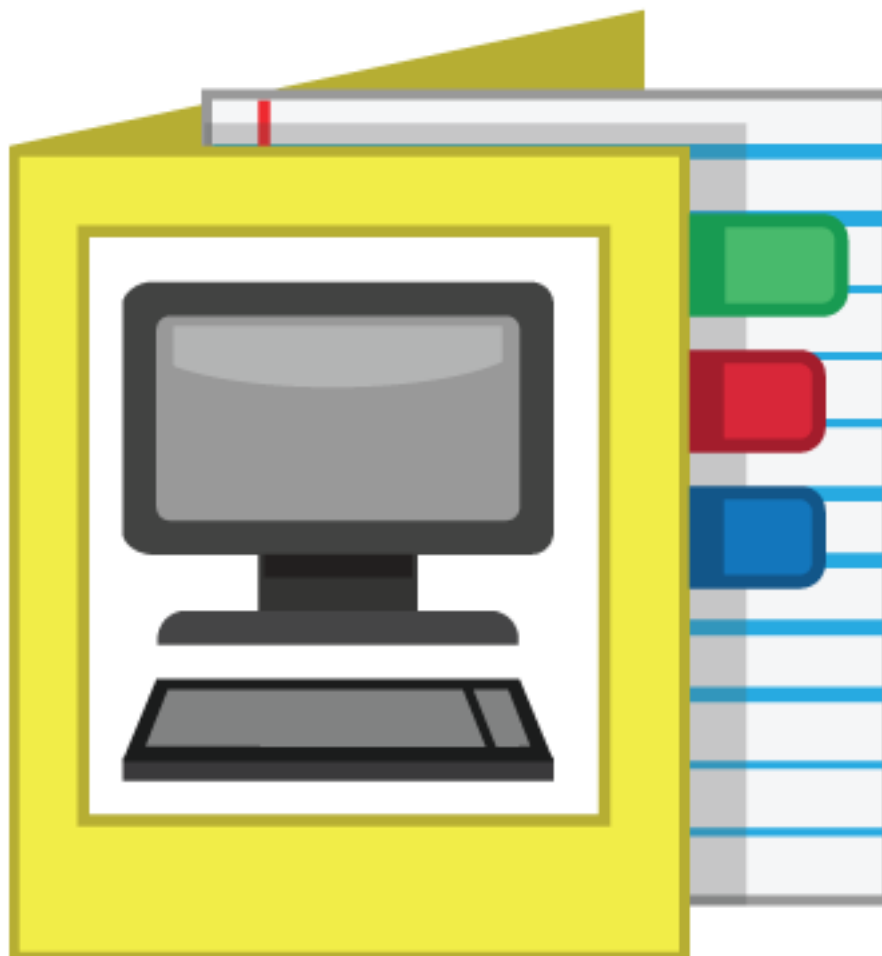




# Computing

## Scheme of Work

### Overview



# Introduction

This document contains an overview of the units included in the Purple Mash Computing Scheme of Work for all year groups.

Individual year group overview documents detail the unit lessons for that year group and contain relevant curriculum maps for England, Wales, Scotland and Northern Ireland.

Year group pages also contain assessment documents for these units.

These can be found by clicking the following links or from the Purple Mash Computing Scheme of Work page.

[Year 1](#)

[Year 2](#)

[Year 3](#)

[Year 4](#)

[Year 5](#)

[Year 6](#)

[Mixed Age Classes](#)

The Purple Mash tools used within each unit are detailed in the [Tools section](#) below.

To make the best use of the scheme, children need to be logged onto Purple Mash with their own individual usernames and passwords, so their work will be saved in their own folders automatically and can be easily reviewed and assessed by the class teacher. If children have not used and logged onto Purple Mash before then they will need to spend some time before starting these lessons, learning how to do this. Children can be supported by having their printed logon cards (produced using [Create and Manage Users](#)) to hand.









Lesson plans also make use of the facility within Purple Mash to set activities for pupils which they can then complete and hand-in online (2Dos). This enables you to assess their work easily as well as distribute resources to all pupils. If children have not opened 2Dos before then they will need more detailed instructions about how to do this. A teacher's guide to 2Dos can be found in the teacher's section: [2Dos Guide](#).

If you are currently using a single login per class or group and would like to set up individual logins yourself, then please see our guide to doing so at [Create and Manage Users](#). Alternatively, please contact support at [support@2simple.com](mailto:support@2simple.com) or 0208 203 1781.

To force links within this document to open in a new tab, right-click on the link then select 'Open link in new tab'.

