



Chapelford Village Primary School

Long Term Subject Progression Overview

Subject: Computing

Subject Lead: L Brownbill

Year Group	Area of Learning	Knowledge	Skills	Vocabulary (Tier 2 and 3)
Early Years	Programming	I can compare real life and virtual situations, e.g., colour in a shape, dress teddy.	<p>I can use a variety of electronic toys in play situations, e.g., dance mats, Bee-Bots, and remote control toys, using basic directional language.</p> <p>I can explore toys that simulate control devices, e.g. traffic lights, scanner, microwave, cash tills, with the intention of finding out how it works.</p> <p>I can control simple games on-screen using the arrow keys.</p>	Equipment Buttons Movement
	Communication	<p>I can explore simple web-based communication tools with adult support</p> <p>I can participate in simple video conferencing and webcam activities with adult help</p>	I can use different forms of electronic 'online' communication in free play, e.g., email, mobile phones, hand-held devices, walkie-talkies, sound recording devices.	Share Create
	Computer Networks		<p>I can use a shortcut such as an icon on the desktop to navigate to a specific website.</p> <p>I can explore a teacher-selected website or apps to find a desired page, using hyperlinks and navigation buttons.</p>	Technology Internet
	Creativity		<p>I can develop mouse control through simple activities on-screen including click-and-drag, drag-and-drop.</p> <p>I can begin to use a keyboard and develop familiarity with letters, numbers, backspace (to delete), arrow keys and space bar.</p> <p>I can use a keyboard in writing.</p> <p>I can use a paint program or interactive whiteboard software to make marks using simple tools, including changing brushes, fill, colour, and stamps, to communicate their ideas.</p>	Screen Mouse Images Keyboard Paint
	Productivity	I can produce simple pictograms with help.	<p>I can collect information, e.g., by taking photographs or collecting objects.</p> <p>I can begin to sort, classify or group various objects progressing from practical activities to the use of ICT, e.g., practically sorting fruit into colours, types or shapes, and then on-screen.</p> <p>I can use ICT to sort and sequence objects on a screen or interactive whiteboard.</p>	Collect Set Count Organise

Year 1	Programming	<p>I can explain that an algorithm is a set of instructions.</p> <p>I know that an algorithm written for a computer is called a program.</p> <p>I know that if something doesn't work it is because my code is incorrect.</p>	<p>I can try and fix my code if it is not working properly.</p> <p>I can say what might happen in a program. For example, where the BeeBot might go.</p>	<p>Instructions</p> <p>Command</p> <p>Buttons</p> <p>Robot</p> <p>Forwards</p> <p>Backwards</p> <p>Patterns</p>
	Communication	<p>I can name devices that can be used to search the internet.</p> <p>I understand what counts as personal information.</p>	<p>I can keep my personal information safe.</p>	<p>Communicate</p> <p>Message</p> <p>Reply</p>
	Computer Networks	<p>I can talk about websites I have been on.</p>	<p>I can keep my login information safe.</p>	<p>Internet</p> <p>Online</p> <p>Website</p>
	Creativity	<p>I can discuss which sounds and videos to keep and which to delete.</p> <p>I can save my work in a safe place.</p>	<p>I can record sound.</p> <p>I can capture video.</p> <p>I can add pictures and text to a program.</p> <p>I can change content on a file such as text and images.</p>	<p>Video</p> <p>Camera Still</p> <p>Sounds</p> <p>Image Bank</p> <p>Word Bank</p> <p>Tools</p> <p>Space bar</p>
	Productivity	<p>I know that pictures give information.</p> <p>I can say what a pictogram is showing.</p>	<p>I can input data into a program.</p>	<p>Photograph</p> <p>Image</p> <p>Data</p> <p>Pictogram</p> <p>Sort</p> <p>Digital</p>
Year 2	Programming	<p>I can explain that an algorithm is a set of instructions to complete a task.</p> <p>I know I need to plan my algorithm carefully so it will work.</p>	<p>I can find and correct error in my program.</p> <p>I can predict that will happen in a program.</p>	<p>Commands</p> <p>Algorithm</p> <p>Forwards</p> <p>Backwards</p> <p>Turn</p> <p>Sequence</p> <p>Debug</p> <p>Predict</p>
	Communication	<p>I can see where technology is used in school.</p>	<p>I can share work and communicate electronically.</p>	<p>Communicate</p> <p>Email</p> <p>Message</p> <p>Reply</p> <p>@</p>
	Computer Networks	<p>I know the consequences of not searching online safely.</p>	<p>I can find information I need using a search engine.</p> <p>I can find information using specific searches.</p>	<p>Website content</p> <p>Hyperlink</p> <p>Purpose</p>
	Creativity	<p>I can name, save and find my work.</p> <p>I can include photos, text and sound in my creations.</p>	<p>I can capture video.</p> <p>I can arrange my video clips to create a short film.</p>	<p>Paint effects</p> <p>Image</p> <p>Text</p>

