Computing Curriculum Map

	Year 1					
	Autumn 1 *Unit 1.1.* *Online Safety*	**Autumn 2** *Unit 1.2* *Grouping and sorting* *Unit 1.3* *Pictograms* *Unit 1.4* *Lego Builders*	**Spring 1** *Unit 1.5* *Maze Explorers*	**Spring 2** *Unit 1.6* *Animated Stories*	**Summer 1** *Unit 1.7* *Coding*	**Summer 2** *Unit 1.8* *Spreadsheets* *Unit 1.9* *Technology Outside of School*
National Curriculum statement	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	**Unit 1.2 and 1.3.** Use technology purposefully to create, organise, store, manipulate and retrieve digital content. **Unit 1.4.** Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs.	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.	**Unit 1.8.** Use technology purposefully to create, organise, store, manipulate and retrieve digital content. **Unit 1.9.** Recognise common uses of information technology beyond school.

		Use logical reasoning to predict the behaviour of simple programs.				
Cultural Capital						
Enrichment						
Vocabulary	Log in, username, password, avatar, my work, log out, save, notification, topics, tools.	**Unit 1.2.** Sort, criteria. **Unit 1.3.** Pictogram, data, collate. **Unit 1.4.** Instruction, algorithm, computer, program, debug.	Direction, challenge, arrow, undo, rewind, forward, backwards, right turn, left turn, debug, instruction, algorithm.	Animation, e-book, font, file, sound effect, display board.	Action, background, button, character, code block, code design, coder, coding, collision detection, command, design mode, input, object, program, properties, scale, stop command, sound, when clicked, when key.	Arrow key, backspace key, cursor, columns, cells, clipart, count tool, delete key, image toolbox, lock tool, move cell tool, rows, speak tool, spreadsheet.
Links to other topics	Units 2.2, 3.2, 4.2, 4.5, 5.2, 5.5, 6.2.	**Unit 1.2:** Units 3.6, 5.4 **Unit 1.3:** Unit 3.8 **Unit 1.4,** 1.5, 1.7, 2.1, 3.1, 4.1, 4.5, 5.1, 5.5, 6.1.	Units 1.7, 2.1, 3.1, 4.1, 4.5, 5.1, 5.5, 6.1.	Units 3.4, 4.4, 5.7, 6.5.	Units 1.5, 2.1, 3.1, 4.1, 4.5, 5.1, 5.5, 6.1.	Unit 1.8: Units 2.3, 3.3, 4.3, 5.3, 6.3. Unit 1.9: Units 3.5, 6.4, 6.6.

	Year 2					
	Autumn 1 *Unit 2.1* *Coding*	**Autumn 2** *Unit 2.2* *Online Safety* *Unit 2.3* *Spreadsheets*	**Spring 1** *Unit 2.4* *Questioning*	**Spring 2** *Unit 2.5* *Effective* *Searching*	**Summer 1** *Unit 2.6* *Creating pictures*	**Summer 2** *Unit 2.7* *Making Music* *Unit 2.8* *Presenting Ideas*
National Curriculum statement	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.	**Unit 2.2.** Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. **Unit 2.3.** Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	**Unit 2.7 and 2.8.** Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
Cultural Capital						

Enrichment						
Vocabulary	Action, algorithm, bug, character, code block, code design, command, debug, design mode, input, object, properties, repeat, scale, timer, when clicked, when key.	**Unit 2.2.** Search, display board, internet, sharing, email, attachment, digital footprint. **Unit 2.3.** Backspace key, copy and paste, columns, cells, count tool, delete key, equals tool, image toolbox, lock tool, move cell tool, rows, speak tool, spreadsheet.	Pictogram, question, data, collate, binary tree, avatar, database.	Internet, search, search engine.	Impressionism, palette, pointillism, share, surrealism, template.	**Unit 2.7.** Bpm, composition, digitally, instrument, music, sound effect (sfx), soundtrack, tempo, volume. **Unit 2.8.** Concept map, node, animated, quiz, non-fiction, presentation, narrative, audience.
Links to other topics	Units 1.5, 1.7, 3.1, 4.1, 4.5, 5.1, 5.5, 6.1.	**Unit 2.2.** Units 1.1, 3.2, 4.2, 5.2, 6.2. **Unit 2.3** Units 1.8, 3.3, 4.3, 5.3, 6.3.	Unit 6.7.	Unit 6.6.	Units: 3.7, 3.8, 4.6, 4.7, 5.6.	**Unit 2.8.** Unit 6.7.

