Organic Chemistry Checklist



Use this alongside our Walkthrough Guides to tick off the concepts you're confident with to plan your study and find areas of improvement!

Functional Groups

- I can identify, draw and name alkanes, alkenes and alkynes
- I can identify, draw and name carboxylic acids and amines
- I can define and describe the terms primary, secondary and tertiary
- I can identify, draw and name haloalkanes
- I can identify, draw and name alcohols

Isomers

- O I can define the term **isomer**
- I can define the termconstitutional (structural)isomers
- I can define the term **geometric**isomer (cis/trans isomers)
- I can describe what is required for a molecule to exist as geometric isomers (cis/trans isomers)

Reactions

O I can describe addition	 I can predict the major
reactions in terms of:	and minor products of an
 Which molecules undergo 	addition reactions using
addition reactions	the reverse Markovnikoff's
What happens during	rule (Saytseff's rule)
addition reactions	 I can describe oxidation
 The reagents used to 	reactions in terms of:
perform addition	What molecules undergo
reactions	oxidation reactions
I can describe and	What happens during
explain why sometimes	oxidation reactions
there are two possible	 The reagents that used to
products in an addition	perform oxidation
reaction	reactions
 I can predict the major 	 The possible products of
and minor products of an	oxidation reactions
addition reactions using	 I can describe substitution
Markovnikoff's rule	reactions in terms of:
O I can describe elimination	What molecules undergo
reactions in terms of:	substitution reactions
 Which molecules undergo 	What happens during
elimination reactions	substitution reactions
What happens during	 The reagents used to
elimination reactions	perform substitution
 The reagents used to 	reactions
perform elimination	O I can describe, explain and
reactions	predict the products of
I can describe and	neutralisation reactions of
explain why sometimes	carboxylic acids
there are two possible	O I can describe, explain and
products in an elimination	predict the products of
reaction	neutralisation reactions of
	amines

Polymers

- I can define the term addition polymer
- I can predict the polymer that would be formed given monomers
- I can draw a polymer, given the monomer

Properties

- I can identify if an organic compound will be polar or nonpolar
- I can describe the observations when both polar and nonpolar liquids are added to water
- I can describe whether a compound will have a low or high melting/boiling point

Identification Tests

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