The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 13 Chemistry EDN
Learning Programme 2

The LORIC skill focus for his LP is: ORGANISATION
The Moral Virtues focus for this LP are: COMPASSION and HONESTY

Compassion - the quality of feeling pity and concern for the sufferings or misfortunes of others.
Honesty - the quality of being truthful.

What will I be learning about in this Learning Programme?
Equilibrium constants Kc and Kp and how to control the position of equilibrium.

Where have I seen this learning before?
GCSE chemistry rates of reaction, A level chemistry module 3, including Le Chatelier's Principle.

What could I use it for?
Degree level chemistry, industrial processes and developing medications.

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 LP2.1, I will know: 21/10/24 - (WK 2)	Key Vocabulary	Homework
how to determine the quantities of reactant and product at equilibrium; how to calculate Kc and determine units.	Equilibrium	PPQ on Kc
In LP2.2, I will know: 04/11/24 - (WK 1)	**Key Vocabulary**	**Homework**
how to calculate Kp and determine units; how to apply Kc and/or Kp to other equilibrium constants.	Mole fraction	PPQ of Kp
LP2 RLW, I will: 11/11/24 - (WK 2)		
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.		
In LP2.3, I will know: 18/11/24 - (WK 1)	**Key Vocabulary**	**Homework**
how to predict how changes within a system affect the position of equilibrium; how to determine the lattice enthalpy of formation. Extended Task.	Enthalpy	PPQ on enthalpy changes
In LP2.4, I will know: 25/11/24 - (WK 2)	**Key Vocabulary**	**Homework**
how to construct a Born-Haber cycle; how to complete a summative assessment.	Born Haber Cycle	PPQ on Born Haber cycles
In LP2.5, I will know: 02/12/24 - (WK 1)	**Key Vocabulary**	**Homework**
how to determine enthalpy changes in solutions; how to determine enthalpy change of hydration.	Electron affinity	PPQ on enthalpy changes
In LP2.6, I will know: 09/12/24 - (WK 2)	**Key Vocabulary**	**Homework**
how to describe and explain the factors affecting lattice enthalpy; how to calculate entropy changes. Extended Task.	Entropy	PPQ on entropy
In LP2.7, I will know: 16/12/24 - (WK 1)	**Key Vocabulary**	**Homework**
how to use the Gibb's free energy equation; how to use free energy to predict feasibility.	Gibb's energy	PPQ on Gibb's energy

PRT Task 1

PRT Task 2

Resources to support learning:
OCR A level chemistry text book, MaChem Guy.

FFET Award Challenge for this Learning Programme:
Complete a full paper 1 past paper.