



Summer Preparation Work

Forensic and Criminal Investigation is all about developing your knowledge of science and then seeing how it applies to Forensic Investigations. You will take part in crime scene investigation, carry out key procedures like chromatography and learn the fundamentals of biology, chemistry and physics.

Please be aware that prep work is an important aspect of your induction onto all courses at Wilberforce Sixth Form College. Please have this ready to hand in during enrolment or to your course teacher in the first week of lessons.

Kind regards

Ashley Howe
Faculty Head for STEM

Task 1 - Research

Research cell structure, the periodic table and energy using the following links (make sure that you click on the different topics on bioninja – there's quite a few)!

<https://ib.bioninja.com.au/standard-level/topic-1-cell-biology/>

<https://alevelchemistry.co.uk/notes/atomic-structure-and-periodic-table/>

<https://www.s-cool.co.uk/a-level/physics/work-energy-and-efficiency/revise-it/work-the-principle-of-conservation-of-energy-an>

Task 2 - Create

Create an A3 Poster (2 A4 sheets if you don't have any A3) with the following titles:

- 1) Cell Biology
- 2) Atomic Structure and the periodic table
- 3) The Conservation of Energy

Make this a piece of work that you are proud of and start the College year strong. The work that you do in this will help to build a foundation of knowledge that you can use to help you achieve distinction grades in your assignments when you join us.

Task 3 - Question

Complete the following questions on lined paper and hand them in:

- 1) What is a prokaryote?
- 2) What is a eukaryote?
- 3) Draw and label a prokaryotic cell
- 4) Draw and label a eukaryotic cell
- 5) What is an atom?
- 6) Draw a helium atom
- 7) What is an isotope?
- 8) Define the term 'work'
- 9) Write the equation for energy efficiency
- 10) Why is an energy saving light bulb more 'efficient' than a standard filament bulb?