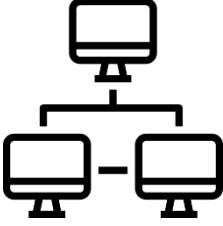

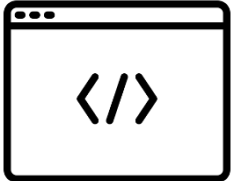
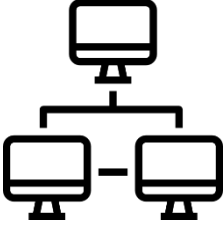

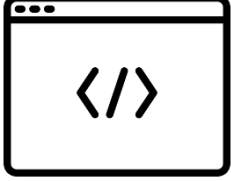


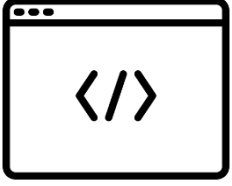
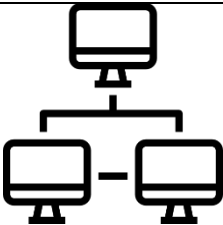

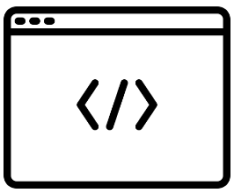




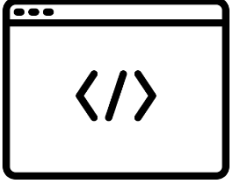
Sticky Knowledge – Computing

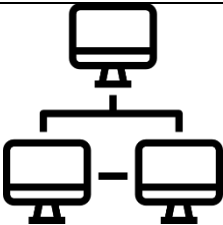

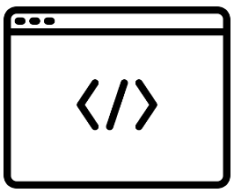
Early Years	<p>Computing Systems & Networks Information Technology</p>	<p>Creating Media Early Digital Literacy</p>	<p>Programming A Pre-Coding</p>
			
	<p>Knowledge I know the names of digital devices.</p> <p>I know about sensible amounts of screen time.</p> <p>I know how to keep safe online.</p>	<p>Knowledge The children know that devices can help us communicate.</p> <p>The children know that you can use a device to create images, sounds and text.</p>	<p>Knowledge I know what a repeating pattern is.</p> <p>I know that instructions help us carry out tasks.</p>
	<p>Skills I explore a range of digital devices.</p> <p>I use devices in my play.</p> <p>I am confident to try new things.</p>	<p>Skills I develop my fine motor skills.</p> <p>I can use ipads.</p> <p>I can take photographs.</p> <p>I can play with Bee-Bots.</p>	<p>Skills I can break down big problems into little problems.</p> <p>I can follow simple instructions.</p> <p>I can continue, copy and create repeating patterns.</p> <p>I can notice and correct errors in repeating patterns.</p>



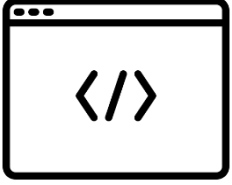
<p>Computing Systems & Networks Technology Around Us</p>	<p>Creating Media Digital Painting</p>	<p>Programming A Moving a Robot</p>
		
<p>Knowledge I can identify technology around me.</p> <p>I can identify a computer and its main parts.</p> <p>I know how to use technology responsibly.</p>	<p>Knowledge I know what freehand tools do.</p> <p>I know what different paint tools do.</p>	<p>Knowledge I know what different commands will do.</p>
<p>Skills I can use a mouse in different ways.</p> <p>I can use a keyboard to type on a computer.</p> <p>I can use a keyboard to edit text.</p>	<p>Skills I can use the shape tool.</p> <p>I can use the line tool.</p> <p>I can paint a digital picture.</p>	<p>Skills I can follow simple instructions.</p> <p>I can combine forwards and backwards commands to make a sequence.</p> <p>I can combine four direction commands to make a sequence.</p> <p>I can plan a simple programme.</p> <p>I can find more than one solution to a problem.</p>

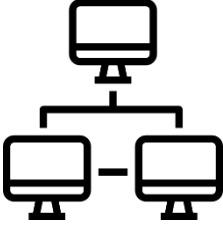

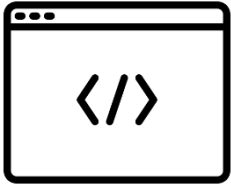
Data and Information Grouping Data	Creating Media Digital Writing	Programming B Programming Animations
		
