

ICT



CURRICULUM OVERVIEW

Year 1/2 YEAR A	Statutory programmes of study	Ideas	Resources/trips
	<p><u>E safety</u></p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>		<p>*Hectors world - http://www.thinkuknow.co.uk/</p> <p>SWGFL planning</p>
	<p><u>Digital literacy and ICT</u></p> <p><i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i></p>	<p>Switching a computer on/off,</p> <p>Logging on/off,</p> <p>Saving work,</p> <p>Printing,</p> <p>Copy and pasting images/saving images.</p> <p>Resizing images.</p>	<p>Laptops, Ipads, Word, PowerPoint, Publisher.</p>
	<p><u>Computer science</u></p> <p><i>understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and</i></p>	<p>Bee bots – writing algorithms on flashcards then programming the beebots.</p> <p>Debug (fix) algorithms where necessary to achieve desired goal.</p>	<p>Espresso</p>

	<p><i>unambiguous instructions</i></p> <p><i>create and debug simple programs</i></p> <p><i>use logical reasoning to predict the behaviour of simple programs</i></p>		
	<p><u>Digital literacy and ICT</u></p> <p><i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i></p>	<p>Typing skills, correcting spellings automatically.</p> <p>Switching on, closing Apps, saving images, downloading and deleting Apps.</p>	<p>Powerpoint, Word, Publisher</p> <p>Computers/laptops.</p> <p>Ipads,</p>
	<p><u>Digital literacy and ICT</u></p> <p><i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i></p>	<p>Researching for information independently,</p> <p>Using key words for refined results '<u>Lion facts for kids</u>' will bring back more appropriate content.</p> <p>Opening multiple web pages for more searches.</p> <p>Coping and pasting text</p> <p>Emoticons which are used to convey meaning. ☺ ☹ :(:x :/</p>	<p>Yahoo for kids, kids click,</p> <p>*internet</p> <p>Laptops/Ipads</p>
	<p><u>Digital literacy and ICT</u></p> <p><i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i></p>	<p>Researching information independently</p> <p>Filtering results for specific images and content.</p>	

Year 1/2 YEAR B	Statutory programmes of study	Ideas	Resources/trips
	<p><u>E safety</u></p> <p>use technology safely, respectfully and</p>		<p>*Hectors world - http://www.thinkuknow.co.uk/</p> <p>SWGFL planning</p>

	responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.		
	<u>Digital literacy and ICT#</u> <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i>	Word processing and presentation software Using an Ipad/Ipod/device Recording sounds, create a video, take a screen shot.	Powerpoint, Word, Publisher Ipads.
	<u>Computer science</u>	Bee bots – writing algorithms on flashcards then programming the beebots. Debug (fix) algorithms where necessary to achieve desired goal. Talk through algorithms with children, predicting what will happen.	*Beebots, Flashcards (premade algorithms), Flashcards (to write algorithms), Espresso
	<u>Digital literacy and ICT</u> <i>Recognise common uses of information technology beyond the classroom.</i>	Using the school website.	
	<u>Digital literacy and ICT</u> <i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i>	Researching for information independently, Creating documents using the internet and publishing software (Word, Publisher, Powerpoint). Formatting the document appropriately to present information.	Laptops/Ipads
	<u>Digital literacy and ICT</u>	Create files and documents	

	<i>use technology purposefully to create, organise, store, manipulate and retrieve digital content</i>		
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Year 3/4 YEAR A	Statutory programmes of study	Ideas	Resources/trips
	<p>1. <u>E-safety and core skills.</u></p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>2. Individual programming lessons (having a go at new resources for their year group/age appropriate).</p> <p><i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i></p> <p><i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i></p> <p><i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i></p>	<p>1. Internet safety display, CEOP video resources, Create a 'how to be safe online' presentation using Videolicious App. Being safe using mobile phones and multimedia devices.</p> <p>2. Predicting what will happen – talking through an algorithm.</p> <p>Flashcards for algorithms 'getting up and going to school' algorithm.</p> <p>Algorithms created for favourite pop songs,</p> <p>'Jam sandwich' - clear, concise and precise instruction 'algorithms – children given language to choose from.</p>	<p>CEOP website. *Smart rules.</p> <p>http://www.saferinternet.org.uk/</p> <p>http://www.chatdanger.com/</p> <p>SWGFL planning</p> <p>*Beebots</p>

