Subject Overview – Computing

Computer Science Information Technology Digital Literacy

LAURANCE HAINES SCHOOL

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Computer Science Information Technology Digital Literacy

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Year 1

	Autumn 1	Autumn 2	Spring 1
Topic	Online safety and exploring Purple Mash (4 weeks)	Grouping and sorting (2 weeks) Pictograms (3 weeks)	Lego Builders (3 weeks) Maze explorers (3 weeks)
Prior learning/ Links	E-safety Logging in to Purple Mash	Simple classification and sorting in everyday life. Understanding of symbols and simple data representation.	Been introduced to basic concepts of sequencing and following instructions.
Vocabulary	○ Alert ○ Avatar ○ Button ○ Device ○ File name ○ Filter ○ Home screen ○ Icon ○ Login / out ○ Menu ○ My work area ○ Password ○ Private ○ Saving ○ Search	○ Algorithm ○ Criteria ○ Describe ○ Equal ○ Groups ○ Less than ○ More than ○ Sort ○ Collect data ○ Compare ○ Data ○ Pictogram ○ Record results ○ Title ○ Totals ○ Visual	○ Algorithm ○ Code ○ Computer ○ Debugging ○ Instructions ○ Machine ○ Program ○ Recipe ○ Sequence ○ Algorithm ○ Challenge ○ Command ○ Delete ○ Direction ○ Instruction ○ Left and right ○ Route ○ Undo ○ Unit
End points	○ To log in safely and understand why that is important. ○ To save work to the My Work area and understand that this is private space. ○ To start to add pictures and text to work. ○ To understand the importance of logging out when they have finished.	○ To sort items using a range of criteria. ○ To sort items on the computer using 'Grouping' activities on Purple Mash. ○ 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.	○ To emphasise the importance of following instructions. ○ To follow and create simple instructions on the computer ○ To consider how the order of instructions affects the result. ○ To understand the functionality of basic directions keys. ○ To understand how to change and extend the algorithm list.

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Enrichment ideas, suggestions (EDI) & cross-curricular links			…
Questions for assessment	What does the word private mean when using technology? What is meant by screen time? What is an avatar? What is meant by notification? What is the purpose of a textbox?	What is meant by the word 'quiz'? What does criteria mean? What does pictogram mean? What is a concept map? Which button is usually pressed on a mouse to perform an action?	What is a pupil set task? If we were predicting the route of a floor robot based on the inputs given, what would we be doing? What is an algorithm that has been written for a computer called? What is a command? What is a QR Code used for?

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Year 1

	Spring 2	Summer 1	Summer 2
Topic	Animated story books (5 weeks)	Coding (6 weeks)	Spreadsheets (3 weeks) Technology outside school (2 weeks)
Prior learning/ Links	Previous introduction to computer terms and concepts.	Understanding how a computer works and giving instructions step-by-step.	
Vocabulary	○ Animation ○ Background ○ Category ○ Clip-art ○ Copy ○ Edit ○ Eraser ○ Features ○ Font ○ Sound ○ Overwrite ○ Paint tools ○ Paste ○ Redo	○ Algorithm ○ Action ○ Background ○ Click ○ Coding ○ Command ○ Debugging ○ Execute ○ Instruction ○ Object ○ Output ○ Programmer ○ Software ○ Sound ○ When clicked	○ Button ○ Calculations ○ Cell ○ Column / row ○ Data ○ Delete ○ Image ○ Move / lock cell ○ Spreadsheet ○ Computer ○ Technology
End points	○ To understand the differences between traditional books and e-books. ○ To add animation to a picture. ○ To add a voice recording to the picture. ○ To add a background to the story.	○ To understand what instructions are. ○ To use code to make a computer program ○ To use an event to control an object. ○ To begin to understand how code executes when a program is run	○ To understand what a spreadsheet looks like. ○ To add clipart images to a spreadsheet. ○ To use the ‘speak’ and ‘count’ tools in 2Calculate to count items.

