



## **Computer Science Curriculum Information - GCSE**

As students embark on their Computer Science GCSE, we thought it would be useful to share an overview of the course.

### **In Key Stage 4 Computer Science:**

The examination board for GCSE Computer Science is AQA. You can find further information relating to the specification [here](#).

- Paper 1 50%: Computational thinking, code tracing, problem-solving, programming concepts including the design of effective algorithms and the designing, writing, testing and refining of code.
- Paper 2 50%: Data representation, Computer systems, Fundamentals of computer networks, Cyber security, Relational databases and SQL, Ethical, legal and environmental impacts of digital technology on wider society, including issues of privacy.

### **Textbooks and resources:**

The students will have a blue exercise book to do their work in lessons, for them to keep notes, and to practise. All students should bring this to every Computer Science lesson.

We have our bespoke Google Site for all Computer Science including Year 10 and 11, that has all of the resources that we use for lessons, making it easy for students to access at home should they need to catch up or revise. Please ask them to show you the site! We send out revision lists prior to tests in October, December and May so that students can revise effectively. In Year 11, there will be mock examinations in the spring term.

### **Required resources:**

- An A4 Ring Binder folder
- A hole punch that will work with the Ring Binder

### **Useful websites:**

- [BBC Bitesize AQA Computer Science](#)
- [Videos by Craig & Dave covering the AQA theory](#)
- [W3Schools tutorial on learning C#](#)
- [W3Schools tutorial on SQL](#)
- [ComputerScienced.co.uk](#)
- [dotnetfiddle.net - online C# compiler](#)

### **Homework and assessment:**

Homework of 40 minutes duration will be set in Computer Science to give the students time to consolidate their understanding of work covered at school and further develop their ideas. Homework is usually set for a lesson in the following academic week. Homework may take the form of a written or practical piece based upon past exam papers and is marked in class where feedback is given in line with the school marking policy and exam board assessment criteria, or a worksheet that will reinforce the topics covered in that lesson. Occasionally homework may be to finish a element of C# coding, this can be completed using their Chromebooks. Assessment marks are subject to change and are based on the last exam season grade boundaries. If your child is struggling with their homework then they should talk to their teacher about it so that support can be provided.

**Revision:**

Revision takes the form of completing past paper questions grouped by topic. These are made available via Google Classroom. Programming questions are made available from both past papers and created to be compatible with the AQA specification specific content and marking guidance.

**Co-curricular Computer Science:**

<https://www.smallpeicetrust.org.uk/cyberfirst-defenders>

If you have any queries, please contact Mr James Petty, Head of Computing, at [jpetty@ahs.bucks.sch.uk](mailto:jpetty@ahs.bucks.sch.uk)