

Cohesive Chemistry Newsletter

#92 - Organic nomenclature

(2 min read)

Happy New Year, folks!

The first newsletter of 2026 relates to Structure 3.2.5:

Structure 3.2.5—"IUPAC nomenclature" refers to a set of rules used by the International Union of Pure and Applied Chemistry to apply systematic names to organic and inorganic compounds.

Apply IUPAC nomenclature to saturated or mono-unsaturated compounds that have up to six carbon atoms in the parent chain and contain one type of the following functional groups: halogeno, hydroxyl, carbonyl, carboxyl.

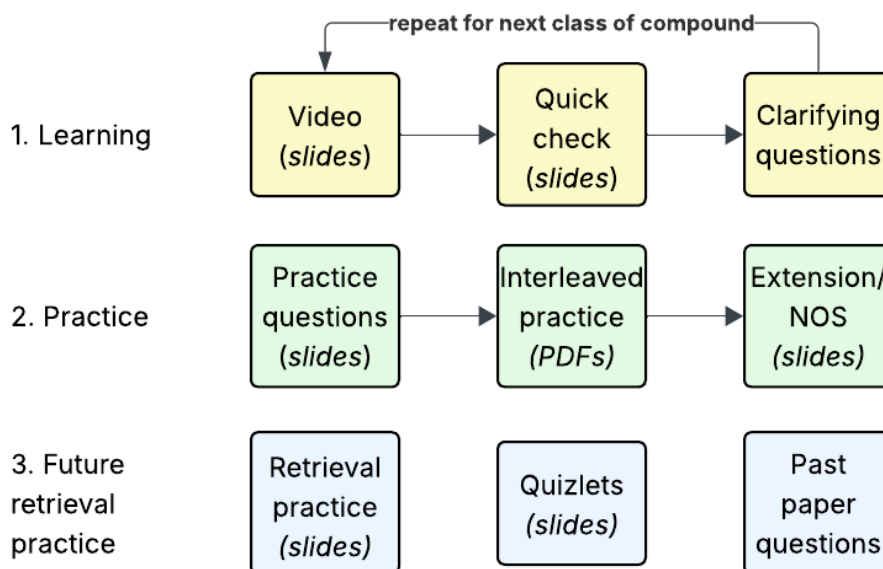
Include straight-chain and branched-chain isomers.
Include numeric prefixes (mono, di, tri, tetra, penta, hexa).

There are some parts of the course where individual, self-paced learning feels more effective than a teacher-directed approach. Organic nomenclature (IUPAC) is one such example because the underlying pattern in IUPAC naming will be straightforward for some and challenging for others. When students are working independently, the teacher can allocate more time to those who need it.

After teaching this content last week, I wanted to identify a few key features that seemed helpful:

1. Effective resources to explain and demonstrate the rules (my videos [here](#)).
2. Checks for understanding ('Quick checks' in the [Google Slides](#)).
3. Enough practice to develop mastery (see folder [here](#), but note that it still contains naming/drawing esters for the previous syllabus).
4. Extensions to reinforce and deepen understanding (also found in the [Google Slides](#)).

The overall process looked something like this:



As a quick self-promotion, there are many good YouTube videos on this content, but in mine, I have ensured that I include examples that highlight the relevant nuances and common ‘traps’ for students.

As a reminder for new teachers, the syllabus statement implies that students should be able to name ‘mono-unsaturated compounds’ with ‘one type of the following functional groups...’. This suggests that they should be able to differentiate between ethanol and ethenol (although I am yet to see a question like this).

Ultimately, making this knowledge stick will depend on continued practice in the remaining months of the course. These quizlets might be useful to integrate in subsequent lessons ([Class and naming suffixes](#) and [Naming and drawing organic compounds](#)).

Cheers

Ollie

If you want to unsubscribe from the newsletter, please email me at cohesivechemistry@gmail.com.