	○ To continue and complete an animated story.	○ To understand what backgrounds and objects are. ○ To plan and make a computer program.	○ To find and understand examples of where technology is used in the local community. ○ To record examples of technology outside school.
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	Which button would redo something you had undone? What is an 'ebook'? What does overwrite mean? What are sound effects? What is meant by built in sound effect?	What is meant by the term program? What is meant by direction? What is meant by code view? What movement type is possible with these additional keys? If you make a floor robot move several steps you would have programmed it. T/F	What is meant by online device? What is meant by the word pictogram? What is meant by spreadsheet? What is a concept map? Why is electrical safety important when using electronic technology?

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Year 2

	Autumn 1	Autumn 2	Spring 1
Topic	Coding (6 weeks)	Online safety (3 weeks) Spread sheets (4 weeks)	Questioning (5 weeks)
Prior learning/ Links	Coding in Year 1.	Online safety in reception and Year 1. Spreadsheets in Year 1.	Information technology in Year 1.
Vocabulary	○ Action ○ Algorithm ○ Background ○ Bug ○ Button ○ Click events ○ Collision detection ○ Command ○ Debugging ○ Event ○ Execute ○ Implement ○ Instructions ○ Interaction ○ Interval ○ Object	○ Attachment ○ Digital footprint ○ Display board ○ Email ○ Filter ○ Private ○ Protection ○ Reply ○ Search ○ Block graph ○ Cell ○ Coins ○ Column ○ Count tool ○ Data ○ Drag ○ Equals tool	○ Avatar ○ Binary tree ○ Data ○ Database ○ Field ○ Information ○ Pictogram ○ Question ○ Record ○ Search ○ Sort ○
End points	○ To create a computer program using an algorithm. ○ To create a program using a given design. ○ To design an algorithm that follows a timed sequence. ○ To understand what different events do in code.	○ To use digital technology to share work on Purple Mash to communicate and connect with others locally. ○ To introduce Email as a communication tools using 2Respond simulations.	○ To show that the information provided on pictograms is of limited use beyond answering simple questions. ○ To use yes/no questions to separate information. ○ To construct a binary tree to separate different items.

	○ To create a program using a given design. ○ To debug simple programs.	○ To identify the steps that can be taken to keep personal data and hardware secure. ○ To revise spreadsheet related vocabulary. ○ To use 2Calculate to solve a simple puzzle. ○ To add and edit data in a table layout.	○ Use 2 question to answer questions.
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	What does the word programmer mean? Which code block is an event? Which attribute allows you to change the size of an image? What is meant by implement? What is meant by timer? What is meant by code view?	Why do we have usernames and passwords to access sites such as purple mash? What does a filter do when searching online? Why should you keep personal information secure when online? What is meant by select when we think about spreadsheets? What does column mean? If you were to lock a cell, what would this do?	What is meant by block graph? What is meant by information? What is meant by sort? What is meant by binary tree? On a binary tree, what types of questions can be answered?

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Year 2

	Spring 2	Summer 1	Summer 2
Topic	Effective Searching (3 weeks) Creating pictures (3 weeks)	Creating pictures (2 weeks) Making music (3 weeks)	Presenting Ideas (4 weeks)
Prior learning/ Links	Internet safety in Year 1. Information technology in Year 1.	Pictograms in Year 1.	Oral presentations in Year 1.
Vocabulary	○ Browser ○ Device ○ Digital footprint ○ Domain ○ Internet ○ Network ○ URL ○ Art ○ Clip-art ○ Diagonal ○ Dilute ○ Horizontal ○ Impressionism ○ Parallel ○ Palette	○ Pointillism ○ Repeating pattern ○ Rotated ○ Stamps ○ Surrealism ○ Symmetry ○ Vertical ○ Bars ○ Beat ○ Compose ○ Note ○ Tune ○ Repeat ○ Sound effect	○ Fact file ○ Fiction ○ Mind map ○ Multiple-choice ○ Node ○ Non-fiction ○ Presentation ○ Quiz
End points	○ To understand terminology associated with the Internet and searching. ○ To gain a better understanding of searching the internet. ○ To create a leaflet to help someone search for information on the internet.	○ To look at the work of Piet Mondrian and William Morris and recreate using the template. ○ To be introduced to making music digitally. ○ To add sounds to a tune to improve it. ○ To create their own tune using the sounds which they have	○ 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.

