



Progression in Computing

Strand:	NC Statement	Units	Key Knowledge	Key Skills	Key vocab	Functions
U W T e c h n o l o g y	<p>30-50mths Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones.</p> <p>Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images.</p> <p>Knows that information can be retrieved from computers</p> <p>40-60mths</p> <p>Completes a simple program on a computer. Uses ICT hardware to interact with age-appropriate computer software.</p> <p>ELG</p> <p>Recognise that a range of technology is used in places such as homes and schools. Select and use technology for particular purposes.</p>		<p>Continuous provision</p> <ul style="list-style-type: none"> • Tills • keyboards • iPads • laptops • microwave • cameras • toys with moving parts • wind-up toys • bee bots • torches • construction kits • calculators <p>Focussed activities</p> <ul style="list-style-type: none"> • Using age appropriate apps • Taking images for different purposes • Typing • Creating pictures on iPad and laptops e.g. Tizzy Tools • Controlling a turtle – Tizzy's tools • Beebots • Using powerpoint to present information • Mini mash – creating stories, exploring music, voice recordings 		<p>Computer, switch, screen, mouse, press, CD, digital camera, tape recorder, TV, internet, photograph, image</p>	

C o m p u t e r S c i e n c e	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</p> <p>Create and debug simple programs.</p> <p>Use logical reasoning to predict the behaviour of simple programs.</p>	Lego Builders 1.4	<p>Year One Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program.</p> <p>Children can work out what is wrong with a simple algorithm when the steps are out of order, e.g. The Wrong Sandwich in Purple Mash and can write their own simple algorithm, e.g. Colouring in a bird activity. Children know that an unexpected outcome is due to the code. They have created and can make logical attempts to fix the code, e.g. Bubbles activity in 2Code.</p>	<p>To compare the effects of adhering strictly to instructions to completing tasks without complete instructions.</p> <p>To follow and create simple instructions on the computer.</p> <p>To consider how the order of instructions affects the result.</p>	<p>Instruction, algorithm, computer, program, debug</p>	
		Grouping and sorting 1.2	<p>To sort items using a range of criteria.</p> <p>To sort items on the computer using the 'Grouping' activities in Purple Mash.</p>	<p>Sort, criteria</p>		
		Coding 1.7	<p>When looking at a program, children can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. Children can, for example, interpret where the turtle in 2Go challenges will end up at the end of the program.</p> <p>Year Two Children can explain that an algorithm is a set of instructions to complete a task. When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code.</p>	<p>To understand what coding means.</p> <p>To use design mode to set up a scene.</p> <p>To add characters.</p> <p>To use code blocks to make the character perform actions.</p> <p>To use collision detection.</p> <p>To save and share work.</p> <p>To know the save, print, open and new icon.</p>	<p>Action, background, button, character, code block, code design, coder, coding, collision detect, comand, design mode, input, object, program, properties, scale stop command, sound, when clicked, when key</p>	<p>Open the main menu Save your work Watch the instruction video Get a hint when you are stuck in 2Code Open design mode in 2Code Switch to code mode in 2Code The background object A 'when clicked' code block An object property Sound output block</p>
		Coding 2.1	<p>Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors, e.g. Debug Challenges: Chimp. Children's program designs display a growing awareness of the need for logical, programmable steps.</p> <p>Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program.</p>	<p>To understand what an algorithm is.</p> <p>To design algorithms and then code them.</p> <p>To compare different object types.</p> <p>To use the repeat command.</p> <p>To use the timer command.</p> <p>To know what debugging is and debug programs.</p>	<p>Action, algorithm, bug, character, code block, code design, comand, debug, debugging, design mode, input, object, properties, repeat, scaled, timer, when clicked, when key</p>	<p>Open the main menu Save your work Watch the instruction video Open design mode in 2Code Switch to code mode in 2Code A repeat code block A timer code block An object property</p>
		Exploring Purple Mash 1.1/Ma	<p>To understand the functionality of the direction keys.</p> <p>To understand how to create and debug a set of instructions (algorithm).</p> <p>To use the additional direction keys as part of an algorithm.</p> <p>To understand how to change and extend the algorithm list.</p> <p>To create a longer algorithm for an activity.</p> <p>To set challenges for peers.</p> <p>To access peer challenges set by the teacher as 2dos.</p>	<p>Direction, challenge, arrow, undo, rewind, forwards, backwards, right turn, left turn, debug, instruction, algorithm</p>	<p>Open, close or share a file. Change the speed in which the screen object moves. Rewind an instruction. Undo an instruction. Change the settings in 2Go. Change the colour of the path that the object leaves in 2Go. Control the direction in which the object moves.</p>	



