

Computing Coverage: Progression of Units



Purple Mash

Rather than a scheme with set lessons, the early years resources are designed to integrate into the day-to-day routine and set-up of an early years setting with opportunities for using Mini Mash or Purple Mash as part of the Early Years curriculum to support children in working towards early learning goals. In addition, there are units of suggested ideas that focus on computing skills specifically, that can also be provided as opportunities for learning as part of the topics in other areas to give children a sound basis to explore topics using technology and to be ready for progressing through the Computing curriculum. These are as follows and are designed to be integrated and linked to wider early years curriculum areas. These have been loosely classified into the three streams but there is overlap between all three streams.

Predominant Area of Computing*		
Computer Science	Information Technology	Digital Literacy

*Most units will include aspects of all strands.

Reception:

Mouse and Trackpad Skills	Keyboard Skills	Drawing skills	Robots	Sounds	Photography
Technology Around Us	Hardware	Safety and Privacy	Quizzes	Using Purple Mash with an Individual Login	

By the end of Reception, children will have learnt how to:




- take and watch electronic photographs and videos
- use technology for drawing and songs
- access online information
- enter a simple algorithm into a floor turtle
- use basic technology safely online and offline
- role-play with technology in real-life scenarios e.g. phones, keyboards

This early exposure prepares the children so that in KS1 they can:

- digitally draw and save artwork
- program floor turtles using sequences of instructions and evaluate them
- begin to add and type text to a document
- understand how to behave positively online and how/where to seek support

(Refer to Nursery to Year 1 progression document)




Computing KS1 Year 1 & 2 Cycle A

Predominant Area of Computing*		
	Computer Science	
		
		Information Technology
		Digital Literacy

*Most units will include aspects of all strands.

<p>Unit 1.1 Online Safety & Exploring Purple Mash</p> <p>Number of lessons – 4</p> <p>Programs – Various</p>	<p>Unit 2.5 Effective Searching</p> <p>Number of lessons – 3</p> <p>Programs – Browser</p>	<p>Unit 1.4 Lego Builders</p> <p>Number of lessons – 3</p> <p>Programs – 2DIY</p>
<p>Unit 1.9 Technology outside school</p> <p>Number of lessons – 2</p> <p>Programs – Various</p>	<p>Unit 1.2 Grouping & Sorting</p> <p>Number of lessons – 2</p> <p>Programs – 2DIY</p>	<p>Unit 2.6 Creating Pictures</p> <p>Number of lessons – 5</p> <p>Programs – 2PaintAPicture</p>
<p>Unit 1.8 Spreadsheets</p> <p>Number of lessons – 3</p> <p>Programs – 2Calculate</p>	<p>Unit 1.7 Coding</p> <p>Number of lessons – 6</p> <p>Programs – 2Code</p>	<p>Unit 2.1 Coding</p> <p>Number of lessons – 5</p> <p>Programs – 2Code</p>




KS1 Year 1 & 2 Cycle B

Predominant Area of Computing*		
	Computer Science	
		
		Information Technology
		Digital Literacy

*Most units will include aspects of all strands.

<p>Unit 1.1 Online Safety & Exploring Purple Mash</p> <p>Number of lessons – 4</p> <p>Programs – Various</p>	<p>Unit 1.5 Maze Explorers</p> <p>Number of lessons – 3</p> <p>Programs – 2Go</p>	<p>Unit 2.4 Questioning</p> <p>Number of lessons – 5</p> <p>Programs – 2Question, 2Investigate</p>
<p>Unit 2.2 Online Safety</p> <p>Number of lessons – 3</p> <p>Programs – Various</p>	<p>Unit 1.6 Animated Story Books</p> <p>Number of lessons – 5</p> <p>Programs – 2Create A Story</p>	<p>Unit 2.7 Making Music</p> <p>Number of lessons – 3</p> <p>Programs – 2Sequence</p>
<p>Unit 2.3 Spreadsheets</p> <p>Number of lessons – 4</p> <p>Programs – 2Calculate</p>	<p>Unit 1.3 Pictograms</p> <p>Number of lessons – 3</p> <p>Programs – 2Count</p>	<p>Unit 2.8 Presenting Ideas</p> <p>Number of lessons – 4</p> <p>Programs – Various</p>




KS2 Year 3 & 4 Cycle A

Predominant Area of Computing*		
	Computer Science	
		
		Information Technology
		Digital Literacy

*Most units will include aspects of all strands.

<p>Coding</p> <p>Number of lessons – 6</p> <p>Main Programs – 2Code</p> <p>See table below for breakdown.</p>	<p>Unit 3.2</p> <p>Online safety</p> <p>Number of lessons – 3</p> <p>Programs – Various</p>	<p>Unit 3.3</p> <p>Spreadsheets</p> <p>Number of lessons – 3</p> <p>Programs – 2Calculate</p>
<p>Unit 3.4</p> <p>Touch Typing</p> <p>Number of lessons – 4</p> <p>Programs – 2Type</p>	<p>Unit 3.5</p> <p>Email (including email safety)</p> <p>Number of lessons – 6</p> <p>Programs – 2Email, 2Connect, 2DIY</p>	<p>Unit 3.6</p> <p>Branching Databases</p> <p>Number of lessons – 4</p> <p>Programs – 2Question</p>
<p>Unit 3.7</p> <p>Simulations</p> <p>Number of lessons – 3</p> <p>Programs – 2Simulate, 2Publish</p>	<p>Unit 3.8</p> <p>Graphing</p> <p>Number of lessons – 2</p> <p>Programs – 2Graph</p>	

KS2 Year 3 & 4 Cycle B

Predominant Area of Computing*		
	Computer Science	
		
	Information Technology	Digital Literacy

*Most units will include aspects of all strands.

<p>Coding</p> <p>Number of lessons – 6</p> <p>Main Programs – 2Code</p> <p>See table below for breakdown.</p>	<p>Unit 4.2</p> <p>Online safety</p> <p>Number of lessons – 4</p> <p>Programs – Various</p>	<p>Unit 4.3</p> <p>Spreadsheets</p> <p>Number of lessons – 6</p> <p>Programs – 2Calculate</p>
<p>Unit 4.4</p> <p>Writing for different audiences</p> <p>Number of lessons – 5</p> <p>Programs – 2Email, 2Connect, 2DIY</p>	<p>Unit 4.5</p> <p>Logo</p> <p>Number of lessons – 4</p> <p>Programs – Logo</p>	<p>Unit 4.6</p> <p>Animation</p> <p>Number of lessons – 3</p> <p>Programs – 2Animate</p>
<p>Unit 4.7</p> <p>Effective Search</p> <p>Number of lessons – 3</p> <p>Programs – Browser</p>	<p>Unit 4.8</p> <p>Hardware Investigators</p> <p>Number of lessons – 2</p>	

Coding Breakdown

YEAR 3 & 4 - CYCLE A					
Using Flowcharts Unit 3.1, Lesson 1	Using Timers Unit 3.1, Lesson 2	'if' statements Unit 4.1, Lesson 2	Coordinates Unit 4.1, Lesson 3	Code, Test and Debug – Unit 3.1, Lesson 4	Design, Code, Test and Debug Unit 4.1, Lesson 1
YEAR 3 & 4 - CYCLE B					
Using Repeat Unit 3.1, Lesson 3	Repeat Until and 'if/else' Statements Unit 4.1, Lesson 4	Number Variables Unit 4.1, Lesson 5	Design and Make an Interactive scene Unit 3.1, Lesson 5-6	Making a Playable game – Unit 4.1, Lesson 6	