# Units by Year Group – Single Age Classes

## Theme Key:

	Coding and Computational thinking		Spreadsheets		Internet and Email		Art and Design		Music		Databases and graphing		Writing and Presenting		Communication and networks
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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 Weeks – 4 Programs – Various				Unit 1.2 Grouping & Sorting Weeks – 2 Programs – 2DIY		Unit 1.3 Pictograms Weeks – 3 Programs – 2Count		Unit 1.4 Lego Builders Weeks – 3 Programs – 2DIY		Unit 1.5 Maze Explorers Weeks – 3 Programs – 2Go		Unit 1.6 Animated Story Books Weeks – 5 Programs – 2Create A Story			Unit 1.7 Coding Weeks – 6 Programs – 2Code			Unit 1.8 Spreadsheets Weeks – 3 Programs – 2Calculate		Unit 1.9 Technology outside school Weeks – 2 Programs – Various										

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	32
YEAR 2	Unit 2.1 Coding Weeks – 5 Programs – 2Code					Unit 2.2 Online Safety Weeks – 3 Programs – Various		Unit 2.3 Spreadsheets Weeks – 4 Programs – 2Calculate			Unit 2.4 Questioning Weeks – 5 Programs – 2Question, 2Investigate				Unit 2.5 Effective Searching Weeks – 3 Programs – Browser		Unit 2.6 Creating Pictures Weeks – 5 Programs – 2PaintAPicture			Unit 2.7 Making Music Weeks – 3 Programs – 2Sequence		Unit 2.8 Presenting Ideas Weeks – 4 Programs – Various										

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	32	
YEAR 3	Unit 3.1 Coding						Unit 3.2 Online safety			Unit 3.3 Spreadsheets			Unit 3.4 Touch Typing				Unit 3.5 Email (including email safety)					Unit 3.6 Branching Databases			Unit 3.7 Simulations		Unit 3.8 Graphing						
	Number of Weeks – 6						Weeks – 3			Weeks – 3			Weeks – 4				Weeks – 6					Weeks – 4			Weeks – 3		Weeks – 3						
Main Programs – 2Code						Programs – Various			Programs – 2Calculate			Programs – 2Type				Programs – 2Email, 2Connect, 2DIY					Programs – 2Question			Programs – 2Simulate, 2Publish		Programs – 2Graph							
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	32	33
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				
	Number of Weeks – 6						Weeks – 4				Weeks – 6						Weeks – 5				Weeks – 4			Weeks – 3			Weeks – 3		Weeks – 2				
Main Programs – 2Code						Programs – Various				Programs – 2Calculate						Programs – 2Email, 2Connect, 2DIY				Programs – Logo			Programs – 2Animate			Programs – Browser							
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	32	
YEAR 5	Unit 5.1 Coding						Unit 5.2 Online safety				Unit 5.3 Spreadsheets						Unit 5.4 Databases			Unit 5.5 Game Creator			Unit 5.6 3D Modelling			Unit 5.7 Concept Maps							
	Number of Weeks – 6						Weeks – 3				Weeks – 6						Weeks – 4			Weeks – 5			Weeks – 4			Weeks – 4							
Main Programs – 2Code						Programs – Various				Programs – 2Calculate						Programs – 2Question, 2Investigate			Programs – 2DIY 3D			Programs – 2Design and Make			Programs – 2Connect								

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	32
YEAR 6*	<b>Unit 6.1 Coding</b>						<b>Unit 6.2 Online safety</b>			<b>Unit 6.3 Spreadsheets</b>					<b>Unit 6.4 Blogging</b>				<b>Unit 6.5 Text Adventures</b>			<b>Unit 6.6 Networks</b>		<b>Unit 6.7 Quizzing</b>								
	Number of Weeks – 6						Weeks – 2			Weeks – 5					Weeks – 5				Weeks – 5			Weeks – 3		Weeks – 6								
	Main Programs – 2Code						Programs - Various			Programs – 2Calculate					Programs – 2Blog				Programs – 2Code, 2Connect					Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate								

\* There is an optional unit 6.8 – Understanding Binary that can be used in addition to the above units. It is a four week unit.

# Units by Year Group – Mixed Age Classes

## Theme Key:

 Coding and Computational thinking	 Spreadsheets	 Internet and Email	 Art and Design	 Music	 Databases and graphing	 Writing and Presenting	 Communication and networks
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In Year 1 and 2 coding, the lessons need to be taught in sequence as each lesson introduces skills that are consolidated and developed in the next lesson. Therefore, it is proposed to teach coding for 11 weeks in Cycle A and none in Cycle B. It is also beneficial for all children to recap unit 1.1 in both cycles as this introduces children new to the class with key skills needed to make the most of Purple Mash.

