## Computing Curriculum Overview 2024-2025



Nursery	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus	Digital Literacy	Digital Literacy	Computer Science	Computer Science	Information Technology	Information Technology
Computing	Recognise technology that is	Understand what a computer is	Anticipates repeated sounds,	Operates mechanical toys eg. –	Shows interest in toys with buttons,	Seeks to acquire basic skills in turning
Knowledge	used at home and in school.	and the different uses of	sights and actions – eg. When	turns the knob on a windup toy	flaps and simple mechanisms and	on and operating some digital
and skills		computers i.e., learning,	ad adult demonstrates an	and pulls back on a friction car.	begins to learn to operate them.	equipment.
		communicating, finding	action toy several times.			
		information, playing games etc.				
Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus	Digital Literacy	Digital Literacy	Computer Science	Computer Science	Information Technology	Information Technology
Computing	Develops digital literacy skills by	I can recognise some ways in which	Completes a simple program	Shows an interest in	Can use the internet with adult	Can create content such as video
Knowledge	being able to access, understand	technology might be used to	on electronic devices such as	technological toys with knobs,	supervision to find and retrieve	recording, stories and drawing pictures
and skills	and interact with a range of	communicate with people I know.	bee bot or a coding app.	pulleys, real objects such as	information of interest to them.	on a screen.
	technologies.			cameras and touchscreen		
	-			devices such as mobile phones		
				and tablets.		
Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	Computing systems and	Creating media – Digital painting	Programming A – Moving a	Data and information – Grouping	Creating media – Digital writing	Programming B - Programming
Focus	networks – Technology around		robot	data		animations
Commuting	US				Line legical responsing to prodict the	Create and debug simple programs
Computing	Recognise common uses of	Ose technology purposeruny to	onderstand what algorithms			Create and debug simple programs
Knowledge	information technology beyond	create, organise, store, manipulate,	are, now they are	respectfully, keeping personal	benaviour of simple programs	Designing and programming the
and skills	school	and retrieve digital content	Implemented as programs on	Information private; identify	Using a computer to create and	movement of a character on screen to
	Recognising technology in school	Choosing appropriate tools in a	digital devices, and that	where to go for help and	format text, before comparing to	tell stories.
	and using it responsibly.	program to create art, and making	programs execute by	support when they have	writing non-digitally.	
		comparisons with working non	following precise and	concerns about content or		
		digitally.	unambiguous instructions.	contact on the internet or other		
			Writing short algorithms and	online technologies.		
			programs for floor robots,	Exploring object labels, then		
			and predicting program	using them to sort and group		
			outcomes.	objects by properties.		
Year 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	Computing systems and	Creating media – Digital	Programming A – Robot	Data and information –	Creating media - Digital music	Programming B - Programming quizzes
Focus	networks – IT around us	photography	algorithms	Pictograms		
Computing	Posognisa common usos of	Use logical reasoning to prodict the	Understand what algorithms	use technology safely and	Lise technology purper of ully to	Create and debug simple programs
Computing	information technology beyond	behaviour of simple programs	are how they are	respectfully, keeping percend	create erganice store manipulate	Decigning algorithms and programs that
Knowledge	school	Canturing and changing digital	implemented as programs on	information privates identify	create, organise, store, manipulate,	Designing algorithms and programs that
and skills	School		disital devices and that	information private; identify		to realize an internetive avia
	Identifying IT and now its	photographs for different	digital devices, and that	where to go for help and	Using a computer as a tool to explore	to make an interactive quiz.
	responsible use improves our	purposes.	programs execute by following	support when they have	rhythms and melodies, before	
	world in school and beyond.		precise and unambiguous	concerns about content or	creating a musical composition.	
			instructions.	contact on the internet or other		
			Creating and debugging	online technologies.		
			programs, and using logical	Collecting data in tally charts		
				and using attributes to organise		



