Curriculum Map: **Computing** **Year 2**

Below outlines the learning focus for each term

Term	Learning Focus		Conceptual Development
	Knowledge	**Skills**	
Autumn 1	**Computer Science** To understand that an algorithm is a set of instructions that we give to a computer To understand that programs respond to different sorts of input (keyboard and mouse)	To program objects to move, hide, show and turn when a key is pressed (key press events) To program objects to move by pressing and releasing the mouse button (pointer pressed/released events) To create a loop (repeating set of instructions) To program objects to match the mouse pointer's position	**Build upon:** To create a more advanced app that combines start events and click events **Prepare for:** To create a program where objects can be used to control other objects (buttons)
Autumn 2	**Information Technology** To understand that MS Paint can be used create digital art	To change the colour and size of dots To draw lines and fill spaces with colour To rotate, resize and colour shapes To produce lighter and darker shades of a colour To duplicate and alter colours of an image To save and retrieve digital content	**Build upon:** To paint with different colours and brushes To insert shapes and text **Prepare for:** To create digital publications in MS Publisher
Spring	**Computer Science** To understand that an algorithm is a set of instructions that we give to a computer To understand that buttons are a type of computer input	To program buttons to control other objects (button click events) To add and name new buttons on the design screen To practise debugging code	**Build upon:** To create a simple program where programs respond to different sorts of inputs (keyboard and mouse) **Prepare for:** To code a sequence of commands to create simple animations and simulations
Summer 1	**Information Technology** To understand that MS PowerPoint can be used to create digital presentations	To insert and format the layout of slides To insert images by copying and pasting To insert and format text boxes To add animations to images and text boxes To add transitions to slides To save and retrieve digital content	**Build upon:** To type, select and format text in MS Word **Prepare for:** To create digital branching quizzes in MS PowerPoint
Summer 2	**Computer Science** To understand that algorithms are implemented as programs on digital devices To understand that programs execute by following precise and unambiguous instructions	To add and remove characters and backgrounds To program a character to grow and shrink To make characters move at different speeds and distance To use a repeat instruction to make a sequence	**Build upon:** To program a Bee-Bot to move across a floor mat **Prepare for:** To program buttons to control other objects (button click events) in Espresso Coding

		of instructions run more than once To create programs that play a recorded sound	
Online Safety Lessons (1 per half term)	**Digital Literacy** To understand that the information I put online leaves a digital footprint To understand how to safely search using search engines To recognise whether a website is appropriate for children	To keep personal information private To use keywords in an online search to find key information about a topic To use search engines and websites appropriate for children To be able to identify kind and unkind behaviour online	**Build upon:** To sort personal information into safe and not safe to share **Prepare for:** To understand how websites use digital footprints to target advertising