<p>Knowledge I know that objects can be counted</p>	<p>Knowledge I know that the look of text can be changed on a computer</p>	<p>Knowledge I know that a series of commands can be joined together.</p> <p>I know the effect of changing a value.</p> <p>I know that each sprite has its own instructions.</p>
<p>Skills I can label objects</p> <p>I can describe objects in different ways</p> <p>I can count objects with the same properties</p> <p>I can compare groups of objects</p> <p>I can answer questions about groups of objects</p>	<p>Skills I can use a computer to write</p> <p>I can add and remove text on a computer</p> <p>I can make careful choices when changing text.</p> <p>I can explain the tools that I used.</p> <p>I can compare typing on a computer to writing on paper.</p>	<p>Skills I can choose a command for a given purpose.</p> <p>I can design a project.</p> <p>I can use an algorithm to create a program.</p>



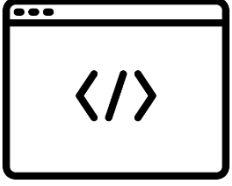
Year Two	Computing Systems & Networks IT Around Us	Creating Media Digital Photography	Programming A Robot Algorithms
			
	<p>Knowledge</p> <p>I know lots of different examples of computers.</p> <p>I know the uses of computers.</p> <p>I know that a computer is part of a wider IT system.</p> <p>I know lots of different examples of IT.</p> <p>I know how IT is used in my school.</p> <p>I know how IT is used outside of school.</p> <p>I know how IT helps us.</p> <p>I know that I make choices when I use IT.</p>	<p>Knowledge</p> <p>I know different devices which can take photographs.</p> <p>I know what makes a good photograph.</p> <p>I know how photos can be improved.</p> <p>I know that photos can be changed.</p>	<p>Knowledge</p> <p>I know that a series of instructions is called a sequence.</p> <p>I know what happens when we change the order of a sequence of instructions.</p> <p>I know that programming projects can contain both code and artwork.</p>
	<p>Skills</p> <p>I can use technology safely.</p>	<p>Skills</p> <p>I can use a digital device to take a photograph.</p> <p>I make choices when taking a photograph.</p> <p>I can use tools to change an image.</p>	<p>Skills</p> <p>I can use logical reasoning to predict the outcome of a program.</p> <p>I can design an algorithm.</p> <p>I can put together the different parts of a program.</p>

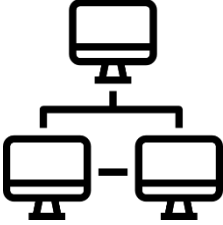

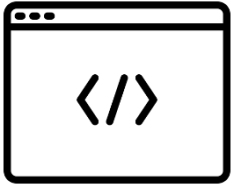
Data and Information Pictograms	Creating Media Digital Music	Programming B Programming Quizzes
		
<p>Knowledge</p> <p>I know that we can count and compare objects using tally charts.</p> <p>I know that objects can be represented as pictures.</p> <p>I know that people can be described by attributes.</p> <p>I know that we can present information using a computer.</p>	<p>Knowledge</p> <p>I know how music makes me feel.</p> <p>I know that there are patterns in music.</p>	<p>Knowledge</p> <p>I know that a sequence of commands has a start.</p> <p>I know that a sequence of a commands has an output.</p>
<p>Skills</p> <p>I can select objects by attribute and make comparisons.</p>	<p>Skills</p> <p>I can experiment with sound using a computer.</p> <p>I can use a computer to create a musical pattern.</p> <p>I can create music for a purpose.</p> <p>I can review and refine my work.</p>	<p>Skills</p> <p>I can create a program using a given design.</p> <p>I can change a given design.</p> <p>I can create a program using my own design.</p> <p>I can decide how to improve my project.</p>



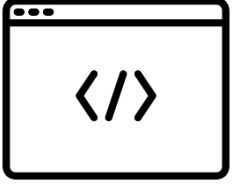
Year Three	<p>Computing Systems & Networks Connecting Computers</p>	<p>Creating Media Stop Frame Animation</p>	<p>Programming A Sequencing Sounds</p>
			
