

# COMPUTING CURRICULUM

## **Intent**

Our computing curriculum ensures that children in all year groups enjoy a comprehensive programme of study that allows their creativity to flourish, devising expressive multi-media stories, games and pictures. It is aligned to the national Curriculum and EYFS framework. The overview facilitates teachers to achieve the very best outcomes, regardless of starting points. It exposes pupils to a wide variety of skills, experiences and poignant real-life scenarios which supports the notion of cultural capital; providing the foundations that lead to well-rounded global citizens.

## **Implementation**

Children study a range of areas over the course of a year, including:

- Coding and computational thinking
- Spreadsheets
- Internet and email
- Art and design
- Music
- Databases and graphing
- Writing and presenting
- Communication and networks

Lessons can be undertaken in the computing room or in classrooms using tablets. There are 5 unscheduled weeks in KS1 to be used to reinforce learning as appropriate. In KS2, revision or learning of optional units may be undertaken as appropriate. Online safety is integral to the programme and children are taught a range of ways to ensure they are safe online.

# WHOLE SCHOOL OVERVIEW FOR COMPUTING

**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
<b>YEAR 1</b>	<b>Unit 1.1</b> Online Safety & Exploring Purple Mash  Weeks – 4  Programs – Various				<b>Unit 1.2</b> Grouping & Sorting  Weeks – 2  Programs – 2DIY		<b>Unit 1.3</b> Pictograms  Weeks – 3  Programs – 2Count		<b>Unit 1.4</b> Lego Builders  Weeks – 3  Programs – 2DIY		<b>Unit 1.5</b> Maze Explorers  Weeks – 3  Programs – 2Go		<b>Unit 1.6</b> Animated Story Books  Weeks – 5  Programs – 2Create A Story			<b>Unit 1.7</b> Coding  Weeks – 6  Programs – 2Code			<b>Unit 1.8</b> Spreadsheets  Weeks – 3  Programs – 2Calculate		<b>Unit 1.9</b> 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
<b>YEAR 2</b>	<b>Unit 2.1</b> Coding  Weeks – 5  Programs – 2Code					<b>Unit 2.2</b> Online Safety  Weeks – 3  Programs – Various			<b>Unit 2.3</b> Spreadsheets  Weeks – 4  Programs – 2Calculate				<b>Unit 2.4</b> Questioning  Weeks – 5  Programs – 2Question, 2Investigate				<b>Unit 2.5</b> Effective Searching  Weeks – 3  Programs – Browser		<b>Unit 2.6</b> Creating Pictures  Weeks – 5  Programs – 2PaintAPicture			<b>Unit 2.7</b> Making Music  Weeks – 3  Programs – 2Sequence		<b>Unit 2.8</b> 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											

**Unit 3.9**  
Presenting (with  
Microsoft PowerPoint  
or Google Slides)

(Optional Unit)  
**Number of Lessons** – 5  
or 6 (version dependent)  
**Main Program** – MS  
PowerPoint or Google  
Slides

**Unit 4.9**  
Making Music

(Optional Unit)  
**Number of Lessons** – 4

**Main Program** – Busy  
Beats

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	<b>Unit 5.1 Coding</b>						<b>Unit 5.2 Online safety</b>			<b>Unit 5.3 Spreadsheets</b>						<b>Unit 5.4 Databases</b>				<b>Unit 5.5 Game Creator</b>				<b>Unit 5.6 3D Modelling</b>				<b>Unit 5.7 Concept Maps</b>				
	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				

**Unit 5.8**  
**Word processing (with Microsoft Word or Google Docs)**

(Optional Unit)  
**Number of Lessons – 8**

**Main program – MS Word or Google Docs**

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										

**Unit 6.8  
Understanding Binary**

(Optional Unit)  
Number of Lessons – 4

Main Program – 2Code

**Unit 6.9  
Spreadsheets (with  
Microsoft Excel or  
Google Sheets)**

(Optional Unit)  
Number of Lessons – 8

Main program – MS  
Excel or Google Sheets

