Computing Progression

By the end of Early Years: -Children recognise that a range of technology is used in places such as homes and schools. Children select and use technology for a particular purpose.

By the end of KS1	By the end of KS2 (lower)
• Understand what algorithms are; how they are implemented as programmes on digital devices: and that programs execute by following precise and unambiguous instructions. • Create and debug simple systems • Use logical reasoning to predict the behaviour of simple programs • Recognise common uses of information technology beyond school • Use technology purposefully to create, organise, store, manipulate and retrieve digital content • 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.	• 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 worldwide web; and the opportunities they offer for communication and collaboration • Use search technologies effectively, appreciate how results are selected and ranked, and to be discerning in evaluating digital content. • Select, use and combine a variety of software 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.

Contexts	Year 1	Year 2	Year 3	Year 4
Computer Systems and Networks	Technology all around us	IT around us	Connecting computers	The internet
Creating Media	Digital painting	Digital photography	Stop-frame animation	Audio production

Programming A	Moving a robot	Robot algorithms	Sequencing sounds	Repetition in shapes
Data and Information	Grouping data	Pictograms	Branching databases	Data logging
Creating Media	Digital writing	Digital music	Desktop publishing	Photo editing
Programming B	Programming animations	Programming quizzes	Events and actions in programmes	Repetition in games