



# Roe Green Infant School

## Computing - Skills Progression



	Reception	Year 1	Year 2	LKS2	UKS2
E-Safety	Understands that you can find information from the internet. Understands that we should only access 'safe sites'.	<ul style="list-style-type: none"> <li>Knows about the internet and beginning to understand some key age appropriate safety 'rules.'</li> </ul>	<ul style="list-style-type: none"> <li>Can talk about key online safety rules</li> <li>Understand where to go for help when they have concerns on the internet or other online technologies</li> </ul>	<ul style="list-style-type: none"> <li>Use technology safely and respectfully, keeping personal information private and understand that communication online maybe seen by others</li> <li>Use technology safely and recognise acceptable and unacceptable behaviour</li> <li>Know where to go for help when they have concerns on the internet or other online technologies</li> </ul>	<ul style="list-style-type: none"> <li>Understand the need to only select age appropriate content</li> <li>Can demonstrate 'web savvy' awareness from a range of given scenarios</li> <li>Can discuss a range of E-Safety and E-Security (privacy) issues.</li> <li>Knows a range of ways to report concerns or inappropriate behaviour.</li> </ul>
Using Computers	<ul style="list-style-type: none"> <li>Naming parts of a computer</li> <li>Complete a simple program on a computer.</li> <li>Uses ICT hardware to interact with age-appropriate computer software.</li> </ul>	<ul style="list-style-type: none"> <li>Use technology to purposely create digital content</li> </ul>	<ul style="list-style-type: none"> <li>Recognise common uses of technology beyond school</li> <li>Use technology to purposely create, organise, store, manipulate and retrieve digital content</li> </ul>	<ul style="list-style-type: none"> <li>Recognise different forms of input and output devices and how they are used</li> <li>Can use some software to create / assemble digital content for clear purpose. It could be for text, images, animation, sound etc.</li> <li>With support select, use and combine a variety of software on digital devices to design and create.</li> </ul>	<ul style="list-style-type: none"> <li>Independently select, use appropriate software for a task and combine a variety of software to collect, analyse, evaluate, present data and information</li> <li>Use and combine a variety of software to design and create content for an audience such as DT, art or music projects</li> </ul>
Understanding Technology (Individual)	<ul style="list-style-type: none"> <li>Explores a range of devices in everyday life. Shows an interest in technological toys and equipment.</li> <li>Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images.</li> <li>Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. <b>(ELG)</b></li> </ul>	<ul style="list-style-type: none"> <li>Show an awareness of the range of devices in everyday life.</li> </ul>	<ul style="list-style-type: none"> <li>Show an awareness of the range of inputs to a computer (IWB, mouse, keyboard, microphone, touchscreen etc.)</li> </ul>	<ul style="list-style-type: none"> <li>Have an awareness in the use of computing devices and explain why their choice was made</li> <li>Make choices about devices and tools they use for specific purposes</li> <li>Begin to show awareness of specific tools used in in everyday life</li> <li>.</li> </ul>	<ul style="list-style-type: none"> <li>Use devices and tools they use for specific purposes</li> <li>Evaluate the tools available to them including unfamiliar ones</li> <li>Demonstrate awareness of outcomes depending on choices regarding tools and devices.</li> </ul>
Understanding Technology (The internet)	<ul style="list-style-type: none"> <li>Knows that information can be retrieved from computers.</li> </ul>	<ul style="list-style-type: none"> <li>Recognise common uses of information technology in the home and school environment.</li> <li>Show awareness that what is created on a digital device can be shown on another device (tablets, laptops, desktops, printer, projector)</li> </ul>	<ul style="list-style-type: none"> <li>Begin to understand internet services and WWW.</li> <li>Use websites and manage journey around them (using back and forward buttons).</li> </ul>	<ul style="list-style-type: none"> <li>Show awareness that not all the resources that are used are not on the device they are using.</li> <li>Begin to show an understanding of URL'S</li> <li>show awareness of the need of accuracy in spelling to search effectively.</li> </ul>	<ul style="list-style-type: none"> <li>Perform searches on different search engines and check the results against each other</li> <li>Use filters in search technologies effectively</li> <li>Can check the results of web searches i.e. how useful, relevant, reasonable, valid accurate and appreciate how search results are selected and ranked</li> <li>.</li> </ul>
Electronic Communication			<ul style="list-style-type: none"> <li>Children begin to work together to request or share information from their class via email.</li> </ul>	<ul style="list-style-type: none"> <li>Show understanding that their username and passwords (my USO) is key to accessing personal resources e.g. my documents emails, online banking, personal files.</li> </ul>	<ul style="list-style-type: none"> <li>Share ICT work via email.</li> <li>Where possible respond to emails received within the school's network.</li> <li>Abide by the schools rules for e-safety</li> </ul>

