

Progression of Skills iCompute						
	Units	Computer Science	Units	Information Technology	Units	Digital Literacy (including E-Safety)
EYFS	<ul style="list-style-type: none"> Throughout all units 	<ul style="list-style-type: none"> Give and follow simple instructions in order (algorithms) Create a short sequence of instructions (algorithms) Change instructions to create a different outcome (algorithms) Make a programmable toy move (programming) Use simple software and tools to make something planned happen Make choices on-screen about buttons and icons to select 	<ul style="list-style-type: none"> Throughout all units 	<ul style="list-style-type: none"> Use a keyboard to make choices Use the mouse or touch to select icons and items Move onscreen objects Talk about the technology used at home and in school Operate digital equipment Use technology and digital content to play and learn Begin to understand that computers can be used to represent real life and 	<ul style="list-style-type: none"> Throughout all units 	<ul style="list-style-type: none"> Have created shapes and text using digital tools Used technology to show learning Talk about different kinds of information such as pictures, words, video and sound Create simple compositions and record/playback audio Begin to understand that software and tools can be used to communicate through text, images and sound Find information using a basic search Know to ask an adult before going online Know to tell an adult if they find anything worrying online Know that they should not talk to anyone they do not know online Be kind to friends

		<ul style="list-style-type: none"> • Create, recreate and continue patterns • Sort a set of objects according to criteria • Construct simple pictograms • Know that pictures on a pictogram represent numerical values 		<p>imaginary situations</p> <ul style="list-style-type: none"> • Explore simple computer models and talk about what happens if... 		<ul style="list-style-type: none"> • Be able to talk about how much time they spend using computers and devices • Be careful using computers and devices <p>Share the use of computers and devices</p>
Year 1	<p>iAlgorithm</p> <p>iProgram</p>	<ul style="list-style-type: none"> • Read a set of instructions and sometimes predict the correct outcome • Produce instructions but sequence them incorrectly or make assumptions • Understands that humans and computers follow instructions 	<p>iModel</p> <p>iData</p>	<ul style="list-style-type: none"> • Have entered words using a keyboard • Use a mouse to point, click and drag objects around a screen with help. • Have created digital content using IT tools 	<p>iWrite</p> <p>iSafe</p>	<ul style="list-style-type: none"> • Obtain simple information from the world wide web • Use digital drawing tools to express something • Use IT to create sentences that communicate meaning <ul style="list-style-type: none"> • Know that some information is personal (Eg. name & address) • Identify some characteristics of trustworthy/untrustworthy

		happen (e.g. playing robots)		<p>applications and tools to use for a particular purpose</p> <ul style="list-style-type: none"> • Locate, edit and save different versions of their work • Navigate around a website using hyperlinks and the back button • Type web addresses into a web browser • Create Internet favourites 		<p>when using ICT</p> <p>Use ICT to communicate, identify some of the risks and act to minimise them</p>
Year 3	<p>iAlgorithm</p> <p>iProgram</p>	<ul style="list-style-type: none"> • Produce a sequence of instructions that result in planned outcomes. • Program a short a sequence of commands that results in a planned effect 	<p>iSimulate</p> <p>iData</p>	<ul style="list-style-type: none"> • Combine graphics with text Use appropriate effects and re-size graphics • Copy text from an internet page to a document 	<p>iConnect</p> <p>iSafe</p>	<ul style="list-style-type: none"> • Begin to use a range of applications on computers and devices independently • Talk about how useful particular websites and/or applications have been to their work & create digital content that communicates meaning

		<ul style="list-style-type: none"> • Program and test a simple program • Create algorithms to solve simple problems 		<ul style="list-style-type: none"> • Copy images from an internet page • Save, print and retrieve work • Use software, computers and devices to make simple presentations and create things • Enter a URL for a website with support • Identify some links within web content and navigate with purpose 		<ul style="list-style-type: none"> • Understand that a wider range of information is personal (Eg. regular attendance at a specific place) • Identify some of the ways to use computers safely • Know the need for passwords and that they should be kept safe. • follow e-safety guidelines
Year 4	iProgram-1 iProgram-2 iProgram-3	<ul style="list-style-type: none"> • Write an algorithm to produce a given effect using repetition • Accurately predict the outcome of a range of algorithms and programs 	iMail iData	<ul style="list-style-type: none"> • Use the more advanced features of applications (Eg. word processing or presentation software) to help them match their 	iAnimate iSafe	<ul style="list-style-type: none"> • Understand that a computer network means connected computers • Understand that you can use the internet for activities other than web browsing • Know that not all information available online is reliable and