	Year 3					
	Autumn 1 *Unit 3.1* *Coding*	**Autumn 2** *Unit 3.2* *Online Safety* *Unit 3.3* *Spreadsheets*	**Spring 1** *Unit 3.4* *Touch Typing*	**Spring 2** *Unit 3.5* *Email*	**Summer 1** *Unit 3.6* *Branching* *Databases*	**Summer 2** *Unit 3.7* *Simulations* *Unit 3.8* *Graphic* *Modelling*
National Curriculum statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing then into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	**Unit 3.2.** Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact. **Unit 3.3.** 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		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. Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact.	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, evaluation and presenting data and information.	**Unit 3.7 and 3.8** 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, evaluation and presenting data and information.

		collecting, analysing, evaluation and presenting data and information.				
Cultural Capital						
Enrichment						
Vocabulary	Action, algorithm, bug, code block, code design, command, control, debug, design mode, event, if, input, output, object, properties, repeat, computer simulation, selection, timer, variable.	**Unit 3.2.** Password, internet, blog, concept map, username, website, webpage, spoof website, PEGI rating. **Unit 3.3.** < > = symbols, advanced mode, copy and paste, columns, cells, delete key, equals tool, move cell tool, rows, spin tool, spreadsheet.	Posture, top row keys, home row keys, bottom row keys, space bar.	Communication, email, compose, send, report to the teacher, attachment, address book, save to draft, password, CC, formatting.	Branching database, data, database, question.	**Unit 3.7.** Simulation **Unit 3.8.** Graph, field, data, bar chart, block graph, line graph.
Links to other topics	Units 1.5, 1.7, 2.1, 4.1, 4.5, 5.1, 5.5, 6.1.	**Unit 3.2.** Units 1.1, 2.2, 4.2, 5.2, 6.2. **Unit 3.3.** Units 1.8, 2.3, 4.3, 5.3, 6.3.	Units 1.6, 4.4, 5.7, 6.5.	Units 1.9, 6.4, 6.6.	Units 1.2, 5.4.	**Unit 3.7 and 3.8.** Units 2.6, 4.6, 4.7, 5.6.

Year 4						
	Autumn 1 *Unit 4.1 Coding*	**Autumn 2** *Unit 4.2 Online Safety* *Unit 4.3 Spreadsheets*	**Spring 1** *Unit 4.4 Writing for different audiences*	**Spring 2** *Unit 4.5 Logo*	**Summer 1** *Unit 4.6 Animation*	**Summer 2** *Unit 4.7 Simulations* *Unit 4.8 Hardware Investigators*
National Curriculum statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing then into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	**Unit 4.2.** Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact. **Unit 4.3.** 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	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, evaluation and presenting data and information.	Use sequence, selection and repetition in programs; work with variables and various forms of input and output. 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, evaluation and presenting data and information.	Use sequence, selection and repetition in programs; work with variables and various forms of input and output.	**Unit 4.7** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

		goals, including collecting, analysing, evaluation and presenting data and information.				
Cultural Capital						
Enrichment						
Vocabulary	Action, alert, algorithm, bug, code design, command, control, debug, design mode, event, function, get input, if, if/else, input, output, object, repeat, sequence, selection, simulation, timer, variable.	**Unit 4.2.** Computer virus, cookies, copyright, digital footprint, email, identity theft, malware, phishing, plagiarism, spam. **Unit 4.3.** Average, advance mode, copy and paste, columns, cells, charts, equals tool, formula, formula wizard, move cell tool, random tool, rows, spin tools, spreadsheet, timer.	Font, bold, italic, underline.	LOGO, BK, FD, RT, LT, REPEAT, SETPC, SETPS, PU, PD.	Animation, flipbook, frame, onion skinning, background, play, sound, stop motion, video clip.	**Unit 4.7.** Easter egg, internet, internet browser, search, search engine, spoof website, website. **Unit 4.8.** Motherboard, CPU, RAM, graphics card, network card, monitor, speakers, keyboard, mouse.

Links to other topics	Units 1.5, 1.7, 2.1, 3.1, 4.5, 5.1, 5.5, 6.1.	**Unit 4.2** Units 1.1, 2.2, 3.2, 5.2, 6.2. **Unit 4.3.** Units 1.8, 2.3, 3.3, 5.3, 6.3.	Units 1.6, 3.4, 5.7, 6.5.	Units 1.5, 1.7, 2.1, 3.1, 4.1, 5.1, 5.5, 6.1.	Units 2.6, 3.7, 3.8, 4.7, 5.6.	Units 2.6, 3.8, 4.6, 4.7, 5.6.

