

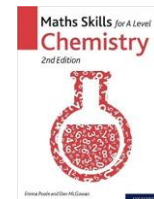
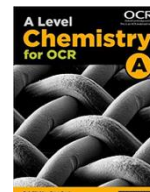
Welcome to A Level Chemistry

- **What you can read:**

'A Level Chemistry for OCR A' by Rob Ritchie and Dave Gent

'Maths Skills for A Level Chemistry' by Emma Poole and Dan McGowan

'OCR A Level Chemistry Specification' – link below:



<https://www.ocr.org.uk/Images/171750-specification-accredited-as-level-gce-chemistry-a-h032.pdf>

- **What you can watch:**

Below are some of the skills/topics that you will be learning when you join us at Burnley College. Here are some videos for you to watch to get you started on those topics and/or skills:

- Atomic Structure <https://www.youtube.com/watch?v=n2Nvmyr6DW8>
- Electron configuration <https://www.youtube.com/watch?v=ZpapQPcgw7w>
- Balancing equations - <https://www.youtube.com/watch?v=TGFkvy8vubw>
- Significant figures - <https://www.youtube.com/watch?v=l2yuDvwYq5g>
- Rearranging equations - <https://www.youtube.com/watch?v=oZ-k71dW6do>

- **What are some of the topics and skills that you will cover:**

Below are some of the topics and skills that we will cover in September and October:

Topics	Relevant skills to the topic
Atomic structure	<ul style="list-style-type: none"> - Rearranging equations - Significant figures - Algebra
Compounds, formulae and equations	<ul style="list-style-type: none"> - Balancing and writing equations - Recalling names and formulae of ions
Amount of substance	<ul style="list-style-type: none"> - Rearranging equations - Significant figures - Algebra - Converting units e.g mg to g - Using ratios, fractions and percentages - Practical skill, determine the relative atomic mass of Mg
Acids	<ul style="list-style-type: none"> - Practical skills, complete a titration - Balancing equations

- **Tasks that you can do to prepare you:**

<u>Task</u>	<u>Link to the course/specification</u>
<p>Task 1.</p> <p>Watch the video on atomic structure and create a revision map of the structure of an atom and how that links to the periodic table.</p> <p>Determine the number of protons, neutrons and electrons in ^{23}Na, ^{24}Na and $^{24}\text{Na}^+$. Make sure you make note on how you got to the answer.</p>	<p>2.1.1 Atoms and isotopes</p> <p>This topic builds directly from GCSE Science expanding on your knowledge of the structure of the atom and it's link to the periodic table.</p> <p>We will look at how this information is gathered experimentally and use this to calculate means.</p>
<p>Task 2.</p> <p>Research the formulae for the following ions and compounds;</p> <ol style="list-style-type: none"> 1. Sulfate and sulfuric acid 2. Phosphate and phosphoric acid 3. Carbonate 4. Nitrate and nitric acid 5. Ammonium and ammonia <p>Create revision cards (Quizlet is a good app to use) to keep for the duration of the course. Use these to commit the formula of these ions/compounds to memory – get family members to test your recall.</p>	<p>2.1.2 Compounds, formulae and equations</p> <p>This topic builds on GCSE Science knowledge of word equations and formulae.</p> <p>In this topic you gain basic chemical skills such as writing chemical formulae and constructing equations. These skills will be used consistently throughout the two year course.</p>
<p>Task 3</p> <p>Watch the Amount of Substance video and write down all the new equations that encounter. Again make revision cards to keep for the duration of the course.</p> <p>Once you have done the above, make sure you can rearrange the equations confidently making different parts of the equation the subject.</p>	<p>2.1.3 Amount of substance</p> <p>You may/may not be familiar with aspects of this topic depending on whether you did triple or combined science.</p> <p>Don't worry if not, by the time we have finished this topic you will be masters of calculating chemical quantities using different chemical equations.</p>

- **Contact information**

If you have questions regarding this or any other A Level course at Burnley College, please contact alevels@burnley.ac.uk or call 01282733373

We look forward to seeing you in September.