	Autumn 1	Autumn 2	Winter 1	Winter 2	Spring 1	Spring 2
Year 1	1.1 E-Safety *Logging on safely, saving their own creative work, safe image searching, staying SMART (Safe, Meet, accept, Reliable, Tell) and keeping personal information safe.*	1.2 Grouping and Sorting *To sort items using a range of criteria.* *To sort items on the computer using the 'Grouping' activities in Purple Mash.* 1.3 Pictograms *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.*	1.4 Lego Builders *To compare the effects of adhering strictly to instructions to completing tasks without complete instructions.* *To follow and create simple instructions on the computer.* *To consider how the order of instructions affects the result.* 1.5 Maze Builders *To understand the functionality of the direction keys.* *To understand how to create and debug a set of instructions (algorithm).* *To use the additional direction keys as part of an algorithm.*	1.5 Maze Builders continued. *To understand how to change and extend the algorithm list.* *To create a longer algorithm for an activity.* *To set challenges for peers.* *To access peer challenges set by the teacher as 2Dos* 1.6 Animated Stories *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.*	1.7 Coding *To understand what instructions are and predict what might happen when they are followed.* *To use code to make a computer program.* *To understand what object and actions are.* *To understand what an event is.* *To use an event to control an object.* *To begin to understand how code executes when a program is run. To understand what backgrounds and objects are.* *To plan and make a computer program*	1.8 Spreadsheets *To know what a spreadsheet program looks like.* *To locate 2Calculate in Purple Mash.* *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.* 1.9 Technology Outside School *To walk around the local community and find examples of where technology is used.* *To record examples of technology outside school.*
Year 2	2.2 Online Safety *To know how to refine searches using the Search tool.* *To have some knowledge and understanding about*	2.1 Coding *To understand what an algorithm is.* *To create a computer program using an algorithm.*	2.3 Spreadsheets *To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine.*	2.4 Questioning *To learn about data handling tools that can give more information than pictograms.*	2.5 Effective Searching *To understand the terminology associated with searching.*	2.7 Making Music *To make music digitally using 2Sequence.* *To explore, edit and combine sounds using 2Sequence.*

	sharing more globally on the Internet. *To understand how we should talk to others in an online situation.* *To understand that information put online leaves a digital footprint or trail.* *To identify the steps that can be taken to keep personal data and hardware secure.*	*To create a program using a given design.* *To understand the collision detection event.* *To understand that algorithms follow a sequence.* *To design an algorithm that follows a timed sequence.* *To understand that different objects have different properties.* *To understand what different events do in code.* *To understand the function of buttons in a program.* *To understand and debug simple programs.*	*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.* 2.2 Online Safety Continued *To use digital technology to share work on Purple Mash to communicate and connect with others locally.* *To introduce Email as a communication tool using 2Respond simulations.*	*To use 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.*	*To gain a better understanding of searching on the Internet.* *To create a leaflet to help someone search for information on the Internet.* 2.6 Creating Pictures *To learn the functions of the 2Paint a Picture tool.* *To learn about and recreate the Impressionist style of art (Monet, Degas, Renoir).* *To recreate Pointillist art and look at the work of pointillist artists such as Seurat.* *To learn about the work of Piet Mondrian and recreate the style using the lines template.* *To learn about the work of William Morris and recreate the style using the patterns template.* *To explore surrealism and eCollage.*	*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.* 2.8 Presenting Ideas *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.*
Year 3	3.2 Online safety *To know what makes a safe password, how to keep passwords safe and the consequences of giving your passwords away.* *To consider if what can be read on websites is always true.*	3.1 Coding *To review previous coding knowledge.* *To understand how to use the repeat command.* *To use coding knowledge to create a range of programs.*	3.5 Emailing *To think about the different methods of communication.* *To open and respond to an email.* *To write an email to someone from an address book.*	3.6 Branching databases *To sort objects using just YES/NO questions.* *To complete a branching database using 2Question.* *To create a branching database of the children's choice.*	3.8 Graphing *To enter data into a graph and answer questions.* *To solve an investigation and present the results in graphic form.*	3.9 presenting with PowerPoint *To create a page in a presentation.* *To add media to a presentation* *To add animations into a presentation*

	To learn about the meaning of age restrictions symbols on digital media and devices. 3.4 Touch-typing *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 design and create an interactive scene.* 3.3 Spreadsheets *To add and edit data in a table layout.* *To introduce the 'more than', 'less than' and 'equals' tools.* *To learn about describing cells using their addresses.*	*To add an attachment to an email.*	3.7 Simulations *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 timings into a presentation.* *To use the skills learnt in previous weeks to design and present an effective presentation.*
Year 4	4.2 Online Safety *To understand that information put online leaves a digital footprint or trail and that this can aid identity theft.* *To identify the risks and benefits of installing software including apps.* *To understand that copying the work of others and presenting it as their own is called 'plagiarism' and to consider the consequences of plagiarism.* *To understand the importance of balancing game and screen time with other parts of their lives.*	4.1 Coding *To review coding vocabulary and knowledge.* *To begin to understand selection in computer programming.* *To understand how to use coordinates in computer programming.* *To understand the Repeat until command.* *To understand what a variable is in programming.* *To review vocabulary and concepts learnt in Year 4 Coding.*	4.3 Spreadsheets *To explore how the numbers entered into cells can be set to either currency or decimal.* *To explore how tools can be combined to use 2Calculate to make number games.* *To interpret a line graph to estimate values between data readings.* *To use the currency formatting tool in 2Calculate.* *To use the functions of allocating value to images in 2Calculate to make a resource to teach place value.*	4.4 Writing for a different audience. *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.* 4.5 Logo *To learn the structure of the language of 2Logo.* *To input simple instructions in 2Logo.* *To use 2Logo to create letter shapes.* *To use and build procedures in 2Logo.*	4.6 Animation *To learn how animations are created by hand.* *To learn about onion skinning in animation.* *Introducing 'stop motion' animation.* 4.7 Effective Searching *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.*	4.8 Hardware Investigators *To understand the different parts that make up a desktop computer.* *To recall the different parts that make up a computer.* 4.9 Making Music *To identify and discuss the main elements of music: Pulse, Rhythm, Tempo, Pitch, Texture* *To understand and experiment with rhythm and tempo.* *To compose a piece of electronic music.*
Year 5 & 6	5.2 Online Safety	5.1 Coding	5.3 Spreadsheets	5.5 Game Creator	5.7 Concept Maps	5.8 Word Processing

	To review children' 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 a consideration for the reliability of the results of sources to check validity and understand the impact of incorrect information.* *Ensuring reliability through using different methods of communication.*	*To review existing coding knowledge.* *To understand what a simulation is.* *To know what decomposition and abstraction are in Computer Science* *To understand how to use friction in code.* *To understand what the different variable types are and how they are used differently.*	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 use formulae to calculate area and perimeter of shapes.* *To use a spreadsheet to help plan a school cake sale.* 5.4 Databases *To learn how to search for information in a database.* *To contribute to a class database.* *To create a database around a chosen topic.*	To plan, create and debug a game. To self and peer assess games. 5.6 3D Modelling 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 certain criteria. To refine and print a model.	*To understand the need for visual representation when generating and discussing complex ideas.* *To create a concept map.* *To understand how a concept map can be used to retell stories and information.* *To create a collaborative concept map and present this to an audience*.	Children will be able to create a word processing document, altering the look of the text and navigating around the document. To add and edit images to a document. To know how to use word wrap with images and text. To add features to a document to enhance its look and usability. To use tables within Google Docs to present information.