Whole School Computing Yearly Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	**iPad introduction – unlocking the iPad and using the keyboard.**		**Media – Using an iPad to take photos and videos**		**Moving a robot – Introduction to Bee-Bot**	
	Computing Systems and Networks	**Creating Media**	**Programming A**	**Data and Information**	**Creating Media**	**Programming B**
Year 1	**Technology around us** Recognising technology in school and using it responsibly Paintz app	**Digital painting** Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally Microsoft paint or similar	**Moving a robot** Writing short algorithms and programs for floor robots, and predicting program outcomes. Bee-Bot	**Gathering data** Exploring object labels, then using them to sort and group objects by properties. Google slides or PowerPoint	**Digital writing** Using a computer to create and format text, before comparing to writing non-digitally. Google Docs or Word	**Programming animations.** Designing and programming the movement of a character on screen to tell stories. ScratchJr
Year 2	**Information technology around us.** Identifying IT and how its responsible use improves our world in school and beyond. Google slides or PowerPoint	**Digital photography** Capturing and changing digital photographs for different purposes. Digital Camera	**Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions. Bee-Bot	**Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer. J2data Pictogram	**Digital music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition. Chrome Music Lab	**Programming quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. ScratchJr
Year 3	**Connecting computers** Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks Painting Program - any	**Stop-frame animation** Capturing and editing digital still images to produce a stop-frame animation that tells a story iMotion - App	**Sequencing sounds** Creating sequences in a block-based programming language to make music Scratch	**Branching databases** Building and using branching databases to group objects using yes/no questions. J2data Branch and Pictogram	**Desktop publishing** Creating documents by modifying text, images, and page layouts for a specified purpose. Canva.com	**Events and actions in programs** Writing algorithms and programs that use a range of events to trigger sequences of actions. Scratch
Year 4	**The internet** Recognising the internet as a network of networks including the	**Audio production** Capturing and editing audio to produce a	**Repetition in shapes** Using a text-based programming language to explore count-	**Data logging** Recognising how and why data is collected over time, before using	**Photo editing** Manipulating digital images, and reflecting on the impact of	**Repetition in games** Using a block-based programming language to explore count-

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	WWW, and why we should evaluate online content Various Website	podcast, ensuring that copyright is considered. Audacity	controlled loops when drawing shapes FMSLogo	data loggers to carry out an investigation. Data logger and associated software	changes and whether the required purpose is fulfilled. Paint.NET or Microsoft Windows	controlled and infinite loops when creating a game. Scratch
Year 5	**Systems and searching** Recognising IT systems in the world and how some can enable searching on the internet Google slides	**Video production** Planning, capturing, and editing video to produce a short film. Microsoft Photos	**Selection in physical computing** Exploring conditions and selection using a programmable microcontroller. Crumble controller + starter kit + motor	**Flat-file databases** Using a database to order data and create charts to answer questions. J2data Database	**Introduction to vector graphics** Creating images in a drawing program by using layers and groups of objects Google drawings	**Selection in quizzes** Exploring selection in programming to design and code an interactive quiz Scratch
Year 6	**Communication and collaboration** Exploring how data is transferred by working collaboratively online. Google Slides	**Webpage creation** Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation Google Slides	**Variables in games** Exploring variables when designing and coding a game. Scratch	**Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data Google Sheets or Excel	**3D modelling** Planning, developing, and evaluating 3D computer models of physical objects. Tinkercad	**Sensing movement** Designing and coding a project that captures inputs from a physical device. Micro:bit and Microsoft MakeCode