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	32	33
YEAR 1 & 2 – CYCLE A	Unit 1.1 Online Safety & Exploring Purple Mash Weeks – 4 Programs – Various				Unit 2.5 Effective Searching Weeks – 3 Programs – Browser			Unit 1.4 Lego Builders Weeks – 3 Programs – 2DIY			Unit 1.9 Technology outside school Weeks – 2 Programs – Various		Unit 1.2 Grouping & Sorting Weeks – 2 Programs – 2DIY		Unit 2.6 Creating Pictures Weeks – 5 Programs – 2PaintAPicture			Unit 1.8 Spreadsheets Weeks – 3 Programs – 2Calculate		Unit 1.7 Coding Weeks – 6 Programs – 2Code			Unit 2.1 Coding Weeks – 5 Programs – 2Code										

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	32	33	34
YEAR 1 & 2 – CYCLE B	Unit 1.1 Online Safety & Exploring Purple Mash Weeks – 4 Programs – Various				Unit 1.5 Maze Explorers Weeks – 3 Programs – 2Go			Unit 2.4 Questioning Weeks – 5 Programs – 2Question, 2Investigate					Unit 2.2 Online Safety Weeks – 3 Programs – Various		Unit 1.6 Animated Story Books Weeks – 5 Programs – 2Create A Story			Unit 2.7 Making Music Weeks – 3 Programs – 2Sequence		Unit 2.3 Spreadsheets Weeks – 4 Programs – 2Calculate		Unit 1.3 Pictograms Weeks – 3 Programs – 2Count		Unit 2.8 Presenting Ideas Weeks – 4 Programs – Various										

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	32	
YEAR 3 & 4 CYCLE A	Coding						Unit 3.2 Online safety			Unit 3.3 Spreadsheets			Unit 3.4 Touch Typing				Unit 3.5 Email (including email safety)					Unit 3.6 Branching Databases			Unit 3.7 Simulations		Unit 3.8 Graphing						
	Number of Weeks – 6						Weeks – 3			Weeks – 3			Weeks – 4				Weeks – 6					Weeks – 4			Weeks – 3		Weeks – 3						
	Main Programs – 2Code						Programs – Various			Programs – 2Calculate			Programs – 2Type				Programs – 2Email, 2Connect, 2DIY					Programs – 2Question			Programs – 2Simulate, 2Publish		Programs – 2Graph						
	See table below for breakdown																																
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	32	33
YEAR 3 & 4 CYCLE B	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							
	Number of Weeks – 6						Weeks – 4			Weeks – 6						Weeks – 5				Weeks – 4		Weeks – 3		Weeks – 3		Weeks – 2							
	Main Programs – 2Code						Programs – Various			Programs – 2Calculate						Programs – 2Email, 2Connect, 2DIY				Programs – Logo		Programs – 2Animate		Programs – Browser									
	See table below for breakdown																																

### Coding Breakdown

YEAR 3 & 4 CYCLE A	Review previous coding – Year 3, Lesson 1	Simulating a physical system – Year 3, Lesson 2	Making a timer – Year 4, Lesson 4	Debugging – Year 3, Lesson 6	Making a control simulation – Year 4, Lesson 5	Decomposition and Abstraction – Year 4, Lesson 6
YEAR 3 & 4 CYCLE B	Review previous coding, Y4, lesson 1	Introducing ‘if’ statements – Year 3, Lesson 4	‘if/else’ statements – Year 4, Lesson 2	Repetition – Year 3, Lesson 5	Repeat until - Year 4, Lesson 3	Variables – Year 3, Lesson 4

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 5 & 6 CYCLE A*	Unit 5.1 Coding						Unit 5.2 Online safety			Unit 5.3 Spreadsheets					Unit 5.4 Databases				Unit 5.5 Game Creator			Unit 5.6 3D Modelling			Unit 5.7 Concept Maps							
	Number of Weeks – 6						Weeks – 3			Weeks – 5					Weeks – 4				Weeks – 5			Weeks – 4			Weeks – 4							
Main Programs – 2Code						Programs - Various			Programs – 2Calculate					Programs – 2Question, 2Investigate				Programs – 2DIY 3D			Programs – 2Design and Make			Programs – 2Connect								
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	32
YEAR 5 & 6 CYCLE B*	Unit 6.1 Coding						Unit 6.2 Online safety			Unit 6.3 Spreadsheets					Unit 6.4 Blogging				Unit 6.5 Text Adventures			Unit 6.6 Networks			Unit 6.7 Quizzing							
	Number of Weeks – 6						Weeks – 3			Weeks – 5					Weeks – 5				Weeks – 5			Weeks – 3			Weeks – 6							
Main Programs – 2Code						Programs - Various			Programs – 2Calculate					Programs – 2Blog				Programs – 2Code, 2Connect			Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate											

\* There is an optional unit 6.8 – Understanding Binary that can be used in addition to the above units. It is a four week unit.

