

	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
Digital Literacy Theme	Privacy and Security	Online Bullying	Online Relationships	Health, Wellbeing and Lifestyle	Managing Online Information	Copyright and ownership
Little Explorers	Awesome Autumn – Pumpkin Soup	Winter Warmers – Let's make an igloo!	Springtime – Rabbit Run	Springtime – Seed Sequencing	Boats ahoy! Build a boat	Busy Bodies – Parts of our body
Big Explorers Cycle A	Computer Systems and Networks Y1: Technology around us (CS)	Creating Media Y1: Digital Writing (IT)	Programming A Y1: Moving a robot(CS)	Data and Information Y2: Pictograms (IT)	Creating Media Y1: Digital Painting (IT)	Programming B Y1: Programming Animations (CS)
Big Explorers Cycle B	Computer Systems and Networks Y2: IT around us (CS)	Creating Media Y2: Digital Music (IT)	Programming A Y2: Robot Algorithms (CS)	Data and Information Y1: Grouping Data (IT)	Creating Media Y2: Digital Photography (IT)	Programming B Y2: Programming Quizzes (CS)
Philosophers Cycle A	Computer Systems and Networks Y3: Connecting Computers (CS)	Creating Media Y3: Desktop Publishing (IT)	Programming A Y3: Sequencing Sounds (CS)	Data and Information Y3: Branching Databases (IT)	Creating Media Y3: Stop-frame Animation (IT)	Programming A Y4: Repetition in shapes (CS)
Philosophers Cycle B	Computer Systems and Networks Y4: The Internet (CS)	Creating Media Y4: Photo editing (IT)	Programming B Y3: Events and actions (CS)	Creating Media Y4: Audio production (IT)	Data and Information Y4: Data Logging (IT)	Programming B Y4: Repetition in games (CS)
Trailblazers Cycle A	Computer Systems and Networks Y5: Systems and searching (CS)	Creating Media Y5: Vector Drawings (IT)	Programming A Y5: Selection (CS)	Data and Information Y5: Flat file databases (IT)	Creating Media Y6: 3D Modelling (IT)	Programming B Y6: Sensing – Micro:bit (CS)
Trailblazers Cycle B	Computer Systems and Networks Y6: Communication and collaboration (CS)	Creating Media Y5: Video Editing (IT)	Programming B Y5: Selection (CS)	Creating Media Y6: Webpage creation (IT)	Data and Information Y6: Spreadsheets (IT)	Programming A Y6: Variables – Crumbles (CS)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic:	Marvellous Explorers!	Exploring the Future!	Animal Explorers!	Exploring Growing!	Exploring Buildings!	Go and Explore!
Unit Title:	Awesome Autumn – Pumpkin soup	Winter Warmers – Let's make an igloo!	Springtime – Rabbit Run	Springtime Seed Sequencing -	Boats ahoy! Build a boat	Busy Bodies – Parts of our body
Concepts/ Approaches Covered:	Algorithms, decomposition, collaborating	Logic, tinkering, decomposition, collaborating, persevering	Algorithms, Persevering, collaborating	Algorithms, Decomposition, Collaborating	Algorithms, decomposition, creating	Logic, Pattern, Abstraction
Early Learning Goals and Development Matters Links:	ELG: Building Relationships ■ Work and play cooperatively and take turns with others; ELG: Fine Motor Skills ■ Use a range of small tools, including scissors, paint brushes and cutlery; ELG: Managing Self ■ Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. Understanding the world ■ 3 and 4 year olds – Begin to understand the need to respect and care for the natural environment and all living things. ■ Reception – Understand the effect of changing seasons on the natural world around them.	ELG: Building Relationships ■ Work and play cooperatively and take turns with others; ELG: Fine Motor Skills ■ Use a range of small tools, including scissors, paint brushes and cutlery; ELG: The Natural World ■ Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Understanding the world ■ 3 and 4 year olds – Begin to understand the need to respect and care for the natural environment and all living things. ■ Reception – Recognise some environments that are different to the one in which they live. Expressive arts and design ■ 3 and 4 year olds – Join different materials and explore different textures.	ELG: Building Relationships ■ Work and play cooperatively and take turns with others; Active Learning ■ Respond to new experiences that you bring to their attention Creating and thinking critically ■ Review their progress as they try to achieve a goal. Check how well they are doing. Mathematics 3 and 4 year olds – Discuss routes and locations, using words like 'in front of' and 'behind'. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'	ELG: Building Relationships ■ Work and play cooperatively and take turns with others; ELG: The Natural World ■ Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. Understanding the world ■ 3 and 4 year olds – Plant seeds and care for growing plants. Begin to understand the need to respect and care for the natural environment and all living things. ■ Reception – Understand the effect of changing seasons on the natural world around them. Explore the natural world around them.	Communication and Language ■ 3 and 4 year olds: Understand a question or instruction that has two parts. Expressive Arts and Design ■ 3 and 4 year olds: Develop their own ideas and then decide which materials to use to express them	■ Children use and understand recently introduced vocabulary during discussions about stories, nonfiction, rhymes and poems and during role-play. Understanding the World ■ 3 and 4 year olds: Continue developing positive attitudes about the differences between people. Literacy ■ 3 and 4 year olds: - Understand that print has meaning - Engage in extended conversations about stories, learning new vocabulary.

