

Progression Map 2025/26		Subject: Computing		Subject Lead: Miss J Burt		
Nursery	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
General themes	All about me	Let's celebrate	Winter Wonderland	Planting and growing	Who can help me?	Once upon a time
Personal, Social and Emotional Development	Children's personal, social and emotional development (PSED) is crucial for children to lead healthy and happy lives, and is fundamental to their cognitive development. Underpinning their personal development are the important attachments that shape their social world. Strong, warm and supportive relationships with adults enable children to learn how to understand their own feelings and those of others. Children should be supported to manage emotions, develop a positive sense of self, set themselves simple goals, have confidence in their own abilities, to persist and wait for what they want and direct attention as necessary. Through adult modelling and guidance, they will learn how to look after their bodies, including healthy eating, and manage personal needs independently. Through supported interaction with other children they learn how to make good friendships, co-operate and resolve conflicts peaceably. These attributes will provide a secure platform from which children can achieve at school and in later life. EYFS Statutory Educational Programme					
Computing and Online safety RSE – online relationships	Use of play technology to explore Use of IWB Digiducks Big Decision online story—Childnet	Use of play technology to explore Use of IWB Chicken Clicking Story	Getting familiar with school iPad Safer Internet Day — Smartie the penguin online story (Childnet)	How to use iPad safely—opening and closing, storage Unplugged Story	Learn how to take a photo of something you are proud of. Dot. story	Use of programable toys—Beebots, Codapillar, Troll Stinks story
Reception	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
General themes	Me and my emotions	Celebrations of light	I wonder why?	New life	People who help us	Terrific tales
Personal, Social and Emotional Development	Children's personal, social and emotional development (PSED) is crucial for children to lead healthy and happy lives, and is fundamental to their cognitive development. Underpinning their personal development are the important attachments that shape their social world. Strong, warm and supportive relationships with adults enable children to learn how to understand their own feelings and those of others. Children should be supported to manage emotions, develop a positive sense of self, set themselves simple goals, have confidence in their own abilities, to persist and wait for what they want and direct attention as necessary. Through adult modelling and guidance, they will learn how to look after their bodies, including healthy eating, and manage personal needs independently. Through supported interaction with other children they learn how to make good friendships, co-operate and resolve conflicts peaceably. These attributes will provide a secure platform from which children can achieve at school and in later life. EYFS Statutory Educational Programme					
Computing and Online safety RSE – online relationships	Use of IWB How to use iPad safely—opening and closing, storage Digiducks Big Decision online story—Childnet	Take selfies and photos using iPads Chicken Clicking Story	Safer Internet Day — Smartie the penguin online story (Childnet)	Use a basic app on the iPad Unplugged Story	Use a basic app on the iPad Use of beebots/codapillar Troll Stinks story	Use a basic app on the iPad Once Upon a Time Online Story

- Year 1 and 2 are following their own individual year group’s curriculum to ensure coverage across KS1.
- LKS2 and UKS2 are following a two-year rolling program to ensure curriculum coverage and will move to their own individual year group’s curriculum in the coming years.

NC Aims	The national curriculum for computing aims to ensure that all pupils: <ul style="list-style-type: none"> - can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation - can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems - can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems - are responsible, competent, confident and creative users of information and communication technology. 						
NC for KS1	<ul style="list-style-type: none"> - 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 - recognise common uses of information technology beyond school - 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. 						
	Year group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge (Breadth)	1	iPad skills and apps	Keeping safe and exploring technology	Exploring digital sound	Making multimedia stories	An introduction to digital art	Programming direction
Skills		Introduce children to apps and software used on the iPads throughout school to develop familiarity and skills required using a number of different tools and tasks.	Help children stay safe and understand what a healthy use of technology is. Then explore the tech in our homes and businesses and get hands on with control equipment to figure out how it all works.	Introduce children to digital sound, and let them experiment with simple beats, tempo and composition with various tools.	Get children writing and creating digital stories, and then bring them to life with sound and animation.	Introduce children to a range of digital art packages and the tools within them. They apply the tools and their skills to a range of artistic styles and genres from painting to photography.	A programming unit that focuses on directional instructions and creating sequences (algorithms) using a variety of programs and equipment.
Vocabulary for this unit		iPad, app, software, edit, create, document, import, upload	Control, digital citizen, digital media, Internet, media, media balance, media choices, network, online, private information, server, world wide web	Digital, digital content, edit, evaluation, layer, online, save, timeline, combine, software, import, multimedia	Alter, animation, digital content, edit, format (text), import, media, multimedia, save, computer, text box, fill, shape, keyboard, keys, space bar, backspace, delete, shift (for capital letters), enter, navigation, presentation	Alter, edit, evaluation, flood fill, multimedia, online, save, software	Algorithm, block, command, control, debug, decomposition, edit, execute, logic, logical reasoning, program, repetition/loop, save, sequence, instruction, prediction, debug, turn

