**Preparing for Transition from Key Stage 4 to Key Stage 5**

|  |  |
| --- | --- |
| **Subject** | **Qualification** |
| **Chemistry** | **A Level** |
| **Recommended Reading Materials** | **Recommended Websites**  |
| * **Exam Board information** -OCR A First place to look is the Exam board website. As well as the relevant specification it has a range of resources and content that will give you a good outline of what is to come<https://www.ocr.org.uk/qualifications/as-and-a-level/chemistry-a-h032-h432-from-2015/> - OCR
* **Revision Guides** -These are great if you want a quick overview of the course when you’re revising for your exams. Remember to use other tools as well, as these aren’t detailed enough on their own

**Books**Periodic Tales: The Curious Lives of the Elements (Paperback) Hugh Aldersey-Williams ISBN-10: 0141041455Calculations in AS/A Level Chemistry (Paperback) Jim Clark ISBN-10: 0582411270**Magazines** – Focus, New Scientist or Philip Allan updates can help you put the chemistry you’re learning in context. Your local library may have access to some of these science online magazines which you can view on your phones or computers- all you will need is a library card | * **YouTube** - Chemistry videos. Just be careful to look at who produced the video and why, because some videos distort the facts. Check the author, date and comments – this help indicate whether the clip is reliable
* **Online Forums** - The student room Join the A-level Chemistry forums and share thoughts and ideas with other students, just be careful what you share [www.thestudentroom.co.uk](http://www.thestudentroom.co.uk)- The Student Room
* **The Royal Society of Chemistry (RSC)** The RSC do everything from naming new elements and lobbying MPs, to improving funding for research sciences in the UK. You’ll find lots of handy resources on their website
 |
| **Preparation Tasks** | **Recommended Research**  |
| **Log onto Seneca learning using this link:**Register using this link: <https://app.senecalearning.com/dashboard/join-class/onyxtl9zcy>Complete section 1.3Complete section 1.3   | * An interesting fact is that Venus is the hottest planet in the solar system. Can you find out why then compare and contrast with Earth and why it may be so hot?
 |
| **Recommended trips or visits this Summer** |
| Consider what career you may be interested in and see if there are opportunities for any form of work experience or work shadowing. This may be difficult in the current climate however it may be time to think of why chemistry A level may help in achieving your goals. |
| **Transition Tasks to Complete**  |
| **Online Research**Use your online searching abilities to see if you can find out as much about the topic as you can. Remember it you are a prospective A level chemist, you should aim to push your knowledge. Choose 2 of the following tasks below and make a 1-page summary for each one you research using Cornell notes: <http://coe.jmu.edu/learningtoolbox/cornellnotes.html> Task 1: The chemistry of fireworks What are the component parts of fireworks? What chemical compounds cause fireworks to explode? What chemical compounds are responsible for the colour of fireworks? Task 2: Why is copper sulfate blue? Copper compounds like many of the transition metal compounds have got vivid and distinctive colours – but why? Task 3: Aspirin What was the history of the discovery of aspirin, how do we manufacture aspirin in a modern chemical process? Task 4: The hole in the ozone layer Why did we get a hole in the ozone layer? What chemicals were responsible for it? Why were we producing so many of these chemicals? What is the chemistry behind the ozone destruction?Task 5: ITO and the future of touch screen devices ITO – indium tin oxide is the main component of touch screen in phones and tablets. The element indium is a rare element and we are rapidly running out of it. Chemists are desperately trying to find a more readily available replacement for it. What advances have chemists made in finding a replacement for it? |