



# Computing Long Term Plan



Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<p>Computing is incorporated within the Early Years Foundation Stage Curriculum predominately through the use of the learning environment and classroom provision. The children are given a wealth of opportunities and resources to engage in activities, both child initiated and adult directed, which enable them to recognise technology, and use it to enhance their learning. Throughout the year EYFS include computing in their continuous provision by giving children the opportunity to explore and use technology around the classroom. Children explore computing through mini mash on the clevertoch boards, Ipads, chormebooks, beebots and classroom computers to support them to develop their technology skills, so that the essential building blocks of Computing are established.</p>					
Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<p><u>Purple Mash 1.5 Maze Explorers unit:</u></p> <ul style="list-style-type: none"> <li>To create a programme for beebots</li> <li>To understand the functionality of the direction keys.</li> <li>To understand how to create and debug a set of instructions (algorithm).</li> <li>To use the additional direction keys as part of an algorithm.</li> <li>To understand how to change and extend the algorithm list.</li> <li>To create a longer algorithm</li> </ul>	<p><u>Purple Mash 1.2 Grouping and Sorting:</u></p> <ul style="list-style-type: none"> <li>To sort items using a range of criteria.</li> <li>To sort items on the computer using</li> <li>the 'Grouping' activities in Purple Mash.</li> </ul> <p><u>Purple Mash 1.4 Lego Builders unit:</u></p> <ul style="list-style-type: none"> <li>To compare the effects of adhering</li> <li>strictly to instructions to completing</li> <li>tasks without complete instructions.</li> <li>To follow and</li> </ul>	<p><u>Purple Mash 1.3 Pictograms unit:</u></p> <ul style="list-style-type: none"> <li>To understand that data can be represented in picture format.</li> <li>To contribute to a class pictogram.</li> <li>To use a pictogram to record the results of an experiment</li> </ul>	<p><u>Purple Mash 1.6 Animated Story Books unit:</u></p> <ul style="list-style-type: none"> <li>To introduce e-books and the 2Createa Story tool.</li> <li>To add animation to a story.</li> <li>To add sound to a story, including voice recording and music the children have composed.</li> <li>To work on a more complex story, including adding backgrounds and copying and pasting pages.</li> <li>To share e-books on a class display board.</li> </ul>	<p><u>Purple Mash 1.7 Coding unit:</u></p> <ul style="list-style-type: none"> <li>To understand what instructions are and predict what might happen when they are followed.</li> <li>To use code to make a computer program.</li> <li>To understand what object and actions are.</li> <li>To understand what an event is.</li> <li>To use an event to control an object.</li> <li>To begin to understand how code executes when a program is run.</li> <li>To understand</li> </ul>	<p><u>Purple Mash 1.9 Technology Outside School unit:</u></p> <ul style="list-style-type: none"> <li>To walk around the local community and find examples of where technology is used.</li> <li>To record examples of technology outside school.</li> </ul>



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	<p>for an activity.</p> <ul style="list-style-type: none"> <li>To set challenges for peers.</li> <li>To access peer challenges set by the teacher as 2Dos.</li> </ul>	<p>create simple instructions on the computer.</p> <ul style="list-style-type: none"> <li>To consider how the order of instructions affects the result.</li> </ul>			<p>what backgrounds and objects are</p> <ul style="list-style-type: none"> <li>To plan and make a computer program</li> </ul>	
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\*All online safety units have moved. Please ensure you are using 2besafe as your starter powerpoints and Project Evolve for your knowledge harvest.

Year 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<p><u>Purple Mash 2.1 Coding Unit</u></p> <ul style="list-style-type: none"> <li>To understand what an algorithm is.</li> <li>To create a computer program using an algorithm.</li> <li>To create a program using a given design.</li> <li>To understand the collision detection event.</li> <li>To understand that algorithms follow a sequence.</li> <li>To design an algorithm that follows a timed</li> </ul>	<p><u>Purple Mash 2.7 Making Music Unit</u></p> <p>Composing digital melodies using 2Sequence.</p> <ul style="list-style-type: none"> <li>Understanding a digital music tool</li> <li>Relating the functions to musical terms</li> <li>Composing music digitally</li> </ul> <p><u>Programming robot algorithms (Beebots)</u></p> <ul style="list-style-type: none"> <li>Understand a set of instruction in sequence</li> <li>Give commands to investigate outcome</li> </ul>	<p><u>Purple Mash 2.6 Creating pictures Unit</u></p> <ul style="list-style-type: none"> <li>To learn the functions of the 2Paint a Picture tool.</li> <li>To learn about and recreate the Impressionist style of art (Monet, Degas, Renoir).</li> <li>To recreate Pointillist art and look at the work of pointillist artists such as Seurat.</li> <li>To learn about the work of Piet Mondrian and recreate the style using the lines</li> </ul>	<p><u>Purple Mash 2.3 Spreadsheets Unit</u></p> <ul style="list-style-type: none"> <li>To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine.</li> <li>To learn how to copy and paste in 2Calculate.</li> <li>To use the totalling tools.</li> <li>To use a spreadsheet for money calculations.</li> <li>To use the 2Calculate equals tool to check calculations.</li> </ul>	<p><u>Purple Mash 2.8 Presenting Ideas Unit</u></p> <ul style="list-style-type: none"> <li>To explore how a story can be presented in different ways.</li> <li>To make a quiz about a story or class topic.</li> <li>To make a fact file on a non-fiction topic.</li> <li>To make a presentation to the class</li> </ul>	<p><u>Purple Mash 2.4 Questioning Unit</u></p> <ul style="list-style-type: none"> <li>To learn about data handling tools that can give more information than pictograms.</li> <li>To use yes/no questions to separate information.</li> <li>To construct a binary tree to identify items.</li> <li>To use 2Question (a binary tree database) to answer questions.</li> <li>To use a database to</li> </ul>



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	<p>sequence.</p> <ul style="list-style-type: none"><li>• To understand that different objects have different properties.</li><li>• To understand what different events do in code.</li><li>• To understand the function of buttons in a program.</li><li>• To understand and debug simple programmes.</li></ul>		<p>template.</p> <ul style="list-style-type: none"><li>• To learn about the work of William Morris and recreate the style using the patterns template.</li></ul> <p>To explore surrealism and eCollage.</p>	<ul style="list-style-type: none"><li>• To use 2Calculate to collect data and produce a graph.</li></ul>		<p>answer more complex search questions.</p> <ul style="list-style-type: none"><li>• To use the Search tool to find information.</li></ul>
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