Computing at Moorside

National Curriculum:

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.

Our Intent:	***Every child becomes digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology and progress as an active participant in an ever evolving digital world.***		
	Key Stage 1	**Lower Key Stage 2**	**Upper Key Stage 2**
Knowledge	• Recognise common uses of information technology beyond school • Use technology purposefully to create, organise, store, manipulate and retrieve digital content • Understand where to go for help and support with any concerns about content or contact on the internet or other online technologies • Understand what algorithms are and how they are implemented on digital devices	• Recognise familiar forms of input and output devices and how they are used • Understand what servers are and how they provide services to a network • Understand where to go for help and support with concerns about content or contact on the internet or other online technologies • Use logical reasoning to explain how some simple algorithms work • Use logical reasoning to detect and correct errors in algorithms and programs	• Understand how computer networks enable computers to communicate and collaborate • Understand the need to only select age appropriate content • Identify a range of ways to report concerns about content and contact in and out of school • Be discerning when evaluating digital content • Solves problems by decomposing them into smaller parts • Use logical reasoning to explain how increasingly complex algorithms work

Skills	• Use technology purposefully to create digital content • Predict the behaviour of simple programs • Use technology purposefully to create, organise, store, manipulate and retrieve digital content • Use logical reasoning to predict the behaviour of simple programs • Use technology safely and keep personal information private • Create and debug simple programs	• Select, use and combine a variety of software on a range of digital devices to accomplish given goals • Use a variety of software on a range of digital devices • Use technology safely and recognise acceptable and unacceptable behaviour • Use simple search technologies • Select, use and combine a variety of software, systems and content that accomplish given goals • Design, write and debug programs that control or simulate virtual events	• Independently select and use appropriate software for a task • Use and combine a variety of software to design and create content for a given audience, including collecting, analysing, evaluating and presenting data and information • Use technology respectfully and responsibly • Use filters in search technologies effectively • Use variables, sequence, selection, and repetition in programs • Use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently
Implementation	Computing is taught weekly by class teachers across each key stage using PurpleMash (a specially designed software program) which supports the development of computing and digital skills across the curriculum. Computing is implemented across the curriculum through: • Visiting workshops such as Google Internet Legends where children were provided with an engaging, interactive and immersive experience to promote online safety. • Theme days with opportunities to collaboratively share classwork in workshops and whole school assemblies. • Opportunites to develop computing and ICT skills throughout the primary curriculum.		
Impact:	Computing is assessed on Target Tracker termly. The computing coordinator uses the information gathered to support staff with new ideas and suggest up to date resources which help to further develop computing skills across each key stage.		

	Children's computing and ICT skills are embedded and applied throughout all curriculum subjects so that they become proficient users of technology. Childre know the importance of E-Safety, and can keep themselves safe online.