## Wilkinson Primary School – Computing Skills Progression

## Key Stage 1

	Aut	umn	Sp	ring	Sun	nmer
	Fairy Tales		Our Country		Toys	
	Broadcaster	Programmer	Programmer	Data Handler	Film Maker	Designer
	Create a traditional tale audio book.	Programme a Bee Bot over a route on a map.	Use scratch jr to create a short story about a flight	Use 2Graph to represent a survey on children's holidays	Instructions for making a puppet	Creating a design for a toy car.
Year 1	<ul> <li>use their voice expressively to bring the story to life</li> <li>begin to use the basic principles of editing (trimming audio, moving audio around, the idea that sound is shown as a waveform)</li> <li>suggest ways they could improve their work</li> </ul>	<ul> <li>Press the buttons in the correct order to make my robot do what I want.</li> <li>Describe what actions I will need to do to make something happen and begin to use the word algorithm.</li> <li>Begin to use the word debug when I correct mistakes when I program.</li> <li>Begin to predict what will happen for a short sequence of instructions.</li> </ul>	<ul> <li>Create a simple computer program that includes multiple instructions.</li> <li>Test a simple program, notice bugs and make changes to improve it</li> <li>Use the word debug</li> <li>Use the word algorithm</li> </ul>	<ul> <li>View a range of graphs, charts and spread sheets and understand the differences between the ways in which the data can be presented.</li> <li>Identify where data is presented in graphical form in the wider world.</li> <li>Work independently or with other learners to decide on the types of data to be collected and how that data can be presented.</li> <li>Use a simple graphing application to present previously collected data.</li> </ul>	<ul> <li>Begin to understand the basic principles of editing (trimming, moving clips, etc.)</li> <li>Use a plan as a basis for filming scenes.</li> <li>Work with other learners to write a simple script and storyboard in response in preparation for filming.</li> <li>Work with others to use a recording device to record digital video footage, following a simple script or storyboard.</li> </ul>	<ul> <li>Understand that technology can be used to manufacture objects created onscreen</li> <li>Work individually or with others learner to modify and/or create a simple design</li> <li>Select and use a range of simple drawing tools with software to produce a design</li> </ul>

	The Hor	ne Front	In	dia	Grea	t Fire
	Programmer	Musician	Presenter	Publisher	Programmer	Artist
	Scratch game: move air raid warden to different houses	Soundscape for an air raid.	Powerpoint of information about an aspect of India	Create an e-book based on Indian animals	Conversation between two people about GFoL using Scratch	Pictures of the Great Fire of London using 2Paint
Year 2	<ul> <li>Create a simple computer program that includes multiple instructions.</li> <li>Test a simple program, notice bugs and make changes to improve it.</li> <li>Describe to other children how they created a program, and what they hoped to achieve.</li> </ul>	<ul> <li>Select audio clips that bring a story to life</li> <li>understand and use the basic principles of editing (trimming, reordering, fading in and out the idea that sound is shown as a waveform)</li> <li>suggest ways they could improve their work</li> </ul>	<ul> <li>View a variety of presentations; understand that some presentations are more effective than others and be able to offer a simple explanation as to why.</li> <li>Work independently or with other learners to plan a simple presentation e.g. using a storyboard/plan.</li> <li>Work independently or with other learners to add a selection of simple objects, including text and media, to a presentation.</li> <li>Use simple appropriate animations to add emphasis.</li> </ul>	<ul> <li>Design and create publications (e.g. eBooks) that combine text, images and audio.</li> <li>Format text and images in a publication to engage and interest the reader.</li> <li>View own publications and evaluate against agreed success criteria.</li> </ul>	<ul> <li>Be able to describe what happened when a set of instructions was run, and whether it achieved the desired outcome.</li> <li>Suggest simple suggestions why a program did not work correctly.</li> <li>Be able to predict the behaviour of a simple program, and to test that prediction.</li> <li>Suggest specific reasons why a program did not work correctly, and work, with support, to solve issues.</li> </ul>	<ul> <li>Begin to apply simple editing to digital images such as crop, effects and filters.</li> <li>Created a piece of digital work which includes a variety of styles and tool techniques.</li> <li>Reflect upon their own artwork against agreed success criteria.</li> </ul>

