

Curriculum Outline 2018-19 **ICT**

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>5</b>	Admin Storing and Retrieving Data on MBMS network Formatting Text/Graphics, <b>E-safety</b> Using cloud computing Intro to mbms.org.uk	<b>Control, programming</b> Gaming using coding blocks Scratch programming  <b>Presenting Information</b> 2d Graphic Design	<b>Modelling and Simulations</b> Creating a spreadsheet model  <b>Control Programming</b> Lego WeDo	<b>Data Handling</b> Simulations and modelling Create and design a spreadsheet to solve a problems for costings -	<b>Control Programming</b> Flowol <b>Computational Thinking</b> Understanding computer networks including the internet	<b>Manipulating Sound and Digital Images</b> Editing images, digital sounds and music <b>Code Combat</b> Introduction to textual coding language functions
<b>6</b>	<b>Collaboration and Presentation</b> Cloud computing E-safety Revision Collaboration research and Online Surveys	<b>Inside the internet -</b> understanding of the theory of computer  <b>Presenting Information 3d</b> graphic design	<b>Modelling</b> Create and design a spreadsheet to solve a specific problem with different variations to support enterprise	<b>Presenting Information</b> conventions and formats 2d and 3d Graphic Design. <b>Algorithms</b>	<b>Raspberry Pi</b> design, write and debug programs that control or simulating physical systems <b>Robotics</b> Lego Mindstorm NXT	<b>Manipulating Sound and Digital Images</b> Recording, editing, creating sounds and music digitally <b>Digital art -</b> Creating and formatting images Digital Art sculpture
<b>7</b>	<b>Data and Representation</b> <b>File management and Virus</b>  <b>Modelling &amp; Simulations</b> Use of complex formulas/ functions to create an Interactive Quiz	<b>Understanding Computers</b> <b>Introduction to binary</b>  <b>Programming, using coding blocks</b> E Safety Scratch quiz using Boolean Logic	<b>Modelling Testing Hypothesis</b> Create and design a model to solve a specific problem for costing with different variations to support enterprise	<b>Data and Representation</b> Explain Data Representation as binary including Monochrome BMP images	<b>Programming and Development- Python</b> Introduction to textual coding language functions	<b>Raspberry Pi's</b> design, write and debug programs that control or simulating physical systems
<b>8</b>	<b>Understanding Computers</b> Describe the basic functions of computer components and how information is transported over the Internet <b>Data and Representation</b> Google Sites Creating E portfolios	<b>HTML Coding /CSS</b> Web Design on topic of e-safety <b>Collaboration</b> <b>App Design</b> Design an APP, or game or animation	<b>Programming and Development- Python</b> Write programs using variables, operators, loops  <b>Understanding Computers</b> How the Internet works- cloud com	<b>Computer Language</b> Converting Denary–Binary. ASCII Code  <b>Computing: Algorithms</b> Design solutions to problems by decomposition and creating sub-solutions.	<b>Modelling</b> Testing Hypothesis cell referencing, making predictions, data analysis Evaluate what kinds of problems can be solved using modelling	<b>Computing in the Wider Context</b> Reflect on their own and others use of ICT adopting safe, and responsible practice <b>Basic graphics</b> Review a range of existing promotional products