

Year 11 Chemistry

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? How different factors affect the rate of a reaction.				
Where have I seen this learning before? You will have studied chemical reactions at KS3.				
What could I use it for? This learning will be revisited in the rates and equilibria in Alevel Chemistry.				
In LP1.1, I will know:		01/09/26 - (WK 1)	Key Vocabulary	Homework
how to calculate the rate of a reaction; how to calculate the rate of a reaction using tangents			Tangent	Sparx science homework task
In LP1.2, I will know:		07/09/26 - (WK 2)	Key Vocabulary	Homework
how rates of a reaction are affected by; surface area, temperature, concentration; how to explain this by linking to collision theory; how to undertake the two concentration required practical's (volume of gas and turbidity).			Product	Sparx science homework task
In LP1.3, I will know:		14/09/26 - (WK 1)	Key Vocabulary	Homework
how rates of a reaction are affected by pressure and catalysts; how to explain this by linking to collision theory.			Catalyst	Sparx science homework task
Extended Task.				
In LP1.4, I will know:		21/09/26 - (WK 2)	Key Vocabulary	Homework
how we can make changes to equilibrium position by; adding/removing reactants; how we can make changes to equilibrium position by; adding/removing products.			Equilibrium	Sparx science homework task
In LP1.5, I will know:		28/09/26 - (WK 1)	Key Vocabulary	Homework
how we can make changes to equilibrium position by; adding/removing reactants or products, changing the temperature and changing the pressure.			Pressure	Sparx science homework task
In LP1.6, I will know:		05/10/26 - (WK 2)	Key Vocabulary	Homework
how to explain crude oil formation, draw the first four alkanes and understand what a hydrocarbon is; to describe the process behind fractional distillation; to explain the key physical and chemical properties of the crude oil fractions;			Hydrocarbons	Sparx science homework task
Extended Task.				
In LP1.7, I will know:		12/10/26 - (WK 1)	Key Vocabulary	Homework
how to describe and formulate equations for complete and incomplete combustion; how to explain the importance of cracking in industrial chemistry			Fractional Distillation	Sparx science homework task
Resources to support learning: EPC Knowledge organiser, GCSE Bitesize AQA Chemistry, Synergy.				
FFET Award Challenge for this Learning Programme: LP1 - Create a poster to show how fractions of crude oil are used in the real world.				

PRT Task 1

PRT Task 2