



ORGANIC COMPOUNDS

CHEMISTRY

LEVEL 2

Study Checklist

If you've picked up this checklist, congrats! You've begun the first step in a system of resources designed to help you through the Organic Compounds external. To make the most of this, we suggest you sit down, grab a pen, and mark any points that you're feeling a little unsure of. Then, create a subject audit using our template, or refer to the page numbers to find the section in our walkthrough guide to help you out!

FUNCTIONAL GROUPS

- I can identify, draw and name alkanes, alkenes and alkynes [12]
- I can identify, draw and name haloalkanes [15]
- I can identify, draw and name alcohols [16]
- I can identify, draw and name carboxylic acids and amines [19]
- I can define and describe the terms primary, secondary and tertiary [21]

ISOMERS

- I can define the term isomer [23]
- I can define the term constitutional (structural) isomers [24]
- I can define the term geometric isomer (cis/trans isomers) [26]
- I can describe what is required for a molecule to exist as geometric isomers (cis/trans isomers) [26]

REACTIONS

- I can describe addition reactions in terms of:
 - What molecules undergo addition reactions [30]
 - What happens during addition reactions [30]
 - The reagents that can be used to perform addition reactions [30]
 - I can describe and explain why sometimes there are two possible products in an addition reaction [33]
 - I can predict the major and minor products of an addition reactions using markovnikoff's rule [33]
- I can describe elimination reactions in terms of:
 - What molecules undergo elimination reactions [34]
 - What happens during elimination reactions [34]
 - The reagents that can be used to perform elimination reactions 34
 - I can describe and explain why sometimes there are two possible products in an elimination reaction [38]
 - I can predict the major and minor products of an addition reactions using the "reverse Markovnikoff's rule" (Saytseff's rule) 38

- I can describe oxidation reactions in terms of: [39]
- What molecules undergo oxidation reactions [39]
 - What happens during oxidation reactions [39]
 - The reagents that can be used to perform oxidation reactions [39]
 - The possible products of oxidation reactions [39]
- I can describe substitution reactions in terms of: [41]
- What molecules undergo substitution reactions [41]
 - What happens during substitution reactions [41]
 - The reagents that can be used to perform substitution reactions [41]
- I can describe, explain and predict the products of neutralisation reactions of carboxylic acids [43]
- I can describe, explain and predict the products of neutralisation reactions of amines [44]

POLYMERS

- I can define the term addition polymer [46]
- I can predict the polymer that would be formed given monomers [46]

PROPERTIES

- I can identify if an organic compound will be polar or non-polar [48]
- I can describe whether a compound will have a low or high melting/boiling [53]
- I can describe the observations when both polar and non-polar liquids are added to water [51]

IDENTIFICATION TESTS

- I can describe and explain which compounds will react with red and/or blue litmus paper [58]
- I can describe and explain how bromine water can be used to distinguish between alkenes and alkanes [61]
- I can describe and explain how alcohols and alkenes can be distinguished from other compounds [59]

