

Computing Curriculum at Charlestown

Skills and progression document

Identity								
	Nursery	Reception	Y1	Y2	Y3	Y4	Y5	Y6
Knowledge	<p>Use the touchscreen to play games.</p> <p>Use the “Talking Pegs” to record children’s own voices. Can you change your voice in the school environment (shouting down a tunnel, talking into a tube, high and low voices) and record this?</p>	<p>Introduce Seesaw as a learning tool.</p> <p>Writing names on a Seesaw canvas, using the drawing and writing tools (including Capital Letters), supporting however this is usually taught.</p> <p>Scanning QR codes for books.</p> <p>Use Google Earth app, to identify where I am and look at the satellite and street views of school and their street/house.</p>	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • N/A 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • create and debug simple programs • use logical reasoning to predict the behaviour of 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 	<p>Algorithms and Programming:</p> <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 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • 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 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • N/A 	<p>Algorithms and Programming:</p> <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 logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • use sequence, selection, and repetition in programs; work with variables and various forms of input and output
			<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use search technologies effectively, appreciate how 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise

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			<p>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.</p>	<p>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</p>	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>results are selected and ranked, and be discerning in evaluating digital content</p>	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>
			<p>Information Technology:</p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<p>Information Technology:</p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school 	<p>Information Technology:</p> <ul style="list-style-type: none"> • 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 	<p>Information Technology:</p> <ul style="list-style-type: none"> • 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 	<p>Information Technology:</p> <ul style="list-style-type: none"> • 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 	<p>Information Technology:</p> <ul style="list-style-type: none"> • N/A
Skills/Experience			<ul style="list-style-type: none"> • use the web safely to find ideas for an illustration • select and use appropriate 	<ul style="list-style-type: none"> • describe carefully what happens in computer games • use logical reasoning to make predictions 	<ul style="list-style-type: none"> • develop a number of strategies for finding errors in programs 	<ul style="list-style-type: none"> • Children will use an online program to build their Block Coding skills. They will use a spiral 	<ul style="list-style-type: none"> • develop an appreciation of the links between geometry and art • become familiar with the tools and 	<ul style="list-style-type: none"> • Children will use an online program to build their Block Coding skills. They will use a spiral curriculum to

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			<p>painting tools to create and change images on the computer</p> <ul style="list-style-type: none"> • understand how this use of ICT differs from using paint and paper • create an illustration for a particular purpose • know how to save, retrieve and change their work • use sound recording equipment to record sounds • develop skills in saving and storing sounds on the computer • develop collaboration skills as they work together in a group • understand how a talking book differs from a paper-based book • talk about and reflect on their use of Computers • share recordings with an audience. • reflect on their work and act on feedback received. 	<p>of what a program will do</p> <ul style="list-style-type: none"> • test these predictions • think critically about computer games and their use • be aware of how to use games safely and in balance with other activities. 	<ul style="list-style-type: none"> • build up resilience and strategies for problem solving • increase their knowledge and understanding of Scratch • recognise a number of common types of bug in software. 	<p>curriculum to ensure that prior learning is in their long-term memory and then built upon.</p>	<p>techniques of a vector graphics package</p> <ul style="list-style-type: none"> • develop an understanding of turtle graphics • experiment with the tools available, refining and developing their work as they apply their own criteria to evaluate it and receive feedback from their peers • develop some awareness of computer-generated art, in particular fractal-based landscapes. 	<p>ensure that prior learning is in their long-term memory and then built upon.</p>
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Food glorious food								
	Nursery	Reception	Y1	Y2	Y3	Y4	Y5	Y6
Knowledge	Turning the iPad on/off. Turning an app on/off. Use the iPads for fun, even in role play having iPads around or pretend laptops.	Continue using Seesaw and QR codes for learning, such as recording sounds, storytelling and giving explanations to problems.	Algorithms and Programming: <ul style="list-style-type: none"> • create and debug simple programs 	Algorithms and Programming: <ul style="list-style-type: none"> • create and debug simple programs • use logical reasoning to predict the behaviour of 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 	Algorithms and Programming: <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 	Algorithms and Programming: <ul style="list-style-type: none"> • N/A 	Algorithms and Programming: <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output 	Algorithms and Programming: <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 logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • use sequence, selection, and repetition in programs; work with variables and various forms of input and output
			Digital Literacy: <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal information private; identify 	Digital Literacy: <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal information 	Digital Literacy: <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable 	Digital Literacy: <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable 	Digital Literacy: <ul style="list-style-type: none"> • N/A 	Digital Literacy: <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour;

