



HORSLEY  
C of E PRIMARY SCHOOL

## Computing Progression of Knowledge and Skills Map

	EYFS (KS1 readiness objectives)	By the end of KS1 children should be able:
Computers & Using Computers	<ul style="list-style-type: none"> <li>• Awareness of different technologies in and out of school</li> <li>• Awareness of the cause and effect of technology</li> <li>• Awareness of digital storage of information- photography, digital writing and research information</li> <li>• Awareness of input and outputs of devices</li> <li>• Can use technology to express creatively and constructively</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise common uses of information technology in the home and school environment</li> <li>• Use technology to purposely create digital content</li> <li>• Recognise common uses of information technology beyond school</li> <li>• Use technology to purposely create, organise, store, manipulate and retrieve digital content</li> <li>• Use technology to purposely create digital content comparing the benefits of different programs</li> </ul>
E-Safety	<ul style="list-style-type: none"> <li>• Awareness of different technologies in and out of school</li> <li>• Awareness of the cause and effect of technology</li> <li>• Awareness of digital storage of information- photography, digital writing and research information</li> <li>• Awareness of input and outputs of devices</li> <li>• Can use technology to express creatively and constructively</li> </ul>	<ul style="list-style-type: none"> <li>• Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies</li> <li>• Use technology safely and keep personal information private</li> </ul>
Coding	<ul style="list-style-type: none"> <li>• Awareness of the cause and effect of technology</li> <li>• Awareness of digital storage of information- photography, digital writing and research information</li> <li>• Awareness of input and outputs of devices</li> <li>• Can use technology to express creatively and constructively</li> </ul>	<ul style="list-style-type: none"> <li>• Predict the behaviour of simple programs. Understand what algorithms are and how they are implemented on digital devices</li> <li>• Use logical reasoning to predict the behaviour of simple programs</li> <li>• Create simple programs</li> <li>• Create and debug simple programs</li> <li>• Debug simple programs by using logical reasoning to predict the actions instructed by the code</li> <li>• Understand that programs execute by following precise and unambiguous instruction</li> </ul>

Net Searching			
Networks			



## Computing Progression of Knowledge and Skills Map

	<b>By the end of LKS2 children should be able:</b>
Computers & Using Computers	<ul style="list-style-type: none"> <li>• Recognise familiar forms of input and output devices and how they are used</li> <li>• Make efficient use of familiar forms of input and output devices with support select and use a variety of software to accomplish goals</li> <li>• Use other input devices such as cameras or sensors</li> <li>• With support select and use a variety of software on a range of digital devices</li> <li>• With support select, use and combine a variety of software on a range of digital devices to accomplish given goals</li> </ul>
E-Safety	<ul style="list-style-type: none"> <li>• Use technology safely and respectfully, keeping personal information private</li> <li>• Use technology safely and recognise acceptable and unacceptable behaviour</li> <li>• Use technology responsibly and understand that communication online may be seen by others</li> <li>• Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies</li> </ul>
Coding	<ul style="list-style-type: none"> <li>• Design, write and debug programs that control or simulate virtual events</li> <li>• Use logical reasoning to explain how some simple algorithms work</li> <li>• Decompose programs into smaller parts</li> <li>• Use logical reasoning to detect and correct errors in algorithms and programs</li> <li>• Select, use and combine a variety of software, systems and content that accomplish given goals</li> </ul>
Networks	<ul style="list-style-type: none"> <li>• Understand that computer networks enabling the sharing of data and information</li> <li>• Understand that the internet is a large network of computers and that information can be shared between computers</li> <li>• Understand what services are and how they provide services to a network</li> </ul>
Net Searching	<ul style="list-style-type: none"> <li>• Use simple search technologies</li> <li>• Use simple search technologies and recognise that some sources are more reliable than others</li> <li>• Understand how results are selected and ranked by search engines</li> </ul>



## Computing Progression of Knowledge and Skills Map

	By the end of UKS2 children should be able:
Computers & Using Computers	<ul style="list-style-type: none"> <li>Independently select and use appropriate software for a task</li> <li>Independently select, use and combine a variety of software</li> <li>To design and create content for a given audience</li> <li>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</li> <li>Design and create a range of programs, systems and content for a given audience</li> <li>Independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information</li> </ul>
E-Safety	<ul style="list-style-type: none"> <li>Understand the need to only select age-appropriate content</li> <li>Use technology respectfully and responsibly</li> <li>Identify a range of ways to report concerns about content and contact in and out of school</li> </ul>
Coding	<ul style="list-style-type: none"> <li>Design, input and test an increasingly complex set of instructions to a program or device</li> <li>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems</li> <li>Design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated</li> <li>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</li> <li>Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency</li> <li>Include use of sequences, selection and repetition with the hardware used to explore real world systems</li> <li>Solve problems by decomposing them into smaller parts</li> <li>Create programs which use variables</li> <li>Use variables, sequence, selection and repetition programs</li> <li>Use logical reasoning to explain how increasingly complex algorithms</li> <li>Work and to detect and correct errors in algorithms and programs efficiently</li> </ul>
Networks	<ul style="list-style-type: none"> <li>Begin to use internet services to share and transfer data to a third party</li> <li>Understand how computer networks enable computers to communicate and collaborate</li> <li>Begin to use internet searches within his/her own creations to share and transfer data to a third party</li> </ul>
Net Searching	<ul style="list-style-type: none"> <li>Use filters in search technologies effectively</li> <li>Use filters in search technologies effectively and appreciate how results are selected and ranked</li> <li>Use filters in search technologies effectively and is discerning when evaluating digital content</li> </ul>