	○ To look at the work of impressionist and pointillist artists and recreate using the template.	recorded to the Sounds section.	
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	What is a digital footprint? What is a search engine? Why is a search bar found on most websites useful? What is an email? What is an avatar? In computing what is meant by style?	What does dilute mean? What does dropdown menu mean? Which icon lets a user clear their drawing? What is text? What is meant by the word compose? Which action would change tempo?	What benefits are there to e-books? What is meant by mindmap? Multiple-choice means… What is a background? What is meant by fact file?

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Year 3

	Autumn 1	Autumn 2	Spring 1
Topic	Coding (6 weeks)	Online safety (3 weeks) Spreadsheets (3 weeks)	Touch typing (4 weeks)
Prior learning/ Links	Coding in Year 1 and 2.	Online safety Reception – Year 3. Spreadsheets in Year 2.	Using keyboards on iPads.
Vocabulary	○ Action ○ Alert ○ Algorithm ○ Background ○ Bug ○ Collision detection event ○ Command ○ Degrees ○ Flowchart ○ Implement ○ Input ○ Interval ○ Nest ○ Object ○ Predict ○ Properties	○ Blog ○ Inappropriate ○ Personal information ○ Reliable source ○ Reputable source ○ Spoof ○ Advanced mode ○ Bar graph ○ Cell address ○ Less/more than ○ Pie chart ○ Spinner tool	○ Keys ○ Posture ○ Spacebar ○ Typing ○
End points	○ To understand what a flowchart is and how they are used in computer programming. ○ To be able to select the right type of timer for a purpose. ○ To understand how to use the repeat command. ○ To understand the importance of nesting.	○ To know what makes a safe password, how to keep passwords sage/ ○ To look and create a 'spoof' website. ○ To learn about the meaning of age restriction symbols and discuss why PEGI restrictions exist.	○ To learn how to use the home, top and bottom row keys. ○ To practice and improve typing for home, bottom and top rows. ○ To practice the keys typed with the left hand. ○ To practice the keys typed with the right hand.

		○ To add and edit data in a table layout. ○ To introduce more than, less than, equal to and spin tools. ○ To learn about describing cells using their addresses.	
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	Is it true you don't need to debug if you are good at coding? Why is it important to know there are different object types? What does collision detection do in coding? What does repeat do in coding? What is meant by nesting? What do control blocks do?	Why is a search bar useful? What should a good password consist of? What is an email? What is meant by a digital footprint? What is a spoof website? How could a spreadsheet help you when you are planning some shopping? What is data? What useful things could a spreadsheet be used for?	What are the keys in the middle of the keyboard called? What is digital avatar? Which row is the letter Z found on? What is a password and why should we keep them safe? What is a file name?

