Subject	**Chemistry A Level**
Context	***Organic*** You will have encountered basic organic chemistry at GCSE (alkanes, alkenes, alcohols etc.). At A Level you will expand your knowledge of this, becoming familiar with the behaviour of a greater variety of organic compounds. At the heart of this will be your ability to represent and name these compounds. During A Level you will follow internationally agreed conventions outlined by IUPAC. ***Physical*** At GCSE you cover basic principles of physical chemistry at GCSE (A_r, relative atomic mass, M_r, relative formula mass, the relationship between moles, mass, molarity etc.). At A level you will expand your knowledge of this and learn how to use these expressions in a variety of amount of substance calculations. In order to be successful, you will need to have a good understanding of standard form conversions, a knowledge of significant figures and the ability to rearrange equations. You will also be required to write chemical formulae for ionic equations as well as constructing balanced chemical formulae from word equations.
Securing	1) Follow both links and read through the rules on drawing and naming organic molecules, make note of key principles as you work: http://www.chemguide.co.uk/basicorg/conventions/draw.html http://www.chemguide.co.uk/basicorg/conventions/names.html 2) Work through as the explanations and examples given on the BBC Bitesize site https://www.bbc.co.uk/bitesize/guides/zgcyw6f/revision/1 3) Review guide on calculating empirical formula, this will be an application on what you have learnt about moles. https://www.bbc.co.uk/bitesize/guides/z2ty97h/revision/2 4) Review the information in "Structure and Bonding Summary" available on the school website. 5) Practice rearranging formulae by working through the Socrative quiz by following this link: https://api.socrative.com/rc/47fDjL 6) Use the sheet "Ions list" to complete the Socrative quiz at the following link: https://api.socrative.com/rc/m9jShf In this quiz you will need to write the name or formula of the compound given in the question. Write this in the work sheet "Writing substances Formulae or Names ANS sheet". After submitting each answer please mark against the explanation given. 7) Review the worksheet "Writing Equations – Support Sheet"
Processing	1) Use the ideas presented in the securing task to write out a guide to naming alkanes, including branched alkanes, alkenes and halogenoalkanes. 2) Complete Socrative quiz where you will perform reacting mass, concentration of solutions and empirical formulae calculations. Please present all working out to these questions on paper and submit the answers only using the link. Please review the answers

	against the explanations where errors are made. Submit answers using the following link: https://api.socrative.com/rc/zrzCX5 3) Review the information in "Structure and Bonding Summary" then complete the Socrative quiz https://api.socrative.com/rc/Wp6vvc 4) Using ideas from the worksheet "Writing Equations – Support Sheet" complete: "Writing word equations for reactions" "Writing balanced equations with state symbols".
Exploring	Research a Chemist – word limit **500 words ± 10%.** (see requirement below) • Choose at least one Chemist (**ideally one you have not heard of)** that is in a field of Chemistry you are interested in. • Who are/were they and what did they discover or are working on. • How their science applies to everyday modern life today • Why did you choose this Chemist? • Include your references (ideally Harvard referencing style – there are plenty of free tools online to help you do this)
Reviewing	1) Complete the worksheet "Naming organic compounds" available in the bridging work section of the school website. This will review principles learnt in the organic tasks.