C o m p u t e r S c i e n c e	LCS2	Coding	<p>Year Three Children can turn a simple real-life situation into an algorithm for a program by deconstructing it into manageable parts. Their design shows that they are thinking of the desired task and how this translates into code. Children can identify an error within their program that prevents it following the desired algorithm and then fix it.</p> <p>Children demonstrate the ability to design and code a program that follows a simple sequence. They experiment with timers to achieve repetition effects in their programs. Children are beginning to understand the difference in the effect of using a timer command rather than a repeat command when creating repetition effects. Children understand how variables can be used to store information while a program is executing.</p> <p>Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. For example, 'if' statements, repetition and variables. They make good attempts to 'step through' more complex code in order to identify errors in algorithms and can correct this. e.g. traffic light algorithm in 2Code. In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.</p>	<p>To design algorithms using flowcharts. To design an algorithm that represents a physical system and code this representation. To use selection in coding with the 'if' command. To understand and use variables in 2Code. To deepen understanding of the difference between timers and repeat commands.</p>	<p>Action, algorithm, bug, code block, code design, command, control, debug, debugging, design mode, event, if, input, output, object, properties, repeat, computer simulation, selection, timer, variable</p>	<p>Open the main menu Save your work Open design mode in 2Code Switch to code mode in 2Code An 'if' command Creating a variable in 2Code A change variable block</p>
		Coding	<p>Children can list a range of ways that the internet can be used to provide different methods of communication. They can use some of these methods of communication, e.g. being able to open, respond to and attach files to emails using 2Email. They can describe appropriate email conventions when communicating in this way.</p> <p>Year Four When turning a real-life situation into an algorithm, the children's design shows that they are thinking of the required task and how to accomplish this in code using coding structures for selection and repetition. Children make more intuitive attempts to debug their own programs</p> <p>Children's use of timers to achieve repetition effects are becoming more logical and are integrated into their program designs. They understand 'if statements' for selection and attempt to combine these with other coding structures including variables to achieve the effects that they design in their programs. As well as understanding how variables can be used to store information while a program is executing, they are able to use and manipulate the value of variables. Children can make use of user inputs and outputs such as 'print to screen'. e.g. 2Code.</p>	<p>To use selection in coding with the 'if/else' command. To understand and use variables in 2Code. To use flowcharts for design of algorithms including selection. To use the 'repeat until' with variables to determine the repeat. To learn about and use computational thinking terms decomposition and abstraction.</p>	<p>Action, alert, algorithm, bug, code design, command, control, debug, debugging, design mode, event, get input, if, if/else, input, output, object, repeat, selection, simulation, timer, variable</p>	<p>Open design mode in 2Code Switch to code mode in 2Code An 'if/else' command Repeat until command Creating a variable in 2Code A change variable block</p>
		Logo 4.5	<p>Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. For example, 'if' statements, repetition and variables. They can trace code and use step through methods to identify errors in code and make logical attempts to correct this. e.g. traffic light algorithm in 2Code. In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.</p> <p>Children recognise the main component parts of hardware which allow computers to join and form a network. Their ability to understand the online safety implications associated with the ways the internet can be used to provide different methods of communication is improving.</p>	<p>To learn the structure of the coding language of Logo. To input simple instructions in Logo. Using 2Logo to create letter shapes. To use the Repeat function in Logo to create shapes. To use and build procedures in Logo.</p>	<p>LOGO – a text-based coding language used to control an onscreen turtle to create mathematical patterns. BK – move backwards a distance of units. FD – move forward a distance of units. RT – turn right a given number of degrees. LT – turn left a given number of degrees. REPEAT – repeat a set of instructions a specified number of times. SETPC – set pen colour to a given colour. SETPS – set the pen thickness. PU – lift the pen up off the screen. PD – put the pen back down on the screen.</p>	<p>Open, save and share work Choose the turtle style Choose a background Switch the grid on and off Arrow press and the logo mouse follows the instructions Reset the mouse to the start position Change the speed at which the mouse moves.</p>