	<p>Knowledge I know how digital devices function.</p> <p>I identify input and output devices.</p> <p>I know how digital devices can change the way we work.</p> <p>I know how a computer network can be used to share information.</p> <p>I identify the physical components of a network.</p>	<p>Knowledge I know that animation is a sequence of drawings or photographs.</p> <p>I know what an animation will look like.</p>	<p>Knowledge I know that commands have an outcome.</p> <p>I know that a program has a start.</p> <p>I know that a sequence of commands has an order.</p>
	<p>Skills I explore how digital devices be connected.</p>	<p>Skills I can plan an animation.</p> <p>I can work consistently and carefully.</p> <p>I can review and improve animation.</p> <p>I can evaluate the impact of adding other media to animation.</p>	<p>Skills I explore a new programming environment.</p> <p>I can change the appearance of a project.</p> <p>I can create a project from task description.</p>

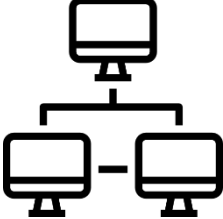
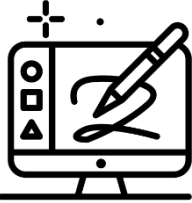
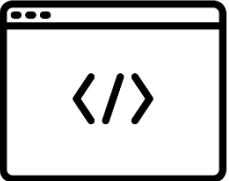
Data and Information Branching Databases	Creating Media Desktop Publishing	Programming B Events and Actions in Programs
		
<p>Knowledge</p> <p>I know the attributes needed to collect data about an object.</p> <p>I know why it is helpful to create a well-structured database.</p>	<p>Knowledge</p> <p>I know that text and images convey meaning.</p> <p>I know that text and images can be edited.</p> <p>I know that different layouts suit different purposes.</p> <p>I know the benefits of desktop publishing.</p>	<p>Knowledge</p> <p>I know how a sprite moves in a project.</p>
<p>Skills</p> <p>I can create questions with yes/no answers.</p> <p>I can create a branching database.</p> <p>I can plan a branching database.</p> <p>I can create an identification tool.</p>	<p>Skills</p> <p>I can choose appropriate page settings.</p> <p>I can add content to a desktop publishing publication.</p>	<p>Skills</p> <p>I can create a program that moves a sprite in four directions.</p> <p>I can adapt a program to a new context.</p> <p>I can develop my program by adding features.</p> <p>I can design and create a maze-based challenge.</p>



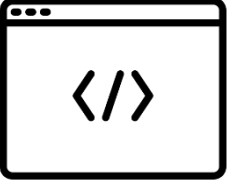
Year Four	<p>Computing Systems & Networks The Internet</p>	<p>Creating Media Audio Production</p>	<p>Programming A Repetition in Shapes</p>
			
	<p>Knowledge I know how networks physically connect to other networks.</p> <p>I know how networked devices make up the internet.</p> <p>I know how websites are shared on the world wide web.</p> <p>I know how to access content on the world wide web.</p> <p>I know that content on the world wide web is created by people.</p> <p>I know that not everything on the world wide web is true.</p>	<p>Knowledge I know that sound can be recorded.</p> <p>I know that audio recordings can be edited.</p>	<p>Knowledge I know that accuracy is important in coding.</p> <p>I know what repetition means.</p>
	<p>Skills I explore the world wide web safely.</p> <p>I evaluate content on the world wide web.</p>	<p>Skills I can create a podcast.</p> <p>I can edit audio.</p> <p>I can combine audio.</p> <p>I can evaluate my work.</p>	<p>Skills I can create a program in a text-based language.</p> <p>I can modify a count-controlled loop to produce a given outcome.</p> <p>I can decompose a task into small steps.</p> <p>I can create a program that uses count controlled loops to produce a given outcome.</p>

Data and Information Data Logging	Creating Media Photo Editing	Programming B Repetition in Games
		
<p>Knowledge</p> <p>I know that data is gathered overtime and can be used to answer questions.</p> <p>I know that a data logger collects data points from sensors over time.</p> <p>I know that a computer can help analyse data.</p>	<p>Knowledge</p> <p>I know that the composition of digital images can be changed.</p> <p>I know that colours can be changed in digital images.</p> <p>I know that cloning can be changed in digital images.</p> <p>I know that images can be combined.</p>	<p>Knowledge</p> <p>I know that in programming there are count controlled loops and infinite loops.</p>
<p>Skills</p> <p>I can use a digital device to collect data.</p> <p>I can identify the data I need to answer a question.</p> <p>I can use data from sensors to answer questions.</p>	<p>Skills</p> <p>I can combine digital images.</p> <p>I can evaluate my changes.</p>	<p>Skills</p> <p>I can develop my use of count-controlled loops.</p> <p>I can develop a design that includes two or more loops which run at the same time.</p> <p>I can modify an infinite loop.</p> <p>I can design a project that includes repetition.</p>

