The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 13 Chemistry Teacher 2
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. I will show integrity by taking responsibility for my actions.
Gratitude - Feeling and expressing thanks. I will show gratitude by saying please and thank you.

What will I be learning about in this Learning Programme?
Enthalpy, Feasibility of reactions and Equilibrium

Where have I seen this learning before?
GCSE Rates of reaction and Year 12 Equlibrium

What could I use it for?
During industrial processes that require reactions to be feasible verses cost. In medical and industrial applications. Degree level study.

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

In LP4.1, I will know: 09/03/26 - (WK 2)	Frayer Model Words	Homework
How to demonstrate knowledge of lattice enthalpy and Born-Haber cycles and use this to calculate lattice enthalpy.	Born Haber cycle	Born Haber Cycles Exam Question
In LP4.2, I will know: 16/03/26 - (WK 1)	**Frayer Model Words**	**Homework**
Define Enthalpy change of Solution and construct enthalpy Diagrams	Lattice Enthalpy	Lattice Enthalpy Exam Question
In LP4.3, I will know: 23/03/26 - (WK 2)	**Frayer Model Words**	**Homework**
How to identify and explain factors affecting lattice enthalpy. Extended Task.	Enthalpy	Lattice Enthalpy Exam Question
In LP4.4, I will know: 13/04/26 - (WK 1)	**Frayer Model Words**	**Homework**
How to define the term "Entropy" and calculate Entropy changes;	Entropy	Entropy Exam Question
In LP4.5, I will know: 20/04/26 - (WK 2)	**Frayer Model Words**	**Homework**
How to understand the term Free Energy and using the Gibbs equation to identify the feasibility of reactions.	Free Energy	Gibbs Free Energy Exam Question
In LP4.6, I will know: 27/04/26 - (WK 1)	**Frayer Model Words**	**Homework**
How to review my learning on module 3 enthalpy and equilibrium. Extended Task.	Equilibrium	Equilibrium Exam Question
In LP4.7, I will know: 04/05/26 - (WK 2)	**Frayer Model Words**	**Homework**
How to review my learning on module 5 Rates of Reaction and Equilibrium	Rate of Reaction	Rates of Reaction Exam Question

PRT Task 1

PRT Task 2

Resources to support learning:
Knowledge organiser, Microsoft TEAMS, Carousel learning, Machem guy YouTube videos. Knock hardy and a level chemistry.co.uk

FFET Award Challenge for this Learning Programme:
Independently complete a past paper