Computing overview with concepts and links to the National Curriculum

Concept:	Description
Algorithms	Writing and using algorithms to perform given tasks successfully.
Programming	Writing software to allow computers to solve problems. Involving the use of and understanding of abstraction, debugging, computational thinking, logic, problem solving and sequencing.
Data and	How data is stored, organised, and used to represent real-world artefacts and scenarios. Manipulation of data within programs
Information	What is a computer, how do its parts function together as a whole? Understand how networks can be used to retrieve and share information and come with associated risks.

Computer systems	Select and create a range of media including text, images, sounds and video to complete a desired outcome.
and Networks	Planning, creating and evaluating computing artefacts.
Creating media	
Design and	
Effective use o	Use software tools to support computing work. Selection of appropriate tools to complete a T desired outcome.
tools	

Impact of technology	How individuals, systems, and society interact with computer systems. Analysing the positives and negatives of computerised systems.			
Safety and security	Understanding risks when using technology and how to protect individuals and systems.			

Cycle A – 2024-2025

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1/2	Digital Writing 1.4, 1.6 CM, ET	Grouping Data 1.4, 1.6 DI	Data and Information – Pictograms 1.1, 1.2, 1.3, 1.4 DI, ET	Programming Introduction to animation 1.1, 1.2, 1.3, 1.4 AL, DD, PG	Programming – An introduction to Quizzes 1.1, 1.2, 1.3 PG	Creating Music 1.4
Year 3/4	Desktop Publishing 2.5, 2.6	Branching Databases 2.6 DI	Programming – Events in action 2.1, 2.2, 2.3, 2.6 ET PG	Creating media-photo editing 2.5, 2.6, 2.7	Data logging 2.2, 2.6 DI	Programming – Repetition in games. 2.1, 2.2, 2.3, 2.6 AL, PG

Year 5/6	Creating	Flat-file databases	Selection in	3D Modelling	Selection in	Sensing
	Media –	2.5, 2.6	quizzes		physical	
	Vector			2.6, 2.7	computing	2.1, 2.2, 2.3,
	drawings.	DI, ET	2.1, 2.2, 2.3,		2.1, 2.2, 2.3,	2.6
	2.6,		2.6		2.6	
	CM, DI, ET			CM, ET, DD		<mark>CS</mark> , DD, <mark>PG</mark>
			AL, DD, <mark>PG</mark>		<mark>CS,</mark> PG	

Cycle B 2025 / 2026

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1/2	Technology around us 1.4, 1.5, 1.6 CS, IT	Information Technology around us 1.4, 1.5, 1.6 CS, NW, SS	Digital Painting 1.4 CM, ET, DD	Digital Photography 1.4, 1.5, 1.6 CM, CS, DD, ET	Moving a robot 1.1, 1.2, 1.3, 1.5 AL, DD, IT, PG	Robot Algorithms 1.1, 1.2, 1.3, 1.4 AL, DD, PG
Year 3/4	Stop-frame Animation 2.6 CM, DD, ET	Audio editing 2.5, 2.6, 2.7 CM, CS, DD, DI, ET,	Sequence in music AL, CM ET, PG 2.1,2.2,2.3,2.6 DD,	Repetition in shapes 2.1, 2.2, 2.3. 2.6 AL, ET, PG	Connecting Computers 2.2, 2.4, 2.6 CS, IT, NW	The Internet 2.4, 2.5, 2.6, 2.7 NW, SS, CM, IT

