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| **Year 10 Term 5**  **GCSE Computer Science** | Our mission is to stimulate and challenge our students to excel and provide a desire for lifelong learning and pursue careers in the world of Business, Computing, and ICT. | | | | | |
| **Enquiry Questions: How many websites hold your personal data? Is there a way of finding out where the data is saved?** | | | | | | |
| **Component 1: Computer Systems & Component, 2: Computational Thinking, Algorithms & Programming**  Students will understand the components that make up digital systems, and how they communicate with one another and with other systems. They will also recognise the impacts of digital technology to the individual and to wider society. Students also learn computing fundamentals of data and apply mathematical skills relevant to data representation. | | | | | | |
| **Knowledge**  Students will know about… | **Application/Skills**  Students will be able to… | **Vocabulary** | **Home Learning** | **Assessment** | **Extra Resources**  **Extended Reading** | **Cultural Capital** |
| * **Legislation relevant to Computer Science**   Ethical Issues  Privacy Issues  Cultural Issues  Legal Issues  Benefits and drawbacks of computer science   * **Structured Query Language**   Searching though a database to filter records  Using records to store data   * **Logic Gates & Truth Tables**   Understand how circuits are created to implement binary  Determine the outcome of a digital circuit and express it in an algebraic form | * Identify correct legislation for certain crimes and actions * Discuss the impact of technology regarding ethics, privacy, culture * Implement SQL an practice searching through a database * Draw logic circuits from Boolean expressions and vice versa * Draw truth tables to determine the outcome of any logical circuit | * Ethical issues * Legal issues * Cultural issues * Environmental issues * Privacy issues * The Data Protection Act 2018 * Computer Misuse Act 1990 * Copyright Designs and Patents Act 1988 * Software licences (i.e. open source and proprietary) * SQL * SELECT * FROM * WHERE * Logic Circuits * Boolean Expression | High quality Homework set on Google Classrooms  Teach-ICT.com  PG Online – GCSE Computer Science | End of unit assessments   * Ethical and Legal * SQL * Logic Gates   Pre-Public Examination at the end of year 10 May 2023. | [Teach-ICT.com](https://teach-ict.com/2016/GCSE_Computing/OCR_J277/OCR_J277_home.html)  [Isaac Computer Science](https://isaaccomputerscience.org/topics/gcse?examBoard=all&stage=all#all)  Seneca – [Computer Science](https://app.senecalearning.com/classroom/course/a1ce4570-6e27-11e8-af4b-35cf52f905c2/section/65ac2e24-3b57-4598-b4dc-01e04eddee1b/session)  BBC Bitesize  CGP – GCSE Computer Science  Hodder Education – Revision Book A Level Computer Science | The National Science Museum (free events)  <https://www.sciencemuseum.org.uk/>  The Royal Institute of Science (free events)  <https://www.rigb.org/families/family-fun-days>  **National Museum of Computing, Bletchley Park (Near Milton Keynes)**  <http://www.tnmoc.org/>    <https://www.bletchleypark.org.uk/>  <http://www.codesandciphers.org.uk/bletchleypark/>  (virtual tour)    Centre for Computing History, Cambridge  <http://www.computinghistory.org.uk/> |