KS1 Computing Curriculum		
Computer Science <i>(How computers and computer systems work and how they are designed and programmed)</i>	Information Technology <i>(the purposeful use of existing programs to develop products and solutions)</i>	Digital Literacy <i>(the skills, knowledge and understanding needed in order to participate fully and safely in an increasingly digital world)</i>
A- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions		
B- create and debug simple programs		
C- use logical reasoning to predict the behaviour of simple programs		
D- use technology purposefully to create, organise, store, manipulate and retrieve digital content		
E- recognise common uses of information technology beyond school		
F- 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		

Long Term Plan

Cycle		Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
		All Aboard!	Fire, Fire!	Up, up and away!	We are Explorers	How does your garden grow?	Africa
A	CS	Computer Systems and networks DEF MIXED		Programing A: Beebots/Floorbots ABC MIXED			Programming B: Scratch Jnr ABC MIXED
	IT		Creating Media: Digital Writing DF		Data and Information: Pictograms DE Link to Y2 Statistics unit (maths)	Creating Media: Digital Painting D	
	DL	Privacy and Security F School AUP	Online Bullying (PSHE) F Self image and Identity F	Online Relationships F Online Reputation F (PSHE)	Health, Wellbeing and Lifestyle EF (PSHE)	Managing Online Information F	Copyright and Ownership F
		Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
		Moon Zoom	Banquets, Balls and Battles	Fantastic Festivals	Robin Hood and Our Forest	Victorians	Beach combers
B	CS	Computer Systems and networks DEF MIXED		Programing A: Beebots/Floorbots ABC MIXED			Programming B: Scratch Jnr ABC MIXED
	IT		Creating Media: Making Music D		Data and Information: Block Charts DE Link to Y2 Statistics unit (maths)	Creating Media: Digital Photography DE	
	DL	Privacy and Security F School AUP	Online Bullying (PSHE) F Self image and Identity F	Online Relationships F Online Reputation F (PSHE)	Health, Wellbeing and Lifestyle EF (PSHE)	Managing Online Information F	Copyright and Ownership F

Key Stage 2 National Curriculum Objectives		
Computer Science	Information Technology	Digital Literacy
<i>(How computers and computer systems work and how they are designed and programmed)</i>	<i>(the purposeful use of existing programs to develop products and solutions)</i>	<i>(the skills, knowledge and understanding needed in order to participate fully and safely in an increasingly digital world)</i>
A - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts		
B - use sequence, selection, and repetition in programs; work with variables and various forms of input and output		
C - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs		
D - 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		
E - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content		
F - 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		
G - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact		