		<ul style="list-style-type: none"> • Test, debug and refine algorithms and programs • Use sequence and basic selection and repetition in computer programs • Explain how a programmed effect has been achieved • Talk about improvements that could be made to programs 		<p>work to their audience</p> <ul style="list-style-type: none"> • Send an email. • Reply to an email • Use the search facility in a database to find the answer to questions • Carry out searches involving more than one condition to find answers to a variety of questions, sometimes with help • Confidently enter URLs into an address bar of a browser 		<p>needs to be checked</p> <ul style="list-style-type: none"> • Understand that you can use the internet for activities other than web browsing • Find information by navigating around a number of websites using hyperlinks and buttons • Know that not all information available online is reliable and it needs to be checked but does not always do so • Know that internet search engines give a list of websites based on search terms • Cross-check information provided on one website against that provided on another • Demonstrate the use of basic safety measures when using technology and working online (Eg. logging out)
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Year 5	iAlgorithm iProgram iCrypto	<ul style="list-style-type: none"> • Explain how a programmed effect has been achieved • Write and amend computer programs • Use repetition, variables and conditional statements in computer programs 	iCrypto iWeb iDraw iModel	<ul style="list-style-type: none"> • Understand that information in the form of text, sound and pictures can be combined to create digital content and communicate with an audience 	iProgram iSafe	<ul style="list-style-type: none"> • Know that a computer network consists of a number of computers and devices that are connected • Suggest a range of activities you can do using the internet, including web browsing • Find information by navigating around a number of websites using hyperlinks and buttons <p>8 question the credibility of</p>

		<ul style="list-style-type: none"> • Test, debug and refine algorithms and programs • Identify some common internet services that use the internet (e.g. online gaming or voice over internet) • Know that a computer takes input, processes it and produces output • Identify a variety of computing devices and a number of inputs and outputs (e.g. touch, sound) know that computers store and manipulate data as a series of ones and zeros and that this is called binary 		<ul style="list-style-type: none"> • Recognise the audience when designing and creating digital content • Create digital content that incorporates text and image • Choose and use the appropriate advanced features of word processing or presentation software to increase their efficiency when matching their work to their audience • Carry out multi-conditioned searches in databases to find answers to a variety of 		<p>information given on websites</p> <ul style="list-style-type: none"> • Know that internet search engines give a list of websites based on key words • Cross-check information provided on one website against that provided on another • Use search technology to find things out • Suggest a number of activities that you can use the internet for (e.g. online gaming, voice over internet, email etc.)
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				<p>questions with assistance</p> <ul style="list-style-type: none"> • Use the sort facility of a database to answer questions • Create own questions to be answered by searching a database 		
Year 6	<p>iProgram</p> <p>iApp</p>	<ul style="list-style-type: none"> • Write or amend computer programs to produce specific actions • Understand that the same 'problem' can be solved in different ways • Know that commands can be given in shorter form • Use iteration (repeats and loops) in algorithms and programs 	<p>iNetwork</p> <p>iData</p>	<ul style="list-style-type: none"> • Understand that information in the form of text, sound and pictures can be combined to create digital content • Create digital content (e.g. a webpage) that incorporates text, images and sound 	<p>iApp</p> <p>iProgram</p> <p>iSafe</p>	<ul style="list-style-type: none"> • Use internet services other than web browsing (e.g. voice over internet or email) • Discuss opportunities for communication and collaboration online • Find relevant information online and make some checks for accuracy and reliability • Understand that internet search engines find information and list search results in order of popularity • Remix simple web content, sometimes with support



						<ul style="list-style-type: none">Recognises an audience when creating digital content
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