

Subject	Chemistry
Context / relevance	<p><b>Organic</b> You will have encountered basic organic chemistry at GCSE (alkanes, alkenes; and if you did Triple then 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.</p> <p><b>Physical</b> At GCSE you cover basic principles of physical chemistry at GCSE (<math>A_r</math>, relative atomic mass, <math>M_r</math>, 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. 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.</p>
Securing	<ol style="list-style-type: none"> <li>1) Follow both links and read through the rules on drawing and naming organic molecules, make note of key principles as you work:  <a href="http://www.chemguide.co.uk/basicorg/conventions/draw.html">http://www.chemguide.co.uk/basicorg/conventions/draw.html</a>  <a href="http://www.chemguide.co.uk/basicorg/conventions/names.html">http://www.chemguide.co.uk/basicorg/conventions/names.html</a> </li> <li><i>Note: Combined Students – You have learnt fewer organic functional groups (only alkanes and alkenes). This is a good opportunity to ensure you have familiarity with a wider range of molecules.</i></li> <li>2) Work through as the explanations and examples given on the BBC Bitesize site  <a href="https://www.bbc.co.uk/bitesize/guides/zgcyw6f/revision/1">https://www.bbc.co.uk/bitesize/guides/zgcyw6f/revision/1</a> </li> <li>3) Review guide on calculating empirical formula (the simplest whole number ratio of atoms in a molecule/compound). This will be an application on what you have learnt about moles.  <a href="https://www.bbc.co.uk/bitesize/guides/z2ty97h/revision/3">https://www.bbc.co.uk/bitesize/guides/z2ty97h/revision/3</a> </li> <li>4) Practice rearranging formulae by working through the Socrative quiz by following this link: <a href="https://api.socrative.com/rc/LAD5KU">https://api.socrative.com/rc/LAD5KU</a></li> <li>5) Complete: <a href="https://api.socrative.com/rc/F3yzqg">https://api.socrative.com/rc/F3yzqg</a> In this quiz you will need to write the name or formula of the compound given in your notes, check and mark the question as you work through the quiz.</li> </ol>
Processing	<p>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:  <a href="https://api.socrative.com/rc/z3cNfy">https://api.socrative.com/rc/z3cNfy</a></p>

Exploring	<p>Research and write a response to the question: “The Ozone Layer, what is it and what are the issues?” – word limit <b>500 words <math>\pm</math> 10%</b>. (see requirement below)</p> <ul style="list-style-type: none"> <li>• What is the ozone layer? Where is it? Why is it important?</li> <li>• What are CFC’s? What are they used for?</li> <li>• What impact were CFC’s found to have on the ozone layer? What was the issue with this? What has been done to reduce this?</li> </ul> <p>Include your references (ideally Harvard referencing style – there are plenty of free tools online to help you do this)</p>
Reviewing	<p>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.</p>