Computing Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Communication & Language	Expressive Arts	Literacy	Mathematics	Physical Development	Understanding the World
Year 1	Online Safety & Exploring Unit 1.1 Grouping & Sorting Unit 1.2 Online Safety · to understand the idea of 'ownership' of their creative work · to find saved work · add pictures and text to work. Grouping & Sorting · sort items using a range of criteria. · sort items on the computer.	Pictograms Unit 1.3 Lego Builders Unit 1.4 Pictograms · understand that data can be represented in picture format. · contribute to a class pictogram · use a pictogram to record the results of an experiment Lego Builders · understand the importance of following instructions. · follow and create simple instructions on the computer. · consider how the order of	Maze Explorers Unit 1.5 Maze Explorers · understand the functionality of the direction keys. · understand how to create and debug a set of instructions · use the additional direction keys as part of an algorithm. · understand how to change and extend the algorithm list. · create a longer algorithm · set challenges for peers.	Animated Story Books Unit 1.6 Animated Story Books · explore e-books · add animation to a story. · add sound to a story, including voice recording and music · add backgrounds and copying and pasting pages. · share e-books.	Coding Unit 1.7 Coding · understand what coding means in computing. · create unambiguous instructions like those required by a computer. · build one- and two-step instructions · add and change backgrounds and characters · use code blocks to make the characters move · use collision detection.	Spreadsheets Unit 1.8 Technology outside School Unit 1.9 Spreadsheets · understand what a spreadsheet looks like. · be able to navigate around a spread sheet and enter data. · learn new vocabulary related to spreadsheets. · add clipart images to a spreadsheet. · use the 'move cell' and 'lock' tools · use the 'speak' and 'count' tools Technology outside school · walk around the local

		instructions affects the result.				community find and record examples of where technology is used.
Year 2	Coding Unit 2.1 Coding · To understand what an algorithm is. · To design algorithms and then code them. · To compare different object types. · To use the repeat command. · To use the timer command. · To know what debugging is and debug programs.	Online Safety Unit 2.2 Spreadsheets Unit 2.3 Online Safety · To have some knowledge and understanding about 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 secure. Spreadsheets · To use image, lock,	Questioning Unit 2.4 Questioning · To learn about data handling tools that can give more information than pictograms. · 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.	Effective Searching Unit 2.5 Effective Searching · 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.	Creating Pictures Unit 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 usin the lines template. · To learn about the work of William Morris and recreate the style using the patterns template. · To	Making Music Unit 2.7 Presenting Ideas Unit 2.8 Making Music · To make music digitally using 2Sequence. · To explore, edit and combine sounds · 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 · To record and upload environmental sounds · To use these sounds to create tunes.

		move cell, speak and count tools to make a counting machine. · To learn how to copy and paste · To use a spreadsheet for money calculations. · To use the equals tool to check calculations. · To use to collect data and produce a graph.			explore surrealism and eCollage.	
Year 3	Coding Unit 3.1 Coding • 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 different between timers	Online Safety Unit 3.2 Spreadsheets Unit 3.3 Online Safety · To know what makes a safe password. · Methods for keeping passwords safe. · To understand how the Internet can be used in effective communication. · To understand how a blog can be used to communicate with a wider	Typing Unit 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 practise typing with the left and right hand.	Email Unit 3.5 e-mails · To think about different methods of communication. · To open and respond to an email using an address book. · To learn how to use email safely. · To add an attachment to an email. · To explore a simulated email scenario.	Branching Databases Unit 3.6 Simulations Unit 3.7 Branching Databases · To sort objects using just 'yes' or 'no' questions. · To complete a branching database using 2Question. · To create a branching database of the children's choice Simulations · To consider what	Graphing Unit 3.8 Presentation Unit 3.9 Graphing · To enter data into a graph and answer questions. · To solve an investigation and present the results in graphic form Presentation · To understand the uses of PowerPoint. · To create a page in a presentation. · To add media to a presentation. · To