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			where to go for help and support when they have concerns about content or contact on the internet or other online technologies	private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	behaviour; identify a range of ways to report concerns about content and contact	eptable behaviour; identify a range of ways to report concerns about content and contact		identify a range of ways to report concerns about content and contact
			Information Technology: <ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	Information Technology: <ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	Information Technology: <ul style="list-style-type: none"> 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 	Information Technology: <ul style="list-style-type: none"> 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 	Information Technology: <ul style="list-style-type: none"> N/A 	Information Technology: <ul style="list-style-type: none"> 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
Skills/Experience			<ul style="list-style-type: none"> break down a process into simple, clear steps, as in an algorithm use different features of a video camera 	<ul style="list-style-type: none"> Children will use an online program to build their Block Coding skills. They will use a spiral curriculum to ensure that prior 	<ul style="list-style-type: none"> Children will use an online program to build their Block Coding skills. They will use a spiral curriculum to ensure that prior 	<ul style="list-style-type: none"> use an app to edit music create and develop a musical composition, refining their ideas through 	<ul style="list-style-type: none"> Children will use an online program to build their Block Coding skills. They will use a spiral curriculum to ensure that prior learning is in their 	<ul style="list-style-type: none"> use a programming language I have learned previously to code a physical robot

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			<ul style="list-style-type: none">• use a video camera to capture moving images• develop collaboration skills• discuss their work and think about how it could be improved.	learning is in their long-term memory and then built upon.	learning is in their long-term memory and then built upon.	reflection and discussion <ul style="list-style-type: none">• develop collaboration skills• develop an awareness of how their composition can enhance work in other media.	long-term memory and then built upon.	<ul style="list-style-type: none">• use prior learning to aid further learning• draw shapes using a robot• use procedures to complete a task
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Communication								
	Nursery	Reception	Y1	Y2	Y3	Y4	Y5	Y6
Knowledge	<p>Teachers to model looking at age appropriate websites to support their learning, on the iPads and screens.</p> <p>Take part in an age-appropriate conversation on Safer Internet Day.</p>	<p>Introduce the school laptops as another way to Communicate with technology. (Getting to grips with the difference between iPad/laptop.)</p> <p>Use and recognise the save and new page icons.</p> <p>Take part in an age-appropriate conversation on Safer Internet Day.</p>	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • create and debug simple programs 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • N/A 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • N/A 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • 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 	<p>Algorithms and Programming:</p> <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 	<p>Algorithms and Programming:</p> <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 logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • use sequence, selection, and repetition in programs; work with variables and various forms of input and output
			<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use search technologies effectively, appreciate how 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise

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			<p>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</p>	<p>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</p> <ul style="list-style-type: none"> recognise common uses of information technology beyond school 	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>results are selected and ranked, and be discerning in evaluating digital content</p>	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>
			<p>Information Technology:</p> <ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<p>Information Technology:</p> <ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<p>Information Technology:</p> <ul style="list-style-type: none"> 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 search technologies 	<p>Information Technology:</p> <ul style="list-style-type: none"> 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 	<p>Information Technology:</p> <ul style="list-style-type: none"> 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 	<p>Information Technology:</p> <ul style="list-style-type: none"> N/A

