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| **What will we be learning?**  C7- Organic Chemistry | **Why this? Why now?**  **Previous learning**  Rate and extent of chemical change, chemical changes  **What other GCSE Science units does this unit relate to?**  Chemistry- Energy Changes, Structure and Bonding  Biology- Bioenergetics  Physics-Energy | **Key Words:**  Finite  Fossil fuel  Mixture  Hydrocarbon  Homologous Series  Alkane  Alkene  Fraction  Fractional Distillation  Viscosity  Flammability  Volatile  Complete combustion  Oxidation  Catalytic Cracking  Steam Cracking  Polymers |
| **What will we learn?**   * Carbon compounds as fuels and feedstock   **Useful equations/formulae/maths skills for this unit:**  General Formula for an alkane = CnH2n+2  Methane = CH4 Ethane= C2H6 Propane=C3H8 Butane= C4H10  Complete combustion: CxHy + O2→ CO2 + H2O  Balancing Equations  **Misconceptions in this topic**  Remember that carbon can form 4 bonds. Take care when drawing the displayed formula that you have only drawn 4 lines from each carbon!  Intermolecular molecules forces are the forces **between** molecules.  Covalent bonds **are NOT broken** during fractional distillation.  Covalent bonds **are broken** during cracking. | |
| **What opportunities are there for wider study?**  **If you are interested in this unit, what careers does it relate to?**  Pharmacist, Organic chemist, Food manufacturing, Plastics and paints, Petroleum industry, Biochemist, Biotechnologist, Analytical chemist, Forensic scientist, Industrial research chemist, Environmental consultant, Polymer chemist, Cosmetic scientist, Agricultural scientist  **Collins Revision guide relevant pages for this unit:**  Higher – P136-139, P154, P174  Foundation – P132- 135, P150-151, P168 | |
| **How will I be assessed?**  **EOTT** | |