



National Curriculum: Progression in ICT

	Nursery (22-36 months and 30-50 months)	Foundation (40-60 months)
	<p>22-36</p> <p>Seeks to acquire basic skills in turning on and operating some ICT equipment.</p> <ul style="list-style-type: none"> Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. <p>30-50</p> <p>Knows how to operate simple equipment, e.g. turns on CD player and uses remote control.</p> <ul style="list-style-type: none"> Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. Knows that information can be retrieved from computers 	<ul style="list-style-type: none"> Completes a simple program on a computer. Uses ICT hardware to interact with age-appropriate computer software.

Lower Phase

	Year 1	Year 2	Year 3
	<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 <p>We are treasure hunters - using programmable toys We are TV chefs - filming the steps of a recipe</p>	<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 <p>We are astronauts - programming on screen We are game testers - exploring how computer games work</p>	<ul style="list-style-type: none"> use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs <p>We are programmers - programming an animation We are bug fixers - finding and correcting bugs in programs</p>

	<p>We are collectors - finding images using the web</p> <ul style="list-style-type: none"> ● create and debug simple programs 		
	<ul style="list-style-type: none"> ● use logical reasoning to predict the behaviour of simple programs <p>We are treasure hunters - using programmable toys</p> <p>We are TV chefs - filming the steps of a recipe</p>	<ul style="list-style-type: none"> ● create and debug simple programs <p>We are astronauts - programming on screen</p> <ul style="list-style-type: none"> ● use logical reasoning to predict the behaviour of simple programs <p>We are astronauts - programming on screen</p> <p>We are game testers - exploring how computer games work</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>We are programmers - programming an animation</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>We are programmers - programming an animation</p> <p>We are bug fixers - finding and correcting bugs in programs</p> <p>We are presenters - videoing performance</p>
	<ul style="list-style-type: none"> ● use technology purposefully to create, organise, store, manipulate and retrieve digital content <p>We are TV chefs - filming the steps of a recipe</p> <p>We are painters - illustrating an ebook</p> <p>We are collectors - finding images using the web</p> <p>We are storytellers - producing a talking book</p> <p>We are celebrating - creating a card digitally</p>	<ul style="list-style-type: none"> ● use technology purposefully to create, organise, store, manipulate and retrieve digital content <p>We are photographers - taking better photographs</p> <p>We are researchers - researching a topic</p> <p>We are detectives - collecting clues</p> <p>We are zoologists - collecting data about bugs</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>We are programmers - programming an animation</p> <p>We are presenters - videoing performance</p> <p>We are vloggers - Making and sharing short screen cast presentation</p> <p>We are communicators - communicating safely on the internet</p> <p>We are opinion pollsters - collecting and analysing data</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>We are vloggers - Making and sharing short screen cast presentation</p>

	<ul style="list-style-type: none"> recognise common uses of information technology beyond school <p>We are treasure hunters - using programmable toys We are TV chefs - filming the steps of a recipe We are painters - illustrating an ebook We are collectors - finding images using the web We are storytellers - producing a talking book We are celebrating - creating a card digitally</p>	<ul style="list-style-type: none"> recognise common uses of information technology beyond school <p>We are game testers - exploring how computer games work We are photographers - taking better photographs We are researchers - researching a topic We are detectives - collecting clues We are zoologists - collecting data about bugs</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>We are vloggers - Making and sharing short screen cast presentation We are communicators - communicating safely on the internet We are opinion pollsters - collecting and analysing data</p>
	<ul style="list-style-type: none"> 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 <p>We are painters - illustrating an ebook We are collectors - finding images using the web We are celebrating - creating a card digitally We are storytellers - producing a talking book</p>	<ul style="list-style-type: none"> 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 <p>We are game testers - exploring how computer games work We are photographers - taking better photographs We are researchers - researching a topic We are detectives - collecting clues We are zoologists - collecting data about bugs</p>	<ul style="list-style-type: none"> use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. <p>We are presenters - videoing performance We are vloggers - Making and sharing short screen cast presentation We are communicators - communicating safely on the internet</p>
<p>Online Safety</p>	<p>Developing online safety guidelines Social and emotional wellbeing and developing resilience Responsible internet use Keeping information safe Digital citizenship Playing games and having fun</p>		

Upper Phase

	Year 4	Year 5	Year 6
Algorithms	<ul style="list-style-type: none"> use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs <p>We are software developers - developing a simple educational game We are toy designers - prototyping an interactive toy We are meteorologists - presenting the weather</p>	<ul style="list-style-type: none"> use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs <p>We are game developers - developing an interactive game We are cryptographers - cracking codes We are artists - fusing geometry and art</p>	<ul style="list-style-type: none"> use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs <p>We are adventure gamers - making a text based adventure game We are computational thinkers - Mastering algorithms for searching, sorting and mathematics</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>We are software developers - developing a simple educational game We are toy designers - prototyping an interactive toy</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>We are game developers - developing an interactive game</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>We are adventure gamers - making a text based adventure game We are computational thinkers - Mastering algorithms for searching, sorting and mathematics</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>We are software developers - developing a simple educational game We are toy designers - prototyping an interactive toy We are musicians - producing digital music We are meteorologists - presenting the weather</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>We are game developers - developing an interactive game We are artists - fusing geometry and art</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>We are adventure gamers - making a text based adventure game We are computational thinkers - Mastering algorithms for searching, sorting and mathematics</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>We are html editors - editing and writing html We are meteorologists - presenting the weather We are co-authors - producing a Wiki We are musicians - producing digital music</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>We are game developers - developing an interactive game We are artists - fusing geometry and art We are web developers - creating a website about cyber safety We are bloggers - sharing experiences and opinions We are architects - creating a virtual space</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>We are advertisers - creating a short television advert We are travel writers - using media and mapping to document a trip We are publishers - creating a year book or magazine</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>We are co-authors - producing a Wiki We are meteorologists - presenting the weather We are musicians - producing digital music</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>We are web developers - creating a website about cyber safety We are architects - creating a virtual space We are bloggers - sharing experiences and opinions</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>We are advertisers - creating a short television advert We are travel writers - using media and mapping to document a trip We are publishers - creating a year book or magazine</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 	<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 	<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>We are musicians - producing digital music We are html editors - editing and writing html We are co-authors - producing a Wiki</p>	<p>We are cryptographers - cracking codes We are web developers - creating a website about cyber safety We are bloggers - sharing experiences and opinions</p>	<p>We are network technicians - exploring computer networks including the internet We are travel writers - using media and mapping to document a trip We are publishers - creating a year book or magazine</p>
	<ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. <p>We are html editors - editing and writing html We are co-authors - producing a Wiki We are musicians - producing digital music</p>	<ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. <p>We are cryptographers - cracking codes We are web developers - creating a website about cyber safety We are bloggers - sharing experiences and opinions</p>	<ul style="list-style-type: none"> • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. <p>We are advertisers - creating a short television advert We are network technicians - exploring computer networks including the internet We are travel writers - using media and mapping to document a trip We are publishers - creating a year book or magazine</p>
	<p>Developing online safety guidelines Social and emotional wellbeing and developing resilience Responsible internet use Keeping information safe Digital citizenship Playing games and having fun</p>		