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Year 3

	Spring 2	Summer 1	Summer 2
Topic	Email (incl. email safety) (6 weeks)	Branching Databases (4 weeks) Simulations (3 weeks)	Graphing (2 weeks) Presenting (5/6 weeks)
Prior learning/ Links	Internet safety Reception – Year 3.	Spreadsheets and data collection in Year 2. Presenting in Year 2.	Presenting and data collection in Year 2. Drawing graphs in maths.
Vocabulary	○ Attachment ○ Communication ○ Compose ○ Email ○ Inbox ○ Link ○ Mind mapping ○ Node ○ Password ○ Personal information ○ Save to draft ○ Trusted contact	○ Binary tree ○ Branching database ○ Data ○ Database ○ debugging ○ advantages ○ analysis ○ decision ○ disadvantages ○ evaluation ○ modelling ○ point of view ○ realistic ○ simulation	○ Axis ○ Chart ○ Column ○ Data ○ Graph ○ Investigation ○ Sorting ○ Survey ○ Tally chart ○ Animation ○ Duration ○ Editing ○ Presentation ○ Preview ○ Slideshow ○ Timing ○ Theme ○ Transition
End points	○ To think about the different methods of communication. ○ To write an email to someone from an address book. ○ To learn how to use email safely ○ To add an attachment to an email. ○ To explore a simulated email scenario.	○ To sort objects using yes/no questions. ○ To complete a branching database using 2Question. ○ To create a branching database of the children's choice.	○ To enter data into a graph and answer questions. ○ To investigate in order to answer a question and present the results in graphic form. ○ To create a page in presentation. ○ To add media to a presentation.

		○ To find out what a simulation is and understand the purpose of simulations. ○ To explore a simulation, making choices and discussing their effects.	○ To add animations and timings into a presentation. ○ To use the skills learned to design and present.
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	Discuss web browsers you know of. What are the advantages of using email compared to sending a letter through the post? Which button should be pressed if you need to send an email response back to the sender? When using email, what does compose mean? What is meant by a trusted contact?	How does a pictogram show information? How is information organised in a binary tree? How can a database help organise information? What is a computer simulation? Can you think of two things that simulators are good for? What is the difference between realistic and unrealistic?	How is information presented in a pictogram? When would a pictogram be useful? What is a mind map? What is a digital presentation? What is meant by slide? Name two types of quiz questions that can be created using software like 2Quiz. What is meant by slide transition?

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Year 4			
	Autumn 1	**Autumn 2**	**Spring 1**
Topic	Coding (6 weeks)	Online safety (3 weeks) Spreadsheets (3 weeks)	Writing for different audiences (5 weeks)
Prior learning/ Links	Coding Years 1 – 4.	Online safety Reception – Year 4 Spreadsheet Years 2+3.	Presenting in Year 3.
Vocabulary	○ Code blocks ○ Command ○ Co-ordinates ○ Debugging ○ Event ○ If statements ○ Nest ○ Prompt ○ Implement ○ Predict ○ Repeat ○ Sequence ○ Variable	○ Collaborate ○ Cookies ○ Copyright ○ Data analysis ○ Digital footprint ○ Malware ○ phishing ○ Plagiarism ○ Randsomware ○ Report ○ SMART rules ○ Software ○ Virus	○ Campaign ○ Format ○ Font ○ Genre ○ Opinion ○ Reporter ○ Viewpoint ○
End points	○ To create a simple computer program ○ To understand how an IF statement works. ○ To understand the Repeat until command. ○ To understand what a variable is in computer programming. ○ To create a playable game.	○ To understand that information put online leaves a digital footprint. ○ To identify the risks and benefits of installing software including apps. ○ To identify appropriate behaviour when participating or contributing to collaborative online projects for learning.	○ 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.

		○ To understand the importance of balancing game and screen time. ○ To find out how to add formulae to a cell ○ To explore how tools can be combined to use 2Calculate to make number games. ○ To use 2Calculate to create a model of a real-life situation. ○ To use the functions of allocating value to images to make a resource to teach place value.	
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	In coding, what is an object? In coding, what is meant by the term sequence? What is a flowchart? What is an if statement? In coding what does it mean to change the attributes of an object? What is a click event in coding?	Can you write down the SMART rules? Is everything I read on the internet true? What is a computer virus? What is a cell address? What does it mean to format a cell in spreadsheet? When would a line graph be used? What is a calculation in a spreadsheet?	What information can a presentation contain? What does the bold button do in presentation software? Why is it important to format writing? Why may it be useful to add animation to a presentation? Why should I change the font when I am writing?

