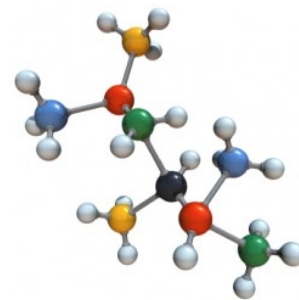


Triple Unit Overview – Organic chemistry

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 Words

alkanes
alkenes
cracking
hydrocarbon
monomer
petrol
polymers
saturated
unsaturated
Bonds
Fractional distillation
Evaporation
Condensation
Mixture

Key learning points

Crude oil	
Alkanes	
Fractional distillation	
Properties of hydrocarbons	
Cracking	
Alkenes	
Alcohols	
Carboxylic acids	
Addition and condensation polymerisation	
Amino acids and DNA	

Links to other subjects:

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

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, describe the process of polymerisation

Numeracy: Plot boiling points of alkanes against number of carbons and make predictions, balance equations, interpret homologous series.