Theme 1	Curriculum Flight Path Year A			
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**
Theme	Exploring Mini Mash and Purple Mash using a variety of technology in the classroom (interactive whiteboard, laptop, ipad).	<u>**Online safety and exploring Purple Mash**</u> **Program:** -Various **Breakdown:** Purple Mash unit 1.1	<u>**Coding**</u> **Program:** 2Code **Breakdown:** Purple Mash units 3.1 and 4.1 - Accomplishing a goal in a program – Year 3 Lesson 1 - Accomplishing a goal in a program – Year 4 Lesson 1 - Simulating a physical system – Year 3 Lesson 2 - Making a control simulation – Year 4 Lesson 6 - Debugging – Year 3 Lesson 5 - Debugging – Year 4 Lesson 4	<u>**Coding**</u> **Program:** 2Code **Breakdown:** Purple Mash units 5.1 and 6.1 - Accomplishing a goal in a program – Year 5 Lesson 1 - Simulating a physical system – Year 5 Lesson 2 - Creating a game with a score and timer – Year 5 Lessons 4 and 5 - Using buttons to showcase work – Year 6 Lesson 5 - Internet safety – Year 5 Lesson 6
Questions	Where can you go into Mini Mash?	What is a password and why should you keep them safe? What is a digital avatar? Where can you store work on Purple Mash?	What does selection mean in coding? How can you achieve this in your code? Can you give an example of how to use a variable in coding? Can you explain the stages of the design, code, test, debug coding process? What do the terms decomposition and abstraction mean?	What does simulating a physical system mean? Can you describe how you would use variables to make a timer countdown and scorepad for a game? Can you give examples of how you could use the launch command?
Vocabulary (progressive – so what are the new words?)	Technology Click	Log in Username Password	Alert Event Get Input	Sequence

	EYFS	Year 1/2	Year 3/4	Year 5/6
		Avatar My work Log out Save Notification Topics Tools	Output Computer Simulation Selection Simulation Timer Variable Variable	
Theme 2	**Curriculum Flight Path Year A**			
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**
Theme)	Explore a computer and a mouse. Use the mouse to move things around on the screen and use the keyboard to become familiar with using the keys. **Programs:** Mini Mash and Purple Mash	**Effective searching** **Programs:** Browser **Breakdown:** Purple Mash Unit 2.5 Effective Searching	**Online Safety** **Programs:** various **Breakdown:** Purple Mash Unit 3.2 Online Safety	**Online Safety** **Programs** - various **Breakdown:** Purple Mash Unit 5.2 Online Safety
Questions	How do you use a mouse around the screen? What is a keyboard used for?	How can you search the internet?	What is a password and why should we keep them safe? Is everything you read on the Internet true? How do you know if you are old enough to play a computer game?	Who should you tell if you see anything online that makes me upset or scared? Why are passwords so important? Why is it important to reference sources in your work?
Vocabulary (progressive – so what are the new words?)	Mouse Keyboard	Internet Search Search engine	Password Blog Concept map Username Website Webpage Spoof website PEGI rating	Smart rules Reputable Encryption Shared image Citations Reference Bibliography
Theme 3	**Curriculum Flight Path Year A**			
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**
Theme	Explore why teachers use computers to help them to do	**Lego builders** **Program:** 2DIY	**Spreadsheets** **Program:** 2Calculate	**Spreadsheets** **Program:** 2Calculate

	their job. Technology hunt around school. Why do we need it?	**Breakdown:** Purple Mash Unit 1.4 Lego Builders	**Breakdown:** Purple Mash Unit 3.3 Spreadsheets	**Breakdown:** Purple Mash Unit 5.3
Questions	What is technology? What does technology need to work? Why do you need a computer in the school office? What do we use at home every day?	What is an instruction? Why do we need to debug a code?	Explain how you would collect data to find out children's favourite school subjects. What sort of graph would you create? How can you make a 3 times table machine using the spin tool? Could you use the equals tool to check your answer? How would you locate a cell in the advanced mode?	How would you add a formula so that the cell shows the product of two other cells? What would you use to have a cell that automatically calculates the number of days since a certain date? Can you explain what a spreadsheet model of a real-life situation is and what it can be used for?
Vocabulary (progressive – so what are the new words?)	Technology	Instruction Algorithm Computer Program Debug	< > = Advance mode Copy and Paste Columns Cells Delete key Equals tool Move cell tool Rows Spin Tool Spreadsheet	No new vocabulary

