




A-Level Chemistry

Full course title and Exam Board	AQA A-Level Chemistry (7405)	Specification QR 
Teacher(s)	Mrs A Kotecha akotecha@enfieldgrammar.org Ms H Brimble hbrimble@enfieldgrammar.org Mr A Walker-Trew awalker-trew@enfieldgrammar.org	
Introduction	Are you open-minded, imaginative, argumentative, methodical, logical and determined? Do you wonder about the world, how it works and how mankind is changing it? If so, you will probably be interested in 'A' Level Chemistry at Enfield Grammar School. It is a rewarding but demanding course, which sets the subject within a relevant and modern-day framework, without sacrificing intellectual rigour. It builds on the higher concepts learnt at GCSE and appeals to students who like to ask the questions 'why', 'how' and 'what' and are keen to find out the answers.	
What is the course about?	Chemistry involves the study of atoms & molecules and how & why they interact. During the course you will make useful products such as aspirin, soap and nylon. You will dissolve 1 pence coins to determine their copper content, analyse the iron content of spinach and extract limonene, an essential oil, from oranges. You will learn how to carry out practical work safely & effectively, collect and analyse results. You will solve problems logically & mathematically and use the language of Chemistry (formulae, equations & diagrams as well as words such as 'enthalpy') precisely to explain observations. It is a challenging but rewarding course.	
How will I be assessed and what will I be studying?	<p>AQA A level chemistry course 7405 requires you to take 3 2 hour exams at the end of Year 13. You will also carry out practical work to gain the practical endorsement award which is now usually required for you to study a science degree at university.</p> <p>Physical chemistry The theoretical parts of chemistry, including atomic structure, chemical calculations, bonding, rates of reaction, acids & bases, equilibria and energetics.</p> <p>Inorganic chemistry The study of reactions of Groups 2, 7 & transition metal elements plus periodicity.</p> <p>Organic chemistry The study of reactions of carbon-containing compounds, e.g. alkenes, alcohols and benzene.</p>	
Current Text book and further Reading	A-Level Sciences for AQA. AQA Chemistry. 2nd Edition. OXFORD. Ted Lister and Janet Renshaw. https://successatschool.org/advisedetails/190/Why-Study-Chemistry%3F http://www.futuremorph.org/14-16/next-steps/follow-your-favourite-subject/careers-from-chemistry/	
Future Career Directions	As far as employment prospects are concerned, Chemistry is a 'heavyweight' subject, essential for many scientific careers and highly regarded for non-vocational jobs. It has obvious relevance for medicine and veterinary science, as well as jobs in businesses involved in drugs and medicine manufacture, agriculture, brewing, food, biotechnology and forensic science – to name just a few. Any student qualified in Chemistry will automatically be regarded as someone who is numerate, well organised, self-motivated and intellectually adept – useful qualities to bring to any job.	



**Subject Entry
Requirements**

Grade 7 in Additional Science and Grade 6 Maths.