**UNIT OVERVIEW:** Nomenclature and Isomerism

**ENQUIRY:** How asymmetric carbon atoms form stereoisomers and how do their properties differ?

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| **Unit intention:** First the students will be given the opportunity to revise the IUPC nomenclature of the organic compounds they have studied in AS chemistry syllabus and further their learning of the aromatic compounds. Then they will study the structures and the properties of optical isomers; how the chiral centre determines the stereo-isomerism; how the specific stereo-isomers are used to synthesise stereo selective drugs. | | | |
| **Success criteria** | | 🗸 | X |
| 1. I can use the rules of IUPAC for naming the organic compounds,  2. I can identify the chiral centre of an organic molecule and describe the properties of optically active isomers.  3. I can describe the functions of a polarimeter and how to identity the enantiomers.  4. I can define what a racemate is and describe how a racemate is formed by organic synthesis.  5. I can describe the main issues involving the optical isomers in the drug industry. | |  |  |
| **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. Naming organic compounds. 2. Optical isomerism. 3. Synthesis of optically active compounds. 4. The thalidomide tragedy. | **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**