**UNIT OVERVIEW:** Aromatic Chemistry

**ENQUIRY:** How the structure of Benzene ring gives the unique properties of aromatic compounds?

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| **Unit intention:**  To understand the unusual structure of benzene; understand the stability of the structure with the evidence of data; know how the ring of delocalized electrons makes it perform electrophilic substitution reactions. Finally, to learn the synthetic route and the properties of benzene derivatives. | | | |
| **Success criteria** | | 🗸 | X |
| 1. I can use thermochemical evidence from enthalpies of hydrogenation to account for this extra stability of benzene ring.  2. I can explain why substitution reactions occur in preference to addition reactions in benzene rings  3. I can outline the electrophilic substitution mechanisms of: nitration, including the generation of the nitronium ion; acylation using AlCl3 as a catalyst.  4. I can show all the reaction mechanisms that benzene and its derivative compounds undergo for different reactions. | |  |  |
| **Unit summative and formative assessment details:**  Mini mocks  End of topic test | | | |
| Preview of your QR Code**Home Learning (What and how often):**  Seneca- 1 hour a week  Past exam paper practice. | | | |
| **Topic Sequence**   1. Introduction to Arenes. 2. Physical properties and reactivity of Arenes. 3. Nitration of Benzenes and TNT 4. Fridel-Craft cylation of Benzene 5. Introduction to aromatic amines 6. Synthesis of aromatic amines 7. End of unit test | **Recommended reading:** | | |

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| **Success criteria** – Have you met them? Show your evidence in the boxes below. |
| **1.** |
| **2.** |
| **3.** |
| **4.** |
| **5.** |
| **6.** |
| **How will you improve your work?** |

**End of Unit EVALUATION**