Theme 4	**Curriculum Flight Path Year A**			
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**
Theme	Explore technology at home.	**Technology Outside School** **Programs:** Various **Breakdown:** Purple Mash Unit 1.9 Technology Outside School	**Email** **Programs:**2Email, 2Connect, 2DIY **Breakdown:** Purple Mash Unit 3.5 Email	**Databases** **Programs:** 2Question, 2Investigate **Breakdown:** Purple Mash Unit 5.4 Databases
Question (based on specific components of knowledge and	Why do we need technology? What do we use technology for? What technology do you see on the way to school?	What is technology?	What is email? What should you do if you receive an email that makes you upset or scared? What information can you send in an email?	What is a database? Why is the collaborative feature important? In what ways can you sort information in a database?

Vocabulary (progressive – so what are the new words?)	Technology			Communication Email Compose Send Report to the teacher Attachment Address book Save to draft Password CC Formatting	Avatar Binary tree Charts Collaborative Find Record Sort, Group and Arrange Statistics and reports Table
Theme 5	**Curriculum Flight Path Year A**				
	EYFS	Year 1/2	Year 3/4	Year 5/6	
Theme (overarching e.g Tudors)		**Grouping and sorting** **Program:** 2DIY **Breakdown:** Purple Mash Unit 1.2 Grouping and Sorting	**Branching Databases** **Program:** 2Question **Breakdown:** Purple Mash Unit 3.6 Branching Databases	**Creating a Game** **Programs:** 2DIY, 3D **Breakdown:** Purple Mash Unit 5.5 Game Creator	
Question (based on specific components of knowledge and		In what way can you sort objects?	What is meant by data? What is a database? What is a branching database?	What makes a good computer game? Why is it important to continually evaluate your game?	
Vocabulary (progressive – so what are the new words?)		Sort Criteria	Branching database Data Database Question	Animation Computer game Customise Evaluation Image Instruction Interactive Screenshot Texture Perspective Playability	
Theme 6	**Curriculum Flight Path Year A**				
	EYFS	Year 1/2	Year 3/4	Year 5/6	
Theme (overarching e.g Tudors)		**Creating pictures** **Programs:** 2PaintAPicture	**Simulations** **Programs:** 2Simulate, 2Publish	**Modelling** **Programs:** 2Design and Make	

	EYFS	Year 1/2	Year 3/4	Year 5/6
		Breakdown: Purple Mash Unit 2.6 Creating Pictures	**Breakdown:** Purple Mash Unit 3.7 Simulations	**Breakdown:** Purple MashUnit 5.6 3D Modelling
Question (based on specific components of knowledge and		What are the main features of impressionism? What are the main features of pointillism? What are the main features of surrealism?	What is a computer simulation? What kind of simulations are there? Are there any problems with simulations? What are these?	What are the different views of an object are available in the modelling software? How can the objects designed in the modelling software be turned into 3D objects? How is CAD software used in industry?
Vocabulary (progressive – so what are the new words?)		Impressionism Palette Pointillism Share Surrealism Template	Simulation	CAD Modelling 3D Viewpoint Polygon - 2D Net Points Template
Theme 7	**Curriculum Flight Path Year A**			
	EYFS	Year 1/2	Year 3/4	Year 5/6
Theme (overarching e.g Tudors)		**Spreadsheets** **Program:** 2Calculate **Breakdown:** Purple Mash Unit 1.8 Spreadsheets	**Graphing** **Program:** 2Graph **Breakdown:** Purple Mash Unit 3.8 Graphing	**Concept Maps** **Program:** 2Connect **Breakdown:** Purple Mash Unit 5.7 Concept Maps
Question (based on specific components of knowledge and		What does a spreadsheet look like? How could you use a spreadsheet to add up values? How could you use the count and speak tools?	What is a graph? What are the frame lines on the graph called? What different kinds of graphs are there?	What is a concept map? How is information arranged on a concept map? How does a concept map help share ideas?
Vocabulary (progressive – so what are the new words?)		Arrow keys Backspace key Cursor Columns Cells Clipart Count tool	Graph Field Data Bar chart Block graph Line graph	Audience Collaboratively Concept Concept Map Connection Idea Node

