

TPPS Progression Overview



Theme Key:															
	Coding and Computational thinking		Spreadsheets		Internet and Email		Art and Design		Music		Databases and graphing		Writing and Presenting		Communication and networks

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
YEAR 1	Unit 1.1 Online Safety & Exploring Purple Mash. Programs – Various -To log in safely. -To start to understand the idea of ‘ownership’ of their creative work. -To learn how to find saved work in the Online Work area and find teacher comments. -To start to add pictures and text to work. -To explore the Tools section 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.				Unit 1.2 Grouping & Sorting Programs – 2DIY -To sort items using a range of criteria. -To sort items on the computer using the ‘Grouping’ activities in Purple Mash.		Unit 1.3 Pictograms Programs – 2Count -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.		Unit 1.4 Lego Builders Programs – 2DIY - To follow and create simple instructions on the computer. - To consider how the order of instructions affects the result.			Unit 1.5 Maze Explorers Programs – 2Go -To understand the functionality of the basic direction keys. - To understand how to create and debug a set of instructions (algorithm). To use the additional direction keys as part of their algorithm. To understand how to change and extend the algorithm list. To create a longer algorithm for an activity.			Unit 1.6 Animated Story Books Programs – 2Create A Story -To be introduced to e-books and 2Create a Story. -To add animation to a story. -To add sound to a story, including voice recording and music. -To work on a more complex story, including adding backgrounds and copying and pasting pages.				Unit 1.7 Coding Programs – 2Code -Introduction to block coding on screen. -Introduction to backgrounds and characters. -Making a character move left and right. -Making a character move when clicked. -Introduction to Collision Detection.				Unit 1.8 Spreadsheets Programs – 2Calculate -Children can navigate around a spreadsheet. -Children can explain what rows and columns are. -Children can save and open sheets. -Adding images to a spreadsheet and using the image toolbox. -Using the ‘speak’ and ‘count’ tools in 2Calculate to count items.		Unit 1.9 Technology outside school Programs – Various - To walk around the local community and find examples of where technology is used. - To record examples of technology outside school.						

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YEAR 2	Unit 2.1 Coding Programs – 2Code					Unit 2.2 Online Safety Programs – Various		Unit 2.3 Spreadsheets Programs 2Calculate				Unit 2.4 Questioning Programs – 2Question, 2Investigate				Unit2.5 Effective Searching Programs – Browser			Unit 2.6 Creating Pictures Programs – 2PaintAPicture				Unit2.7 Making Music Programs – 2Sequence			Unit 2.8 Presenting Ideas Programs – Various					
	<ul style="list-style-type: none"> -To use Repeat and Timer commands. - Debugging. - To explore the possible actions of different types of objects. - To create a more complex program to retell a story, using 2Code. 					<ul style="list-style-type: none"> -To know how to refine searches using the Search tool. -To know how to share work electronically using the display boards. -To have some knowledge and understanding about sharing work on Purple Mash and the Internet. 		<ul style="list-style-type: none"> - Copying and Pasting Totalling tools. - Using a spreadsheet to add amounts. -Creating a table and block graph 				<ul style="list-style-type: none"> - To show that the information provided on pictograms is of limited use beyond answering simple questions. - To use yes/no questions to separate information. - To construct a binary tree to separate different items. - To use 2Question (a binary tree) to answer questions. - To use a database to answer more complex search questions. -To use the Search tool to find information. 				<ul style="list-style-type: none"> -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. 			<ul style="list-style-type: none"> - To use 2Paint a Picture to create my own art based upon this style. - To recreate pointillist art and look at the work of pointillist artists such as Seurat. - To look at the work of Piet Mondrian and recreate it using the Lines template. - To look at the work of William Morris and recreate it using the Patterns template. - To explore surrealism and eCollage. 				<ul style="list-style-type: none"> - To be introduced to making music digitally using 2Sequence. -To explore, edit and combine sounds using 2Sequence. - To add sounds to a tune they've already created to change it. - To upload a sound from a bank of sounds into the Sounds section. -To record their own sound and upload it into the Sounds section. 			<ul style="list-style-type: none"> -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. 					

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YEAR 3	Unit 3.1 Coding Main Programs – 2Code -To design and write a program that accomplishes a specific goal. -To design and write a program that simulates a physical system. -To use repetition commands. -To introduce If statements. -To explain what steps I need to follow to debug a program. -To introduce variables.						Unit 3.2 Online safety Programs – Various -To know what makes a safe password, how to keep passwords safe and the consequences of giving your passwords away. -To understand how the Internet can be used to help us to communicate effectively. -To understand how a blog can be used to help us communicate with a wider audience. -To look at some ‘spoof’ websites. -To think about why these sites might exist and how to check that the info is accurate.		Unit 3.3 Spreadsheets Programs – 2Calculate -To create pie charts and bar graphs. -To use the ‘more than’, ‘less than’ and ‘equals’ tools. -To introduce the Advanced Mode of 2Calculate and use coordinates.		Unit 3.4 Touch Typing Programs – 2Type -To introduce typing terminology. -To use two hands to type the letters on the keyboard. -To start typing words. -To type a series of words with speed and accuracy.			Unit 3.5 Email (including email safety) Programs – 2Email, 2Connect, 2DIY -To think about different methods of communication. -To open and respond to an email. -To write an email to someone using an address book. -To learn how to use email safely. -To add an attachment to an email. -To read and respond to a series of email communications.					Unit 3.6 Branching Databases Programs – 2Question -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.			Unit 3.7 Simulations Programs – 2Simulate, 2Publish -To consider what simulations are. -To explore a simulation. -To analyse and evaluate a simulation.			Unit 3.8 Graphing Programs – 2Graph -To enter data into a graph and answer questions. -To solve an investigation and present the results in graphic form.						

