

Year 1	Term 1/2	Term 3/4	Term 5/6
National Curriculum Coverage	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>☑ understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>☑ create and debug simple programs</li> <li>☑ use logical reasoning to predict the behavior of simple programs</li> <li>☑ use technology purposefully to create, organize, store, manipulate and retrieve digital content</li> <li>☑ recognize common uses of information technology beyond school</li> <li>☑ use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>☑ understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>☑ create and debug simple programs</li> <li>☑ use logical reasoning to predict the behavior of simple programs</li> <li>☑ use technology purposefully to create, organize, store, manipulate and retrieve digital content</li> <li>☑ recognize common uses of information technology beyond school</li> <li>☑ use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</li> </ul>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>☑ understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>☑ create and debug simple programs</li> <li>☑ use logical reasoning to predict the behavior of simple programs</li> <li>☑ use technology purposefully to create, organize, store, manipulate and retrieve digital content</li> <li>☑ recognize common uses of information technology beyond school</li> <li>☑ use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</li> </ul>
Lesson Objectives + Concepts	<p><b>Unit 1.9 Tech Outside School (Term 2)</b> 1 –What is technology and what does it look like outside of school. <b>(See Purple Mash unit 1.9 planning for more details)</b></p> <p><b>Online Safety -</b> <b>Unit 1.1 Online Safety (Term 1)</b> 1- To log in safely and understand why that is important. 2-To learn how to find saved work in the Online Work area. 3- To become familiar with the types of resources available in the Topics section. 4- To explore the Tools area of Purple Mash and to learn about the common icons used in Purple Mash for Save, Print, Open, New. To understand the importance of logging out when they have finished. <b>(See Purple Mash unit 1.1 planning for more details)</b></p> <p><b>(Term 2)</b> 1 -Understand the terms Zip it block it flag it.</p>	<p><b>Unit 1.4 Lego Builders</b> 1-To follow and create simple instructions on the computer. 2- To consider how the order of instructions affects the result. <b>(See Purple Mash unit 1.4 planning for more details)</b></p> <p><b>Online Safety</b> <b>Internet Safety Day (Term 3)</b> 1– To use technology safety and respectfully 2—Understand about keeping personal information private 3—Identify where to go for help and support when they have concerns about content or conduct on the internet or other online technologies</p> <p><b>(Term4)</b> 1– To recognize what is personal information.</p>	<p><b>Unit 1.7 Coding</b> 1- To understand that computer programs work by following instructions called code. 2- To use code to make a computer program 3- To understand what an event is 4- To begin to understand how code executes when a program is run. 5- To understand what backgrounds and objects are. To understand how to use the scale property 6– To plan and make a computer program</p> <p><b>Online Safety</b> 1 –Sharing information online</p> <p><b>(Term 6)</b> 1 –How to be kind online</p>
Knowledge taught	<ul style="list-style-type: none"> <li>◆ Understand what is meant by technology and can identify a variety of examples both in and out of school.</li> <li>◆ Understanding about the technological devices in use in their daily lives and how some of these facilitate communication of a variety of formats.</li> </ul> <p><b>Online Safety—</b></p> <ul style="list-style-type: none"> <li>◆ Children understand to keep personal information safe and tell a trusted adult.</li> <li>◆ Demonstrate an understanding of the importance of online safety, using their own private usernames and passwords for Purple Mash</li> <li>◆ Most children will be able to demonstrate an understanding of the reasons for keeping their password private including talking about the meaning of ‘private information’</li> </ul>	<ul style="list-style-type: none"> <li>◆ Children can state where an error has occurred on one of the models from the instructions given</li> <li>◆ Children can give each other precise simple instructions and follow them to create the desired outcomes for their Lego mode</li> <li>◆ Children know that an algorithm written for a computer to follow is called a program.</li> <li>◆ Children can debug a very simple set of printed instructions for a recipe, the approach they use should entail breaking the instructions into smaller parts to support interpretation.