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					effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content			
Skills/Experience			<ul style="list-style-type: none"> • understand that a programmable toy can be controlled by inputting a sequence of instructions • develop and record sequences of instructions as an algorithm • program the toy to follow their algorithm • debug their programs • predict how their programs will work 	<ul style="list-style-type: none"> • recognise that different devices can be used to capture photographs • gain experience capturing, editing and improving photos • recognise that images we see may not be real 	<ul style="list-style-type: none"> • develop a basic understanding of how email works • gain skills in using email • be aware of broader issues surrounding email, including 'netiquette' and e-safety • work collaboratively with a remote partner • experience video conferencing 	<ul style="list-style-type: none"> • Children will use an online program to build their HTML Coding skills. They will use a spiral curriculum to ensure that prior learning is in their long-term memory and then built upon 	<ul style="list-style-type: none"> • become familiar with blogs and vlogs as a medium and a genre of writing • create a sequence of blog posts on a theme • incorporate additional media • comment on the posts of others • develop a critical, reflective view of a range of media, including text. 	<ul style="list-style-type: none"> • Children will use an online program to build their HTML Coding skills. They will use a spiral curriculum to ensure that prior learning is in their long-term memory and then built upon.

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Explorers								
	Nursery	Reception	Y1	Y2	Y3	Y4	Y5	Y6
Knowledge	<p>Take photos using the camera app on the iPads.</p> <p>Record short films using the camera app on the iPads.</p> <p>Display these photos and discuss their film/photo work.</p>	<p>Early programming (using Beebots) - Can you make the BeeBot move from x to y? What steps did your BeeBot take? How many forwards do you need to move from x to y?</p> <p>Use the cameras to take photos/film. Display children's photos and videos. Watch the film back on the iPad and screen, so it has purpose.</p>	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • N/A 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • create and debug simple programs • use logical reasoning to predict the behaviour of 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 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • N/A 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • 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 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output 	<p>Algorithms and Programming:</p> <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 logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • use sequence, selection, and repetition in programs; work with variables and various forms of input and output
			<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • N/A 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise

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			<p>Information Technology:</p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<p>Information Technology:</p> <ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<p>Information Technology:</p> <ul style="list-style-type: none"> • 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 search technologies effectively, appreciate how results are selected and ranked, and be 	<p>Information Technology:</p> <ul style="list-style-type: none"> • 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 	<p>Information Technology:</p> <ul style="list-style-type: none"> • N/A 	<p>Information Technology:</p> <ul style="list-style-type: none"> • N/A

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					discerning in evaluating digital content			
Skills/Experience			<ul style="list-style-type: none"> ● find and use pictures on the web ● know what to do if they encounter pictures that cause concern ● group images on the basis of a binary (yes/no) question ● organise images into more than two groups according to clear rules ● sort (order) images according to some criteria ● ask and answer binary (yes/no) questions about their images 	<ul style="list-style-type: none"> ● have a clear understanding of algorithms as sequences of instructions ● convert simple algorithms to programs ● predict what a simple program will do ● spot and fix (debug) errors in their programs. 	<ul style="list-style-type: none"> ● gain skills in shooting live video, such as framing shots, holding the camera steady, and reviewing ● edit video, including adding narration and editing clips by setting in/out points ● understand the qualities of effective video, such as the importance of narrative, consistency, perspective and scene length. 	<ul style="list-style-type: none"> ● develop an educational computer game using selection and repetition ● understand and use variables ● start to debug computer programs ● recognise the importance of user interface design, including consideration of input and output. 	<ul style="list-style-type: none"> ● Children will use an online program to build their HTML Coding skills. They will use a spiral curriculum to ensure that prior learning is in their long-term memory and then built upon. 	<ul style="list-style-type: none"> ● Children will use unplugged activities to consolidate and expand their Computing knowledge.

Structures								
	Nursery	Reception	Y1	Y2	Y3	Y4	Y5	Y6
Knowledge	Begin to use Seesaw to substitute for paper, drawing and writing. Children will already be logged into the Seesaw classroom, they would need to find and select their name to submit their work.	Use Seesaw to create a class/group multimodal text, with audio and visuals. Create an audio book of learning in other areas of learning.	Algorithms and Programming: <ul style="list-style-type: none"> • create and debug simple programs 	Algorithms and Programming: <ul style="list-style-type: none"> • create and debug simple programs • use logical reasoning to predict the behaviour of 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 	Algorithms and Programming: <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 	Algorithms and Programming: <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • 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 	Algorithms and Programming: <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output 	Algorithms and Programming: <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 logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • use sequence, selection, and repetition in programs; work with variables and various forms of input and output
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Skills/Experience			<ul style="list-style-type: none"> Children will use an online program to build their Block Coding skills. They will use a spiral curriculum to ensure that 	<ul style="list-style-type: none"> recall how to use a programmable robot draw shapes using the robot use decomposition to solve bugs 	<ul style="list-style-type: none"> create an algorithm for an animated scene in the form of a storyboard write a program in Scratch to create the animation 	<ul style="list-style-type: none"> Children will use an online program to build their Python Coding skills. They will use a spiral curriculum to ensure that prior 	<ul style="list-style-type: none"> be familiar with semaphore and Morse code understand the need for private information to be encrypted 	<ul style="list-style-type: none"> Children will use an online program to build their Python Coding skills. They will use a spiral curriculum to ensure that prior learning is in