		Delete key Image toolbox Lock tool Move cell tool Rows Speak tool Spreadsheet		Though Visual
Theme 8	**Curriculum Flight Path Year A**			
	EYFS	**Year 1/2**		
Theme (overarching e.g Tudors)		**Coding** **Program:** 2Code **Breakdown:** Purple Mash Unit 1.7		
Question (based on specific components of knowledge and		What is coding? How can you make characters move in a 2Code program? Why is it useful to design before coding?		
Vocabulary (progressive – so what are the new words?)		Action Background Button Character Code block Code design Coder Coding Collision detection Command Design mode Input Object Program Properties Scale Stop command Sound When clicked When key		

Theme 9		Curriculum Flight Path Year A		
	EYFS	**Year 1/2**		
Theme (overarching e.g Tudors)		<u>Coding</u> **Program:** 2Code **Breakdown:** Purple Mash Unit 2.1		
Question (based on specific components of knowledge and		What is an algorithm? Why is it useful in coding? Explain what the repeat command and the timer command do? If you are good at coding, you don't need to debug. Is this true?		
Vocabulary (progressive – so what are the new words?)		Action Algorithm Bug Character Code block Code design Command Debug/debugging Design mode Input Object Properties Repeat Scale Timer When clicked When key		

Theme 1	Curriculum Flight Path Year B			
	EYFS	Year 1/2	Year 3/4	Year 5/6
Theme (overarching e.g Tudors)	Talk to the children about how technology gets used by people every day for all the different things that they do. Link this to the topic you are doing and look at the different ways that technology could be used. **Programs:** Mini Mash and Purple Mash	**Online Safety & Exploring Purple Mash** **Program:** Various **Breakdown:** Purple Mash Unit 1.1 Online Safety & Exploring Purple Mash.	**Coding** **Program:** 2Code **Breakdown:** -Introducing 'If' statements – Year 3 Lesson 4 -Variables and 'if/else' statements – Year 4 Lesson 2 -Repetition using a timer and repeat commands – Year 3 Lesson 3 -Repetition and user input – Year 4 Lesson 3 -Variables – Year 3 Lesson 6 -Variables – Year 4 Lesson 5	**Coding** **Program:** 2Code **Breakdown:** - Designing and writing a more complex program – Year 6 Lessons 1 and 2 - Introducing text variables – Year 5 Lesson 3 -Introducing Functions – Year 6 Lesson 3 -Text Adventure – Year 6 Lesson 6 -Vocabulary review and quizzes – Year 6 Lesson 4
Question (based on specific components of knowledge and	What job do you think ues technology?	What is a password and why should you keep them safe? What is a digital avatar? Where can you store work on Purple Mash?	What does selection mean in coding? How can you achieve this in your code? Can you give an example of how to use a variable in coding? Can you explain the stages of the design, code, test, debug coding process? How can variables and if/else statements be useful when coding programs with selection? What do the terms decomposition and abstraction mean?	What is the effect of using tabs in your code? What is a function in coding? How can a program receive user input?
Vocabulary (progressive – so what are the new words?)	Technology	Log in Username Password Avatar My work Log out Save	Alert Event Get Input If If/Else Output Computer Simulation	Sequence Tabs