Year Five	<p>Computing Systems & Networks Systems and Searching</p>	<p>Creating Media Video Production</p>	<p>Programming A Selection in Physical Computing</p>
			
	<p>Knowledge I know that computers can be connected together to make a system.</p> <p>I know about the role of computer systems in our lives.</p> <p>I know how search engines select results.</p> <p>I know how search results are ranked.</p> <p>I know why the order of results is important.</p>	<p>Knowledge I know what makes a video effective.</p> <p>I know that video can be improved through editing and reshooting.</p>	<p>Knowledge I know that a loop can stop when a condition is met.</p> <p>I know that a loop can be used to repeatedly check whether a condition has been met</p>
	<p>Skills I can use a search engine.</p>	<p>Skills I can use a digital device to record video.</p> <p>I can use a range of video techniques.</p> <p>I can create a storyboard.</p>	<p>Skills I can control a simple circuit connected to a computer.</p> <p>I can write a programme that involves count controlled loops.</p> <p>I can design a project that involves selection.</p> <p>I can create a program that controls a physical computing project.</p>

Data and Information Flat-File Databases	Creating Media Introduction to Vector Graphics	Programming B Selection in Quizzes
		
<p>Knowledge I know how you can answer questions by grouping and then sorting data.</p> <p>I know that computer programs can be used to compare data visually.</p>	<p>Knowledge I know that drawing tools can be used to create different outcomes.</p> <p>I know that vector drawings consist of layers.</p>	<p>Knowledge I know how selection is used in computer games.</p> <p>I know that a conditional statement links a condition to an outcome.</p> <p>I know how selection directs the flow of a program.</p>
<p>Skills I can use a form to record information.</p> <p>I can compare computer and paper-based databases.</p> <p>I can use tools to select specific data.</p> <p>I can use a real-world database to answer questions.</p>	<p>Skills I can create a vector drawing by combining different shapes.</p> <p>I can use tools to create a desired effect.</p> <p>I can group objects to make them easier to work with,</p>	<p>Skills I can design a program that uses selection.</p> <p>I can evaluate a program.</p>

<p>Computing Systems & Networks Communication & Collaboration</p>	<p>Creating Media Web Page Creation</p>	<p>Programming A Variables in Games</p>
		
<p>Knowledge I know about internet addresses.</p> <p>I know how data is transferred across the internet.</p> <p>I know how sharing information online can help people work together.</p> <p>I know</p>	<p>Knowledge I know how websites are structured.</p> <p>I know the features of a website.</p> <p>I know about the images used on websites.</p> <p>I know about content ownership.</p> <p>I know about navigation paths.</p>	<p>Knowledge I know that a variable is something that is changeable.</p> <p>I know why a variable is used in a program.</p>
<p>Skills I can work online with other people.</p>	<p>Skills I can evaluate websites.</p> <p>I can plan a website.</p> <p>I can preview webpages.</p> <p>I can create hyperlinks.</p> <p>I think before I link!</p>	<p>Skills I can improve a game using variables.</p> <p>I can design a project, building on an example.</p> <p>I can use my design to create a project.</p> <p>I can evaluate a project.</p> <p>.</p>

Data and Information Introduction to Spreadsheets	Creating Media 3D Modelling	Programming B Sensing Movement
		
<p>Knowledge I know that formulas can be used to produce calculated data.</p>	<p>Knowledge I know that I can work in three dimensions on a computer.</p> <p>I know that digital 3D objects can be modified.</p> <p>I know that objects can be combined in a 3D model</p>	<p>Knowledge I know that selection can control the flow of a program.</p>
<p>Skills I can create a data set in a spreadsheet.</p> <p>I can build a data set in a spreadsheet.</p> <p>I can apply formulas to data.</p> <p>I can create a spreadsheet to plan an event.</p> <p>I can choose suitable ways to present data.</p>	<p>Skills I can plan 3D models.</p> <p>I can create 3D models.</p>	<p>Skills I can create a program to run on a controllable device.</p> <p>I can update a variable with a user input.</p> <p>I can use a conditional statement to compare a variable to a value.</p> <p>I can design a project that uses inputs and outputs on a controllable device.</p> <p>I can develop a program that uses inputs and outputs on a controllable device.</p>