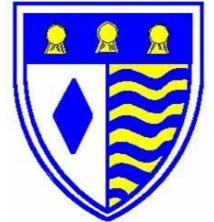


Weaverham High School

Computer Science and IT Department



Year 9 – Preparing for GCSE Computer Science.



Welcome to your GCSE Computer Science preparation document. Over the next two school years you will study two unit areas, Computer Systems and Computational Thinking, with the aim to encourage you to:

- understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation
- analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs
- think creatively, innovatively, analytically, logically and critically
- understand the components that make up digital systems, and how they communicate with one another and with other systems
- understand the impacts of digital technology to the individual and to wider society
- apply mathematical skills relevant to Computer Science



To support transition and prepare for the GCSE course we have created a Google Classroom with tasks and activities to complete.

All students who have opted for Computer Science have been invited to join this Classroom.

Computer Systems

- guided learning tasks sampling a number of the key topics.
- Each task will be supported with learning resources
- Questions to answer to help develop your knowledge.

Computational Thinking

- Amazon Future Engineer Python challenges.
- Learn many of the fundamental programming techniques necessary for the GCSE course by completing the four series of challenges.
- Visual block coding followed up by text based Python code.
- A class leader board is in place to see who can complete the challenges first.