



Computing Progression Grid

KS1	LKS2	UKS2
<p>Intent:</p> <p>It is our intention to enable children to find, explore, analyse, exchange and present information. We also focus on developing the skills necessary for children to be able to use information in a discriminating and effective way. We want children to know more, remember more and understand more in computing so that they leave primary school computer literate. Computing skills are a major factor in enabling children to be confident, creative and independent learners and it is our intention that children have every opportunity available to allow them to achieve this.</p> <p>We intend to build a computing curriculum that develops pupil's learning and results in the acquisition of knowledge of the world around them that ensures all pupils can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.</p> <p>We intend to build a computing curriculum that prepares pupils to live safely in an increasingly digital British society where pupils can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems</p> <ul style="list-style-type: none"> • Ensure we are covering skills and concepts from the National Curriculum • We aim to develop their computing and coding skills. • We will ensure children have the opportunity to use and develop these skills throughout the lessons. 		
<p>Implementation:</p> <ul style="list-style-type: none"> • We will structure lessons so that prior learning and revision of key skills are continuously built upon. • We will ensure key skills and techniques are introduced and used with lessons. 		
<p>Impact:</p> <ul style="list-style-type: none"> • We want children to develop a love of computing and coding. • We will measure the impact of learning through assessing their development of key skills. 		

Computing Progression and Assessment Grids

	Year 1	Year 2
Computers and using computers	recognise common uses of information technology in the home and school environment · use technology to purposely create digital content	· recognise common uses of information technology beyond school · use technology to purposely create, organise, store, manipulate and retrieve digital content · use technology to purposely create digital content comparing the benefits of different programs
E-Safety	understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies	use technology safely and keep personal information private
Coding	· predict the behaviour of simple programs · understand what algorithms are and how they are implemented on digital devices	· use logical reasoning to predict the behaviour of simple programs · create simple programs · create and debug simple programs · debug simple programs by using logical reasoning to predict the actions instructed by the code

		<ul style="list-style-type: none"> · understand that programs execute by following precise and unambiguous instruction
	Year 3	Year 4
Computers and using computers	<ul style="list-style-type: none"> · recognise familiar forms of input and output devices and how they are used · make efficient use of familiar forms of input and output devices · with support select and use a variety of software to accomplish goals 	<ul style="list-style-type: none"> · use other input devices such as cameras or sensors · with support select and use a variety of software on a range of digital devices · with support select, use and combine a variety of software on a range of digital devices to accomplish given goals
E-Safety	<ul style="list-style-type: none"> · use technology safely and respectfully, keeping personal information private · use technology safely and recognise acceptable and unacceptable behaviour 	<ul style="list-style-type: none"> · use technology responsibly and understand that communication online may be seen by others · understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies
Coding	<ul style="list-style-type: none"> · design, write and debug programs that control or simulate virtual events · use logical reasoning to explain how some simple algorithms work 	<ul style="list-style-type: none"> · decompose programs into smaller parts · use logical reasoning to detect and correct errors in algorithms and programs · select, use and combine a variety of software, systems and content that accomplish given goals
Networks	<ul style="list-style-type: none"> · understand that computer networks enabling the sharing of data and information · understand that the internet is a large network of computers and that information can be shared between computers 	<ul style="list-style-type: none"> · understand what services are and how they provide services to a network

Net Searching	<ul style="list-style-type: none"> · use simple search technologies · use simple search technologies and recognise that some sources are more reliable than others 	<ul style="list-style-type: none"> · understand how results are selected and ranked by search engines
	Year 5	Year 6
Computers and using computers	<ul style="list-style-type: none"> · independently select and use appropriate software for a task · independently select, use and combine a variety of software to design and create content for a given audience 	<ul style="list-style-type: none"> · independently select, 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 · design and create a range of programs, systems and content for a given audience · independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information
E-Safety	<ul style="list-style-type: none"> · understand the need to only select age appropriate content 	<ul style="list-style-type: none"> · use technology respectfully and responsibly · identify a range of ways to report concerns about content and contact in and out of school
Coding	<ul style="list-style-type: none"> · design, input and test an increasingly complex set of instructions to a program or device · design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems · design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated · design, write and test simple programs with opportunities for selection, where a particular result will happen based on actions or situations controlled by the user · use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency 	<ul style="list-style-type: none"> · include use of sequences, selection and repetition with the hardware used to explore real world systems · solve problems by decomposing them into smaller parts · create programs which use variables · use variables, sequence, selection and repetition programs · use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently
Networks	<ul style="list-style-type: none"> ● begin to use internet services to share and transfer data to a third party 	<ul style="list-style-type: none"> · understand how computer networks enable computers to communicate and collaborate

		· begin to use internet searches within his/her own creations to share and transfer data to a third party
Net Searching	· use filters in search technologies effectively · use filters in search technologies effectively and appreciate how results are selected and ranked	use filters in search technologies effectively and is discerning when evaluating digital content

Key Vocabulary	
KS1	KS2
Algorithm Programme Digital Device Instructions Create Debug Simple Programmes organise store manipulate retrieve Safety personal information Internet Online Offline	Design Write Solve Problems Sequence Selection Repetition Variables Input Output Algorithms Detect/Correct errors World Wide Web Software