Computer Science	UKS2	Coding 5.1	<p>Year Five Children may attempt to turn more complex real-life situations into algorithms for a program by deconstructing it into manageable parts. Children are able to test and debug their programs as they go and can use logical methods to identify the approximate cause of any bug but may need some support identifying the specific line of code.</p> <p>Children can translate algorithms that include sequence, selection and repetition into code with increasing ease and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures. They are combining sequence, selection and repetition with other coding structures to achieve their algorithm design.</p> <p>When children code, they are beginning to think about their code structure in terms of the ability to debug and interpret the code later, e.g. the use of tabs to organise code and the naming of variables.</p>	<p>To represent a program design and algorithm. To create a program that simulates a physical system using decomposition. To explore string and text variable types so that the most appropriate can be used in programs. To use the Launch command in 2Code Gorilla To program a playable game with timers and scorepad.</p>	<p>Action, alert, algorithm, bug, code design, command, control, debug, debugging, design mode, event, get input, if, if/else, input, output, object, repeat, selection, simulation, timer, variable</p>	<p>Open design mode in 2Code Switch to code mode in 2Code Add a new Tab to your code Creating a variable in 2Code Gorilla Combining variables and strings to print to the screen Use change variable block and the Launch command block</p>
		Coding 6.1	<p>Children understand the value of computer networks but are also aware of the main dangers. They recognise what personal information is and can explain how this can be kept safe. Children can select the most appropriate form of online communications contingent on audience and digital content, e.g. 2Blog, 2Email, Display Boards.</p> <p>Year Six Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction) and then decomposing them in a logical way using their knowledge of possible coding structures and applying skills from previous programs. Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.</p>	<p>To use the program design process, including flowcharts, to develop algorithms for more complex programs using and understanding of abstraction and decomposition to define the important aspects of the program. To code, test and debug from these designs. To use functions and tabs in 2Code to improve the quality of the code. To code user interactivity using input functions.</p>	<p>Action, alert, algorithm, bug, code design, command, control, debug, debugging, function, event, get input, if, if/else, input, output, object, repeat, selection, simulation, timer, variable, sequence, tabs</p>	<p>Open design mode in 2Code Switch to code mode in 2Code Add a new Tab to your code or move code blocks between tabs Creating a variable or function in 2Code Combining variables and strings to print to the screen A change variable block. A function called 'square' that is called by clicking on a button called btnSquare.</p>
		Text adventures 6.5	<p>Children translate algorithms that include sequence, selection and repetition into code and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures, including nesting structures within each other. Coding displays an improving understanding of variables in coding, outputs such as sound and movement, inputs from the user of the program such as button clicks and the value of functions.</p> <p>Children are able to interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the program as a whole.</p> <p>Children understand and can explain in some depth the difference between the internet and the World Wide Web. Children know what a WAN and LAN are and can describe how they access the internet in school.</p>	<p>To find out what a text adventure is. To plan a story adventure. To make a story-based adventure. To introduce map-based text adventures. To code a map-based text adventure.</p>	<p>Text-based adventure, concept map, debug, sprite, function</p>	<p>Create an adventure story in 2Create a Story Plan out your story Add a button to the story Add a sprite to the story Add sound to the story Choose a background Undo or redo the last action Play your text based adventure</p>

Strand:	NC Statement	Focussed activities	Key Knowledge	Key Skills	Key vocab	Functions
