

# 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 <u>Create and Manage Users</u>) 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: <u>2Dos Guide</u>.

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 <u>Create and Manage Users</u>. Alternatively, please contact support at <u>support@2simple.com</u> 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'.

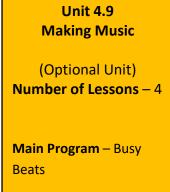


#### **Units by Year Group – Single Age Classes**

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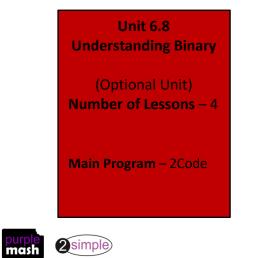
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#### **Units by Year Group – Mixed Age Classes**



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.

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\* There is an optional unit 4.9 – Making Music that can be used in addition to the above units. It is a four week unit.

#### Coding Breakdown

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



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#### 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 w – Year 5 Lessons 4		The Launch Command – Year 5 Lesson 6	Using User Input – Year 6, Lesson 4
YEAR 5 & 6 CYCLE	Designing and writing	a more complex	Introducing text	Introducing	Flowcharts and	Text Adventure –
В	program – Year 6 Less	ons 1 and 2	variables – Year	Functions – Year 6	control simulations	Year 6 Lesson 6
			5 Lesson 3	Lesson 3	– Year 6, Lesson 5	



### 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	2Туре
	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
	4.9	Making Music	Busy Beats
	(Optional)		2Sequence
			Writing Templates



Year	Unit	Title	Tools used
Υ5	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

