

ICT SKILLS

Skill/domain	Key stage 1	Lower Key Stage 2	Upper Key Stage 2
Keyboard/Word processing	<p>Use index fingers (left and right hand) on a keyboard to build words & sentences</p> <p>Know when and how to use the RETURN/ ENTER key. Use SHIFT & CAPS LOCK to enter capital letters. Use DELETE & BACKSPACE buttons to correct text. Create sentences, SAVE & edit later</p>	<p>Amend text & save changes</p> <p>Use a keyboard effectively, including the use of keyboard shortcuts</p> <p>Use individual fingers to input text & use SHIFT key to type characters</p>	<p>Amend text by highlighting & using SELECT/ DELETE & COPY/ PASTE</p> <p>Use font sizes & effects such as bullet points appropriately</p> <p>Know how to use a spell check</p> <p>Evaluate the effectiveness of their own work and the work of others</p>
Mouse	<p>Use a mouse to rearrange objects and pictures on a screen</p>	<p>Use right click and left clicks on a mouse.</p>	<p>Use a mouse to highlight text, Copy and Paste.</p>
Multimedia	<p>Use a camera or sound recorder to collect photos or sound</p> <p>Add text and images to a template document using an image & word bank</p>	<p>Add pictures to presentations to enhance the effect</p> <p>Use video editing software such I-movie to cut,</p> <p>Explore the use of video, animation & green screening</p>	<p>Explore the effects of multimedia (photos, video, sound) in a presentation or video and show how they can be modified</p> <p>Store, retrieve, and export my recording to a computer</p>

			<p>Explain how to improve a video by reshooting and editing</p> <p>Select the correct tools to make edits to my video</p>
Paint/Art	Use paint programs to create simple pictures	Use an increasing variety of tools and effects in paint programs and talk about their choices	Use a wide range of effects in art programs and online tools, discussing the choices made and their effectiveness

<u>Programming</u>						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Help adults operate equipment around the school, independently operating simple equipment	Physically follow & give each other instructions to move around	Physically follow and give each other forward, backward & turn (right-angle) instructions	Plan & enter a sequence of instructions on a robot specifying distance & turn to achieve specific outcomes, debug the sequence where necessary	Create & edit procedures typing logo commands including pen up, pen down & changing the trail of the turtle	Explore procedures using repeat to achieve solutions to problems with Logo & a floor robot	Record in some detail the steps (the algorithm) that are required to achieve an outcome & refer to this when programming
Use simple software to make things happen	Explore outcomes when buttons are pressed in sequences on a robot	Articulate an algorithm to achieve a purpose	Test & improve / debug programmed sequences.	Use sensors to 'trigger' an action such as turning the lights on using Probot if it 'goes through a tunnel',	Talk about procedures as parts of a program	Predict the outputs for the steps in an algorithm

				or reversing if it touches something		
Press buttons on a floor robot and talk about the movements	Begin to use software to create movement & patterns on a screen	Plan and enter a sequence of instructions to achieve an algorithm, with a robot specifying distance & turn and drawing a trail	Begin to type logo commands to achieve outcomes.	Solve open-ended problems with a floor robot, Logo & other software using efficient procedures to create shapes & letters	Refine procedures to improve efficiency	Increase confidence in the process to plan, program, test & review a program
Explore options and make choices with toys, software and websites	Begin to identify an algorithm to achieve a specific purpose	Explore outcomes when giving instructions in a simple Logo program	Explore outcomes when giving sequences of instructions in Logo software	Experience a variety of resources to extend knowledge & understanding of programming.	Use a variable to replace number of sides in a regular shape	Write a program which follows an algorithm to solve a problem for a floor robot or other model
	Execute a program on a floor robot to achieve an algorithm	Watch a Logo program execute & debug any problems	Use repeat to achieve solutions to tasks	Create an algorithm & a program that will use a simple selection command for a game	Explore instructions to control software or hardware with an input & using if... then... commands	Write a program which follows an algorithm to achieve a planned outcome for appropriate programming software

	Use the word debug to correct any mistakes when programming a floor robot	Predict what will happen & test results	Solve open-ended problems with a floor robot & Logo including creating simple regular polygons, making sounds & planning movements such as a dance	Begin to correct errors (debug) as they program devices & actions on screen, & identify bugs in programs written by others	Explore a computer model to control a physical system	Control on screen mimics & physical devices using one or more input & predict the outputs
	Begin to predict what will happen for a short sequence of instructions in a program	Talk about similarities & differences between floor robots and logo on screen	Create an algorithm to tell a joke or a simple story	Use an algorithm to sequence more complex programming into order	Change inputs on a model to achieve different outputs	Understand how sensors can be used to measure input in order to activate a procedure or sequence & talk about applications in society
			Sequence pre-written lines of programming into order	Link the use of algorithms to solve problems to work in Maths, Science & DT.	Refine & extend a program	Create variables to provide a score/trigger an action in a game
			Talk about algorithms planned by others & identify any problems & the expected outcome		Identify difficulties & articulate a solution for errors in a program	Link errors in a program to problems in the original algorithm

					Group commands as a procedure to achieve a specific outcome within a program	
					Write down the steps required (an algorithm) to achieve the outcome that is wanted and refer to this when programming.	