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Year 4

	Spring 2	Summer 1	Summer 2
Topic	Logo (4 weeks) Animation (3 weeks)	Effective searching (3 weeks) Hardware Investigators (2 weeks)	Making music (4 weeks) Optional: Microbit (4 weeks)
Prior learning/ Links	Programming during coding in Years 1 – 4. Simulation.	Effective searching and internet safety. Coding Years 1 – 4.	Making music in Year 2.
Vocabulary	○ Debugging ○ Grid ○ Logo ○ Prediction ○ Procedure ○ Repeat ○ SETPC ○ Animation ○ FPS ○ Frame ○ Onion skinning ○ Pause ○ Stop motion	○ Balanced view ○ Easter eggs ○ Internet ○ Key words ○ Reliability ○ Results page ○ Search engine ○ Components ○ CPU ○ Graphics card ○ Hard drive ○ Hardware ○ Input ○ Motherboard ○ Network card ○ Output	○ BPM ○ Dynamics ○ Harmonious ○ Melody ○ Pitch ○ Pulse ○ Rhythm ○ Tempo ○ Texture ○ synths ○
End points	○ To input simple instructions in 2Logo. ○ To use 2Logo to create letter shapes. ○ To use the repeat command in 2Logo to create shapes.	○ To locate information on the search results page. ○ To use search effectively to find out information. ○ To assess whether an information source is true and reliable.	○ To identify and discuss the main elements of music ○ To understand and experiment with rhythm and tempo. ○ To create a melodic phrase. ○ To compose a piece of electronic music.

	○ To use and build procedures in 2Logo. ○ To learn how animations are created by hand. ○ To add backgrounds and sounds to animations. ○ To share animation to the class blog.	○ To understand the different parts that make up a desktop computer. ○ To recall the different parts that make up a computer.	
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	What does it mean to rotate a screen turtle? In Logo what is the run speed? What does the repeat instruction do in Logo? What is meant by the term fill when using an art program? What does FPS stand for? What is onion skinning? What is stop motion animation?	What is meant by digital footprint? When asking a search engine to solve a maths question a * should be used instead of? What are key words? What is meant by computer? What is one advantage of email?	What is meant by composed digitally? What happens when we change the BPM of the piece of music? What does it mean to loop a piece of music? You can change the pitch by changing the…?

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Year 5

	Autumn 1	Autumn 2	Spring 1
Topic	Logo (4 weeks) Animation (3 weeks)	Effective searching (3 weeks) Hardware Investigators (2 weeks)	Making music (4 weeks) Optional: Microbit (4 weeks)
Prior learning/ Links	Coding Years 1 – 5.	Online safety Reception – Year 5. Spreadsheets – Year 1, 3, 5.	Databases in Year 3.
Vocabulary	○ Abstraction ○ Concatenation ○ Decomposition ○ Efficient ○ Flowchart ○ Friction ○ Output ○ Physical system ○ Random ○ Repeat ○ Sequence ○ Simplify ○ Simulation ○ String ○ Tabs ○ Timer ○ Variable	○ Appropriate ○ Bibliography ○ Citation ○ Collaborate ○ Communication ○ Copyright ○ Encrypt ○ Identify theft ○ malware ○ Computation model ○ Format cell ○ Formula wizard ○ Perimeter ○ Spreadsheet ○ Totalling tool	○ Profit ○ Rows ○ Data ○ Variable ○ Chart ○ Collaborative ○ Database ○ Field ○ Group ○ Record ○ Search ○ Sort ○ Statistics
End points	○ To begin to be able to simplify code. ○ To program a simulation using 2Code. ○ To use decomposition to make a plan of a real-life situation. ○ To being to understand what a function is and how functions work in code.	○ To review children's responsibility to one another in their online behaviour. ○ To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online. ○ To search the internet with consideration for the reliability of the results.	○ To use formulae to calculate area and perimeter of shapes. ○ To creature formulae that use text variables. ○ To use a spreadsheet to help plan a school cake sale. ○ To learn how to search for information in a database.