		Notification Topics Tools	Selection Simulation Timer Variable Variable	
Theme 2		Curriculum Flight Path Year B		
	EYFS	Year 1/2	Year 3/4	Year 5/6
Theme (overarching e.g Tudors)	Use the topics in Simple City resources to talk to the children about how technology is used by people in different ways. **Programs:** Mini Mash and Purple Mash	<u>**Maze explorers**</u> **Program:** 2Go **Breakdown:** Purple Mash Unit 1.5 Maze Explorers	<u>**Online Safety**</u> **Program:** Various **Breakdown:** Purple Mash Unit 4.2 Online safety	<u>**Online Safety**</u> **Program:** Various **Breakdown:** Purple Mash Unit 6.2 Online safety
Question (based on specific components of knowledge and		What is 2Go? How do you undo a mistake on 2Go?	What is meant by a digital footprint? What is SPAM? What is meant by plagiarism?	Why do you need to be aware of the dangers of being online? What is meant by your digital footprint? Why is it important to think about how much time you use a screen for?
Vocabulary (progressive – so what are the new words?)		Direction Challenge Arrow Undo Rewind Forward Backwards Right turn Left turn Debug Instruction Algorithm	Computer virus Cookies Copyright Malware Phishing Plagiarism Spam	Screen time
Theme 3		Curriculum Flight Path Year B		
	EYFS	Year 1/2	Year 3/4	Year 5/6
Theme (overarching e.g Tudors)	Explore different jobs. **Programs:** Mini Mash and Purple Mash	<u>**Questioning**</u> **Programs:** 2Question, 1Investigate	<u>**Spreadsheets**</u> **Program:** 2Calculate **Breakdown:** Purple Mash Unit 4.3 Spreadsheets	<u>**Spreadsheets**</u> **Program:** 2Calculate **Breakdown:** Purple Mash Unit 6.3 Spreadsheets

	EYFS	Year 1/2	Year 3/4	Year 5/6
			Breakdown: Purple Mash Unit 2.4 Questioning		
Question (based on specific components of knowledge and	How do you think a farmer might use technology to look after animals on his farm? How do you think a builder/doctor/shopkeeper uses technology?	How does a pictogram show information? How is information organised in a binary tree? How can a database help organise information?	How would you add a formula so that the cell shows the percentage score for a test? Which tools would you use to create a timed times tables test? Can you give an example of the data that could be best represented by a line graph? Can you explain what a spreadsheet model of a real-life situation is and what it can be used for?	How would you add a formula so that the cell shows the total of a column of cells? What is a computational model and what it can be used for? If you were going to use a spreadsheet to plan your dream holiday, what data would you collect to cost the trip?
Vocabulary (progressive – so what are the new words?)		Pictogram Question Data Collate Binary tree Avatar Database	Average Charts Formula Formula Wizard Random tool Timer	Count (how many) tool Dice
Theme 4	<td colspan="4" align="center">**Curriculum Flight Path Year B**</td>			
	EYFS	Year 1/2	Year 3/4	Year 5/6
Theme (overarching e.g Tudors)		**Online safety** **Program:** Various **Breakdown:** Purple Mash Unit	**Writing for Different Audiences** **Programs:** 2Email, 2Connect, 2DIY **Breakdown:** Purple Mash Unit 4.4 Writing for different audiences	**Blogging** **Program:** 2Blog **Breakdown:** Purple Mash Unit 6.4 Blogging
Question (based on specific components of knowledge and		What is a password and why should you keep them safe? What is a digital avatar? Where can you store work on Purple Mash?	Why should you change the font when I am writing?	What is a blog? What can a blog be about? How are the audience involved in a blog?
Vocabulary (progressive – so what are the new words?)		Log in Username Password Avatar	Fon Bold Italic Underline	Audience Blog Blog page Blog post

