



Computing Breadth Map 2020/2021

(All units from Purple Mash)

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	Unit 3.2 Online Safety Unit 3.1 Coding	3.3 Spreadsheets	3.4 Touch Typing 3.5 Email	3.6 Branching Databases	3.7 Simulations	3.8 Graphing
Year 3 Concepts covered	<p>Use technologies safely, respectfully and responsibly</p> <p>For children to consider if that they read on websites is true</p> <p>To know where to turn for help if they see inappropriate content or have inappropriate contact from others.</p> <p>To review coding vocabulary that relates to Object, Action, Event.</p> <p>To design and write a program that simulates a physical system.</p>	<p>To create pie charts and bar graphs</p> <p>To use the 'more than', 'less than' and 'equals' tools.</p> <p>To introduce the Advanced Mode of 2Calculate and use coordinates</p> <p>Output, Control and</p>	<p>To introduce typing terminology. Understand the correct way to sit at the keyboard. To learn how to use the home, top and bottom row keys</p> <p>To practise and improve typing for home, bottom and top rows</p> <p>To practise the keys typed with both hands</p> <p>To open and respond to an email. To write emails safely to someone, using an address book</p>	<p>To sort objects using just YES/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>To look at and explore simulations</p> <p>To analyse and evaluate a simulation.</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>

Year 4	Unit 4.2 Online Safety Unit 4.1 Coding	4.3 Spreadsheets	4.5 Writing for Different Audiences 4.5 Logo	4.6 Animation	4.7 Effective Searching	4.8 Hardware Investigators
Year 4 Concepts covered	<p>To understand how children can protect themselves from online identity theft. Understand that information put online leaves a digital footprint or trail and that this can aid identity theft.</p> <p>To Identify the risks and benefits of installing software including apps.</p> <p>To understand the importance of balancing game and screen time with other parts of their lives.</p> <p>To introduce the If/else statement and use it in a program.</p> <p>To create a variable.</p> <p>To explore a flowchart design for a program with an if/else statement</p> <p>To create a program which responds to the If/else command, using the value of the variable.</p>	<p>Use the formula wizard in the advanced mode to add formulae and explore formatting cells.</p> <p>Use a spreadsheet for budgeting.</p> <p>Explore place value in a spreadsheet.</p>	<p>To explore how font size and style can affect the impact of a text.</p> <p>To learn the language of Logo. To input simple instructions on Logo.</p> <p>To use the Repeat function in Logo to create shapes.</p>	<p>To discuss what makes a good animated film or cartoon and what their favourites are.</p> <p>To learn how animations are created by hand.</p> <p>To find out how 2Animate can be created in a similar way using the computer.</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>To understand the different parts that make up a computer.</p> <p>To recall the different parts that make up a computer.</p>

Year 5	Unit 5.2 Online Safety Unit 5.1 Coding	5.3 Spreadsheets	5.4 Databases	5.5. Game Creator	5.6 3D Modelling	5.7 Concept Maps
Year 5 Concepts covered	<p>To gain a greater understanding of the impact that sharing digital content can have. To review sources of support when using technology. To review children's responsibility to one another in their online behaviour.</p> <p>To understand the advantages, disadvantages, permissions and purposes of altering an image digitally and the reasons for this.</p> <p>To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online.</p> <p>To review coding vocabulary.</p> <p>To use a sketch or storyboard to represent a program design and algorithm.</p> <p>To use the design to create a program.</p>	<p>To convert units of measurements.</p> <p>Formulae including the advanced mode.</p> <p>Using text variables to perform calculations.</p> <p>Using a spreadsheet to plan an event.</p>	<p>To learn how to search for information on a database.</p> <p>To contribute to and create a database around a chosen topic.</p>	<p>To create the game environment.</p> <p>To create the game quest.</p> <p>To finish and share the game.</p> <p>To evaluate their and peers' games.</p>	<p>To explore the effect of moving points when designing.</p> <p>To understand designing for a purpose.</p> <p>To understand printing and making.</p>	<p>To understand the need for visual representation when generating and discussing complex ideas.</p> <p>To understand and use the correct vocabulary when creating a concept map.</p> <p>To create a concept map.</p> <p>To create a collaborative concept map and present this to an audience.</p>

Year 6	Unit 6.2 Online Safety Unit 6.1 Coding	6.3 Spreadsheets	6.4 Blogging	6.5 Text Adventures	6.6 Networks	6.7 Quizzing
Year 6 Concepts covered	<p>Identify benefits and risks of mobile devices broadcasting the location of the user/device, e.g. apps accessing location.</p> <p>Identify the benefits and risks of giving personal information and device access to different software.</p> <p>To begin to understand how information online can persist and give away details of those who share or modify it.</p> <p>To use variables within a game to keep track of the properties of objects.</p> <p>To organise code into functions and Call functions to eliminate surplus code in the program.</p>	<p>Explore probability</p> <p>Use of spreadsheets in 'real life' Creating a computational mode.</p> <p>Use a spreadsheet to plan pocket money spending and plan an event.</p>	<p>To identify the purpose of writing a blog. To identify the features of successful blog writing.</p> <p>To consider the effect upon the audience of changing the visual properties of the blog.</p> <p>To understand the importance of regularly updating the content of a blog.</p> <p>To peer-assess blogs against the agreed success criteria.</p>	<p>To find out what a text adventure is. To plan a story adventure.</p> <p>To introduce map-based text adventures.</p> <p>To code a map-based text adventure.</p>	<p>To find out what a LAN and a WAN are. To find out how we access the internet in school.</p> <p>To research and find out about the age of the internet.</p> <p>To think about what the future might hold regarding technology.</p>	<p>To explore on line quizzes.</p> <p>To learn how to use the question types within 2Quiz to make a quiz for younger children.</p> <p>To make a quiz that requires the player to search a database.</p>