Information Technology	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Exploring Purple Mash 1.1/Effective se	<p>Year One Children are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work and follow simple instructions to access online resources, use Purple Mash 2Quiz example (sorting shapes), 2Code design mode (manipulating backgrounds) or using pictogram software such as 2Count.</p>	<p>To know what a spreadsheet program looks like. How to open 2Calculate in Purple Mash. How to enter data into spreadsheet cells. To use 2Calculate image tools to add clipart to cells. To use 2Calculate control tools: lock, move cell, speak and count.</p>	<p>Arrow keys, backspace key, cursor, columns, cells, clip art, count tool, delete key image toolbox, lock tool, move cell tool, rows, speak tool, spreadsheet</p>	<p>Open the main menu Save your work Open a previously saved file Increase or decrease spreadsheet size The 2Calculate toolbox, image toolbox, clipart picker and control toolbox</p>
		Spreadsheets 1.8	<p>Year Two Children demonstrate an ability to organise data using, for example, a database such as 2Investigate and can retrieve specific data for conducting simple searches. Children are able to edit more complex digital data such as music compositions within 2Sequence. Children are confident when creating, naming, saving and retrieving content. Children use a range of media in their digital content including photos, text and sound.</p>	<p>To understand the terminology associated with searching. To gain a better understanding of searching on the Internet. To create a leaflet to help someone search for information on the Internet.</p>	<p>internet, search, search engine</p>	
		Spreadsheets 2.3		<p>To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine. To learn how to copy and paste in 2Calculate. To use the totalling tools. To use a spreadsheet for money calculations. To use the 2Calculate equals tool to check calculations. To use 2Calculate to collect data and produce a graph.</p>	<p>Back space, copy, past, column, cells, count tool, delete key, equals tool, image toolbox, lock tool, move cell tool, rows, speak tool, spreadsheet</p>	<p>Open the main menu Save your work Open a previously saved file Increase or decrease spreadsheet size The 2Calculate toolbox, image toolbox, clipart picker and control toolbox</p>
		Questioning 2.4		<p>To learn about data handling tools that can give more information than pictograms. yes/no questions to separate information. To construct a binary tree to identify items. To use 2Question (a binary tree database) to answer questions. To use a database to answer more complex search questions. To use the Search tool to find information</p>	<p>Pictogram, question, data, collate, binary, avatar, database</p>	<p>Enter data into a pictogram. Open, Save and share information. Add or delete columns in a pictogram. Add a question to sort the information in a binary tree. Give a name to the binary tree. Find information in a database. Sort, group and arrange information in a database.</p>
		Pictograms 1.3		<p>To understand that data can be represented in picture format. To contribute to a class pictogram. To use a pictogram to record the results of an experiment.</p>	<p>Pictogram, data, collate</p>	<p>Open, close and share Add or delete columns Frequency Add or delete objects from the Pictogram.</p>



Information Technology	UKS2	<p>Spreadsheets 3.3</p> <p>Year Three Children can carry out simple searches to retrieve digital content. They understand that to do this, they are connecting to the internet and using a search engine such as Purple Mash search or internet-wide search engines.</p> <p>Children can collect, analyse, evaluate and present data and information using a selection of software, e.g. using a branching database (2Question), using software such as 2Graph. Children can consider what software is most appropriate for a given task. They can create purposeful content to attach to emails, e.g. 2Respond.</p>	<p>To use the symbols more than, less than and equal to, to compare values.</p> <p>To use 2Calculate to collect data and produce a variety of graphs.</p> <p>To use the advanced mode of 2Calculate to learn about cell references.</p>	<p><>, advance mode, copy and paste, columns, cells, delete key, equals tool, move cell tool, rows, spin tool, spreadsheet</p>	<p>Open the main menu</p> <p>Save your work</p> <p>Open a previously saved file</p> <p>Increase or decrease spreadsheet size</p> <p>2Calculate toolbox</p> <p>Chart control</p> <p>2Calculate control toolbox</p> <p>Advanced mode</p>
		<p>Email 3.5</p> <p>Year Four Children understand the function, features and layout of a search engine. They can appraise selected webpages for credibility and information at a basic level.</p> <p>Children are able to make improvements to digital solutions based on feedback. Children make informed software choices when presenting information and data. They create linked content using a range of software such as 2Connect and 2Publish+. Children share digital content within their community, i.e. using Virtual Display Boards.</p>	<p>To think about different methods of communication.</p> <p>To open and respond to an email using an address book.</p> <p>To learn how to use email safely.</p> <p>To add an attachment to an email.</p> <p>To explore a simulated email scenario.</p>	<p>Communication, email, compose, send, report to the teacher, attachment, address book, save to draft, password, CC, formatting</p>	<p>Writing emails</p> <p>Accessing saved previous contacts to</p> <p>Who is the email to be sent to? cc</p> <p>Who else will the email be sent to? What is the email about?</p> <p>Attaching work and pictures to the email.</p> <p>Click the button to send the email.</p> <p>Formatting bar where you can change how the message looks.</p>
