

## SUMMER BRIDGING WORK 2025

Summer Bridging Work is an important part of your transition to Wilberforce Sixth Form College. This piece of work will count towards your effort grade. Please complete your summer bridging work in time for the start of term.

### BTEC Level 3 Extended Diploma in Applied Science

#### OVERVIEW OF SUBJECT:

BTEC Applied Science is all about developing your skills and knowledge in science. The course will give you a really strong foundation in biology, chemistry and physics before allowing you to apply what you have learnt to practical investigations. You will be carrying out chromatography, titrations, microscopy and many more investigations to find out more about the world around you. You will develop key skills including problem solving, analysis and team work. This is a great course for students looking to get into university places and careers in the field of science.

Prep work is an important aspect of your induction onto all courses at Wilberforce Sixth Form College. Please complete this work **in time for your enrolment** onto your courses

**ENTRY CRITERIA:** A minimum of 4 GCSEs grades 9-4, including English Language, Maths and Science.

**You are required to bring evidence in paper or electronic format and hand this into your subject teacher during your first lesson.**

#### Task 1 – Research

Research cell structure, the periodic table and changes of state using the following links

Cell Structure - [Summary Notes - Topic 2 Cells - AQA Biology A Level](#)

Periodic Table - [ADFS::HardDisc4.\\$\\$.Riscript5.PostScript](#)

Changes of state - [Heat transfer to changes of state - Kinetic theory – WJEC - GCSE Physics \(Single Science\) Revision - WJEC - BBC Bitesize](#)

#### 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 – Questions

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?

Kind regards

Lynne Quinn

**Faculty Head for Science and Art**

If you have any queries regarding your Summer Bridging Work, please contact me via email [lq@wilberforce.ac.uk](mailto:lq@wilberforce.ac.uk)  
I will aim to respond before your enrolment appointment.