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YEAR 4	Unit 4.1 Coding						Unit 4.2 Online safety		Unit 4.3 Spreadsheets						Unit 4.4 Writing for different audiences				Unit 4.5 Logo			Unit 4.6 Animation		Unit 4.7 Effective Search		Unit 4.8 Hardware Investigators					
	Main Programs – 2Code						Programs – Various		Programs – 2Calculate						Programs – 2Email, 2Connect, 2DIY				Programs – Logo			Programs – 2Animate		Programs – Browser							
	<ul style="list-style-type: none"> - To explain what Object, Action, Output, Control and Event are in computer programming. - Variables and 'If/else' statements. - Using repetition and user input. - To explain how they debugged their partner's program. -To explain how they made their program change the number every second. - Using 2Code to make a control simulation. 						<ul style="list-style-type: none"> - To share knowledge of online safety. - To create and share an online safety presentation and information materials. 		<ul style="list-style-type: none"> -Using the formula wizard in the advanced mode to add formulae and explore formatting cells -To use the timer, random number and spin button tools. -To use a series of data in a spreadsheet to create a line graph. -Using a spreadsheet for budgeting -To allocate values to images and use these to explore place value. 						<ul style="list-style-type: none"> - 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. 				<ul style="list-style-type: none"> - To input simple instructions in Logo. - Using 2Logo to create letter shapes. - To use the Repeat function in Logo to create shapes. - To use and build procedures in Logo 			<ul style="list-style-type: none"> -To learn how animations are created by hand. - 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. 		<ul style="list-style-type: none"> -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. 		<ul style="list-style-type: none"> -To understand the different parts that make up a computer. - To recall the different parts that make up a computer. 					

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YEAR 5	Unit 5.1 Coding Main Programs – 2Code - To explain which commands they included in their program and what they achieve. - To show that their vehicles move at different speeds. - Introducing text variables. -To create a game which has a timer and score pad. -To use my coding knowledge to create a program that explains internet safety.						Unit 5.2 Online safety Programs – Various -To discuss and understand the importance of keeping personal information safe. -To understand issues concerning the reliability of sources and people online. - To create a comic strip to share knowledge about online safety.		Unit 5.3 Spreadsheets Programs – 2Calculate -Conversions of measurements -Novel use of the count tool -Formulae including the advanced mode -Using text variables to perform calculations -Using a spreadsheet to plan an event.				Unit 5.4 Databases Programs – 2Question, 2Investigate - To learn how to search for information in a database. - To contribute to a class database. - To create a database around a chosen topic.				Unit 5.5 Game Creator Programs – 2DIY 3D - To describe some of the elements that make a successful game. - To create the game environment - To create the game quest. - To finish and share the game - To evaluate their and peers’ games.				Unit 5.6 3D Modelling Programs – 2Design and Make -To know what the 2Design and Make tool is for. - To explore the effect of moving points when designing. -To understand designing for a purpose. -To understand printing and making.			Unit 5.7 Concept Maps Programs – 2Connect -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 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.							

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YEAR 6	Unit 6.1 Coding Main Programs – 2Code -To debug when things do not run as expected. - Introducing functions. - Vocabulary review. - Using buttons to showcase work. - Using 2Code to make a text based adventure.						Unit 6.2 Online safety Programs – Various - To review aspects of online safety and make an online safety themed game. - To learn about the safety aspects of blogging.		Unit 6.3 Spreadsheets Programs – 2Calculate -Exploring Probability -Use of spreadsheets in ‘real life’ Creating a computational model -Use a spreadsheet to plan pocket money spending -Planning a school event					Unit 6.4 Blogging Programs – 2Blog - To identify the purpose of writing a blog. -To identify the features of successful blog writing. - To plan the theme and content for a blog. - 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 existing blog. To understand how and why blog posts are approved by the teacher. - To understand the importance of commenting on blogs. To peer-assess blogs against the agreed success criteria.					Unit 6.5 Text Adventures Programs – 2Code, 2Connect - 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.					Unit 6.6 Networks -To know the difference between the World Wide Web and the internet. - To find out what a LAN and a WAN are. To find out how we access the internet in school. - To research and find out about the age of the internet.			Unit 6.7 Quizzing Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate - To make a picture quiz for young children. -To understand the different 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.				

		30-50months	40-60 months
Foundation Stage	Emerging	<p>Understanding the World (Technology)</p> <ul style="list-style-type: none"> -Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. -Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. 	<p>Understanding the World (Technology)</p> <ul style="list-style-type: none"> - Completes a simple program on a computer.
	Expected	<ul style="list-style-type: none"> -Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. 	<ul style="list-style-type: none"> -Uses ICT hardware to interact with age-appropriate computer software.
	Exceeding	<ul style="list-style-type: none"> - Knows that information can be retrieved from computers 	<ul style="list-style-type: none"> -Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.