A Level Biology
Essential Bridging Work

If you intend to enrol on this course you must complete the following work - it should take you about 5 hours.

Make sure you bring it with you to your first lesson and you have tried to understand the knowledge - you will be tested on it in your first lesson.

Topic / Context	The cell is the basic unit of all living things During Year 1 of the course it's important to have an understanding of how to use a light microscope and also to develop an understanding of why electron microscopes and laser scanning confocal microscopes are so important in biology. Careful observation using microscopes reveals details of cell structure and ultrastructure and provides evidence to support hypotheses regarding the roles of cells and organelles.
Task	The cell is the basic unit of all living things - MICROSCOPY **Our expectation is that you write your own notes related to the following instructions**. PLEASE DO NOT PLAGARISE. Research, read & then write about the different types of microscope that we can use in biology: • Light microscope • Scanning electron microscope • Transmission electron microscope • Laser scanning confocal microscope Your notes **MUST** include the following: • how each microscope works and the history of its development • how specimens are prepared for viewing under each of the three main types of microscope • staining techniques used with each • magnification possible with each • resolution possible with each • advantages and disadvantages of using each type of microscope • computer enhancement of images produced by each microscope • examples of typical images produced from each microscope
Resources	**Online Research:** You can use any source of information you like, but here are some links to get you started: https://www.youtube.com/results?search_query=microscopes http://www.microscopemaster.com/different-types-of-microscopes.html http://www.hk-phy.org/atomic_world/tem/tem04_e.html https://www.youtube.com/watch?v=XDt9v8kgT0w https://www.pearsonschoolsandfecolleges.co.uk/Secondary/Science/16Biology/ASandA2OCRBiology/Samples/SamplepagesfromOCRASBiologyStudentBook/AS_Biology_sample.pdf
Presentation	Present your findings. Your notes should be **handwritten**. Make sure this is presented as neatly as possible.