Computing skills Progression document

Strand		Early Years Foundation Stage	Key Stage 1	Lower KS2	Upper KS2
Computer Science		**Listening, Attention and Understanding ELG :** children follow instructions involving several ideas or actions. They answer 'how' and 'why' questions about their experiences and in response to stories or events. **Gross and Fine motor skills ELGs:** children show good control and co-ordination in large and small movements. They move confidently in a range of ways, safely negotiating space.	Pupils will be taught to: • 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	Pupils will be taught to: • design write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them in 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.	Pupils will be taught to: • design, write and debug programs that accomplish specific goals; including controlling or simulating physical systems and solving 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

	Digital Literacy	**Creating with materials ELG:** children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. **Being imaginative and expressive ELG:** children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories.	Pupils will be taught to: • 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	Pupils will be taught to: • use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content • Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact	Pupils will be taught to: • use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact
	ICT	**Past and present ELG:** children talk about past and present events in their own lives and in the lives of family members. They know that other children don't always enjoy the same things and are sensitive to this. They know about similarities and differences between themselves and others, and among families, communities and traditions.	Pupils will be taught to: • use technology purposefully to create, organise, store, manipulate and retrieve digital content	Pupils will be taught to: • 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	Pupils will be taught to: • 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