Marden Bridge Middle School

Believe, achieve, succeed.

Computing Curriculum Outline 2020/21

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
5	**Admin** Storing and Retrieving Data on MBMS network Formatting Text/Graphics, Intro to **MBMS Google Apps** **E-safety:** SMART/Netiquette Baseline test	**Collaboration** Using cloud computing **Programming** Gaming using coding blocks Scratch programming **Presenting Information** 2d Graphic Design	**Modelling and Simulations** Create a spreadsheet model to solve real life problems **Presenting Information** **Charts and graphs**	**Data Handling** present primary and secondary data in formatted tables, bar charts and line graphs **Control Programming** Lego WeDo	**Control Programming** Understanding Algorithms Physical Systems Flowol **Computer Hardwares** Understanding functions of computer components	**Manipulating Sound and Digital Images** Editing,images digital, sounds and music **Code Combat** Introduction to textual coding language functions
6	**Digital Citizens** E-safety Revision Reliable **Internet searches** **Collaboration and Presentation** Cloud computing Collaboration research and Online Surveys	**Understanding Computers** How the Internet works-cloud computing. **Presenting Information 2d and 3d** graphic design	**Modelling** Create and design a spreadsheet to solve a specific problem with different variations to support enterprise	**Data Handling -**collect present primary and secondary data in tables, charts and graphs **Presenting Information** conventions and formats 2d and 3d Graphic Design.	**Physical Computing** **Ccrumble** design, write and debug programs that control or simulatie physical systems **Robotics** Lego Mindstorm NXT	**Manipulating Sound and Digital Images** Recording, editing, creating sounds and music digitally **Digital art -** Creating and formatting images Digital Art sculpture
7	**Digital Citizens** E-safety Revision Presenting Information **Data and Representation** File management and Viruses **Modelling & Simulations** Use of complex formulas/ functions (Interactive Quiz)	**Understanding Computers** **Introduction to binary** Converting Denary–Binary. ASCII Code **Programming, using coding blocks** E Safety Scratch	**Programming and Development-** Converting block coding to Pseudocode **Python** Introduction to textual coding language functions	**Modelling Testing Hypothesis** Create model to solve a specific problem to support enterprise **Physical Computing** Introduction to Raspberry Pi's - light shows	**Data and Representation** Data Representation as binary including text/graphics/sound	**Raspberry Pi's (crumble)** design, write and debug programs that control or simulating physical system
8	**Digital Citizens**Google Sites on social networking **Understanding Computers** Describe the stages of fetch execute cycle. Functions of computer hardware/software. Network Topology	**HTML Coding /CSS** Web Design on topic of E safety **App Design** Design an APP, or game or animation.	**Programming and Development- Python** Write programs using variables,operators, loops **Physical Computing** Raspberry PI Minecraft	**Modelling** Testing Hypothesis cell referencing, making predictions, data analysis Evaluate what kinds of problems can be solved using modelling	.**Digital Citizens** Google Sites creating eportfolios **Computing:Algorithms** Design solutions to problems by composition and creating sub-solutions.	**Computing in the Wider Context** Reflect on their own and others use of ICT adopting safe, and responsible practice **Basic graphics** Review a range of existing promotional products.