	○ To understand how to create a string.	○ To use formulae within a spreadsheet to convert measurements of length and distance. ○ To use the count tool to answer hypotheses about common letters in use.	○ To contribute to a class database. ○ To create a database around a chosen topic.
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	What does it mean to debug code? In coding what is meant by input/selection? What is a flowchart? Is coding or decomposition the word for the method of breaking down a task into manageable components? In coding, what is abstraction? Which of these are examples of variables in coding?	What is meant by phishing? What does the T stand for in SMART rules? What would be your tips for a good, secure password? What is a digital footprint? What buttons would I use to copy a formula? What does a formula wizard do? Which buttons would I use to copy and paste a formula?	What symbol is used for multiplication questions instead of a x? Write a formula to work out the number of minutes in a given cell. What is a branching database? What is meant by data? Another name for a branching database is… What is a record in a database?

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Year 5

	Spring 2	Summer 1	Summer 2
Topic	Game creator (5 weeks) 3D Modelling (1 weeks)	3D Modelling (4 weeks) Concept maps (4 weeks)	Word processing (8 weeks)
Prior learning/ Links	Coding Years 1 – 5. Information technology in previous years.		Touch typing in Year 3.
Vocabulary	○ Evaluation ○ Feedback ○ Instructions ○ Promotion ○ Quest ○ Scene ○ Screenshot ○ 2D ○ 3D ○ Design brief ○ Net ○ Pattern fill	○ Points ○ Template ○ ○ Concept map ○ Connection ○ Collaborate ○ Heading ○ Sub-heading ○ Node ○ Presentation mode	○ Attributing ○ Bullet lists ○ Breaks ○ Columns ○ Copyright ○ Cropping ○ Distributing columns ○ Drop capitals ○ Grammar check ○ Hyperlink ○ Image transparency ○ Page orientation ○ Readability ○ Selecting/highlighting ○ Spell check ○ Template ○ Text formatting
End points	○ To begin planning a game. ○ To design the game environment. ○ To design the game quest to make it a playable game. ○ To finish and share a game ○ To self and peer evaluate. ○ To be introduced to the 2Design and Make tool.	○ To explore the effect of moving points when designing. ○ To design a 3D model to fit a certain criterion. ○ To refine and print a model. ○ To understand the uses of a concept map. ○ To create a concept map.	○ To know what a word processing tool is for. ○ To add and edit images to a word document. ○ To know to use word wrap with images and text. ○ To change the look of text within a document. ○ To add features to a document to enhance its look and usability.

		○ To understand how a concept map can be used to retell stories and information. ○ To create a collaborative concept map and present to an audience.	○ To use tables within MS Word to present information. ○ To introduce children to templates. ○ To consider page layout including heading and columns.
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	In animation what is FPS? Why is it important to evaluate the game? T/F – You should credit sources if you have used someone else's work in your game… What is a quest item in a game? Why are instructions important in a game? How can a computer help with creating art?	What does a pattern fill allow you to do on a program? What does a 3D view of a design help you to do? What is a design brief? What is meant by a font? On a concept map what is a node? Why should I change the font when I am writing?	Write 4 letters that can be found on the home row of the keyboard. What does it mean to format the text? Write down a word processing tool. What is text wrapping? Why should I type certain keys with certain fingers? What do we need to think about when planning a presentation? Why should I plan out my presentation? What does grammar check do in a document?

