Phase One Bridging Work 2021 - Computer Science

All tasks should be completed and handed in to your teacher during your taster lesson on the A-level induction day on Monday 12 July.

Introduction to the Course *(2 hours)*	**GCSE Flashback** *(2 hours)*	**A Level Preparation Tasks** *(2 hours)*
A Level Computer Science (OCR H446) https://www.ocr.org.uk/qualifications/as-and-a-level/computer-science-h046-h446-from-2015/ **The aims of this qualification are to enable learners to develop:** • 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. **Task** Please prepare a short presentation (1-3 minutes) about **"Why I would like to study A Level Computer Science."** You might want to consider: ● Introducing yourself and explaining	**Truth Tables** At GCSE we have learnt about the logic operators; NOT, AND and OR. Follow the link and then complete the exercise on truth tables and logic:  163715-binary-truth-tables-checkpoint-t **Binary and Hexadecimal** At GCSE we have also learnt about Binary (base-2) and Hexadecimal (base-16). Follow the link and then complete the exercise on binary and hexadecimal:  253513-data-types-data-structures-and	**Algorithms and programming** Use Khan Academy to develop your programming skills in Python: https://www.khanacademy.org/ (Spend approximately one hour on this) Then follow the link and complete the Transition Task on algorithms and programming:  253510-problem-solving-and-programm **Please bring all your completed work with you on the Sixth Induction Day on Monday, 12 July 2021.**

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.		

Approx. 6 hours of work in total. For further guidance, please contact afaulkner@chippingnortonschool.org