Computing Knowledge and Skills Progression

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Key Learning at Scargill Primary School - National Curriculum (Essential) & Key Learning (Guidance)							
National Curriculum	Even though Computing is not stated on the Early Years Curriculum, using technology and computing learning is used with these learning and development areas: • Communication and language • Personal, social and emotional development • Literacy • Mathematics • Understanding the world	Pupils should 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 • Use technology purposefully to create, organise, store, manipulate and retrieve digital content • 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 should be taught to: • 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 world wide web; and the opportunities they offer for communication and collaboration • 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 • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.			
Computer Science (Taken from Purple Mash)	• Progam a toy using forward, turn and back commands	• Understand what algorithms are • Create and debug simple programs • Use logical reasoning to predict the behavior of simple programs		• 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 • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors • Understand computer networks, including the internet		• Design, write and debug programs that accomplish specific goals including controlling or simulating physical systems • 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 • Understand computer networks including the internet	
Information Technology (Taken from Purple Mash)	• Use technology purposefully in different learning areas	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content		• Use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content		• 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 on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analyzing, evaluating and presenting data and information.	

Digital Literacy (Taken from Purple)	• Know the importance of using technology safely and talking to a trusted adult	• 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	• Use technology safely, respectfully and responsibly • Recognise acceptable and unacceptable behavior • Identify a range of ways to report a concern about content or contact	• Use technology safely, respectfully and responsibly • Recognise acceptable/unacceptable behavior • Identify a range of ways to report concern about content and contact