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Year 6

	Autumn 1	Autumn 2	Spring 1
Topic	Coding (6 weeks)	Online safety (2 weeks) Spreadsheets (5 weeks)	Blogging (4 weeks) Text adventures (2 weeks)
Prior learning/ Links	Coding in Years 1 – 6.	Online safety Reception – Year 6. Spreadsheets in Year 1, 2, 4 and 5.	Writing for different audiences Year 3.
Vocabulary	○ Execute/run ○ Flowchart ○ Function ○ Launch command ○ Predict ○ Properties ○ Sequence ○ Simulation ○ Text object ○ Turtle object ○ Variable	○ Digital footprint ○ Inappropriate ○ Location sharing ○ Password ○ PEGI rating ○ Phishing ○ Advanced mode ○ Budget ○ Chart ○ Columns ○ Expense ○ Format cell	○ Approval ○ Archive ○ Blog ○ Blog post ○ Collaborate ○ Commenting ○ Connections ○ Nodes ○ Vlog ○ Debugging ○ Flow of control ○ Link ○ QR code ○ Repeat ○ Selection ○ Sprite
End points	○ To understand how the launch command works. ○ To understand how functions are created and called. ○ To create a simulation of a room in which devices can be controlled. ○ To understand how user input can be used in a program.	○ To identify secure sites by looking for privacy seals of approval. ○ To begin to understand how information online can persist and give away details of those who share or modify it. ○ To identify the positive and negative influences of technology on health and the environment.	○ To identify the purpose of writing a blog. ○ To plan the theme and content for a blog. ○ To understand how to contribute to an existing blog. ○ To peer-assess blogs against the agreed success criteria. ○ To use 2Connect to plan a 'Choose your own Adventure' type story.

	○ To understand how 2Code can be used to make a text-based adventure program.	○ To use a spreadsheet to investigate the probability of the results of throwing many dive. ○ To use a spreadsheet to plan how to spend pocket money and the effect of saving money. ○ To use a spreadsheet to plan a school charity day to maximise the money donated to charity.	○ To read and understand given code for a text adventure game. ○
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	What is an input? What is an algorithm? Describe what is meant by decomposition in coding? Which of these words means the same as the run button? Express/execute/entail. What does debug mean? What is concatenation?	What is a citation? Why are PEGI ratings important? Why should you be careful what you post on social media? What is used instead of divide when writing formulas in a spreadsheet? What kind of charts can you construct in a spreadsheet? In a spreadsheet what is a formula?	What does CC mean in an email? What is the difference between a blog and a vlog? What information can I send in an email? What does teacher approve mean? What does it mean to evaluate a program? What is a concept map? What is a sprite? In computing, what is a link?

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Year 6

	Spring 2	Summer 1	Summer 2
Topic	Text adventures (3 weeks) Networks (3 weeks)	Quizzing (6 weeks)	Understanding binary (4 weeks) Optional – Spreadsheets (8 weeks)
Prior learning/ Links	Text adventures cont from previous term.		Spreadsheets in Year 1, 2, 4 and 5.
Vocabulary	○ Step through ○ Text adventure ○ Variables ○ Ethernet ○ IP address ○ LAN / ISP ○ Router ○ WAN	○ Audio ○ Case sensitive ○ Cloze ○ Clone ○ Image filter ○ Database field ○ Statistics	○ Binary ○ Decimal ○ Denary ○ Game states ○ Integer ○ Microprocessor ○ Nanotechnology ○ Nibble ○ Byte ○ Kilobyte ○ Megabyte ○ Gigabyte ○ Tetrabyte
End points	○ To independently design and implement improvements to a text adventure game. ○ To independently design and implement improvements to a game. ○ To discover what the children know about the internet. ○ To find out how we access the internet in school. ○ To research and find out about the age of the internet.	○ 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. ○ To develop skills in creating surveys and questionnaires.	○ To understand that binary represents numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics. ○ To represent whole numbers in binary, for example counting in binary from zero to 15, or writing a friend's age in binary. ○ To explore how division by two can be used as a technique to determine the binary representation of any

			whole number by collecting remainder terms. ○ To represent the state of an object in a game as active or inactive using the respective binary values of 1 or 0.
Enrichment ideas, suggestions (EDI) & cross-curricular links	…	…	…
Questions for assessment	What is a network card? Write two benefits the internet has given us? What is a WAN?	In a database, what is a field? What is a binary tree? What does clone mean? What does case sensitive mean? What is a cloze quiz question? T/F – A branching database question sorts information into two groups.	What is meant by simulation? What is a function in coding? What is a bit? What is denary? Which two numbers are used in binary?