

Year 13 Chemistry T1

Learning Programme 1

The LORIC skill focus for his LP is: LEADERSHIP The Moral Virtues focus for this LP are: COURAGE and HUMILITY.			Literacy Non-Negotiables: • Capital letters must be used at the start of sentences and for the first letter of proper nouns • Full stops must be used at the end of a sentence • Question marks must be used at the end of a question • Apostrophes should only be used for possession or omission • Days of the week and months must be spelled correctly • Key words must be spelled correctly • Vocabulary to be taught using the Frayer model	
Courage - Acting with bravery and overcoming fears. I will show courage by answering a question in class even when I'm not 100% sure of the answer.				
Humility - Having a modest view of oneself. I will show humility by admitting mistakes and asking for help when needed.				
What will I be learning about in this Learning Programme? Organic compounds: structures, reactions and uses.				
Where have I seen this learning before? GCSE and AS level chemistry. Introduction to organic chemistry, structures and naming compounds.				
What could I use it for? Pharmaceutical and petrochemical industries. Further and higher education study in organic chemistry.				
In LP1.1, I will know:		01/09/26 - (WK 1)	Key Vocabulary	Homework
how to distinguish between Kekule and delocalised models of benzene; how to identify the nomenclature for substituted aromatic compounds.			Aromatic	10 core benzene questions
In LP1.2, I will know:		07/09/26 - (WK 2)	Key Vocabulary	Homework
how to construct a mechanism for the electrophilic substitution of aromatic compounds; how bromine reacts with alkenes and benzene.			Electrophile	PPQ on aromatic compounds
In LP1.3, I will know:		14/09/26 - (WK 1)	Key Vocabulary	Homework
the structure and acidity of phenol; how to construct electrophilic substitutions of phenol.			Nucleophile	10 core phenol reaction questions
Extended Task.				
In LP1.4, I will know:		21/09/26 - (WK 2)	Key Vocabulary	Homework
the directing effects of electron donating and electron withdrawing groups in electrophilic substitution; the importance of directing groups in organic synthesis.			Dipole-dipole forces	PPQ on directing groups
In LP1.5, I will know:		28/09/26 - (WK 1)	Key Vocabulary	Homework
how to oxidise an aldehyde; the reactions of carbonyl compounds.			Electronegativity	10 core questions on aldehydes and ketones
In LP1.6, I will know:		05/10/26 - (WK 2)	Key Vocabulary	Homework
the mechanism of nucleophilic addition in carbonyl reactions; the chemical tests and reagents used in identifying carbonyls.			Racemic mixture	PPQ on carbonyl compounds
Extended Task.				
In LP1.7, I will know:		12/10/26 - (WK 1)	Key Vocabulary	Homework
the chemical tests and reagents used in identifying aldehydes; how to safely complete chemical tests for identifying various functional groups.			Delocalisation	10 core questions on chemical tests
Resources to support learning: EPC Knowledge organiser, Topic Booklet, Synergy, Youtube OCR Alevel Chemistry.				
FFET Award Challenge for this Learning Programme: Research a career that involves chemistry and create a fact file on it.				

PRT Task 1

PRT Task 2