Handling Information	<ul style="list-style-type: none"><li>Begin to use a simple pictogram programme to show graphics. (whole class)</li></ul>	<ul style="list-style-type: none"><li>Begin to use a simple pictogram programme to show graphics.</li></ul>	<ul style="list-style-type: none"><li>Can use a programme to answer questions and create content for a clear purpose (block chart, bar chart, pie chart, line graph)</li><li>Can save, retrieve and edit their work.</li></ul>	<ul style="list-style-type: none"><li>Can create and store some data and then find answers to straight forward questions.</li><li>Can use a data file to find answers to questions by using data logging or a survey or a prepared database or a simple spreadsheets.</li></ul>	<ul style="list-style-type: none"><li>Can collect, analyse and draw conclusions from data, such as through a survey, database or spreadsheets.</li><li>Independently solve a problem by planning and carrying out data collection</li><li>Organising and analysing data by using complex searches using a database and by drawing</li></ul>
Digital Images	<ul style="list-style-type: none"><li>Uses simple paint packages on a smartboard.</li></ul>	<ul style="list-style-type: none"><li>Begin to use simple tools in a paint package</li></ul>	<ul style="list-style-type: none"><li>Make straight forward edits of their digital work (text, image) using simple editing tools to both correct or improve it.</li></ul>	<ul style="list-style-type: none"><li>Manipulate digital images using a range of tools in the appropriate software.</li><li>Make a short animation from images (still or moving) that they have sourced or created.</li></ul>	<ul style="list-style-type: none"><li>Can combine resources from different sources into a digital presentation.</li><li>Use images that they have sourced, captured, manipulated as part of a bigger project. Use these in a digital presentation, evaluate it and show clearly intended purpose and audience</li></ul>
Research		<ul style="list-style-type: none"><li>Begin to show awareness of different information</li><li>Whole class, explore information from different sources</li></ul>	<ul style="list-style-type: none"><li>Children to use simple search engines to find information and images.</li><li>Children can save, edit and retrieve their work</li></ul>	<ul style="list-style-type: none"><li>Children to answer their own questions using different search engines.</li><li>Use information or resources they have found.</li><li>Can talk freely about information and resources found.</li><li>Begin to understand that all information found is not always accurate.</li><li>Continually to be aware of staying safe on the internet in school and at home.</li><li>Accept the school's Internet Safety policy.</li></ul>	<ul style="list-style-type: none"><li>Use copy and paste and start to understand the purpose of copyright.</li><li>Understand that results are selected and ranked by search engines.</li><li>Independently use a variety of search engines to find a range of information on a specific topic.</li><li>Be able to check and validate information for accuracy.</li></ul>
Control (Algorithms)	<ul style="list-style-type: none"><li>Programming a beebot to move from 'A' to 'B'</li></ul>	<ul style="list-style-type: none"><li>Predict the behaviour of simple programmes.</li><li>Understand what algorithms are.</li><li>Control everyday devices to see different outcomes.</li></ul>	<ul style="list-style-type: none"><li>Use logical reasoning to predict simple behaviours</li><li>Control a device on and off the screen.</li><li>create and debug simple programmes</li><li>Understand that programs execute by following precise instructions</li></ul>	<ul style="list-style-type: none"><li>Children can type a short set of instructions to programme a device on or off screen and be able to predict, test and modify.</li><li>Use logical reasoning to explain how simple algorithms work by detecting and correcting errors in algorithms.</li></ul>	<ul style="list-style-type: none"><li>Design, input and test a complex set of instructions to a programme or device.</li><li>Design, write and test simple programmes where a particular result will happen based on actions.</li><li>Use logical reasoning to explain how increasingly complex algorithms work</li><li>Independently create sequences of commands to devices.</li><li>Solve problems by decomposing them into smaller parts.</li><li>Detect errors, evaluate and modify programmes.</li></ul>