Knowledge (Breadth)	2	Writing in different styles	An introduction to animation	Programming with Scratch Jr	Keep safe and create	Programming with Logo	Finding and presenting information
Skills	<i>Introduce children to word processing and desktop publishing using a number of different tools and design tasks.</i>	<i>Get really creative as you introduce both 2D and stop frame animation. Students will love creating their own animated clips and stories with a variety of tools.</i>	<i>Introduce students to this great block-based programming language to create animations and games perfect for KS1. Write and debug algorithms, learn about repeating, and different triggers to create actions.</i>	<i>A combination of 3 lessons from Common Sense Education's excellent digital citizenship curriculum and the chance for your students to apply their learning to digital making activities that would help them share the important online safety messages with others.</i>	<i>Introduce the written programming language of Logo. Students program their on-screen robot to move and create drawings using repeat commands and their own procedures.</i>	<i>Introduces children to web browsers to explore and search websites safely, collecting and presenting information in graphs, and different ways of sorting and classifying data with databases.</i>	
Vocabulary for this unit	<i>Alter, copyright, digital content, edit, format (text), import, media, save</i>	<i>Alter, animation, capture, export, edit, evaluate, frame, save</i>	<i>Algorithm, block, broadcast, command, control, debug, decomposition, edit, execute, logic, logical reasoning, program, repetition, save, script selection, sequence, sprite</i>	<i>Control, digital citizen, digital media, Internet, media, media balance, media choices, network, online, private information, server, world wide web</i>	<i>Algorithm, block, command, control, debug, decomposition, edit, execute, logic, logical reasoning, procedure, program, repetition, save, sequence</i>	<i>Database, edit, evaluation, format (text), information, Internet, network, online, save, search, server, world wide web</i>	


NC for KS2	<ul style="list-style-type: none"> - 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 - 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 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, evaluating and presenting data and information - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 						
	Year group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge (Breadth)	Y3, 3/4, 4 Cycle A (25/26)	Digital literacy Y3/Y4	Computational thinking – Alien contact	First Lego League Explore	Databases	Starting from Scratch	Digital imagery patterns in nature
Skills		Six lessons taken from Common Sense Education’s excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	An unplugged unit to develop your students into strong computational thinkers by solving a wide range of exciting unplugged problems. Will they be able to solve the problems, earn the trust of an alien species and cement a new galactic friendship?!	Work as a team to find out about this year’s STEM theme. Design, build and program a moving model that links to the theme and shows off your ideas, all while displaying the FIRST Core Values.	Explore different ways to collect, interrogate and present data collaboratively using a range of programs. What is a database? Why and how are they used in real life?	Lay strong foundations for coding as you introduce your class to the visual language of Scratch, while using the PRIMM approach. Teach your students to predict, run and investigate code, before they start to modify existing code and eventually plan and make their own coded animation project.	Take a look at the beauty of repeating patterns in nature and different methods of recreating these with digital art tools and photo editing.
Vocabulary for this unit		Y3: Attention, community, concentration, credit, digital footprint, distraction, Internet, online, permanent, private, private information, respect Y4: Advertising, alter, assumption, community, digital citizen, empathy, identity, interpret, norm, password, persuade, photo retouching, phrase, pledge, responsibility, selfie, symbol, username	Abstraction, algorithm, binary, command, computational thinking, cyberbullying, debug, decomposition, digital footprint, evaluation, inference, logical reasoning, online, output, patterns, personal information, private information, program, repetition/loop/iteration, sequence	Algorithm, code, debug, forward, input, instructions, loop, modify, motor, move, output, predict, program, repeat, robot, sensor, sequence, start, stop, test, turn Core values: Discovery Innovation Impact Inclusion Teamwork Fun	Cloud storage, collaboration, data, database, edit, evaluation, export, field, import, rank, record, save, search, sort	Abstraction, algorithm, block, blocks palette, command, coordinate, costume, debug, decomposition, execute, input, logical reasoning, output, program, repetition, script, selection, sequence, sprite, stage	Alter, attribute, copyright,, digital content, edit, evaluation, export, hue, intellectual property, import, layer, photo manipulation, photo retouching, saturation, save, search, software, web browser