		<p>Branching databases 3.6</p>	<p>To sort objects using just 'yes' or 'no' questions.</p> <p>To complete a branching database using 2Question.</p> <p>To create a branching database of the children's choice</p>	<p>Branching database, data, database, question</p>	<p>Open, save and share files.</p> <p>Give the database a name.</p> <p>Add a question to begin to sort the information.</p>
		<p>Graphing 3.8</p>	<p>To enter data into a graph and answer questions.</p> <p>To solve an investigation and present the results in graphic form.</p>	<p>Graph, field, data, bar chart, block graph, line graph</p>	<p>Insert the name of the graph here.</p> <p>Add and remove a row from the graph.</p> <p>Vertical Bar Chart, Horizontal Bar Chart, Block Graph, Line Graph, Pie Chart, Data entry table</p>
		<p>Spreadsheets 4.3</p>	<p>Formatting cells as currency, percentage, decimal to different decimal places or fraction.</p> <p>Using the formula wizard to calculate averages.</p> <p>Combining tools to make spreadsheet activities such as timed times tables tests. Using a spreadsheet to model a real-life situation.</p> <p>To add a formula to a cell to automatically make a calculation in that cell.</p>	<p>Average, advance mode, copy and paste, columns, cells, charts, equals tool, formula, formula wizard, move cell tool, random tool, rows, spin tool, spreadsheet, timer</p>	<p>Open the main menu</p> <p>Save your work</p> <p>Open a previously saved file</p> <p>Increase or decrease spreadsheet size</p> <p>Advanced mode</p> <p>Formula wizard</p> <p>Format cell toolbox</p> <p>Charts</p> <p>Totals toolbox</p> <p>Image Tools</p> <p>Controls Toolbox</p>
		<p>Effective Searching 4.7</p>	<p>To locate information on the search results page.</p> <p>To use search effectively to find out information.</p> <p>To assess whether an information source is true and reliable.</p>	<p>Easter egg, internet, internet browser, search, search engine, spoof website, website</p>	

Information Technology	UKS2	<p>Spreadsheets 5.3</p> <p>Year Five Children search with greater complexity for digital content when using a search engine. They are able to explain in some detail how credible a webpage is and the information it contains.</p> <p>Children are able to make appropriate improvements to digital solutions based on feedback received and can confidently comment on the success of the solution. e.g. creating their own program to meet a design brief using 2Code. They objectively review solutions from others. Children are able to collaboratively create content and solutions using digital features within software such as collaborative mode. They are able to use several ways of sharing digital content, i.e. 2Blog, Display Boards and 2Email.</p> <p>Year Six Children readily apply filters when searching for digital content. They are able to explain in detail how credible a webpage is and the information it contains. They compare a range of digital content sources and are able to rate them in terms of content quality and accuracy. Children use critical thinking skills in everyday use of online communication.</p>	<p>Using the formula wizard to add a formula to a cell to automatically make a calculation in that cell.</p> <p>To copy and paste within 2Calculate.</p> <p>Using 2Calculate tools to test a hypothesis.</p> <p>To add a formula to a cell to automatically make a calculation in that cell.</p> <p>Using a spreadsheet to model a real-life situation and answer questions.</p>	<p>Average, advance mode, copy and paste, columns, cells, charts, equals tool, formula, formula wizard, move cell tool, random tool, rows, spin tool, spreadsheet, timer</p>	<p>Open the main menu</p> <p>Save your work</p> <p>Open a previously saved file</p> <p>Increase or decrease spreadsheet size</p> <p>Advanced mode</p> <p>Formula wizard</p> <p>Format cell toolbox</p> <p>Charts</p> <p>Totals toolbox</p> <p>Image Tools</p> <p>Controls Toolbox</p>
		<p>Databases 5.4</p> <p>Children make clear connections to the audience when designing and creating digital content. The children design and create their own blogs to become a content creator on the internet, e.g. 2Blog. They are able to use criteria to evaluate the quality of digital solutions and are able to identify improvements, making some refinements.</p>	<p>To learn how to search for information in a database.</p> <p>To contribute to a class database.</p> <p>To create a database around a chosen topic.</p>	<p>Avatar, binary tree, charts, collaborative, data, database, find, record, sort group and arrange, statistics and report, table</p>	<p>Avatar creator</p> <p>Open, save or share a file.</p> <p>Design a new database</p> <p>Add a record to the database</p> <p>Find information in the database</p> <p>Sort, group and arrange information. Statistics and reports</p> <p>Represent the information as a chart</p>
