

Curriculum Outline 2015-16: **ICT**

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, E-safety Using cloud computing Intro to mbms.org.uk	Control, programming Gaming using coding blocks Scratch programming Presenting Information 2d Graphic Design	Control Programming Lego WeDo	Data Handling Simulations and modelling Create and design a spreadsheet to solve a problems for costings -	Control Programming Flowol Computational Thinking Understanding computer networks including the internet	Manipulating Sound and Digital Images Recording, editing, creating sounds and music digitally
6	Collaboration and Presentation Cloud computing E-safety Revision Collaboration research and Online Surveys	Presenting Information conventions and formats 2d and 3d Graphic Design	Modelling Create and design a spread sheet to solve a specific problem with different variations to support enterprise	Raspberry Pi design, write and debug programs that control or simulating physical systems	Robotics Lego Mindstorm NXT Digital art - Creating and formatting images Digital Art sculpture	Inside the internet - understanding of the theory of computer
7	Modelling & Simulations Use of complex formulas (If Function-Conditional Formatting- Countif) functions to create an Interactive Quiz	Programming, using coding blocks E Safety Scratch quiz using Boolean Logic Understanding Computers Introduction to binary	Modelling Testing Hypothesis Create and design a model to solve a specific problem for costing with different variations to support enterprise	Data and Representation Explain Data Representation as binary including Monochrome BMP images	Raspberry Pi's design, write and debug programs that control or simulating physical systems	Code Combat Introduction to textual coding language functions Code academy - Python
8	Understanding Computers The basic functions of computer components	HTML Coding Web Design	Collaboration App Design Design an APP, or game or animation	Python Coding Write basic programs using a textual coding language	Modelling Testing Hypothesis cell referencing, making predictions, data analysis Evaluate what kinds of problems can be solved using modelling	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
	Computer Language Converting Denary–Binary. ASCII Code	Understanding Computers How the Internet works- cloud computing				