A LEVEL AQA 7405	CHEMISTRY
SPECIFIC ENTRY REQUIREMENTS	• Grade 6 or above in GCSE chemistry (separate science) or grades 6-6 or above in combined science: trilogy **and** • Grade 6 or above in GCSE mathematics Students will need to successfully complete a bridging unit in chemistry over summer.
COURSE CONTENT	Chemistry is a very interesting and hugely rewarding course which opens many doors to students in the future. Our students thoroughly enjoy realising how different concepts support each other as the course progresses, and learning how to problem-solve. Students learn how substances form, behave and interact; start to explain why reactions occur in the way they do, and consider how we can manipulate these to create new substances. The main aims of the chemistry course are to: • promote enthusiasm for chemistry • develop advanced practical and analytical skills • ensure students can operate effectively and safely in a laboratory • appreciate how and where chemistry is used beyond the laboratory and to raise the profile of potential careers • allow students to discover how the different areas of chemistry support each other create knowledgeable, well rounded scientists of the future. **Year 12 topics:** Topics include: atomic structure, quantitative chemistry, bonding and periodicity, organic chemistry, energetics, kinetics and equilibria, reactions of elements. A Level mathematics or core mathematics may support some aspects of learning but neither is essential. **Year 13 topics:** Topics include: further kinetics and equilibria, acids and bases, carbonyl and aromatic chemistry, polymers, DNA, structure determination, thermodynamics, periodicity, electrochemistry, transition metals and inorganic reactions.
EXAMINATIONS AND ASSESSMENTS	The chemistry course is assessed through linear assessment with students taking **all** their external exams at the end of Year 13. The A Level will have an accompanying teacher recommendation of 'pass' or 'fail' for practical competence based on prescribed core practical activities. **Paper 1 (2hrs):** physical and inorganic chemistry and practical skills **Paper 2 (2hrs):** physical and organic chemistry and practical skills **Paper 3 (2hrs):** any content, any practical skills
SKILLS, LINKS AND PROGRESSION	Chemistry is fundamental for those choosing to pursue a career in chemistry, chemical engineering, pharmacy, medicine, dentistry and veterinary medicine to name but a few. It is also of direct relevance to careers in other medically related areas, and courses such as forensic and environmental science. .
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