		<p>Spreadsheets 6.3</p>	<p>To use a spreadsheet to investigate the probability of the results of throwing many dice.</p> <p>Using the formula wizard to add a formula to a cell to automatically make a calculation in that cell.</p> <p>To create graphs showing the data collected.</p> <p>To type in a formula for a cell to automatically make a calculation in that cell. Using a spreadsheet to create computational models and answer questions.</p>	<p>Average, advance mode, copy and paste, columns, cells, charts, count how many tool, dice, equals tool, formula, formula wizard, move cell tool, random tool, rows, spin tool, spreadsheet, timer</p>	<p>Open the main menu</p> <p>Save your work</p> <p>Open a previously saved file</p> <p>Increase or decrease spreadsheet size</p> <p>Advanced mode</p> <p>Formula wizard</p> <p>Format cell toolbox</p> <p>Charts</p> <p>Totals toolbox</p> <p>Image Tools</p> <p>Controls Toolbox</p>



Strand:	NC Statement	Units	Key Knowledge	Key Skills	Key vocab	Functions
D i g i t a l L i t e r a c y	Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Creating Pictures 2.6	Year One Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can make a distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair. Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons. Children take ownership of their work and save this in their own private space such as their My Work folder on Purple Mash.	To understand the terminology associated with searching. To gain a better understanding of searching on the Internet. To create a leaflet to help someone search for information on the Internet.	Impressionism, palette, pointillism, share, surrealism, template	Choose the style you want to paint in. Open, save and share your picture. Choose a background for your picture. Undo and redo. Zoom in or zoom out. Outline options. Eraser and colour palette. Fill tool and pen thickness.
		Technology outside school 1.9	Year Two Children can effectively retrieve relevant, purposeful digital content using a search engine. They can apply their learning of effective searching beyond the classroom. They can share this knowledge, e.g. 2Publish example template. Children make links between technology they see around them, coding and multimedia work they do in school e.g. animations, interactive code and programs.	To walk around the local community and find examples of where technology is used. To record examples of technology outside school.	Technology	
		Animated Storybook 1.6	Children know the implications of inappropriate online searches. Children begin to understand how things are shared electronically such as posting work to the Purple Mash display board. They develop an understanding of using email safely by using 2Respond activities on Purple Mash and know ways of reporting inappropriate behaviours and content to a trusted adult.	To introduce e-books and the 2Create a Story tool. To add animation to a story. To add sound to a story, including voice recording and music the children have composed. To work on a more complex story, including adding backgrounds and copying and pasting pages. To share e-books on a class display board.	Animation, e book, font, file, sound effect, display board	Open, save or share a file. Plan out a story. Play a story. Add animation and sounds to the story. Choose a story background. Undo or redo the last action. Choose the font for the story. Copy and paste.
		Making Music 2.7		To make music digitally using 2Sequence. To explore, edit and combine sounds using 2Sequence. To edit and refine composed music. To think about how music can be used to express feelings and create tunes which depict feelings. To upload a sound from a bank of sounds into the Sounds section. To record and upload environmental sounds into Purple Mash. To use these sounds to create tunes in 2Sequence.	BPM, composition, digitally, instrument, music, sound effects (fx), soundtrack, tempo, volume	Open, save or share a piece of music. Change the number of quavers in the music. Loop or unloop the piece of music. Play the composed tune. Change the beats per minute in the music. Increase or decrease the volume of an instrument. Choose the digital instrument to use. Delete the music.
		Presenting Ideas 2.8		To explore how a story can be presented in different ways. To make a quiz about a story or class topic. To make a fact file on a non-fiction topic. To make a presentation to the class.	Concept map (mind map), node, animated, quiz, non-fiction, presentation, narrative, audience	Open, close and share a file. Create a new 2Connect document. Node. Collaboration (working together) on or off. Choose a quiz question on 2Quiz. Play the quiz. Preview the quiz question. Change the quiz settings.

