

Year Group	Coding and Computational Thinking	Spreadsheets	Internet and Email	Art and Design	Making Music	Databases and Graphing	Writing and Presenting	Communicating and Networks
Year 1	<p>Grouping and Sorting</p> <ul style="list-style-type: none"> + Sort different items based on characteristics <p>Lego Builders</p> <ul style="list-style-type: none"> + Know algorithms are precise instructions + Follow instructions in algorithm style <p>Maze Explorers</p> <ul style="list-style-type: none"> + Understand directions and numbers of movements + Move a turtle around a maze <p>Coding</p> <ul style="list-style-type: none"> + Be introduced to code blocks + Understand objects and actions + Know events can make things happen + Use a plan for a simple algorithm 	<p>Spreadsheets</p> <ul style="list-style-type: none"> + Open a spreadsheet + Add data into a cell + Use count tool to total data and values 	<p>Online Safety and Exploring Purple Mash</p> <ul style="list-style-type: none"> + Be introduced to features of purple mash + Navigate around the menu and tools pages <p>Technology Outside of School</p> <ul style="list-style-type: none"> + Know technology is widespread in society 			<p>Pictograms</p> <ul style="list-style-type: none"> + Show different data using pictograms + Record results using a pictogram digitally 	<p>Animated Story Books</p> <ul style="list-style-type: none"> + Add text and drawings to a page + Add audio to a page + Add pages + Use copy and paste to make editing more efficient 	

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Year 2	<p>Coding</p> <ul style="list-style-type: none"> + Know an algorithm is simple instructions + Use collision, different object types and buttons to create a programme + Use debugging to apply fixes to problems within code 	<p>Spreadsheets</p> <ul style="list-style-type: none"> + Know the difference between rows and columns + Use automatic total tool within rows and columns 	<p>Online Safety</p> <ul style="list-style-type: none"> + Be aware of searches, email and websites + Know what digital footprint is and how to reduce it or keep it more private <p>Effective Searching</p> <ul style="list-style-type: none"> + Search using key terms + Identify parts of web search page 	<p>Creating Pictures</p> <ul style="list-style-type: none"> + Use 2paint to create different colours, brush sizes and backgrounds + Use pointillism to show an image 	<p>Making Music</p> <ul style="list-style-type: none"> + Use 2sequence with different sounds + Conduct a small sound effect or song with at least 2 instruments + Use volume controls 	<p>Questioning</p> <ul style="list-style-type: none"> + Know pictograms can present simple information + Identify a binary tree + Understand yes/no questions help us eliminate characteristics 	<p>Presenting Ideas</p> <ul style="list-style-type: none"> + Experience idea presented as quiz, mind map and e-book + Use 2connect to make a fact-file 	

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	<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>	<p>+ use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>+ recognise common uses of information technology beyond school</p> <p>+ 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.</p>	<p>+ use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>+ use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>+ use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>+ use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>+ use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>

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Year 3	<p>Coding</p> <ul style="list-style-type: none"> + Read and explain a flowchart + Use 'after' and 'ever' timer commands + Understand the turtle is the object that moves + Use a scene to make something interactive 	<p>Spreadsheets</p> <ul style="list-style-type: none"> + Create a table and add data + Use more than, less than and equals signs in spreadsheet + Describe a cell location 	<p>Online Safety</p> <ul style="list-style-type: none"> + Know how to communicate throughout the internet + Understand not everything is true on the internet + Know why we have age ratings for different apps and content <p>Email (through 2email)</p> <ul style="list-style-type: none"> + Open an email and type a response + Know how to stay safe on an email + Attach an item to an email + Respond to email communications and begin to use conversations to respond 	<p>Simulations</p> <ul style="list-style-type: none"> + Know advantages and disadvantages of simulations + Analyse choices made within simulations + See patterns happening within simulations 		<p>Branching Databases</p> <ul style="list-style-type: none"> + Know a branch has a yes/no response + Create a class branching database + Use different multimedia within a branching database <p>Graphing</p> <ul style="list-style-type: none"> + Add data into a graph + Present results in different graphs 	<p>Presenting</p> <ul style="list-style-type: none"> + Know different types of software for presenting + Present written and artwork in different ways throughout the year 	<p>Touch Typing</p> <ul style="list-style-type: none"> + Understand names of fingers used for touch typing + Use both hands to type different words, phrases and sentences