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			prior learning is in their long-term memory and then built upon.	<ul style="list-style-type: none">• make predictions• use sequencing• debug errors in algorithms	<ul style="list-style-type: none">• correct mistakes in their animation programs.	learning is in their long-term memory and then built upon.	<ul style="list-style-type: none">• encrypt and decrypt messages in simple ciphers• appreciate the need to use complex password and to keep them secure• have some understanding of how encryption works on the web.	their long-term memory and then built upon.
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Change								
	Nursery	Reception	Y1	Y2	Y3	Y4	Y5	Y6
Knowledge	<p>Use the Beebots for play. Can you make the BeeBot move forwards, backwards, left and right?.</p> <p>Use electronic book/s instead of printed book/s, for story time and in learning areas.</p>	<p>Being Year 1 ready.</p> <p>KS1 DL objective: “use technology purposefully”</p> <p>KS1 IT: “use technology to create, store and retrieve digital content”</p> <p>Able to talk about what app to use for a task (with an explanation would be incredible!) and about my own digital work, including being able to recall recent events (school trips, birthdays etc).</p>	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • create and debug simple programs 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • create and debug simple programs • use logical reasoning to predict the behaviour of 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 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • N/A 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • 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 	<p>Algorithms and Programming:</p> <ul style="list-style-type: none"> • use sequence, selection, and repetition in programs; work with variables and various forms of input and output 	<p>Algorithms and Programming:</p> <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 logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • use sequence, selection, and repetition in programs; work with variables and various forms of input and output
			<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely and respectfully, keeping personal 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • N/A 	<p>Digital Literacy:</p> <ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise

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Skills and progression document

			<p>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.</p>	<p>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.</p>	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p> <ul style="list-style-type: none"> 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 	<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>		<p>acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>
			<p>Information Technology:</p> <ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<p>Information Technology:</p> <ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<p>Information Technology:</p> <ul style="list-style-type: none"> use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content 	<p>Information Technology:</p> <ul style="list-style-type: none"> 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 	<p>Information Technology:</p> <ul style="list-style-type: none"> N/A 	<p>Information Technology:</p> <ul style="list-style-type: none"> 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

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Skills and progression document

						presenting data and information		presenting data and information
Skills/Experience			<ul style="list-style-type: none"> Children will use an online program to build their Block Coding skills. They will use a spiral curriculum to ensure that prior learning is in their long-term memory and then built upon. 	<ul style="list-style-type: none"> Children will use an online program to build their Block Coding skills. They will use a spiral curriculum to ensure that prior learning is in their long-term memory and then built upon. 	<ul style="list-style-type: none"> develop our understanding of digital devices know what inputs, outputs and processes are compare digital and non-digital devices be introduced to computer networks, including the devices that make up a network's infrastructure discover the benefits of connecting devices in a network 	<ul style="list-style-type: none"> design and write programs for a floor robot design and write programs to solve repetition problems design and write programs to solve selection problems design and write programs to solve sequence and repetition problems 	<ul style="list-style-type: none"> Children will use an online program to build their Python Coding skills. They will use a spiral curriculum to ensure that prior learning is in their long-term memory and then built upon. 	<ul style="list-style-type: none"> create a website for a chosen purpose identify what makes a good webpage use this to design and evaluate their own webpage pay attention to copyright and fair use of media, the aesthetic of the site and navigation paths