## **Lower Key Stage 2**

	Would Yo	ou Survive?	The Eg	yptians	Br	razil
	Film Maker	Programmer	Designer	Publisher	Prog/Animator	Broadcaster
	Video advert for a survival tool/piece of equipment	Creating an escape maze game.	Design an Egyptian temple/tomb	Web Page on an aspect of Egyptian life.	Scratch animation giving information about Brazil	Brazilian Radio show
Year 3	<ul> <li>Independently use a recording device to record digital video footage, following a simple script or storyboard.</li> <li>Work independently or with other learners to write a simple script and storyboard in response in preparation for filming.</li> <li>Use video editing software to place clips in the correct order, to trim clips to an appropriate length, and to add simple titles.</li> </ul>	<ul> <li>Be able to explain, in simple terms, key vocabulary in programming, including algorithm, program, code/ instruction/ if-then</li> <li>Work independently or with other learners to create pieces of code in age appropriate software and combine sections of code to solve a problem.</li> <li>Be able to predict the behaviour of an algorithm or section of code and to test that prediction.</li> <li>Where a program did not work correctly, locate the specific code, and work (with support if required) to solve issues.</li> </ul>	<ul> <li>Understand that technology can be used to manufacture objects created onscreen</li> <li>Work individually to modify and/or create a simple design</li> <li>Select and use a range of simple drawing tools with software to produce a design</li> <li>Suggest possible improvements to a design</li> </ul>	<ul> <li>Understand that web designers will adapt the style, content and structure of a website based on their audience</li> <li>Work independently or with other learners to plan the structure of a webpage with a specific audience and purpose in mind.</li> <li>Add a range of objects to a webpage, such as text, titles, images, graphs/charts, hyperlinks and buttons.</li> <li>Evaluate the effectiveness and suitability of own webpages against agreed success criteria. Give useful feedback to other learners</li> </ul>	<ul> <li>Be able to explain, in simple terms, key vocabulary in programming, including loop/ if — then</li> <li>Work independently or with other learners to create more complex pieces of code including loops in age appropriate software and combine sections of code to solve a problem.</li> <li>Enhance games by using sound recordings</li> <li>Be able to predict the behaviour of an algorithm or section of code and to test that prediction.</li> <li>Where a program did not work correctly, locate the specific code, and work (with support if required) to solve issues.</li> </ul>	<ul> <li>Listen to, reflected on and shared a range of recordings</li> <li>Recognise the differences between a live and recorded broadcast</li> <li>Plan and script a broadcast, include the place/timings of music and sound effects in a script</li> <li>Use sounds/music to represent objects or create moods</li> <li>Use effective expression and volume when speaking on a recording</li> </ul>

	The R	omans	The Ang	lo Saxons	Britain's	s Kitchen
	Presenter	Programmer	Music	Publisher	Programmer	Data Handler
	Wikipedia about aspects of Roman life.	Description of a Roman Soldier	Use Garageband to create a Music for a fight	Create an interactive e- book on Anglo Saxon Monarchs	Use Scratch to create a 'Facts about Britain' quiz/game	Create a set of top trumps for fruit
Year 4	<ul> <li>Understand what a WIKI is and how/why it is used</li> <li>Embed media (e.g. images) into a wiki within a learning platform.</li> <li>Adapt language, formatting and objectives to different media or target audiences.</li> <li>Share publications beyond the school e.g. onto the school website.</li> </ul>	<ul> <li>Be able to explain, in simple terms, key vocabulary in programming, including loop and broadcast/receive</li> <li>Work independently or with other learners to create complex pieces of code including broadcast and receive instructions in age appropriate software and combine sections of code to solve a problem.</li> <li>Enhance games by using sound recordings</li> <li>Be able to predict the behaviour of an algorithm or section of code and to test that prediction.</li> <li>Where a program did not work correctly, locate the specific code, and work (with support if required) to solve issues.</li> </ul>	<ul> <li>Evaluate a range of digital music and offer an opinion about its success and ways it may be improved.</li> <li>Begin to use more complex software to compose own digital music, selecting from a range of loops and sound effects.</li> </ul>	<ul> <li>Design and create multimedia publications (e.g. eBooks) that combine text, images and audio/ video.</li> <li>Add hyperlinks in to an e-book to link contents to sub sections.</li> </ul>	<ul> <li>Be able to explain, in simple terms, key vocabulary in programming, including loop, if-thanelse, variable</li> <li>Work independently or with other learners to create complex pieces of code including ask, if-thenelse instructions and variables in age appropriate software and combine sections of code to solve a problem.</li> <li>Enhance games by using sound effects</li> <li>Be able to predict the behaviour of an algorithm or section of code and to test that prediction.</li> <li>Where a program did not work correctly, locate the specific code, and work (with support if required) to solve issues.</li> </ul>	<ul> <li>Understand that data is structured information and that it can be collected in a number of ways.</li> <li>Work independently or with other learners to decide on the types of data to be collected and how that data can be presented.</li> <li>Begin to sort the data in a simple spread sheet in order that conclusions can start to be drawn.</li> <li>Present the database or spread sheet to others in order for the data to be interrogated.</li> </ul>