Knowledge (Breadth)	Y3, 3/4, 4 Cycle B 26/27	Digital literacy Y3/Y4	Programming Scratch maze games	FIRST LEGO League Explore	Communication and collaboration	Searching the web	3D design (Sketch Up)
Skills		Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	Teach algorithms, repetition, conditions and variables, while introducing students to Scratch's block-based coding language. Build adventure maze games and design your own levels, characters and objects to collect.	Work as a team to find out about this year's STEM theme. Design, build and program a moving model that links to the theme and shows off your ideas, all while displaying the FIRST Core Values.	Introduce students to email and online collaborative tools. Learn how to safely and appropriately make use of these essential digital tools.	Take a detailed look at all elements of searching the web with care and consideration, covering: searching tricks, validating websites, improving your searches, searching images and searching online maps.	Introduce 3D modelling and design and take a look at how these skills are used in the real world in a huge variety of different careers. Learn the basics of 3D modelling software Sketchup, and then put your design skills to the test with a variety of projects, including designing furniture and buildings.
Vocabulary for this unit		<p>Y3: Attention, community, concentration, credit, digital footprint, distraction, Internet, online, permanent, private, private information, respect</p> <p>Y4: Advertising, alter, assumption, community, digital citizen, empathy, identity, interpret, norm, password, persuade, photo retouching, phrase, pledge, responsibility, selfie, symbol, username</p>	Abstraction, algorithm, block, blocks palette, command, coordinate, costume, debug, decomposition, execute, input, logical reasoning, output, program (noun), program (verb), repetition, script, selection, sprite, stage, variables	<p>Algorithm, code, debug, forward, input, instructions, loop, modify, motor, move, output, predict, program, repeat, robot, sensor, sequence, start, stop, test, turn</p> <p>Core values: Discovery Innovation Impact Inclusion Teamwork Fun</p>	Alter, annotate, attachment, BCC, CC, cloud storage, collaboration, communication, edit, email, Internet, Internet service provider, online, packet, password, personal information, phishing, private information, save, server, services, social interaction, spam, symbol, username, web browser, world wide web	Algorithm, Artificial Intelligence (AI), attribute, chatbot, cookies, copyright, digital content, evaluation, generative AI, inference, Internet, Internet service provider, license, online, PageRank, prompt, search, server, services, web browser, world wide web	3D, 3D modelling, 3D printing, alter, CAD, digital content, edit, export, import, save, simulation, software


