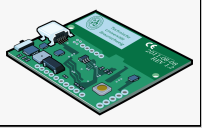



Computing knowledge and skills progression



	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Control systems 	<ul style="list-style-type: none"> *Knows how to operate simple equipment *Know how to use different technological toys *Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movement or a new image 	<ul style="list-style-type: none"> *Show good control and co-ordination in large and small movements *Use directional language to move around the room/playground to a specific place *Experiment with programming a Bee Bot to complete a simple task 	<ul style="list-style-type: none"> *Understand what algorithms are *Understand that algorithms are implemented as programs on digital devices *Understand that programs run by following precise instructions *Create and debug simple programs. *Use logical reasoning to predict the behaviour of programs 		<ul style="list-style-type: none"> *Design, write and debug programs that perform specific goals *Use sequence, selection and repetition in programs: work with variables *Understand what computer networks are e.g. the internet *Predict what will happen accurately 		<ul style="list-style-type: none"> *Combine sequences of instructions to turn a device on and off *Use logical reasoning to detect errors in algorithms *Combine a variable with relational operators (\leq, \geq) to determine when a program changes, e.g. if score >5 say "well done" *Explore "what if?" questions by planning different scenarios for controlled devices *Design computing systems that use sensors such as flowchart *Refine a program based on user feedback *Understand what computer networks are e.g. the internet and the opportunities they offer for communication and collaboration 	
Information Technology 	<ul style="list-style-type: none"> *Shows an interest in technological toys *Use IT hardware to interact with age-appropriate computer software 	<ul style="list-style-type: none"> *Begin to use a mouse/pad to navigate a computer *Know how to use a keyboard and a mouse effectively 	<ul style="list-style-type: none"> *Use technology purposefully to create and organise digital content *Use a mouse or trackpad effectively *Save and reopen work on a digital device *Use technology to find and amend images, as well as crop and recolour *Take digital photographs and record *Use software to explore sound and musical phrases *Use IT to organise, present and 		<ul style="list-style-type: none"> *Select and use software to fulfil a goal *Collect and present data in different ways *Use technology to collaborate *Use IT to compose sound or melodies *Edit and enhance media for particular effect *Create digital content for a purpose *Evaluate and analyse digital content *Storyboard and shoot a stop motion animated sequence 		<ul style="list-style-type: none"> *Use search technologies effectively *Appreciate how results are selected and ranked *Combine software on a range of devices *Generate, amend and combine visual media from different sources for a specific task or audience *Use filters in a database to find out specific information *Capture different images considering lighting, position and angle 	

			understand data, such as graph		<ul style="list-style-type: none"> *Use IT to compose music or sounds to accompany a poem *Create a movie including still images and sound *Select and use software / hardware to produce multimedia soundtrack *Create and modify graphs and charts appropriate to the data being used and analyse the results *Discuss and explore the use of ICT to sort, organise and classify objects based on their properties *Understand copyright issues when sourcing images, video and sound
Digital Literacy 	<ul style="list-style-type: none"> *Use the computer to complete a simple task 	<ul style="list-style-type: none"> *Use a dominant hand *Recall and explain some personal information that they should keep safe when online 	<ul style="list-style-type: none"> *Log onto a computer *Understand how to keep personal information private *Recognise common uses of information technology beyond school *Use technology safely *Know where to go for help when they have concerns about content on the internet 	<ul style="list-style-type: none"> *Use technology safely and respectfully *Recognise acceptable and unacceptable behaviour *Identify a range of ways to report concerns about content or contact on the internet *Know the benefits about different apps and websites *Understand the importance of a good password *Understand the importance of regular screen breaks *Compose an email *Be discerning in evaluating digital content 	<ul style="list-style-type: none"> *Use technology safely, respectfully and responsibly *Recognise acceptable and unacceptable behaviour *Identify a range of ways to report concerns about content or contact on the internet *Know where to find copyright images and audios *Understand which images are appropriate to share online and which are not *Discuss the benefits and dangers of communicating online *Recognise different viewpoints and the impact of incorrect data *Share and exchange ideas via email *Understand that everything online can leave a digital footprint that can last forever *Know the meaning of common website extensions (.org .gov etc) *Know how to identify secure servers (padlock such as internet banking)