### Coding Breakdown

YEAR 5 & 6 CYCLE A	Review Previous coding – 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		The Launch Command – Year 5 Lesson 6	Using User Input – Year 6, Lesson 4
YEAR 5 & 6 CYCLE B	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	Flowcharts and control simulations – Year 6, Lesson 5	Text Adventure – Year 6 Lesson 6



# Tools by Unit

Year	Unit	Title	Tools used
Y1	1.1	Online Safety and Exploring Purple Mash	Avatar creator
			Paint Projects
			Writing Templates
			2Count (Pictograms)
			2Explore (Music)
	1.2	Grouping & Sorting	2Quiz
	1.3	Pictograms	2Connect (Mind Map)
			2Count (Pictograms)
	1.4	Lego Builders	Paint Projects
			Writing Templates
2Quiz			
1.5	Maze Explorers	2Go (coding)	
1.6	Animated Stories	2Create a Story	
1.7	Coding	2Code	
1.8	Spreadsheets	2Calculate	
1.9	Technology Outside School	Writing Templates	

Year	Unit	Title	Tools used
Y2	2.1	Coding	2Code
	2.2	Online Safety	Writing Templates
			Displayboards
			2Respond (2Email)
	2.3	Spreadsheets	2Calculate
	2.4	Questioning	2Question (Binary Databases)
			2Calculate (spreadsheet)
			2Investigate (database)
	2.5	Effective Searching	2Quiz
			Writing Templates
	2.6	Creating Pictures	2Paint a Picture
			Writing Templates
	2.7	Making Music	2Sequence (Music)
2.8	Presenting Ideas	2Connect (Mind Map)	
		2Create a Story (ebook)	
		2Quiz	
		Writing Templates	

Year	Unit	Title	Tools used
Y3	3.1	Coding	2Code
	3.2	Online Safety	2Connect (Mind Map)
			2Blog (Blogging)
			Writing Templates
			Displayboards
	3.3	Spreadsheets	2Calculate
	3.4	Typing	2Type
	3.5	Email	2Email
	3.6	Branching Databases	2Question (Binary Databases)
	3.7	Simulations	2Simulate
			Writing Templates
	3.8	Graphing	2Graph
			Writing Templates
2Blog (Blogging)			

Year	Unit	Title	Tools used
Y4	4.1	Coding	2Code
	4.2	Online Safety	2Connect (Mind Map)
			2Publish Plus
			Displayboards
	4.3	Spreadsheets	2Calculate
	4.4	Writing for Different Audiences	Writing Templates
			2Simulate
			2Connect (Mind Map)
			2Publish Plus
	4.5	Logo	2Logo (text-based coding)
	4.6	Animation	2Animate
	4.7	Effective Searching	2Quiz
			2Connect (Mind Map)
4.8	Hardware Investigators	2Quiz	
		2Connect (Mind Map)	
		Writing Templates	

Year	Unit	Title	Tools used
Y5	5.1	Coding	2Code
	5.2	Online Safety	2Publish Plus
			Writing Templates
			Displayboards
			2Connect (Mind Map)
	5.3	Spreadsheets	2Calculate
	5.4	Databases	2Investigate (database)
			Avatar creator
	5.5	Game Creator	2DIY 3D
			Writing Templates
2Blog (Blogging)			
5.6	3D Modelling	2Design and Make	
		Writing Templates	
5.7	Concept Maps	2Connect (Mind Map)	

Year	Unit	Title	Tools used
Y6	6.1	Coding	2Code
	6.2	Online Safety	2DIY 3D
			2DIY
			2Code
			2Blog (Blogging)
	6.3	Spreadsheets	2Calculate
	6.4	Blogging	2Blog (Blogging)
	6.5	Text Adventures	2Code
			2Connect (Mind Map)
			Writing Templates
	6.6	Networks	2Connect (Mind Map)
			Writing Templates
	6.7	Quizzing	2DIY
			2Quiz
Text Toolkit			
2Investigate (database)			
6.8 (optional)	Understanding Binary	2Connect (Mind Map)	
		2Question (Binary Databases)	
		Writing Templates	
		2Code	