

Year 12 Chemistry T1

Learning Programme 1

The LORIC skill focus for his LP is: LEADERSHIP			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	
The Moral Virtues focus for this LP are: COURAGE and HUMILITY.				
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? How quantities of reactants need to be controlled within chemical reactions and how to carry out a series of complex chemical reactions.				
Where have I seen this learning before? GCSE chemistry. Calculating moles, practical skills and evaluating results.				
What could I use it for? Further study in medicine and pharmacology. As well as a range of chemical industries.				
In LP1.1, I will know:		01/09/26 - (WK 1)	Key Vocabulary	Homework
how to use Avogadro's constant to complete calculations involving masses and moles; how to determine empirical and molecular formula of various substances.			Mole	10 core calculation questions
In LP1.2, I will know:		07/09/26 - (WK 2)	Key Vocabulary	Homework
how to determine the formula of a hydrated salt, using practical methods; how to calculate concentration, volume and moles.			Empirical formula	PPQ on mole calculations
In LP1.3, I will know:		14/09/26 - (WK 1)	Key Vocabulary	Homework
how to use the ideal gas equation to calculate the volume of a gas; how to determine the stoichiometry of a reaction.			Hydration	10 core gas law questions
Extended Task.				
In LP1.4, I will know:		21/09/26 - (WK 2)	Key Vocabulary	Homework
how to calculate the atom economy and percentage yield of a reaction; how to define a strong and weak acid and a base.			Ideal gas law	PPQ on atom economy
In LP1.5, I will know:		28/09/26 - (WK 1)	Key Vocabulary	Homework
how the describe and represent chemically a neutralisation reaction; how to prepare a standard solution for titration.			Stoichiometry	10 core neutralisation questions
In LP1.6, I will know:		05/10/26 - (WK 2)	Key Vocabulary	Homework
how to complete a titration investigation and correctly use titration equipment; how to use experimental data to calculate titration equations.			Limiting reagent	PPQ on titrations
Extended Task.				
In LP1.7, I will know:		12/10/26 - (WK 1)	Key Vocabulary	Homework
how to identify the species oxidised and reduced within a chemical reaction; how to identify and construct REDOX equations.			Atom economy	10 core REDOX questions
Resources to support learning: EPC Knowledge organiser, Topic Booklet, Synergy. Youtube OCR Alevel Chemistry.				
FFET Award Challenge for this Learning Programme: Complete a titration investigation practical write up.				

PRT Task 1

PRT Task 2