



Computing Progression Map

	EFYS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computer Science (CS)	<p>Know how to operate simple equipment, e.g. turns on CD player and uses remote control.</p> <p>Uses ICT hardware to interact with age-appropriate computer software.</p> <p>Complete a simple program on a computer.</p>	<p>Give simple instructions to everyday devices to make things happen.</p> <p>Make choices to control simple models or simulations.</p> <p>Understand what simple algorithms are.</p> <p>Create and de-bug simple programs.</p> <p>Use directional language to control an object and understand that programmes execute by following precise and unambiguous instruction.</p>	<p>Create and debug simple programs. Give precise and unambiguous instructions.</p> <p>Use repeat commands to shorten a set of instructions.</p> <p>Explore and create a sequence of commands to reproduce a simple geometric shape or pattern on screen.</p>	<p>Use logical reasoning to explain how a simple algorithm works.</p> <p>Use sequence, selection and repetition in programs.</p> <p>Design and write a simple program for an on-screen sprite to create simple movements.</p> <p>Detect and correct errors in algorithms and programs.</p> <p>Analyse and tackle problems by decomposing into smaller parts.</p>	<p>Detect and correct errors in algorithms and programs (debug).</p> <p>Test programs using models and simulations.</p> <p>Design and write programs that accomplish specific goals, working with variables for input and output.</p> <p>Design and write a simple program for an on-screen sprite to create simple movements.</p> <p>Use more advanced programming, including repeat and 'if' commands to create, test, modify and refine sequences eg more</p>	<p>Create and refine sequences of commands.</p> <p>Devise, test and refine more effective control sequences incorporating conditional statements.</p> <p>Talk about how they made their program and justify the choice they made for both function and design.</p> <p>Critically evaluate programs and say what they liked and what could be done to improve it.</p>	<p>Plan, create, test, modify and refine control sequences which use inputs and outputs.</p> <p>Devise, test and refine more effective control sequences incorporating conditional statements.</p> <p>Use sequence, selection and repetition in programs; work with variables and various forms of input and output; generate appropriate inputs and predicted outputs to test programs.</p> <p>Talk about how they made their program and justify the choice they made for both</p>



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					complex repeating or conditional movements.		function and design. Independently problem solve and model situations and processes by understanding and explaining the impact of changing variables and rules within a model.
Computer Science Programmes / Applications	Beebot	Beebot 2Logo 2Go	2Logo Scratch Junior	Kodu – Racing Game	Scratch Pac Man Game.	Kodu - Air Hockey.	2Go Scratch – Maze Game
Information Technology (IT)	Select and use technology for particular purposes.	<p>Know that information can be presented as static text / pictures or animated.</p> <p>Use painting programme to create a simple picture with support.</p> <p>Use painting programme to create a simple picture and be able to select some simple tools.</p>	<p>To recognise and use simple word processing tools e.g highlighting and formatting text.</p> <p>To develop the correct use of the keyboard inc space, backspace, delete and shift (not caps lock)</p> <p>To be able to select and add images and sound to their work.</p>	<p>Select specific areas of an image, copy and paste to make repeating patterns.</p> <p>Use various tools in paint packages or photo-manipulation software to edit an image.</p> <p>Experiment with a 3D graphics program.</p> <p>Use tools to create simple 3D shapes</p>	<p>Experiment with a 3D graphics program, looking at a range of features.</p> <p>Use tools to create 3D shapes and objects, including being able to orbit and zoom around a 3D graphical object.</p> <p>To understand that animation is a collection of still images to make moving images.</p>	<p>Describe how internet search engines find a store data.</p> <p>Develop use of more advanced searching techniques eg searching for a phrase using quotation marks to locate precise information.</p> <p>Distinguish between fact and opinion and make informed choices</p>	<p>Develop consistency across a document, using the same styles of font, colour, size for headings, body of text etc.</p> <p>Independently select, process and import images, video and sounds from a variety of sources to enhance projects.</p> <p>Collaborate effectively on planning and</p>



