


A-Level Bridging Work – Computer Science

All tasks should be completed and handed in to your teacher during your first lesson at the start of the academic year. **The highlighted task** should take approximately **one hour** to complete and this should be submitted to your teacher on the A-level induction day in term 6.

Introduction to the Course (2 hours)	GCSE Flashback (2 hours)	A Level Preparation Tasks (2 hours)
<p>A Level Computer Science (OCR H446) https://www.ocr.org.uk/qualifications/as-and-a-level/computer-science-h046-h446-from-2015/</p> <p>The aims of this qualification are to enable learners to develop:</p> <ul style="list-style-type: none"> • An understanding and ability to apply the fundamental principles and concepts of computer science, including: abstraction, decomposition, logic, algorithms and data representation • The ability to analyse problems in computational terms through practical experience of solving such problems, including writing programs to do so • The capacity to think creatively, innovatively, analytically, logically and critically • The capacity to see relationships between different aspects of computer science • Mathematical skills. <p>Task Please prepare a short presentation (1-3 minutes) about “Why I would like to study A Level Computer</p>	<p>Truth Tables At GCSE we have learnt about the logic operators; NOT, AND and OR.</p> <p>Follow the link and then complete the exercise on truth tables and logic:</p> <p>163715-binary-truth -tables-checkpoint-t</p> <p>Binary and Hexadecimal At GCSE we have also learnt about Binary (base-2) and Hexadecimal (base-16).</p> <p>Follow the link and then complete the exercise on binary and hexadecimal:</p> <p>253513-data-types data-structures-and</p>	<p>Algorithms and programming Use Khan Academy to develop your programming skills in Python: https://www.khanacademy.org/ (Spend approximately one hour on this)</p> <p>Then follow the link and complete the Transition Task</p> <p>on algorithms and programming: </p> <p>253510-problem-solving-and-programm</p> <p>Please bring all your completed work with you on the Sixth Induction Day in Term 6.</p>

<p>Science.” You might want to consider:</p> <ul style="list-style-type: none"> • Introducing yourself and explaining what your interests are. • Explain why you are interested in computing, for example, cybersecurity, networks, gaming, video-editing. • Explain what you are most looking forward to learning about; developing better programs, learning about more algorithms, developing your understanding of Internet communication. 		
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Approx. 6 hours of work in total. For further guidance, please contact afaulkner@chippingnortonschool.org