

A Level Physics

Part A - Bridging Work Task

This is a fantastic opportunity to expand your understanding of Physics as you prepare for enrolment and for starting at Franklin in September.

Please complete the work and bring a copy to your enrolment, either printed or electronically.

The work will take you around **2 hours** so plan your time to best suit you.

How do I complete and submit my task?	<p>Complete the tasks on paper/handwritten or digitally and bring a copy either paper or electronically to your enrolment appointment, also take this to your first lesson in September.</p> <p>If you did not attend the Taster Day don't worry – this isn't essential for completing this work but, please ensure that you have completed this bridging work.</p>
Introduction to your Bridging Task	<p>Maths skills for Physics</p> <p>The task below will help us gauge your current understanding of the mathematical techniques from GCSE and Uncertainties that you'll use in Physics, both in the examinations and for the required practicals throughout the course.</p> <p>Practical applications</p> <p>In our experiments during the course, we look behind the theory we learn and how these topics relate to a real-world scenarios. In the taster day you used Computer Aided design to look into the experiment shape of designs, in the task below you will look at some key material properties for use in these designs alongside definitions and examples of designs where these properties are important.</p>

Task details	<p>Please click on this link to get the instructions for the work.</p> <p>A level Physics Bridging Work 2024 (1).docx - Google Docs</p> <p>If you were in the Taster session, you will have been given a paper copy.</p> <p>See resources section above for resources to help you with the task.</p>
Resources to help you with the Bridging Task	<p>These are the resources you will need for the bridging task in the section further down this document.</p> <p>Maths skills Physics: You will need a scientific calculator and possibly your notes from GCSE Maths.</p> <p>This video may also help: https://www.youtube.com/watch?v=ayjtBJ0UcqE</p> <p>Here are some useful website links:</p> <p>https://www.cyberphysics.co.uk/general_pages/si_prefixes.html https://www.bbc.co.uk/bitesize/guides/zgbggk7/revision/4 https://www.mathsisfun.com/algebra/trigonometry.html https://isaacphysics.org/concepts/cp_uncertainties?stage=all</p> <p>For the Diffraction Practical the following links may be helpful</p> <p>Video: https://www.youtube.com/watch?v=71Rp-jG6Eek https://www.youtube.com/watch?v=eW5VGGJuWtQ</p>
Extension Tasks	
Extension Tasks to stretch and challenge you	<p>See the MOOCs section below.</p>
Massive Open Online Courses	<p>MOOCs are Massive Open On-line Courses</p> <p>You might enrol on these online courses and complete the following to push you a little further (this is optional).</p> <p>This is a great course to help you get ready for learning at level 3!</p>

(MOOCs)	https://www.coursera.org/learn/learning-how-to-learn-youth
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Part B – Preparing for Studying at Franklin

A fantastic opportunity to widen your understanding of the course.

Examining Board and Specification	<p>Specification - A level (pearson.com)</p> <p>You will be studying the following topics:</p> <ul style="list-style-type: none"> • Working as a Physicist • Mechanics • Electric Circuits • Further Mechanics • Electric and Magnetic Fields • Nuclear and Particle Physics • Materials • Waves and Particle Nature of Light • Thermodynamics • Space • Nuclear Radiation • Gravitational Fields • Oscillations
Preparing for the course	<p>Look at some of the topics on the attached website to get an idea of the some the content we cover on the course.....</p> <p>Edexcel A-Level Physics Revision - Physics & Maths Tutor (physicsandmathstutor.com)</p>