

Subject: Applied Science

Year 12 Prep Task

Key Info <ul style="list-style-type: none"> - Complete the tasks detailed below in preparation for your baseline assessment in September 2023 		
Week beginning: 24.07.23	Expected completion time: Due Sept 2023 – first lesson.	
Activities to be completed	Location of resources	Additional resources/support
<p>Biology Research the history of the microscope include Robert Hooke and Van Leeuwenhoek Produce a summary powerpoint, set of revision cards or animation</p> <p>Chemistry Produce an overview of electronic structure and its relation to the periodic table. Discuss of the Bohr model and extend your research to include atomic orbitals (s, p and d) and rules of filling orbitals.</p> <p>Physics Produce an annotated diagram of a longitudinal and transverse wave – include the terms - periodic time, speed, wavelength, frequency, amplitude, oscillation</p> <p>Revise this information in preparation for a baseline assessment in September</p>	<p>http://www.microscope-microscope.org/basic/microscope-history.htm</p> <p>http://microscopy-uk.org.uk/index.html?http://microscopy-uk.org.uk/intro/histo.html</p> <p>https://www.savemyexams.co.uk/a-level/chemistry/aqa/17/revision-notes/1-physical-chemistry/1-1-atomic-structure/1-1-5-electron-configuration/</p> <p>www.youtube.com/watch?v=gLkLj8TS9VI</p> <p>www.youtube.com/watch?v=w2s2fZr8sqQ</p>	<p>https://www.savemyexams.co.uk/a-level/biology/ocr/17/revision-notes/2-foundations-in-biology/2-1-cell-structure/2-1-2-using-a-microscope/</p>
Work to be submitted: <ul style="list-style-type: none"> - Biology – summary powerpoint/revision cards/animation of the history of the microscope - Chemistry – overview of electronic structure and the bohr model - Physics – annotated diagrams of transverse and longitudinal waves 		

Further reading:

Surely You're Joking Mr Feynman: Adventures of a Curious Character

ISBN - 009917331X - Richard Feynman was a Nobel Prize winning Physicist. In my opinion he epitomises what a Physicist is. By reading his books you will get insight into his life's work including the creation of the first atomic bomb and his bongo playing adventures and his work in the field of particle physics. (Also available on Audio book).

Junk DNA

Our DNA is so much more complex than you probably realize, this book will really deepen your understanding of all the work you will do on Genetics. Available at amazon.co.uk

Periodic Tales: The Curious Lives of the Elements (Paperback)

ISBN-10: 0141041455 – Hugh Aldersey Williams

This book covers the chemical elements, where they come from and how they are used. There are loads of fascinating insights into uses for chemicals you would have never even thought about.