</li> </ul> <p><b>Online Safety—</b></p> <ul style="list-style-type: none"> <li>◆ Children understand what is personal information and can give examples</li> <li>◆ Understand the importance of not sharing personal information.</li> <li>◆ Can share some examples of when something needs to be zipped, blocked or flagged.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Children can both give and receive verbal instruction to achieve a simple outcome such as getting from one point of the classroom to the other whilst avoiding obstacles.</li> <li>◆ Children can apply off-screen block code to on-screen block code within 2Code</li> <li>◆ Children can consider a variety of factors when coding, including the way that the program is designed.</li> <li>◆ Children know that any unexpected outcome is due to the code that they have created and make logical attempts to try to fix this code rather than attributing it to a fault with the computer understanding the instructions.</li> </ul> <p><b>Online Safety</b></p> <ul style="list-style-type: none"> <li>◆ Children can explain the rules of sharing information online.</li> <li>◆ Children understand that they must treat people online how they would in personal (kind koala).</li> </ul>
Skills used	Communication, team work, IT literacy,	Problem solving, communication, debugging, critical thinking,	Critical thinking, debugging, teamwork, communication, creativity,
Vocabulary to be retained	Computer, Technology, Zip it block it flag it, internet	sharing, search, Debug / Debugging, computer, program, code	Algorithm, code, coding, command, execute, programmer, plan, instruction, event, sharing
Prior learning to recall	<ul style="list-style-type: none"> <li>◆ Understanding of electronic devices</li> <li>◆ How to speak to people in a respectful manner (kind koala)</li> </ul>	<ul style="list-style-type: none"> <li>◆ Children have some knowledge of online safety and able to explain zip it block it flag it.</li> <li>◆ Can follow instructions and have some understanding of the importance of following instructions.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Understand safe searching.</li> <li>◆ Zip it, Block it, Flag it recap for safe searching.</li> <li>◆ Understand how to communicate with others online</li> </ul>
Useful links	<a href="https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y1/computing_sow_y1_unit_1-9">https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y1/computing_sow_y1_unit_1-9</a>	<a href="https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y1/computing_sow_y1_unit_1-4">https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y1/computing_sow_y1_unit_1-4</a>	<a href="https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y1/computing_sow_y1_unit_1-7">https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y1/computing_sow_y1_unit_1-7</a>
Assessment	Complete Purple Mash Quiz unit 1.9 Evidence in floor book, PV Exceeding question— what does intellectual property mean?	Complete Purple Mash Quiz unit 1.4 Evidence in floor book, PV Exceeding question—What is an algorithm?	Complete Purple Mash Quiz unit 1.7 Evidence in Floor book, PV Exceeding question—Why is the program not working with your current code?

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Lesson Objectives + Concepts	<p>1-To refresh our computing skills.  <b>Unit 2.6 Creating Pictures (Term 1)</b>  2—To explore 2Paint A Picture. To look at the work of Impressionist artists and recreate them using the Impressionism template  3 —To recreate pointillist art using the Pointillism template.  4 —To look at the work of William Morris and recreate it using the Patterns template.  Lesson 3 and 5 to be created at home  (See Purple Mash unit 2.6 planning for more details)</p> <p><b>Unit 2.5 Effective Searching (Term 1)</b>  1-To understand the terminology associated with the Internet and searching.  2- To gain a better understanding of searching the Internet.  (See Purple Mash unit 2.5 planning for more details)</p> <p><b>Online Safety -</b>  1— To recap the terminology zip it, block it, flag it  <b>Term 2 Unit 2.2 Online Safety</b>  1. To have some knowledge and understanding about sharing more globally on the Internet.  (See Purple Mash unit 2.2 planning for more details)</p>	<p><b>Unit 2.1 Coding (Term 4)</b>  1- To understand what an algorithm is.  2- To understand the collision detection event.  3- To understand that algorithms follow a sequence.  4- To understand what different events do in code.  5- To understand the function of buttons in a program.  6 -To understand the need to test and debug a program repeatedly.  (See Purple Mash unit 2.1 planning for more details)</p> <p><b>Online Safety</b>  <b>Internet Safety Day (Term 3)</b>  1— To use technology safety and respectfully  2—Understand about keeping personal information private  3—Identify where to go for help and support when they have concerns about content or conduct on the internet or other online technologies  <b>Term 4</b>  1— To recognize what is personal information.</p>	<p><b>Online Safety</b>  1 -Understand the rules of sharing information online.</p> <p><b>Term 6</b>  1 –To recognize how to be kind online.</p>
