At Buckshaw Primary School we believe the teaching of computing is to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world. Knowledge and understanding of Computing is of increasing importance for children's future both at home and for employment. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. At Buckshaw Primary School we believe that Computing should promote social interaction and collaborative working and be used throughout the whole curriculum.

	Nursery	Reception	Year 1	Year 2	End of Key Stage Expectations
Computer Science (The Foundation)	As a computer scientist at Buckshaw: 3 & 4 year olds PSED: Can I select and use activities and resources, with help when needed?	As a computer scientist at Buckshaw: Can I explain the reasons for rules, for example, in order to program?	As a computer scientist at Buckshaw: Do I understand what algorithms are and develop strategies to help find bugs in them? Can I make very simple programs?	As a computer scientist at Buckshaw: Can I use algorithms and know that they can be implemented as programs on devices? Do I know what debugging is and find errors in the programs I use? Do I understand that programs execute by following a precise set of instructions? Can I create simple programs and further develop my strategies and logical thinking to find bugs and predict outcomes in my algorithms and programs?	ELG PSED Managing Self: Explain the reasons for rules ELG Speaking: Offer explanations for why things might happen KS1 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

Information Technology (The Application)	3 & 4 year olds: Can I explore how things work? 3 & 4 year olds PSED: Can I select and use activities and resources, with help when needed?	Can I use technology, with support to create and store digital content such as text and images?	Can I use technology with support, to create, store and retrieve digital content such as text and images? Can I use a simple search to find information or files?	Can I use technology with purpose to create, store, organise, retrieve and manipulate digital content? Can I learn to make a range of simple digital assets such as presentations, movies, audio files and graphs? Can I navigate the web and carry out simple searches using suitable search engines and begin to understand that not everything on the internet is true?	ELG PSED Managing Self: Be confident to try new activities and show independence, resilience and perseverance in the face of challenge; KS1 Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school

Digital Literacy (The Implication)					
	3 & 4 year olds PSED: Do I understand gradually how others might be feeling?	Can I show sensitivity to my own and to others' needs? Can I explain the reasons for rules, know right from wrong and try to behave accordingly when using the internet?	Am I beginning to develop an understanding of how to keep my personal information private and understand the need to use technology safely and respectfully? Can I recognise common uses of information technology beyond school? Do I understand the rules and responsibilities outlined by Buckshaw Primary School's acceptable use policy and begin to understand where to go for help when I have concerns?	Do I know my responsibilities from Buckshaw's acceptable use policy and how to report any concerns I have? Can I recognise situations using technology and the internet involving content and contact that are not safe and know where to go for help? Can I begin to develop an understanding of the importance of computers and the internet to communicate? Can I develop my knowledge of the technology used in everyday life in a range of situations and be able to discuss my ideas? Can I show an understanding of how to keep my personal information private and understand the need to use technology safely and respectfully?	ELG PSED Building Relationships: To show sensitivity to my own and to others' needs ELG PSED Managing Self: To explain the reasons for rules, know right from wrong and try to behave accordingly; KS1 Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private To identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

	Year 3	Year 4	Year 5	Year 6	End of Key Stage Expectations
Computer Science (The Foundation)	As a computer scientist at Buckshaw: Can I plan and write algorithms and programs using sequence and repetition? Can I develop my computational thinking strategies to solve problems and errors in my algorithms and programs? Have I experienced a range of different inputs and outputs? Can I describe some components of a computer network and some of the ways in which computer networks can be used?	As a computer scientist at Buckshaw: Am I able to design and write more complex algorithms and programs using sequence, repetition and selection? Can I develop my computational thinking to help debug my programs and design and solve problems and tasks? Can I use programs to control external devices such as sensors, motors and robots?	As a computer scientist at Buckshaw: Am I able to design and write programs using sequence, repetition, selection and variables? Do I have a greater understanding of how to use selection and repetition in more complex programs? Can I further develop my computational thinking to plan and decompose tasks; explaining how the algorithms work and correct errors in my programs? Can I plan and write programs to control external devices such as sensors and motors and explain about the inputs and outputs used?	As a computer scientist at Buckshaw: Am I able to design and create more complex programs using sequence, repetition, selection and variables? Can I demonstrate how to decompose and evaluate my tasks and correct errors in my algorithms and programs? Can I be confident in my knowledge of inputs and outputs and plan and write programs to solve tasks to control external devices such as sensors and motors?	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 programme

Information Technology (The Application)	Can I use a variety of software and devices to create digital assets such as programs, graphs and multimedia content for a defined purpose? Can I begin to develop my search strategies by refining my use of keywords and starting to use appropriate key phrases and questions?	Can I use and combine a variety of software and devices with increasing independence, to create a range of digital assets such as programs, databases, systems and multimedia content? Can I develop effective search techniques and realise that not all information on the internet is trustworthy and there is a need to verify its reliability?	Can I select, use and combine a range of software and use a wider range of devices to create a variety of digital assets such as programs, systems, databases, spreadsheets and multimedia content for a defined purpose? Can I continue to develop my effective search techniques and start to develop strategies to verify the reliability and accuracy of information on the internet?	Can I independently select, use and combine a wide range of software on a variety of devices? Can I design and create a range of digital assets such as programs, systems and multimedia content for a defined purpose and audience? Can I use advanced searches and use strategies to verify the reliability and accuracy of information on the internet?	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

Digital Literacy (The Implication)					
	Am I able to use technology safely and respectfully and have an understanding of how to keep information secure? Do I realise the importance of reporting any concerns I have using the internet and other communication technologies, and know some ways in which I can do it? Can I develop an understanding of what is acceptable an unacceptable online behaviour?	Am I able to use technology respectfully, responsibly and safely, knowing how to keep their information and passwords secure? Do I know different ways of reporting concerns about content and contact involving the internet and other communication technologies? Do I have a greater understanding of what is acceptable and unacceptable online behaviour?	Can I use technology safely, respectfully and responsibly and continue to develop skills to identify risks involved with contact and content including developing an understanding of digital footprints? Do I know a range of ways of reporting concerns about content and contact involving the internet and other communication technologies? Do I understand what acceptable and unacceptable online behaviour is?	Can I be a competent user of technology using it safely, respectfully and responsibly and know about digital footprints and 'strong' passwords? Can I demonstrate that I can identify the risks involved with content and contact and they know a wide range of ways of reporting any concerns they have? Do I understand – with confidence - what acceptable and unacceptable online behaviour is?	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 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