	Year 5					
	Autumn 1 *Unit 5.1* *Coding*	**Autumn 2** *Unit 5.2* *Online Safety* *Unit 5.3* *Spreadsheets*	**Spring 1** *Unit 5.4* *Databases*	**Spring 2** *Unit 5.5* *Game creator*	**Summer 1** *Unit 5.6* *Modelling*	**Summer 2** *Unit 5.7* *Concept Maps*
National Curriculum statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	**Unit 5.2.** Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact. **Unit 5.3.** 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, evaluation and	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 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, evaluation and presenting data and information.	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 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, evaluation and presenting data and information.	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, evaluation and presenting data and information.	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, evaluation and presenting data and information.

		presenting data and information.				
Cultural Capital						
Enrichment						
Vocabulary	Action, alert, algorithm, bug, code design, command, control, debug, design mode, event, function, get input, if, if/else, input, output, object, repeat, sequence, selection, simulation, timer, variable.	**Unit 5.2.** Online safety, smart rules, password, reputable, encryption, identity theft, shared image, plagiarism, citations, reference, bibliography. **Unit 5.3.** Average, advance mode, copy and paste, columns, cells, charts, count tool, dice, equals tool, formula, formula wizard, move cell tool, rows, spin tools, spreadsheet, timer.	Avatar, binary tree, branching database, charts, collaborative, data, database, find, record, sort, group, arrange, statistics and reports, table.	Animation, computer game, customise, evaluation, image, instruction, interactive, screenshot, texture, perspective, playability,	CAD (computer aided design), modelling, 3D, viewpoint, polygon, 2D, net, 3D printing, points, template.	Audience, collaboratively, concept, concept map, connection, idea, node, thought, visual.
Links to other topics	Units 1.5, 1.7, 2.1, 3.1, 4.1, 4.5, 5.5, 6.1.	**Unit 5.2.** Units 1.1, 2.2, 3.2, 4.2, 6.2.	Unit 1.2, 3.6.	Units 1.5, 1.7, 2.1, 3.1, 4.1, 4.5, 5.1, 6.1.	Units 2.6, 3.7, 3.8, 4.6, 4.7.	Units 1.6, 3.4, 4.4, 6.5.

		Unit 5.3. Units 1.8, 2.3, 3.3, 4.3, 6.3.				

Year 6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	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*
National Curriculum statement	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing then into smaller parts.\n\nUse sequence, selection and repetition in programs; work with variables and various forms of input and output.\n\nUse logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	**Unit 6.2.** Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact.\n\n**Unit 6.3.** 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, evaluation and	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, evaluation and presenting data and information.\n\nUse 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 then into smaller parts.\n\nUse sequence, selection and repetition in programs; work with variables and various forms of input and output.\n\nUse logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	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.	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, evaluation and presenting data and information.

		presenting data and information.				
Cultural Capital						
Enrichment						
Vocabulary	Action, alert, algorithm, bug, code design, command, control, debug, event, function, get input, if, if/else, input, output, object, repeat, sequence, selection, simulation, tabs, timer, variable.	**Unit 6.2.** Digital footprint, password, PEGI rating, phishing, screen time, spoof website. **Unit 6.3.** Average, advance mode, copy and paste, columns, cells, charts, count tool, dice, equals tool, formula, formula wizard, move cell tool, rows, spin tools, spreadsheet, timer.	Audience, blog, blog page, blog post, collaborative, icon.	Text-based adventure, concept map, debug, sprite, function.	Internet, World Wide Web, Network, Local area network (LAN), Wide area network (WAN), router, network cables, wireless.	Audience, collaboration, concept map, database, quiz.
Links to other topics	Units 1.5, 1.7, 2.1, 3.1, 4.1, 5.1, 5.5.	**Unit 6.2.** Units 1.1, 2.2, 3.2, 4.2, 5.2. **Unit 6.3.** Units 1.8, 2.3, 3.3, 4.3, 5.3.	Units 1.9, 3.5, 6.6	Units 1.6, 3.4, 4.4, 5.7.	Units 1.9, 3.5, 6.4	Unit 2.8