Subject: Computer Science

Kay Stage 3 Curriculum Plan

Year: 8

Department Information:

At KS3 students follow the national curriculum.

Curriculum aims and intent:

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Assessment:

Students are assessed on the last lesson of every end of topic, based on the content covered.

Resources used to support learning:

BBC Bitesize - Covers a wide array of topics at KS3 and KS4.
Youtube - Craig n Dave - Although aimed at GCSE content some topics have videos that will be useful for KS3 groups. T

Home Learning:

Students are given one piece of homework per topic

How parents can help their child:

Encourage at home learning through reading the PowerPoints on Microsoft Teams and encouraging revision using BBC Bitesize and other materials.

Term	Summary of work being covered	Knowledge, Understanding and skills assessed	How the work is assessed	Career Links
1	Edublocks Variables Selection (if/else) Iteration (loops) Sequence Inputs and outputs Simple algorithms	Provides an effective bridge between the visual programming students experienced in Scratch and the text-based Python they will study in Year 9.	Microsoft Forms quiz set on Teams	
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3	Spreadsheets Focus on formulas, functions and graphs	What is a spreadsheet? What is it used for? How can I use functions? Which graph is best? How can I present data visually?	Microsoft Forms quiz set on Teams	
4	Spreadsheets Focus on formulas, functions and graphs	What is a spreadsheet? What is it used for? How can I use functions? Which graph is best? How can I present data visually?	Microsoft Forms quiz set on Teams	
5	System Architecture Key words RAM,ROM,CPU,Von Neumann, SSD, Harddrave,Input,Output	Key words needed for GCSE What do they all mean? How does a computer work on a basic level?	Microsoft Forms quiz set on Teams	
6	System Architecture Key words RAM,ROM,CPU,Von Neumann, SSD, Harddrave,Input,Output	Key words needed for GCSE What do they all mean? How does a computer work on a basic level?	Microsoft Forms quiz set on Teams	