Knowledge (Breadth)	Y5, 5/6, 6 Cycle A 25/26	First Lego League Challenge	Getting started with the BBC micro:bit	Digital Literacy Y5/Y6	Manipulating images	Creating instructional videos	Inside the Internet
Skills		Work as a team to investigate this year's STEM theme and come up with innovative solutions to problems. Design, build and program a robot to complete missions linked to the theme, all while displaying the FIRST Core Values.	Introduce students to physical computing with a BBC micro:bit. Control the LED matrix and find out how screens work, learn about inputs and outputs, turn your micro:bit into a scoring or game device while learning about variables, conditionals and iteration	Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	Investigate a range of different artistic styles and how they can be recreated using digital art tools. Digital sculpture is also looked at and combined with photo editing.	Plan, design and create instructional teaching videos. Perfect for reinforcing other areas of the curriculum. Students can create videos to support each other with revision and then share them online to give access to everyone in the class	Get under the skin of the Internet to investigate how the web works, how it's built and written with HTML code. Then learn how to create your own web pages written in HTML and CSS.
Vocabulary for this unit		Algorithm, attachment, autonomous, code, colour sensor, debug, distance sensor, download, gyro sensor, input, iterate, loop, modify, motor, output, port, predict, program, repeat, robot, run, sensor, sequence, start, stop, strategy, test, variable Core values: Discovery Innovation Impact Inclusion Teamwork Fun	Abstraction, algorithm, block, blocks palette, command, coordinate, costume, debug, decomposition, execute, input, logical reasoning, output, program, repetition, script, selection, sequence, sprite, stage	Year 5: Attribute, copyright, cyberbullying, digital citizen, digital footprint, digital media, inference, intellectual property, hardwired, grieving, license, media, media balance, media choices, online video game, personal information, plagiarism, private information, register (online), responsibility, social interaction, upstander Year 6: Advertising, article, avatar, balance, benefit, bias, bully, bullying, bystander, clickbait, commercial curiosity gap, cyberbullying, digital media, empathy, gender stereotypes, headline, inference, media, media balance, media choices, news, personal information, private information, risk, target, upstander	Alter, attribute, copyright, digital content, edit, evaluation, export, hue, intellectual property, import, layer, photo retouching, saturation, safe, search, software, web browser	Annotate, capture, digital content, edit, export, frame, import, layer, narrate, timeline	Computer networks, cookies, CSS (cascading style sheets), data, firewall, hardware, HTML, Internet, Internet service provider, IP address, LAN, network, networked printer, online, password, PC, proxy server, redundancy, router, server, server jobs, services, software, switch, WAN, web browser, wired network, wireless access point (WAP), wireless network, worldwide web


Knowledge (Breadth)	Y5, 5/6, 6 Cycle B 26/27	First Lego League Challenge	Getting started with the BBC micro:bit	Digital Literacy Y5/Y6	Building retro games (Scratch)	Creating instructional videos	What is a computer?
Skills		Work as a team to investigate this year's STEM theme and come up with innovative solutions to problems. Design, build and program a robot to complete missions linked to the theme, all while displaying the FIRST Core Values.	Introduce students to physical computing with a BBC micro:bit. Control the LED matrix and find out how screens work, learn about inputs and outputs, turn your micro:bit into a scoring or game device while learning about variables, conditionals and iteration	Six lessons taken from Common Sense Education's excellent digital citizenship curriculum, covering a wide range of topics including well-being, privacy and security, online identity, relationships, communication and the media.	Choose from 3 classic video game projects with this fantastic coding unit. Analyse the original games, build a simple version of them, then let the students get creative and independently extend their projects.	Plan, design and create instructional teaching videos. Perfect for reinforcing other areas of the curriculum. Students can create videos to support each other with revision and then share them online to give access to everyone in the class	Delve into what really makes a computer a computer. Is a TV a computer? Is a fridge a computer? Is a toilet a computer?! It also investigates just what is inside that metal box, how a computer works, memory, data and binary code. By the end you'll know your RAM from your ROM and your CPU from your GPU.
Vocabulary for this unit		<p>Algorithm, attachment, autonomous, code, colour sensor, debug, distance sensor, download, gyro sensor, input, iterate, loop, modify, motor, output, port, predict, program, repeat, robot, run, sensor, sequence, start, stop, strategy, test, variable</p> <p>Core values: Discovery Innovation Impact Inclusion Teamwork Fun</p>	<p>Abstraction, algorithm, block, blocks palette, command, coordinate, costume, debug, decomposition, execute, input, logical reasoning, output, program, repetition, script, selection, sequence, sprite, stage</p>	<p>Year 5: Attribute, copyright, cyberbullying, digital citizen, digital footprint, digital media, inference, intellectual property, hardwired, grieving, license, media, media balance, media choices, online video game, personal information, plagiarism, private information, register (online), responsibility, social interaction, upstander</p> <p>Year 6: Advertising, article, avatar, balance, benefit, bias, bully, bullying, bystander, clickbait, commercial curiosity gap, cyberbullying, digital media, empathy, gender stereotypes, headline, inference, media, media balance, media choices, news, personal information, private information, risk, target, upstander</p>	<p>Abstraction, algorithm, block, blocks palette, command, coordinate, costume, debug, decomposition, execute, input, logical reasoning, output, program, repetition, script, selection, sequence, sprite, stage, variables</p>	<p>Annotate, capture, digital content, edit, export, frame, import, layer, narrate, timeline</p>	<p>Binary, computer network, CPU (central processor unit), data, digital content, digital media, firewall, GPU (graphics processing unit), hard drive, hardware, input, Internet, Internet service provider, LAN, network, operating system, output, packet, processor, RAM, redundancy, ROM, router, save, server, services, software Switch WAN wireless access point WaP wireless network web browser wire network worldwide web</p>


