



Computing Knowledge and Skills Progression Grid

Big Ideas Progress – All children will be able to use a variety of apps, technologies and will be taught about the progress not only between school years and the skills they learn but also the children of Fawbert and Barnard's will be taught about the progress of technology in the wider world. Community/Online Safety/social media/communication – The children of our school will learn the value of community, communicating with respect and how to remain safe when online. Creativity/design – Through programming, coding and use of multimedia in the technology of our school the children will innovate and explore the design process and use their creativity.													
EYFS		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
Using the Internet & Online-Safety		<ul style="list-style-type: none"> I know what the internet is. I know that Stranger Danger applies to the internet. I will know about Smartie the Penguin from Childnet and be familiar with the story. I can open apps on an ipad (safari) I know what the internet is. <p><u><i>I know the basics about e-safety and have been taught about strangers. I can open apps</i></u></p>		<ul style="list-style-type: none"> Building on previous years learning Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies Be able to upload work to Seesaw 		<ul style="list-style-type: none"> Use technology safely and respectfully, keeping personal information private Use simple search technologies <p><u><i>I can open the internet, search a basic search and know basics of how to be safe online</i></u></p>		<ul style="list-style-type: none"> Use technology safely and recognise acceptable and unacceptable behaviour Use simple search technologies and recognise that some sources are more reliable than others 		<ul style="list-style-type: none"> Communicate responsibly online and know others can see what I post Understand where to go for help and support when they have concerns about content or contact on the internet or online Understand how results are selected and ranked by search engine <p><u><i>I can use the internet to accurately search and where/what to do when I have concerns online</i></u></p>		<ul style="list-style-type: none"> Understand the need to only select age appropriate content Use filters in search technologies effectively Use filters in search technologies effectively and appreciate how results are selected and ranked <p><u><i>I can explain to others how to stay safe and know the legality of online safety. I can filter search results to make them more reliable</i></u></p>	
Vocab		Choices, Internet, Website, Stranger Danger	Technology, Share, Create, Internet	Rules, Online, Private info, Email	Purpose, Online tools, Communication	Appropriate sites, Cyber-bullying, Digital footprint, Keyword searching	Information on sources, Communication, Website content	Secure password, Report abuse button, Gaming	School network, Computer parts Collaboration, Search tools	E-safety rules, Blogs	Different networks, Information collection, Reliability, Owners	Responsible online communication, Informed choices	Computing devices, Internet parts, Collaboration, Responsibility, Webpages

Coding and Programming	<ul style="list-style-type: none"> I can give instructions to my friend and follow their instructions to move around. I can solve problems using a few steps and communicate these steps. I can use a coding app on the iPad to solve problems (Kodable) <p><u>I will know that coding means instructions on ipads/in technology</u></p>	<ul style="list-style-type: none"> Predict the behaviour of simple programs Understand what algorithms are and how they are implemented on digital devices 	<ul style="list-style-type: none"> Use logical reasoning to predict the behaviour of simple programs Create simple programs Create and debug simple programs Understand that programs execute by following precise and unambiguous instruction <p><u>I know how to relay instructions to achieve a goal. I can spot mistakes and debug an error</u></p>	<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 Select, use and combine a variety of software, systems and content that accomplish given goals Debug multiple issues in a code <p><u>I know how to spot errors in my code and correct them. I know how to add items from an outside program (Eg. Images)</u></p>	<ul style="list-style-type: none"> Design, input and test code with debugging -that follow a sequence of instructions or allow a set of instructions to be repeated Use logical reasoning to explain how increasingly complex algorithms work to ensure a program's efficiency 	<ul style="list-style-type: none"> 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 <p><u>I can solve multiple step code and debug a series of errors to complete the code. I know how to use repeated lines of code to make my programming efficient.</u></p>
Vocab	Equipment, Buttons, Movement, Instructions	Instructions, Buttons, Robots, Patterns, Program	Forward, Backward, Right-angle turn, Algorithm, Sequence, Debug, Predict	Sequence instructions, Sequence debugging, Test + improve, Logo commands, Sequence programming	Type + edit logo commands, Sensors, Open-ended problems, Bugs in programs, Complex programming	Explore procedures, Refine procedures, Variable, Hardware + software control, Change inputs, Different outputs, Articulate solutions Commands,	Predicting outputs, Plan, program, test & review a program, Program writing, Control mimics devices, Sensors, Measure input, Create variables, Link errors

Using technology & Multimedia	<ul style="list-style-type: none"> • I can capture images using the camera on different devices. • I can use an interactive whiteboard to zoom in and out on images. • I can recognise technology in our classroom. • Be able to use basic computer programs (apps on ipads). • Know that information can come from the internet. <p><u>Being able to use the basic functions of an ipad – opening apps, using the camera and opening the internet browser.</u></p>	<ul style="list-style-type: none"> • Recognise common uses of information technology in the home and school environment • Use technology to purposely create digital content 	<ul style="list-style-type: none"> • 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 <p><u>To be able to present information using images and effects on a Keynote.</u></p>	<ul style="list-style-type: none"> • Recognise familiar forms of input and output devices and how they are used one lesson on recognising output speakers etc input internet, keynote searches, photos • With support select and use a variety of software to accomplish goals • Airplay ipads onto the screen to show output. Look for mirroring <p>Look on ipad for PAGES apple word version. Do the same for keynote presentations but use this app.</p>	<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 <p><u>I can use multiple technologies including cameras, ipads and screens to present and edit my work before uploading it online</u></p>	<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 <p><u>I know which technology is most appropriate for a task. I can assess a variety of apps, media and ways of presenting information.</u></p>
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Vocab	Screen	Videos	Paint effects	Multimedia	Creating + modifying	Online sharing	Appropriate online
	Mouse	Camera stills	Templates	Presentations	Specific purpose	Multimedia effects	tools
	Images	Sounds	Animation	Alignment	Photo modifying	Multimedia	Audience
	Keyboard	Image bank	Documents	Brush size	Keyboard shortcuts	modification	Atmosphere
	Paint	Word bank	Index finger typing	Repeats	Bullet points	Transitions	Structure
		Space bar	Enter/return	Reflections	Spell check	Hyperlinks	Copyright
			Caps lock	Green screening	Constructive feedback	Editing tools	Information collection
			Backspace	Amend		Refining	HTML code
				Copy		Online sharing	Storing
				Paste			