## **Upper Key Stage 2**

	The Vikings	The N	1ayans	Raging	) Water
Publishe	r Designer	Musician	Broadcaster	Programmer	Animator
Produce a websit aspects of Viking		Use Garageband to create a musical score for a sacrifice	Create a weekly blog about the Mayans.	Use Kodu to create an undersea world game	Use the pixilation technique to make an underwater film
Embed medivideo/audio) website      Adapt langure formatting a objectives to media or tark audiences.      Create a we multiple page page being a area within subject      Create links webpages are hyperlink to sites and resures.      Create a we has a profest look and feet	complex designs with multiple elements with accuracy  Select and use a range of drawing tools to create complex and compound shapes, including extruding and hollowing shapes  Select and use a greater range of textures and surfaces to accurately represent reality  within dother ources  site that sional	Begin to use more complex software to compose own digital music, selecting from a range of loops and	<ul> <li>Understand what a blog is and how/why it is used</li> <li>Embed media (e.g. video) from an external website into a blog post.</li> <li>Adapt language, formatting and objectives to different media or target audiences.</li> <li>Understand the etiquette of commenting on others' blog posts and comments</li> </ul>	<ul> <li>Work in 3 dimensions combining the code of different elements</li> <li>Plan the purpose and environment of their games in advance</li> <li>Be able to explain, in simple terms, key vocabulary in programming, including when-then</li> <li>Work independently or with other learners to create complex pieces of code including 'when-then' in more complex age appropriate software</li> <li>Enhance games by using sound and visual effects, camera angles</li> <li>Share programs or games and give/receive feedback to other children about their programs or games.</li> </ul>	<ul> <li>Understand the process and application of the pixilation technique of animation</li> <li>Prepare detailed storyboards for projects, and actively evaluate and modify these before creating animations.</li> <li>Review animations as they progress to ensure continuity.</li> </ul>

	Natural Disasters	Space	Greece	
	Publisher	Programmer	Film Maker	
	Children will make a magazine about natural disasters.	Children will create a game on an alien planet using Kodu.	Children will create a script for an advert for a Greek resort.	
Year 6	<ul> <li>Design and create multimedia publications (e.g. e-zine) that combine text, images and audio/ video.</li> <li>Add hyperlinks in to an e-zine to link contents to sub sections and to external sources.</li> <li>Combine content created in different applications into a single publication</li> </ul>	<ul> <li>Plan the purpose, components, degrees of difficulty and environment of their games in advance</li> <li>Work independently to create complex pieces of code including when-then instructions, multiple variables (time and score), multiple actions and consequences and constraints of the platform game</li> <li>Share programs or games and give/receive feedback</li> </ul>	<ul> <li>Work independently or with other learners to structure a film script and storyboard to include clear sections and a variety of filming techniques and media.</li> <li>Use a recording device to frame shots appropriately (wide shot, close up etc.)</li> <li>Be proficient at basic video shooting: holding the</li> </ul>	
		to other children about their programs or games.	<ul> <li>camera still, use of a tripod, simple panning.</li> <li>Use video editing software to edit a narrative film, using a variety of techniques: trimming clips, splitting clips, adding images, sound effects, transitions and music.</li> </ul>	