Cycle A	A1	A2	Sp1	Sp2	Su1	Su2
Y1	iPad skills and apps	Keeping safe and exploring technology	Exploring digital sound	Making multimedia stories	An introduction to digital art	Programming direction
Y2	Writing in different styles	An introduction to animation	Programming with ScratchJr	Keep safe and create	Programming with Logo	Finding and presenting information
Y3	Digital literacy Y3	Computational thinking – Alien contact	First Lego League Explore	Databases	Starting from Scratch	Digital imagery: Patterns in nature
Y3/4	Digital literacy Y4	Computational thinking – Alien contact	First Lego League Explore	Databases	Starting from Scratch	Digital imagery: Patterns in nature
Y4	Digital literacy Y4	Computational thinking – Alien contact	First Lego League Explore	Databases	Starting from Scratch	Digital imagery: Patterns in nature
Y5	First Lego League Challenge	micro:bits	Digital literacy Y5	Manipulating images	Creating instructional videos	Inside the internet
Y5/6	First Lego League Challenge	micro:bits	Digital literacy Y6	Manipulating images	Creating instructional videos	Inside the internet
Y6	First Lego League Challenge	micro:bits	Digital literacy Y6	Manipulating images	Creating instructional videos	Inside the internet


Digital Literacy – Online Safety 


Digital Literacy – Multimedia 


Text 


Sound 


Art and design 


Animation 

Video 

Computer Science 

Control and programming 

Computational thinking 

Information Technology 

Cycle B	A1	A2	Sp1	Sp2	Su1	Su2
Y1	iPad skills and apps	Keeping safe and exploring technology	Exploring digital sound	Making multimedia stories	An introduction to digital art	Programming direction
Y2	Writing in different styles	An introduction to animation	Programming with ScratchJr	Keep safe and create	Programming with Logo	Finding and presenting information
Y3	Digital literacy Y3	Programming Scratch maze games	First Lego League	Communication and collaboration	Searching the web	3D design Sketch up
Y3/4	Digital literacy Y4	Programming Scratch maze games	First Lego League	Communication and collaboration	Searching the web	3D design Sketch up
Y4	Digital literacy Y4	Programming Scratch maze games	First Lego League	Communication and collaboration	Searching the web	3D design Sketch up
Y5	First Lego League Challenge	micro:bits	Digital literacy Y5	Building retro games (Scratch)	Creating instructional videos	What is a computer?
Y5/6	First Lego League Challenge	micro:bits	Digital literacy Y6	Building retro games (Scratch)	Creating instructional videos	What is a computer?
Y6	First Lego League Challenge	micro:bits	Digital literacy Y6	Building retro games (Scratch)	Creating instructional videos	What is a computer?