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			reasoning to make	and present data on a		
Year 3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	Computing systems and	Creating media - Stop-frame	Programming A - Sequencing	Data and information –	Creating media – Desktop publishing	Programming B - Events and actions in
Focus	networks – Connecting	animation	sounds	Branching databases		programs
	computers					
Computing	understand computer networks	select, use and combine a variety of	use sequence, selection, and	use technology safely,	use search technologies effectively,	design, write and debug programs that
Knowledge	including the internet; how they	software (including internet	repetition in programs; work	respectfully and responsibly;	appreciate how results are selected	accomplish specific goals, including
and skills	such as the world wide web: and	devices to design and create a	forms of input and output		and ranked, and be discerning in	systems: solve problems by
	the opportunities they offer for	range of programs, systems and	Creating sequences in a	behaviour: identify a range of	Creating documents and modifying	decomposing them into smaller parts
	communication and	content that accomplish given	block-based programming	ways to report concerns about	text, images and page layouts for a	use logical reasoning to explain how
	collaboration	goals, including collecting,	language to make music.	content and contact.	specific purpose.	some simple algorithms work and to
	Identifying that digital devices	analysing, evaluating and		Building and using branching		detect and correct errors in algorithms
	have inputs, processes, and	presenting data and information		databases to group objects using		and programs
	outputs, and how devices can be	Capturing and editing digital still		yes/no questions.		Writing algorithms and programs that
	connected to make networks	images to produce a stop frame				use a range of events to trigger
						sequences of actions.
Year 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	Computing systems and	Creating media - Audio production	Programming A – Repetition	Data and information – Data	Creating media – Photo editing	Programming B – Repetition in games
Focus	networks – The Internet		in shapes	logging		
Computing	understand computer networks	use search technologies effectively,	select, use and combine a	use sequence, selection, and	use technology safely, respectfully	design, write and debug programs that
Knowledge	including the internet; how they	appreciate how results are selected	variety of software (including	repetition in programs; work	and responsibly; recognise	accomplish specific goals, including
and skills	can provide multiple services,	and ranked, and be discerning in	internet services) on a range	with variables and various forms	acceptable/unacceptable behaviour;	controlling or simulating physical
	such as the world wide web; and	evaluating digital content	of digital devices to design	of input and output	Identity a range of ways to report	systems; solve problems by
	communication and	produce a podcast, ensuring that	programs, systems and	is collected over time, before	Manipulating digital images, and	use logical reasoning to explain how
	collaboration	copyright is considered.	content that accomplish	using data loggers to carry out	reflecting on the impact of the	some simple algorithms work and to
	Recognising that the internet is a		given goals, including	an investigation,	changes and whether the required	detect and correct errors in algorithms
	network of networks including		collecting, analysing,		purpose is fulfilled,	and programs
	the WWW, and why we should		evaluating and presenting			Using a block-based programming
	evaluate online content.		data and information			language to explore count-controlled
			programming language to			and minine loops when creating a
			explore count-controlled			Suite
			loops when drawing shapes.			
Year 5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	Computing systems and networks	Creating media - Video production	Programming A – Selection	Data and information – Flat-file	Creating media – Introduction to	Programming B – Selection in quizzes
Focus	- Systems and searching		in physical computing	databases	vector graphics	
Computing	use search technologies	use technology safely,	use sequence, selection, and	use search technologies	select, use and combine a variety of	design, write and debug programs that
Knowledge	effectively, appreciate how	respectfully and responsibly;	repetition in programs; work	effectively, appreciate how	software (including internet services)	accomplish specific goals, including
and skills	results are selected and ranked,	recognise acceptable/unacceptable	with variables and various	results are selected and ranked,	on a range of digital devices to design	controlling or simulating physical
	and be discerning in evaluating	benaviour; identify a range of ways	Torms of input and output	and be discerning in evaluating	and create a range of programs,	systems; solve problems by
		and contact.	selection using a		given goals, including collecting	use logical reasoning to explain how
						some simple algorithms work and to



## Computing Curriculum Overview 2024-2025 ng, and editing programmable

	Recognising IT systems in the world and how some can enable searching on the internet.	Planning, capturing, and editing video to produce a short film.	programmable microcontroller.	Using a database to order data and create charts to answer questions.	analysing, evaluating and presenting data and information Creating images in a drawing program by using layers and groups of objects.	detect and correct errors in algorithms and programs Exploring selection in programming to design and code an interactive quiz.
Year 6	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus	Computing systems and networks - Communication and collaboration	Creating media – Web page creation	Programming A – Variables in games	- Data and information – Spreadsheets	Creating media – 3D Modelling	Programming B - Sensing movement
Computing Knowledge and skills	understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Exploring how data is transferred by working collaboratively online.	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Designing and creating webpages, giving consideration to copyright, aesthetics and navigation.	use sequence, selection, and repetition in programs; work with variables and various forms of input and output Exploring variables when designing and coding a game.	select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Answering questions by using spreadsheets to organise and calculate data.	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Designing and coding a project that captures inputs from physical devices.