Year 13 Chemistry T1
Learning Programme 4

The LORIC skill focus for his LP is: INITIATIVE.
The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.

Integrity - Having strong moral principles.
Gratitude - Feeling and expressing thanks.

What will I be learning about in this Learning Programme?
How to interpret proton and carbon NMR spectra.
How to identify an organic molecule form an NMR spectra.
Reviewing my learning of modules 2,4&6 in preparation for my summer examinations

Where have I seen this learning before?
You have covered organic functional groups as you have moved through Yr12 and 13.
The remainder of the learning programme we are recapping all taught content so we are well prepared for the summer examinations

What could I use it for?
Further degree study, careers in chemical analysis and synthesis particularly in the manufacturing of medicines.

Literacy:
• 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

In LP4.1, I will know:	10/03/25 - (WK 2)	Key Vocabulary	Homework
how to use a carbon-13 NMR to make predictions about the number of carbon environments in a molecule; how to use a carbon-13 NMR to make predictions about possible structures for the molecule; how to use a high resolution proton NMR spectrum to make predictions about the number of proton environments in the molecule.		Nuclear magnetic resonance spectroscopy	NMR practice questions
In LP4.2, I will know:	17/03/25 - (WK 1)	Key Vocabulary	Homework
how to identify a molecule from a carbon-13 or proton NMR spectrum; how to deduce the structures of organic compounds from elemental analysis.		Nuclear magnetic resonance spectroscopy	NMR practice questions
In LP4.3, I will know:	24/03/25 - (WK 2)	Key Vocabulary	Homework
my strengths and areas for development in module 2. Extended Task.		Molar gas volume	Amounts of substances practice questions
In LP4.4, I will know:	31/03/25 - (WK 1)	Key Vocabulary	Homework
my strengths and areas for development from module 4.		Moles	Core organic practice questions
In LP4.5, I will know:	21/04/25 - (WK 2)	Key Vocabulary	Homework
my strengths and areas for development from module 6.		Aromatic hydrocarbon	Benzene Practice questions
In LP4.6, I will know:	28/04/25 - (WK 1)	Key Vocabulary	Homework
my strengths and areas for development from module 6. Extended Task.		Carbonyl compounds	Carbonyl compounds practice questions
In LP4.7, I will know:	05/05/25 - (WK 2)	Key Vocabulary	Homework
my strengths and areas for development in module 2.		Redox	Redox practice questions

PRT Task 1

PRT Task 2

Resources to support learning:
Text book, Microsoft TEAMS, Physics and Maths tutor.com, Machemguy- YouTube.

FFET Award Challenge for this Learning Programme:
LP4 Year 13 Chemistry: Complete a practice paper independently as part of your revision.