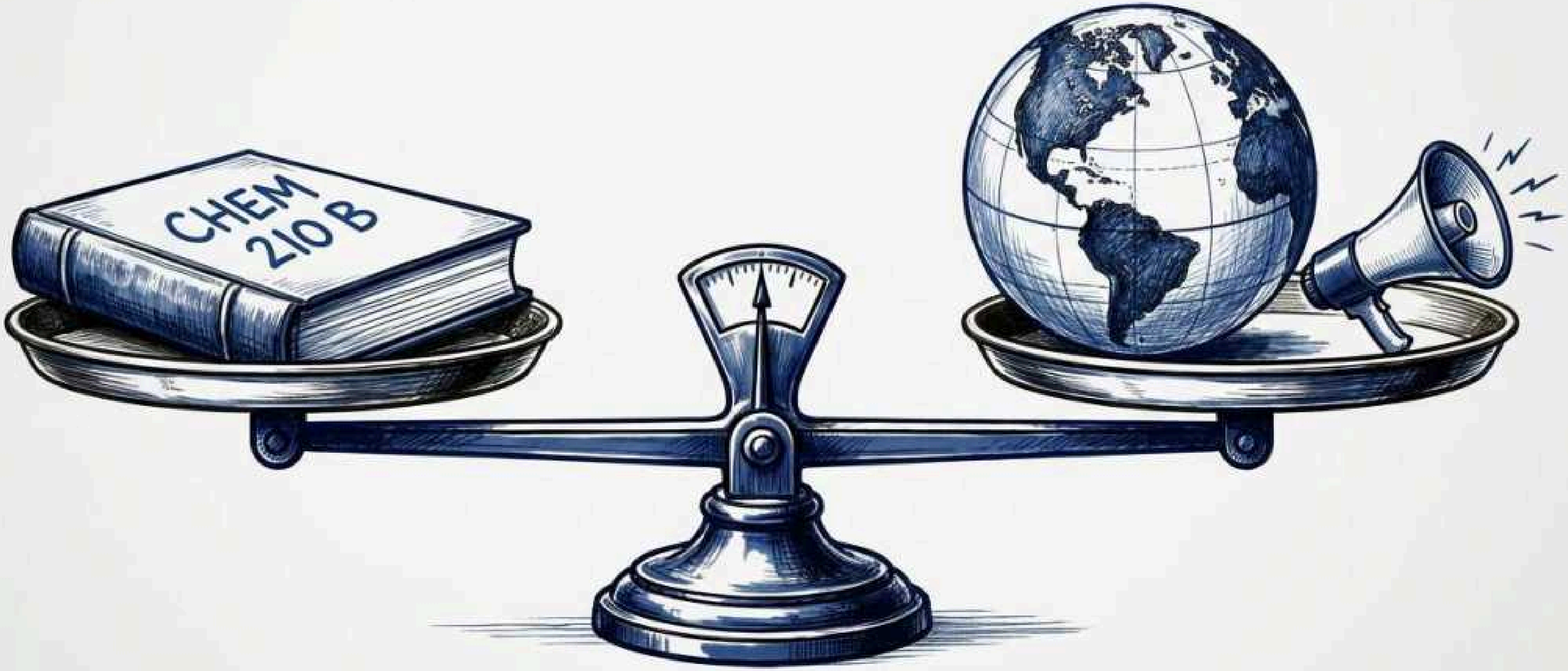


A Reminder: The Cost of Admission

¶ 0.12

The Academy remains free.

Compensation = Service to humanity + Reporting your impact.



Questions? Ready? Let's Begin.

¶0.13

