

High Tunstall College of Science Curriculum Intent

Subject: Chemistry Year: 10

Thread 5—Organic chemistry and chemical detection



	Chemistry Thread 5	Progress		
Topic	Key ideas	R	A	G
Organic chemistry and chemical detection	I can recall how crude oil is formed, and what it is made of, giving properties of hydrocarbons			
	I can explain how crude oil is separated by the process of fractional distillation			
	I understand what an alkane is and can give the structure of the first 4 alkanes			
	I can explain how we can make long chain hydrocarbons useful using the process cracking			
	I can conduct chromatography and explain some of the applications of this			

Lesson	Learning Focus	Assessment	Key Words
1	What are hydrocarbons?	Completion of differentiated tasks	Hydrocarbon, crude oil, fossil fuel
2	How do we separate crude oil?	Completion of SOLO tasks linked to fractional distillation	Fractional distillation, hydrocarbon chain length, condense, evaporate
3	What are alkanes?	Self assessment of tasks	Alkane, homologous series
4	What is chromatography?	Application task	Chromatography, Rf value, solvent front, affinity
5	RPA Chromatography	Completion of RPA	Chromatography, Rf value, solvent front, affinity
6	How do we identify different gases?	Conclusions made from practical work	Hydrogen, oxygen, carbon dioxide, chlorine