	<p><u>Digital Literacy and ICT (70% of computing curriculum)</u></p> <p><i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p>'using ICT and exploring it'.</p> <p>*Provide opportunities to explore (the internet).</p>	
	<p><u>Computer science (25% of computing curriculum).</u></p> <p><i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i></p> <p><i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i></p> <p><i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i></p>	<p>Algorithms, Predicting what will happen – talking through an algorithm. Flashcards for algorithms, Algorithms created for favourite pop songs, 'Jam sandwich' - clear, concise and precise, instruction 'algorithms – children given language to choose from Debugging (fixing) problems.</p> <hr/>	<p>*lightbot *Espresso *Hour of code *Code academy</p>
	<p><u>Digital Literacy and ICT</u></p> <p><i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p>*Provide opportunities to explore (the internet).</p> <p>How to search for information, How the searched information is sorted, How to find a specific picture, What the numbers mean on a picture (picture resolution/size). Texts boxes,</p>	<p>*word, *powerpoint, *Publisher. *Using key words to find a given/obscure picture.</p>

		Clip art, Formatting, Changing text types; fonts and sizes.	
	<u>Digital Literacy and ICT</u> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i>	Exploring the internet, refining searches. Coding programmes with increasing complexity (including 'if, when' statements).	*Espresso *Internet
	<u>Digital Literacy and ICT</u> <i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i>	Exploring the internet, refining searches. Coding programmes with increasing complexity (including 'if, when' statements).	Espresso
Year 3/4 YEAR B	Statutory programmes of study	Ideas	Resources/trips
	1. <u>E-safety and core skills.</u> use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Fake accounts, false information. We want children to spot unacceptable behaviour; this cannot be done without exposing them to unacceptable behaviour. They need to develop a moral compass in real life as well as online life and identities.	Tell children to find out about the tree octopus – set up and designed as a fake website story. Teach the children to use common sense rather than rely on what the internet tells us. http://zapatopi.net/treeoctopus/ *Smart rules SWGFL planning

	<p>2. <u>Individual programming lessons (having a go at new resources for their year group/age appropriate).</u></p> <p><i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i></p> <p><i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i></p> <p><i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i></p>	<p>More advanced coding applications – link with flashcards, writing out the code explicitly.</p>	<ul style="list-style-type: none"> *lightbot *Espresso Scratch jnr (ipads) *Hour of code *Code academy
	<p><u>Digital Literacy and ICT (70% of computing curriculum)</u></p> <p><i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p>Research information on a theme (Carl Linnaeus in Science/topic links)</p> <p>Search for appropriate pictures – save, edit, format them.</p> <p>Word process a script of what you will say in the video</p> <p>Create professional videos to explain and inform on a topic.</p>	<ul style="list-style-type: none"> *Ipads *Videolicious
	<p><u>Computer science (25% of computing curriculum).</u></p> <p><i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by</i></p>	<p>Create flowcharts for favourite pop songs (algorithms),</p> <p>Talk through each step, predicting the behaviour of code – what effect it will have.</p> <p>Algorithms for simple tasks,</p>	<ul style="list-style-type: none"> *lightbot *Espresso *Hour of code *Code academy *Beebot app. <p>More able – introduced to scratch (secured in</p>

	<p><i>decomposing them into smaller parts</i></p> <p><i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i></p> <p><i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i></p>	<p>Programme another human to do 'the time warp, make a sandwich' write algorithms on flashcards, debug and manipulate where necessary.</p>	<p>upper key stage 2).</p>
	<p><u>Digital Literacy and ICT</u></p> <p><i>understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</i></p> <p><i>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i></p>	<p>Searching for specific images/content,</p> <p>Search races, searching for an image in class on internet – who and how will it be found? Refine search criteria etc...</p>	<p>Show children a very specific image on screen, children 'race' each other online to find it using vocabulary in search engines.</p> <p>Search for the same images on different search engines, how/why do they not appear in the same places?</p> <p>http://www.code-it.co.uk/netintsearch.html</p> <p>*purple mash coding.</p>
	<p><u>Digital Literacy and ICT</u></p> <p><i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p>Research information on a theme (Carl Linnaeus in Science/topic links), focused searches. Search for appropriate pictures – save, edit, format them.</p> <p>Word process a script of what you will say in the video.</p> <p>Use word processed script to create professional videos to explain and inform on a topic (imovie/Videolicious).</p>	<p>*Ipads/Laptops</p> <p>*Ipads</p>
	<p><u>Digital Literacy and ICT</u></p>	<p>Make simple sprites/characters,</p>	<p>Espresso</p>

