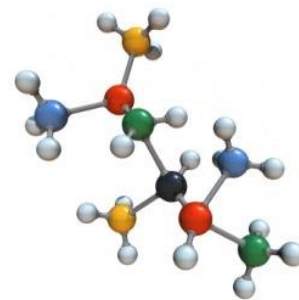


Triple Unit Overview – Organic chemistry

Target grade for test:.....



You will learn about:

- What crude oil is made of and how it can be separated.
- How we use crude oil products in our everyday lives.

You will be able to:

- Visualise 3D models of hydrocarbons.

Key learning points					Key Words	
Crude oil					alkanes alkenes cracking hydrocarbon monomer petrol polymers saturated unsaturated Bonds Fractional distillation Evaporation Condensation Mixture	
Alkanes						
Fractional distillation						
Properties of hydrocarbons						
Cracking						
Alkenes						
Alcohols						
Carboxylic acids						
Addition and condensation polymerisation						
Amino acids and DNA						
<p>Links to other subjects:</p> <p>SMSC: Suggest the impact on fuels, feedstocks and petrochemicals of depleting stocks of crude oil. Look at the cultural and environmental impact of the oil industry around the world. Research the discovery of the structure of DNA including the contributions of Francis Crick, James Watson, Maurice Wilkins and Rosalind Franklyn.</p> <p>Literacy: Describe the formation and composition of crude oil, define a hydrocarbon, Explain what is meant by the formula C_nH_{2n+2}, and the formula C_2H_{2n}, describe the process of fractional distillation and explain in terms of intermolecular forces of attraction. Describe a life without oil or oil derived products. Explain the properties of hydrocarbons in relation to intermolecular forces, describe and explain the process of cracking, describe balanced symbol equations, describe what happens during the reactions of alcohols and carboxylic acids and describe the process of polymerisation.</p> <p>Numeracy: Plot boiling points of alkanes against number of carbons and make predictions, balance equations, interpret homologous series.</p>						
Research	Note-making	Group work & discussion	Memorisation	Precision & accuracy	Independence	Reflection