



ORGANIC CHEMISTRY

CHEMISTRY

LEVEL 2

Strategy Guide

This standard tends to scare a lot of students! Especially because it looks like it is just a whole bunch of memorisation that doesn't make any sense. However, it doesn't have to be that bad! If you take the time to notice the patterns in things like reactions, the memorisation load quickly drops right down.

OVERVIEW OF THE STANDARD/STRUCTURE OF THE EXAM

• This standard is broken in to a few key parts

- 1. Naming
- 2. Isomers
- 3. Solubility melting points and boiling points
- 4. Reactions
- 5. Polymers

There may be explicit questions on each of these areas, but expect naming to pop up throughout the paper.

CONCEPTS AND SKILLS TO FOCUS ON

Although every aspect of the exam is equally important, here are some key concepts to focus your study on:

Naming:

Naming is hands down the most important concept in this standard, if you can name organic molecules given a structure and draw them given a name then you are already well on your way to doing well in this standard. Naming and drawing is important all throughout the paper, whenever you see a name it's a really good habit to draw the molecule just so you can get a picture of what the molecule may be able to do. For example in questions where you are asked to draw isomers and you are unsure whether you have drawn the same structure twice, have a go at naming them to see if they are really different. You can even draw your own molecules and try and name them if you run out of examples in your text book.

Polymers:

Polymers always look kind of the same every year, either having to draw a polymer from a monomer or guess the monomer that formed the polymer. There is pretty much always a question on this and it always looks the same so if you get this down it's a pretty free M/E mark.

COMMON MISTAKES:

From the NCEA gods themselves:

Thinking Markovnikoff's rule is "the rich get richer":

While this is a handy little phrase to help us remember who gets the hydrogen in an addition reaction, just writing this alone will not suffice for an answer as to which product is major or minor. You need to explain a bit more in depth to show you understand with a phrase like "The carbon with the most hydrogens preferentially gets the hydrogen".

Don't get lazy with hydrogens:

This is a big point! Quite often in class or when we are studying we often cheat a little bit and don't put on all the hydrogens because there are just too many and its really boring to draw all of them on. However you NEED to do this in the exam! Not only will your structures not be marked correct if you don't have them on, it can also lead to you make silly mistakes that you otherwise wouldn't have.

OVERALL STUDY AND EXAM STRATEGY:

A decent grade is definitely achievable for this paper with a bit of hustle and grind. The key is to not rote learn, but try to understand the patterns. Pay careful attention to the wording of your explanations, and use the NCEA exemplars and marking schedules, as well as our walkthrough guides to get that M/E-level wording.

