Fareham Academy – Science Overview – Triple Chemistry Yr11

Fareham Academy | Unlocking Potential Creating Opportunity

	Autumn 1	Autumn 2	Spring 1	Spring 2
Topic(s)	C6 – the rate and extent of chemical change , C7 – organic chemistry	C8 – chemical analysis, C9 – chemistry of the atmosphere	C10 – using resources *(NB some topics may overlap into other terms)*	Paper 2 – full preparation and mock exam
Topic Objectives	Use knowledge of conditions on particle theory to increase RoR, use the wide spread understanding of organic chemistry in a range of different contexts	Know a wide range of chemical testing results/data, understand the evolving earth's atmosphere	C10 - understand a range of example where the earth provides vital resources and how over use is creating worldwide problems	Memory retention, application skills, dealing with exam stress and effective revision/preparation
Acquired Knowledge/ Skills	C6 Students can: • Recall that chemical reactions can occur at vastly different rates dependent on many variables that can be manipulated in order to speed them up or slow them down. • Understand that chemical reactions may also be reversible and therefore the effect of different variables needs to be established in order to identify how to maximise the yield of desired product C7 • Make links to the fact that the main sources of organic compounds are living, or once-living materials from plants and animals. These sources include fossil fuels which are a major source of feedstock for the petrochemical industry. • Understand that chemists are able to take organic molecules and modify them in many ways to make new and useful materials,	C8 Students can: • Learn the results for a range of chemical where results are based on reactions that produce a gas with distinctive properties, or a colour change or an insoluble solid that appears as a precipitate. • Link understanding to know that instrumental methods provide fast, sensitive and accurate means of analysing chemicals, and are particularly useful when the amount of chemical being analysed is small. C9: • Understand that the Earth's atmosphere is dynamic and forever changing • Link the causes of these changes to be as a result of man-made and sometimes part of many natural cycles.	Students can: • Understand that industries use the Earth's natural resources to manufacture useful products. • Appreciate that in order to operate sustainably, chemists seek to minimise the use of limited resources, use of energy, waste and environmental impact in the manufacture of these products. • Show awareness that chemists also aim to develop ways of disposing of products at the end of their useful life in ways that ensure that materials and stored energy are utilised. • Understand that pollution, disposal of waste products and changing land use has a significant effect on the environment, and environmental chemists study how human activity has affected the Earth's natural cycles, and how damaging effects can be minimised.	Students will experience help on: • Revision methods • Quality of revision • Learning key model answers off by heart • Learning equations off by heart • Exam technique • Time management • Exam anxiety management
Assessments	C6 topic test to include all topics covered on the specification C7 topic test to include all topics covered on the specification	C8 topic test to include all topics covered on the specification C9 topic test to include all topics covered on the specification	C10 topic test to include all topics covered on the specification	Full chemistry mock released by AQA using the boundaries published