GEMS Founders School DUBAI
مدرسة فاوندرز دبي

Key Stage 4 Curriculum Map 2021-22

Term 3

Subject: Chemistry		Year: Year 10	
Focus/Topic	**UAE Links**	**HPL Links**	**Home Learning / Guided Reading**
• Chemical Analysis • Separating techniques (filtration, crystallization, chromatography)	Importance of water filtration in the UAE and debating the advantages and disadvantages of using chlorine in water	**VAA : Hardworking** Practice *The ability to train and prepare through repetition of the same processes in order to become more proficient.*	Guided Reading
• Chemical Analysis - Gas testing • Testing for Ions			Guided Reading
• Chemical Analysis - Testing for Ions • Assessment		Resilience *The ability to overcome setbacks. Remain confident, focused, flexible and optimistic.*	Guided Reading
• Acids, Bases and Salts - The pH scale • Acids and bases	Investigating the pH of water supplies in the UAE and the impact on the environment. How does the petrol usage affect the pH of natural water in the UAE?	**VAA : Agile** Risk Taking *The ability to work with confidence within unfamiliar scenarios as we apply prior learning to new scenarios*	Guided Reading
• Acids, Bases and Salts - Neutralisation • Ammonia	Exploring the use of ammonia in the production of fertilisers which are required to support plant growth in the UAE (food supply chain)	**ACP : Linking** Connection Finding *The ability to use connections from past experiences to seek possible generalisations*	Guided Reading
• Acids, Bases and Salts - Metal carbonates • Assessment			Guided Reading
• Rates of Reaction - Collision theory	Relate the measuring of rate to industrial processes in the UAE	**ACP : Analysing** Critical/ Logical Thinking	Guided Reading

• Factors Affecting Rate	e.g. medical field. Exploring the need for rapid production of the COVID vaccine	*The ability to deduct, hypothesise, reason, seek supporting evidence relating to the required practicals explored in these units*	
• Rates of Reaction - Reporting a Rate Investigation • Effects of a Catalyst			Guided Reading

• Rates of Reaction
  - Equilibrium
  - Haber Process
  - Contact Process
• Assessment
			Guided Reading