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		<p>To select and use a range of different tools eg, paint spray, stamps, shapes etc...</p> <p>Been able to explain their choices for their picture.</p> <p>Enter information into a graph/data programme.</p> <p>Create a pictogram to represent information with support.</p> <p>Create a pictogram to represent information of their own choice independently.</p>	<p>Make use of graphics and sound to enhance text in multi-media work.</p> <p>Make simple changes to selected text.</p> <p>Create simple presentations for different purposes using templates for support.</p> <p>Understand that animation is a collection of still images to make moving images.</p> <p>Animate simple movements for a character or word.</p> <p>Plan and create a stop frame animation of drawings.</p> <p>Sort and classify a group of items by asking simple yes / no questions.</p>	<p>and objects, including being able to orbit and zoom around a 3D graphical object.</p> <p>Log onto an email account, open emails, create and send appropriate replies.</p> <p>Attach different files to emails eg text document, sound file or image.</p> <p>Work effectively with another person on a collaborative document or application.</p> <p>Use all communication and collaboration tools safely and appropriately and to know what to do if they have a problem.</p>	<p>Move animated figures with precision and care. Storyboard then use captured images to create a short animated sequence.</p> <p>Import music, stills or video into video editing software for a specific project.</p> <p>Arrange, trim and cut clips to create a short film that conveys meaning.</p> <p>Add simple titles, credits and special effects eg transitions.</p>	<p>about the sources of online information used to inform their work.</p> <p>Use appropriate strategies for finding, critically evaluating, validating and verifying information.</p> <p>Develop skills to question where web content might originate from and understand that this gives clues to authenticity and reliability.</p> <p>Develop and use criteria to evaluate design and layout for a range of resources including websites, on-line resources and presentations.</p>	<p>creating a multimedia project.</p> <p>Cut, trim and order video clips effectively to create a video project.</p> <p>Make use of transitions and special effects in video editing software, understanding the effect they have on the audience.</p> <p>Export images and movies in formats appropriate for the purpose and use them in multimedia presentations.</p> <p>Acquire, store and combine images from different sources, then use to enhance a presentation.</p>
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			<p>Use simple graphing software to produce pictograms and other basic tables or graphs. Interpret and draw conclusions from graphs, discuss information contained and answer simple questions.</p>	<p>Begin to identify what data should be collected to answer a specific question. Understand that there are different types of data.</p> <p>Collect data and enter it into a database under appropriate field headings.</p> <p>Use a database to answer straight forward questions by searching, matching and ordering the contents of a single field.</p>		<p>Develop the use of hyperlinks to produce more effective, interactive presentations. Begin to develop consistency across a document.</p> <p>Independently select, process and import images, video and sounds from a variety of sources to enhance presentations.</p> <p>Independently select, edit, manipulate and combine sound files to create a composition which could be broadcast for a specific purpose and audience.</p> <p>Use ICT to produce music or sound effects for a specific purpose, considering the</p>	<p>Create images using a range of techniques to develop a particular style. Combine a number of images using layering and a variety of editing tools to repurpose them for a particular purpose or audience.</p> <p>Refine and make changes to images according to audience.</p>
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						<p>impact on the audience.</p> <p>Create own sounds and compositions to add to presentations, projects and films.</p>	
Information Technology Programmes / Applications		<p>2Paint 2Graph</p>	<p>2Animate 2Publish PowerPoint</p>	<p>2Paint Sketch Up – Roman Fort 2Email 2Classify</p>	<p>Sketch Up – Anglo Saxons 2Animate iMovie</p>	<p>PowerPoint Internet GarageBand</p>	<p>PowerPoint iMovie Abstract You!</p>
Digital Literacy (DL)	<p>Children recognise that a range of technology is used in places such as homes and schools.</p> <p>They select and use technology for particular purposes.</p>	<p>Use technology safely and respectfully, keep personal information private.</p> <p>Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p> <p>Explain how something online might make</p>	<p>Understand the terms ‘cyberbullying’ and ‘online bullying’.</p> <p>Recognise the importance of engaging a trusted adult when they experience cyberbullying.</p> <p>Know how to report to cyberbullying – including the use of the CEOP reporting tool.</p>	<p>Use all communication and collaboration tools safely and appropriately and to know what to do if they have a problem.</p> <p>Understand that the main purpose of product sites is to encourage viewers to buy the product.</p> <p>Recognise how a site’s fun and interesting features help sell the product.</p>	<p>Begin to understand what online identity theft is the effects of this.</p> <p>Understand the information that should and should not be shared online.</p> <p>Explain why it is important to keep your information private.</p> <p>Check the plausibility and usefulness of</p>	<p>Describe how internet search engines find a store data.</p> <p>Develop use of more advanced searching techniques.</p> <p>Distinguish between fact and opinion and make informed choices about the sources of online information used to inform their work.</p>	<p>Explain what cyberbullying is and how this can affect those being bullied.</p> <p>Explain how cyberbullying is both similar to and different to in-person bullying, and learn strategies for handling cyberbullying when it arises – including reporting through CEOP.</p>



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		<p>someone feel worried or sad.</p> <p>Identify what personal information is and the importance of not sharing this. Understand information that can be shared and information that cannot be shared and display this in a 'Shop Window' about themselves.</p>	<p>Create a presentation to explain cyberbullying and the effects it can have on children and how to report it.</p> <p>Recognise common uses of ICT beyond school.</p> <p>Identify personal information that should be kept private.</p>	<p>Begin to identify the key features that make a site interesting to different audiences. Understand the dangers, to both themselves and the hardware used, of following websites and links that appear to be interesting if the website is unknown.</p> <p>Create their own product site home pages with features designed to sell a product for a child.</p>	<p>information they find.</p> <p>Use and combine a variety of software and internet services on a range of digital devices to accomplish given goals including collecting, analysing, evaluating and presenting data and information.</p> <p>Recognise social networking sites and social networking features, built into other things such as online games and handheld games consoles.</p> <p>Make judgements in order to stay safe whilst communicating with others online.</p>	<p>Use appropriate strategies for finding, critically evaluating, validating and verifying information.</p> <p>Develop skills to question where web content might originate from and understand that this gives clues to authenticity and reliability.</p> <p>Recognise that photos can be altered digitally, and consider the upsides and downsides of this practice.</p> <p>Discuss how photo alteration can distort our perceptions and affect our self-image.</p> <p>Analyse how advertising uses</p>	<p>Take account of accuracy and potential bias when searching for and selecting information.</p> <p>Evaluate and improve presentations in the light of discussion, marking and audience response.</p> <p>Discuss scenarios involving online risk.</p> <p>Act as a role model for younger children.</p>
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					Know who to tell if anything worries them online.	photo alteration to help sell products. Explain how photo alterations can both persuade and change people's point of views.	
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