	<i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i>	Complete simple commands for the character to follow,	- Moving onto scratch coding (preparing for upper key stage 2).
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Year 5/6 YEAR A	Statutory programmes of study	Ideas	Resources/trips
	<u>E safety</u> use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.		http://www.childnet.com/resources/young-people-and-social-networking-sites SWGFL planning http://www.digizen.org/
	<u>Digital literacy and ICT</u>	Searching information, using and refining searches Importing sounds, images and media *into Keytone App. Creating professional presentations on Keynote	*Keynote app/lpads
	<u>Computer science</u> <i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by</i>	Scratch Complete 'if/when' statements online. Debug (fix) programmes/algorithms,	**Espresso Scratch Kodu

	<p><i>decomposing them into smaller parts</i></p> <p><i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i></p> <p><i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i></p>	<p>Programmes of increasing complexity.</p> <p>Starting to write out code using technical coding language.</p>	<p>A.L.E.X app.</p> <p>*Faulty algorithms which need fixing (on computers and not on computers – flashcards?)</p>
	<p><u>Digital Literacy and ICT</u></p> <p><i>understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</i></p> <p><i>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</i></p>	<p>Searching for specific images/content.</p> <p>Search races, searching for an image in class on internet – who and how will it be found? Refine search criteria etc...</p>	<p>Show children a very specific image on screen, children ‘race’ each other online to find it using vocabulary in search engines.</p> <p>Search for the same images on different search engines, how/why do they not appear in the same places?</p> <p>Espresso</p>
	Digital literacy and ICT		
	Digital literacy and ICT		

Year 5/6 YEAR A	Statutory programmes of study	Ideas	Resources/trips
	<p><u>E safety</u></p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Year 6 E-safety.</p> <p>Social media?</p> <p>Evaluate effectiveness of school website for e-safety.</p>	<p>*Take a picture of your teacher, see how far you can send it in the space of your lesson by emailing, sharing it etc...</p> <p>SWGFL planning</p> <p>http://www.childnet.com/resources/young-people-and-social-networking-sites</p> <p>http://www.digizen.org/</p>
	<p><u>Digital literacy and ICT</u></p> <p><i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</i></p>	<p>Evaluate effectiveness of school website for target audience,</p> <p>Children write questionnaire for Mrs McGrow to give to parents,</p> <p>Show children an image, create keywords #hashtags, write a sentence about the picture and group the hashtags together. Are all of the sentences on a similar theme?</p>	<p>*internet</p>
	<p><u>Computer science</u></p> <p><i>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</i></p>	<p>Focus on writing elaborate algorithms, debugging (fixing) as you go. Hikatzu runs both coding bottons and javascript – focus more towards writing the javascript.</p>	<p>*Scratch.</p> <p>Espresso</p> <p>A.L.E.X app.</p> <p>Faulty algorithms which need fixing (on computers and not on computers – flashcards?)</p> <p>Scratch planning: http://www.code-</p>

	<p><i>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</i></p> <p><i>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i></p>		<p>it.co.uk/csplanning.html</p>
	<p><u>Digital literacy and ICT</u></p> <p><i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>		<p>*scratch: http://www.code-it.co.uk/csplanning.html</p>
	<p><u>Digital literacy and ICT</u></p> <p><i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</i></p>	<p>Writing out code using technical coding language.</p>	<p>*Scratch: http://www.code-it.co.uk/csplanning.html</p>
	<p><u>Digital literacy and ICT</u></p> <p><i>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish</i></p>	<p>Writing out code using technical coding language.</p>	<p>*Scratch: http://www.code-it.co.uk/csplanning.html</p>

	<i>given goals, including collecting, analysing, evaluating and presenting data and information</i>		
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