D i g i t a l L i t e r a c y	LKS2	Touch Typing 3.4	Year Three Children demonstrate the importance of having a secure password and not sharing this with anyone else. Furthermore, children can explain the negative implications of failure to keep passwords safe and secure. They understand the importance of staying safe and the importance of their conduct when using familiar communication tools such as 2Email in Purple Mash. They know more than one way to report unacceptable content and contact.	To introduce typing terminology. To understand the correct way to sit at the keyboard. To learn how to use the home, top and bottom row keys. To practice typing with the left and right hand.	Posture, top row keys, home row keys, bottom row keys, space bar	Posture and using specific fingers for specific keys
		Simulations 3.7	Year Four Children can explore key concepts relating to online safety using concept mapping such as 2Connect. They can help others to understand the importance of online safety. Children know a range of ways of reporting inappropriate content and contact.	To consider what simulations are. To explore a simulation. To analyse and evaluate a simulation.	Simulation	
		Animation 4.5		To discuss what makes a good animated film or cartoon. To learn how animations are created by hand. To find out how 2Animate can be created in a similar way using the computer. To learn about onion skinning in animation. To add backgrounds and sounds to animations. To be introduced to 'stop motion' animation. To share animation on the class display board and by blogging.	Animation, flip book, frame, onion skinning, background, play, sound, stop motion, video clip	Open, save and share animation. Add or delete a frame from the animation. Play the animation. Switch onion skinning on or off. Add a background picture to the animation. Insert a photograph from a webcam into the animation. Insert a sound file into the animation. Number of frames in the animation.
		Writing for different audiences 4.4		To explore how font size and style can affect the impact of a text. To use a simulated scenario to produce a news report. To use a simulated scenario to write for a community campaign.	Font, bold, italic, underline	Text toolbar, format text tool
		Hardware investigators 4.8		To understand the different parts that make up a computer. To recall the different parts that make up a computer.	Motherboard, CPU, ram, graphics card, network card, monitor, speakers, keyboard and mouse	



D i g i t a l L i t e r a c y	UKS2	Game Creator 5.5	<p>Year Five Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies and online services. Children implicitly relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves and others.</p> <p>Year Six Children demonstrate the safe and respectful use of a range of different technologies and online services. They identify more discreet inappropriate behaviours through developing critical thinking, e.g. 2Respond activities. They recognise the value in preserving their privacy when online for their own and other people's safety.</p>	<p>To set the scene. To create the game environment. To create the game quest. To finish and share the game. To evaluate their and peers' games.</p>	<p>Animation, computer game, customise, evaluation, image, instructions, interactive, screenshot, texture, perspective, playability</p>	<p>Open, save or share your file Change the settings of your game Add images to your game Insert treasure into you game Insert enemies into your game Drag to set the start position of your game Play your game</p>
		3d Modelling 5.6		<p>To be introduced to 2Design and Make and the skills of computer aided design. To explore the effect of moving points when designing. To understand designing for a purpose. To understand printing and making.</p>	<p>CAD (computer aided design), modelling, 3d, viewpoint, polygon, 2d, net, 3d printing, points, template</p>	<p>2D Image 3D Image Net View Colour palette Clear, Undo and Redo Fill options Magnify</p>
		Concept Maps 5.7		<p>To understand the need for visual representation when generating and discussing complex ideas. To understand and use the correct vocabulary when creating a concept map. To create a concept map. To understand how a concept map can be used to retell stories and present information. To create a collaborative concept map and present this to an audience.</p>		<p>Node Connection Resize node Edit node Show story Begin presentation Collaboration off, collaboration on</p>
		Blogging 6.4		<p>To identify the purpose of writing a blog and its key features. To plan the theme and content for a blog and write the content. To consider the effect upon the audience of changing the visual properties of the blog. To understand the importance of regularly updating the content of a blog. To understand how to contribute to an existing blog. To understand how and why blog posts are approved by the teacher.</p>	<p>Audience, blog, blog page, blog post, collaborative, icon</p>	<p>Create a new blog Title of the blog A description to tell the reader what the blog is about An image to illustrate what the blog is about Cover image to go in the blogging header</p>
		Quizzing 6.7		<p>To create a picture-based quiz for young children. To learn how to use the question types within 2Quiz. To explore the grammar quizzes. To make a quiz that requires the player to search a database.</p>	<p>Audience, collaboration, concept map, database, quiz</p>	<p>Create a quiz using 2Do It Yourself Create a quiz using Text Toolkit Choose a question type in 2Quiz Create a concept map from a blank or a template Create a blank database</p>
		Networks 6.6		<p>To learn about what the Internet consists of. To find out what a LAN and a WAN are. To find out how the Internet is accessed in school. To research and find out about the age of the Internet. To think about what the future might hold</p>	<p>Internet, world wide web, network, local area network, wide area network, router, network cables, wireless</p>	