		My work Log out Save Notification Topics Tools		Collaborative Icon
Theme 5	Curriculum Flight Path Year B			
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**
Theme (overarching e.g Tudors)		<u>**Animated Story Books**</u> **Program**: 2Create a Story **Breakdown:** Purple Mash Unit 1.6 Animated Story Books	<u>**Coding**</u> **Program: Logo** **Breakdown:** Purple Mash Unit 4.5 Logo	<u>**Coding**</u> **Programs:** 2Code, 2Connect **Breakdown:** Purple Mash Unit 6.5 Text Adventures
Question (based on specific components of knowledge and		What is a 2Create story? What is an animated story? How can you make a story better?	What is Logo?	What is a text based adventure? Why is it important to plan a text based adventure?
Vocabulary (progressive – so what are the new words?)		Animation E-Book Font File Sound effect Display board	LOGO BK FD RT LT REPEAT SETPC SETPS PU PD	Text-based adventure Concept map Sprite Function
Theme 6	Curriculum Flight Path Year B			
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**
Theme (overarching e.g Tudors)		<u>**Making Music**</u> **Program:** 2Sequence **Breakdown:** Purple Mash Unit 2.7 Making Music	<u>**Animation**</u> **Program:** 2Animate **Breakdown:** Purple Mash Unit 4.6 Animation	<u>**Networks**</u> **Breakdown:** Purple Mash Unit 6.6 Networks
Question (based on specific components of knowledge and		What is meant by digital music? How can you change the way music sounds? What is meant by the tempo of the music?	What is an animation? What is meant by onion skinning? What is meant by stop frame animation?	What is the difference between the Internet and the World Wide Web? What is the difference between a LAN and a WAN? Who is Tim Berners-Lee?

	EYFS	Year 1/2	Year 3/4	Year 5/6
Vocabulary (progressive – so what are the new words?)		BPM Composition Digitally Instrument Music Sound effects (SFX) Soundtrack Tempo Volume	Animation Flipbook Frame Onion skinning Background Play Sound Stop motion Video clip	World Wide Web Network Local area network (LAN) Wide area network (WAN) Router Network cable Wireless
Theme 7		**Curriculum Flight Path Year B**		
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**
Theme (overarching e.g Tudors)		**Spreadsheets** **Program:** 2Calculate **Breakdown:** Purple Mash Unit 2.3 Spreadsheets	**Search Engines** **Program:** Browser **Breakdown:** Purple Mash Unit 4.7 Effective Search	**Create a Quiz** **Programs:** 2Quiz, 2DIY, Text Toolkit, 2Investigate **Breakdown:** Purple Mash Unit 6.7 Quizzing
Question (based on specific components of knowledge and		Why would you copy and paste when using a spreadsheet? How could a spread help when planning some shopping? Look at the graph made in 2Calculate showing the class' favourite pets. Which is the most popular?	What is a search engine? How do you know if something on the internet is true?	What factors do you need to consider when creating a quiz? Can you name three question types used in the program? Apart from the questions, what else does a quiz need to contain?
Vocabulary (progressive – so what are the new words?)		Backspace key Copy and paste Columns Cells Count tool Image toolbox Lock tool Move cell tool Rows Speak took Spreadsheet	Easter egg Internet Internet browser Search Search engine Spoof website Website	Audience Collaboration Concept map Quiz
Theme 8		**Curriculum Flight Path Year B**		
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**

Theme (overarching e.g Tudors)		**Pictograms** **Program:** 2Count **Breakdown:** Purple Mash Unit 1.3 Pictograms	**Understanding Hardware** **Breakdown:** Purple Mash Unit 4.8 Hardware Investigators	
Question (based on specific components of knowledge and		What is a pictogram?	What is the difference between hardware and software?	
Vocabulary (progressive – so what are the new words?)		Data Pictogram Collate	Motherboard CPU RAM Graphics card Network card Monitor Speakers Keyboard and mouse	
Theme 9		<td colspan="3" align="center">**Curriculum Flight Path Year B**</td>		
	EYFS	**Year 1/2**	**Year 3/4**	**Year 5/6**
Theme (overarching e.g Tudors)		**Presenting ideas** **Programs:** Various **Breakdown:** Purple Mash Unit 2.8 Presenting Ideas		
Question (based on specific components of knowledge and		What do you need to think about when planning a presentation? Why should you plan out a presentation?		
Vocabulary (progressive – so what are the new words?)		Concept map (mind map) Node Animated Quiz Non-Fiction Presentation Narrative Audience		