			<p>I can add a title and credits.</p> <p>I can edit digital data such as data in music composition.</p>	<p>Video clip</p> <p>Return/Enter</p> <p>Caps lock</p> <p>Back space</p>
	Productivity		<p>I can organise data – for example using a database.</p> <p>I can organise information – for example using a spreadsheet.</p>	<p>Photograph</p> <p>Image</p> <p>Data</p> <p>Pictogram</p> <p>Sort</p> <p>Digital</p>
Year 3	Programming	<p>I can experiment with timers in my program.</p> <p>I can identify 'if' statements, repetition and variables.</p> <p>I can read programs with several steps and predict what it will do.</p>	<p>I can identify an error in my program and fix it.</p> <p>I can design an algorithm carefully, thinking about what I want it to do.</p>	<p>Sequence</p> <p>Sequence Debug</p> <p>Test & Improve</p> <p>Logo Commands</p> <p>Programming</p> <p>Background</p> <p>Sprite</p>
	Communication	<p>I can identify different ways that the internet can be used for communication.</p> <p>I can use communication tools respectfully and use good etiquette.</p>	<p>I can use email to respond to others appropriately and attach files.</p>	<p>Communication</p> <p>Email</p> <p>Blog</p>
	Computer Networks	<p>I understand the importance of having a secure password.</p> <p>I understand the importance of safe searching.</p>	<p>I can create a secure password.</p> <p>I can use a search engine to find a range of media.</p>	<p>URL</p> <p>Search tools</p> <p>School Network</p> <p>Appropriate websites</p>
	Creativity		<p>I can capture video for a purpose.</p> <p>I can choose which clips to keep and which to discard.</p> <p>I can trim and arrange clips to convey meaning.</p>	<p>Multimedia</p> <p>Presentation</p> <p>Slide</p> <p>Layout</p> <p>Font</p> <p>Copy</p> <p>Paste</p>
	Productivity	<p>I can collect data and put it into software.</p> <p>I can analyse data.</p>	<p>I can present data and information using a range of software.</p>	<p>Questioning</p> <p>Information</p> <p>Database</p> <p>Construct</p>
Year 4	Programming	<p>I can use repetition in my code.</p> <p>I can use timers within my program designs more accurately.</p> <p>I can use variables within my program and know how to change the value or variables.</p>	<p>I can identify errors in my code using different methods.</p> <p>I can red programs that involve several steps and predict the outcomes with increasing accuracy.</p>	<p>Logo Commands</p> <p>Sequence Debug</p> <p>Test & Improve</p> <p>Sensor</p> <p>Conditional</p>
	Communication	<p>I can work collaboratively to create content and solutions.</p>	<p>I can share digital content using a variety of applications.</p>	<p>Communication</p> <p>Email</p> <p>Blog</p> <p>Attach</p> <p>Download</p>

	Computer Networks	<p>I understand the purpose of a search engine and the features within it.</p> <p>I can look at information on a webpage and make predictions about its accuracy.</p> <p>I can demonstrate how to use different online services safely.</p>		<p>URL</p> <p>Networks</p> <p>Search terms</p> <p>Reliability</p> <p>Fact + Opinion</p>
	Creativity		<p>I can record quality video.</p> <p>I can trim and arrange clips for a specific purpose.</p> <p>I can add titles, credits, slide transitions and special effects.</p> <p>I can create my own simple rhythm.</p> <p>I can create a simple melodic pattern.</p> <p>I can experiment with pitch, rhythm and melody to create a short piece of music.</p>	<p>Alignment</p> <p>Photo modifying</p> <p>Rotate</p> <p>Resize</p> <p>Invert</p> <p>Slide Transition</p>
	Productivity		<p>I can sort and organise information.</p> <p>I can use data in a spreadsheet to create a graph.</p>	<p>Database</p> <p>Search</p> <p>Present</p>
Year 5	Programming	<p>I can test and debug programs as I work.</p> <p>I can use sequence, selection, repetition and some other coding structures in my code.</p>	<p>I can organise my code carefully for example, naming variables and using tabs.</p> <p>I can use logical methods to identify the cause of my bug.</p>	<p>Procedure</p> <p>Variable</p> <p>Input</p> <p>Output</p> <p>Solution</p>
	Communication	<p>I can use the most appropriate form of online communication according to the digital content.</p>	<p>I can use collaborative modes to work with others and share content.</p>	<p>Collaboration</p> <p>Responsibility</p> <p>Cloud</p> <p>Upload</p> <p>Download</p>
	Computer Networks	<p>I can explain in detail how accurate, safe and reliable the content is on a webpage.</p> <p>I know the importance of computer networks and how they help solve problems and enhance communication.</p>	<p>I can search precisely when using a search engine.</p>	<p>Webpages</p> <p>Search engine</p> <p>Searching strategies</p>
	Creativity		<p>I can plan a multi-scene animation.</p> <p>I can adjust the number of photographs taken and the playback rate to improve the quality of my animation.</p> <p>I can edit and refine my animation.</p>	<p>Multimedia</p> <p>Transition</p> <p>Animation</p> <p>Hyperlinks</p> <p>Editing Tools</p>
	Productivity		<p>I can collect data and enter it accurately into different programmes.</p> <p>I can create a formula.</p>	<p>Spreadsheet</p> <p>Present</p> <p>Analyse</p> <p>Interpret</p>

				Inaccurate data Graph Formula
Year 6	Programming	I can turn a computer programming task into an algorithm. I can decompose the important aspects of programming task in a logical way.	I can test and debug my program as I work on it. I can identify a specific line of code that is causing a problem and attempt a fix.	Test & Review Loop Variable
	Communication	I can consider the intended audience carefully when I design and make digital content.	I can design and make my own online blogs.	Collaboration Responsibility Cloud Upload Download Sync
	Computer Networks	I can compare a range of digital content sources and rate them in terms of quality, accuracy and content. I can explain in detail how accurate and reliable a webpage and its content is.	I can use filters when searching for content.	Search engine Searching strategies Result rankings Ownership Sources
	Creativity	I can storyboard and capture videos for a purpose. I can plan for the use of special effects and transitions.	I can and edit video to improve the quality of my outcome. I can export my video. I can use transitions and animations to improve the quality of my presentation. I can include sounds and moving graphics in the slides. I can present to a large group or class using notes I have made	Audience Structure Presentation Export Copyright
	Productivity		I can create a spreadsheet to answer questions and solve problems. I can use a range of formula for a purpose.	Spreadsheet Present Analyse Interpret Formula Inaccurate data Plausibility