	and repeat commands	audience. · To consider the truth of the content of websites. · To learn about the meaning of age restrictions symbols on digital media and devices. Spreadsheets · To use the symbols more than, less than and equal to, to compare values. · To use 2Calculate to collect data and produce a variety of graphs. · To use the advanced mode of 2Calculate to learn about cell references.			simulations are. · To explore a simulation. · To analyse and evaluate a simulation.	add animations to a presentation. · To add timings to a presentation. · To use the skills learnt to design and create an engaging presentation.
Year 4	Coding Unit 4.1 Coding · To use selection in coding with the 'if/else' command. · To understand and use variables in 2Code. · To use flowcharts for design of algorithms	Online Safety Unit 4.2 Online Safety · To understand how to protect themselves from online identity theft. · Understand that information put online leaves a digital footprint or trail and that this	Spreadsheets Unit 4.3 Spreadsheets · Formatting cells as currency, percentage, decimal to different decimal places or fraction. · Using the formula wizard to calculate averages. ·	Writing for Different Audiences Unit 4.4 Writing for different audiences · To explore how font size and style can affect the impact of a text. · To use a simulated scenario to produce	Logo Unit 4.5 Animation Unit 4.6 Logo · 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	Effective Searching Unit 4.7 Hardware Investigators Unit 4.8 Effective Searching · To locate information on the search results page. · To use search effectively to find

	including selection. · To use the 'repeat until' with variables to determine the repeat. · To learn about and use computational thinking terms; decomposition and abstraction.	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 identify appropriate behaviour when participating or contributing to collaborative online projects for learning. · To identify the positive and negative influences of technology on health and the environment. · To understand the importance of balancing game and screen time with	Combining tools to make spreadsheet activities such as timed times tables tests. · Using a spreadsheet to model a real-life situation. · To add a formula to a cell to automatically make a calculation in that cell.	a news report. · To use a simulated scenario to write for a community campaign.	function in Logo to create shapes. · To use and build procedures in Logo. Animation · 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.	out information. · To assess whether an information source is true and reliable. Hardware Investigators · To understand the different parts that make up a computer. · To recall the different parts that make up a computer.

		other parts of their lives				
Year 5	Coding Unit 5.1 Coding · 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 score pad .	Online Safety Unit 5.2 Spreadsheets Unit 5.3 Online Safety · To gain a greater understanding of the impact that sharing digital content can have. · To know how to maintain secure passwords. · To learn about how to reference sources in their work · 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. Spreadsheets · Using the formula wizard to add a formula to a cell to	Databases Unit 5.4 Spreadsheets · To learn to create formulae that use text variables. Calculate how many days in x amount of years. · To use a spreadsheet to help plan a school cake sale. 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.	Game Creator Unit 5.5 ame Creator · 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.	Modelling Unit 5.6 3D Modelling · 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.	Concept Maps Unit 5.7 Concept Maps · 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.

		automatically make a calculation in that cell. · Using 2Calculate tools to test a hypothesis. · Using a spreadsheet to model a real-life situation and answer questions				
Year 6	Coding Unit 6.1 Coding · 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	Online Safety Unit 6.2 Spreadsheets Unit 6.3 Online Safety · Identify benefits and risks of mobile devices broadcasting the location of the user/device. · Identify secure sites by looking for privacy seals of approval. · Identify the benefits and risks of giving personal information. · To have a clear idea of appropriate online behaviour. · To	Blogging Unit 6.4 Blogging · 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	Text Adventures Unit 6.5 Text Adventures · 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.	Networks Unit 6.6 Networks · 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.	Quizzing Unit 6.7 Quizzing · 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 make a quiz to test your teachers or parents

	interactivity using input functions.	begin to understand how information online can persist. · To understand the importance of balancing game and screen time with other parts of their lives. Spreadsheets · To use a spreadsheet to investigate the probability of the results of throwing many dice. · Using the formula wizard to add a formula to a cell to automatically make a calculation in that cell. · To create graphs showing the data collected. · To type in a formula for a cell to automatically make a calculation in that cell. · Using a spreadsheet to create computational	existing blog. · To understand how and why blog posts are approved by the teacher. · To understand the importance of commenting on blogs.			

		models and answer questions.				

Pupil Voice Schedule

Is your vision and intent evident?

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Monday							
Tuesday							
Wednesday							
Thursday							
Friday							