Long Term Overview: Year 3/4

Cycle		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
A	CS	Computer Systems and Networks BDEFG		Programming A: (Yr 3) Sequencing sounds ABCF	:		Programming A: (Yr4) Repetition in shapes ABCF
	IT		Creating Media: (Yr 3) Desktop publishing FG (Adobe Spark – Create teacher account and children access to save)		Data and Information: (Yr 3) Branching Databases (Link to Science)	F Creating Media: (Yr 3) Stop-frame Animation (Roman Theme) F	
	DL	Privacy and Security F School AUP	Online Bullying (PSHE) F Self image and Identity F	Online Relationships F Online Reputation F (PSHE)	Health, Wellbeing and Lifestyle EF (PSHE)	Managing Online Information F	Copyright and Ownership F
B	CS	Computer Systems and Networks BDEFG		Programming B: (Yr 3) Events and actions in programs ABCF			Programming B: (Yr 4) Repetition in games (note changes in L1 slides) ABCF
	IT		Creating Media: (Yr 4) Photo editing EFG		Creating Media: (Yr 4) Audio editing EFG (Bandlab education on Chromebooks)	Data and Information: (Yr 4) Data Logging BF (Arduino Science Journal – data logger Android and IOS)	
	DL	Privacy and Security F School AUP	Online Bullying (PSHE) F Self image and Identity F	Online Relationships F Online Reputation F (PSHE)	Health, Wellbeing and Lifestyle EF (PSHE)	Managing Online Information F	Copyright and Ownership F

Long Term Overview: Year 5/6

Cycle		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
A	CS	Computer Systems and Networks: (Yr 5) Sharing Information ABDFG		Programming A (Yr 5) Selection in physical computing (requires Crumble boards) ABDF <i>Alternatives available</i> (available to loan from SME)			Programming B - (Yr 6) Sensing (variables): Microbit ABDF <i>Alternatives available</i>
	IT		Creating Media: (Yr 5) Vector drawing F		Data and Information: (Yr 5) Flat file Databases EF	Creating Media: (Yr 6) 3D Modelling FG	
	DL	Privacy and Security F School AUP	Online Bullying (PSHE) F Self image and Identity F	Online Relationships F Online Reputation F (PSHE)	Health, Wellbeing and Lifestyle EF (PSHE)	Managing Online Information F	Copyright and Ownership F
B	CS	Computer Systems and Networks: (Yr 6) Communication ADEF		Programming B: (Yr 5) Selection in Quizzes ABCF			Programming A: (Yr 5) Variables in games ABDFG
	IT		Creating Media: (Yr 5) Video Editing EFG		Creating Media: (Yr 6) Webpage creation EFG	Data and Information: (Yr 6) Spreadsheets F	
	DL	Privacy and Security F School AUP	Online Bullying (PSHE) F Self image and Identity F	Online Relationships F Online Reputation F (PSHE)	Health, Wellbeing and Lifestyle EF (PSHE)	Managing Online Information F	Copyright and Ownership F

Cycle	Unit	Issue	Options
A	Programming A (Crumbles)	No crumbles	Code.org - Course D lessons 10 - 14 and lesson 18 - lessons focus on selection or Microbit - Data handling unit https://microbit.org/lessons/data-handling-unit-summary/ (Microbits needed) OR Barefoot Computing : You're the Cyber Security Expert https://www.barefootcomputing.org/resources/you-re-the-cyber-security-expert (conditions in loops)
A	Programming B	No Microbits	Lesson adaptations to work with them emulator at https://makecode.microbit.org/ https://computing4schools.com/home-learning/
A	Vector Drawing	Not a 'Google School'	Vector drawing = drawing with shapes Microsoft alternatives: Powerpoint or Publisher
B	Webpage Creation	Not a 'Google School'	W3 Schools html building https://www.w3schools.com/html/tryit.asp?filename=tryhtml_basic see tutorials here to support: https://www.w3schools.com/html/ Or Code Club - HTML https://projects.raspberrypi.org/en/codeclub Or Use ppt/sway or something similar to show links between pages