Knowledge taught	<ul style="list-style-type: none"> <li>◆ Using 2Paint a Picture, children can create an image replicating an established style e.g., pointillism</li> <li>◆ Children can enhance a picture using the tools within 2Paint a Picture which demonstrates their ability to manipulate a digital image</li> <li>◆ Children will learn and show that they can efficiently store and retrieve their work from their saved area on Purple Mash.</li> <li>◆ They will be able to use a range of effects and functions, such as e-collage, in 2Paint a Picture .</li> </ul> <p><b>Unit 2.5</b></p> <ul style="list-style-type: none"> <li>◆ Children can effectively retrieve relevant, purposeful digital content using a search engine</li> <li>◆ Children can apply their learning of effective searching beyond the classroom.</li> <li>◆ Children can identify the basic parts of a web search engine search page.</li> <li>◆ Children have learnt to read a web search results page</li> </ul> <p><b>Online Safety—</b></p> <ul style="list-style-type: none"> <li>◆ Children understand to keep personal information safe and tell a trusted adult.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Children can explain that an algorithm is a set of instructions to complete a task.</li> <li>◆ Children can talk through code which contains a timer command, explaining where this command is positioned and what will happen</li> <li>◆ Children can identify the parts of a program that respond to specific events and initiate specific actions.</li> <li>◆ Children can debug their own and other’s programs</li> <li>◆ Children show an awareness of the need to be precise in their designs so that algorithms can be successfully translated into code.</li> </ul>	<p><b>Online Safety</b>  Children can explain the rules of sharing information online.</p>
Skills used	Creative thinking, problem solving, Communication, typing, critical thinking, safe searching, data collection, IT Literacy	Critical thinking, creativity, debugging, teamwork, problem solving, IT Literacy	Communication, safe searching, problem solving
Vocabulary to be retained	Internet, World Wide Web, Device, Network, Web Page, Browser, Website, Domain, Search Engine, Web address, Fill , Style , Pointillism, Impressionism, Surrealism	Zip it block it flag it, internet, filter, sharing, search, digital footprint, Action, algorithm, Background, Bug, Button , Debug / Debugging, Command, Collision detection , Execute, Implement, Interaction, Object, Output	Zip it block it flag it, internet, filter, sharing, information, cryptic, encoded,
Prior learning to recall	<ul style="list-style-type: none"> <li>◆ Understand safe searching.</li> <li>◆ Zip it, Block it, Flag it recap for safe searching.</li> <li>◆ Logging in to a device using personal log in</li> </ul>	<ul style="list-style-type: none"> <li>◆ Children know that for the computer to make something happen, it needs to follow clear instructions</li> <li>◆ Prior Understanding of algorithms .</li> <li>◆ Understanding of what coding is.</li> </ul>	<ul style="list-style-type: none"> <li>◆ Understand safe searching.</li> <li>◆ Zip it, Block it, Flag it recap for safe searching.</li> <li>◆ Understand how to communicate with others online</li> </ul>
Useful links	<a href="https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y2/computing_sow_y2_unit_2-5">https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y2/computing_sow_y2_unit_2-5</a> <a href="https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y2/computing_sow_y2_unit_2-6">https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y2/computing_sow_y2_unit_2-6</a>	<a href="https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y2/computing_sow_y2_unit_2-1">https://www.purplemash.com/#tab/teachers/computing_sow/computing_sow_y2/computing_sow_y2_unit_2-1</a>	
Assessment	Complete Purple Mash Quiz unit 2.5 Evidence in Floor book, PV Exceeding question - What happens if you use less words in your searches?	Complete Purple Mash Quiz unit 2.1 Evidence in Floor book, PV Exceeding question - Can you give me a example of what an algorithm is?	Complete Purple Mash Quiz unit 2.2 Evidence in Floor book, PV Exceeding question - How can you filter your searches to make them more safe?