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Year 4	<p>Coding</p> <ul style="list-style-type: none"> + Plan an algorithm for a scene created + Use X and Y properties + Use the 'if/else' statement for if something is met + Use 'repeat until' statement + Code a variable for a number such as a timer <p>Logo</p> <ul style="list-style-type: none"> + Know and run common instructions in logo + Understand the pu and pd command + Use procedures to draw shapes, flowers or crystals <p>Hardware Investigators</p> <ul style="list-style-type: none"> + Know the function of computer parts 	<p>Spreadsheets</p> <ul style="list-style-type: none"> + Use formatting to change box backgrounds, currency or decimal places + Use timer and random number tools in spreadsheets + Create a line graph in a spreadsheet 	<p>Online Safety</p> <ul style="list-style-type: none"> + Know security symbols seen on various devices and online services + Know what malware is and what a virus is + Understand plagiarism in terms of copying and researching + Make informed choices about how free time is used when relating to digital content consumption <p>Effective Search</p> <ul style="list-style-type: none"> + Structure search queries to narrow searches + Understand credibility within search results 	<p>Animation</p> <ul style="list-style-type: none"> + Understand how animation is created as a series of drawings slightly different + Know what the onion skin tool does in animation + Know what stop motion animation is and create a film of their own 	<p>Making Music</p> <ul style="list-style-type: none"> + Identify digital sounds + Create a rhythm using Busy Beats and 2Sequence 		<p>Writing for Different Audiences</p> <ul style="list-style-type: none"> + Select and use different fonts, sizes and styles + Use external sources to create a story + Write a persuasive letter for part of a campaign 	

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Year 5	<p>Coding</p> <ul style="list-style-type: none"> + Experiment with code to make it more efficient + Use a simple variable such as a timer in a game + Abstract code to work on it independently away from the whole programme + Debug using logical reasoning + Use strings in coding (text printing) 	<p>Spreadsheets</p> <ul style="list-style-type: none"> + Create simple formula using the formula wizard + Use the count tool to find how many values in a spreadsheet 	<p>Online Safety</p> <ul style="list-style-type: none"> + Learn the SMART rules for online safety + Use keywords to find relevant information when searching + Know what makes a good password and understand the importance of changing passwords between services 	<p>Game Creator</p> <ul style="list-style-type: none"> + Explain what makes a computer game successful + Upload images or use drawing tool when coding + Write instructions which allow people to play the game successfully + Evaluate the impact of the game created <p>3D Modelling</p> <ul style="list-style-type: none"> + Explore different viewpoints within 2Design + Alter shapes and points of models + Create a 3D model from a 2D design 		<p>Databases</p> <ul style="list-style-type: none"> + Know how to search a database with given characteristics + Create a class database + Understand what a database field is and add one to their database 	<p>Concept Maps</p> <ul style="list-style-type: none"> + See value when using a concept map for visualisation + Create a concept map based on key features such as nodes and connections + Present a concept map to an audience 	

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Year 6	<p>Coding</p> <ul style="list-style-type: none"> + Plan ideas using different methods + Use code efficiently with functions, repetition and two-way selection + Organise code in tabs + Debug using logical reasoning <p>Text Adventures</p> <ul style="list-style-type: none"> + Record experiences of code to utilise for later projects + Experience story and map-based text adventures 	<p>Spreadsheets</p> <ul style="list-style-type: none"> + Create advanced formula to answer a variety of mathematical questions relating to probability, money and real-life situations 	<p>Online Safety</p> <ul style="list-style-type: none"> + Be aware of risks online when using search engines and digital content + Understand the impact of online behaviour for themselves and others + Make informed choices about how children use their free time with respects to screen time and online content consumption + Know the SMART rules for online safety and apply them when using any digital device 				<p>Blogging</p> <ul style="list-style-type: none"> + Know what a blog is and why people might write one + Give the key features of a blog + Create a blog for a specific purpose to engage a community + Post comments and understand the approval process for moderators of some blogs <p>Quizzing</p> <ul style="list-style-type: none"> + Know the different question types in 2Quiz + Understand how the ability of the audience impact questions + Use 2DIY and 2Quiz to create a quiz show 	<p>Networks</p> <ul style="list-style-type: none"> + Know what is referred to as the internet is the World Wide Web + Explore the school network and how everything is connected + Investigate who Tim Berners-Lee was and how he impacted the digital world today

NC Links KS2	Coding and Computational Thinking	Spreadsheets	Internet and Email	Art and Design	Making Music	Databases and Graphing	Writing and Presenting	Communicating and Networks
	<p>+ design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts + use sequence, selection, and repetition in programs; work with variables and various forms of input and output + use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<p><i>+ select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p>+ use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content + use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p><i>+ select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p><i>+ select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p><i>+ select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p><i>+ select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p>+ understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</p>