

Year 1	National Curriculum Links	iCan - Computing
iAlgorithm Line Line Line Line Line Line Line Lin	understand what algorithms are; how they are how implemented as programs on digital devices understand that programs execute by following precise and unambiguous instructions use logical reasoning to predict the behaviour of simple programs create and debug simple programs understand that programs execute by following precise	☐ I can tell you about something I do every day that needs to be done in order ☐ I can follow instructions ☐ I can make a set of instructions for others to follow ☐ I can change instructions if they are wrong ☐ I can follow instructions to do something depending if something is true or false ☐ I can read instructions and usually can tell you what I think will happen ☐ I can tell you what an algorithm is ☐ I can show you something that does something when you give it an instruction
iProgram	and unambiguous instructions	↑ I can make a programmable toy go where I want it to go ↑ I can draw instructions that would move a toy
	 duse logical reasoning to predict the behaviour of simple programs decreate and debug simple programs duse technology purposefully to create, organise, store, manipulate and retrieve digital content 	♥ I can tell you what I think a toy will do if it followed a set of instructions
iWrite	√ी To use technology purposefully to create, organise, store, manipulate and retrieve digital content	 ☐ I can write a simple sentence using a keyboard ☐ I can print my work ☐ I can open a document and make a story using a word bank ☐ I can save my work ☐ I can tell you about when it would be useful to use a word processor
iData	to create, organise, store, manipulate and retrieve digital content	↑ I can make a pictogram ↑ I can use pictograms to answer questions ↑ I can sort objects into an order ↑ I can make a graph ↑ I can tell you what I have learnt from graphs
iModel	To use technology purposefully to create, organise, store, manipulate and retrieve digital content	[・] I can use a mouse ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・











		1 can use an adventure game and make choices on screen
		1 can recognise what is real and what is not real in an adventure game
		⁴l can use drawing tools
iSafe D	use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	1 can tell you about the information that only belongs to me 1 can talk about who I can and should not share personal information with 1 can talk about people I can and can't trust 1 can identify someone I can trust (E.g. police officer or teacher)
	recognise common uses of information technology beyond school	1 can tell you about a risky situation when I might need the help of a trusted adult I can talk about how emotions and sensations can make me feel safe or unsafe I can talk about which information is personal to me and whom they should/should not give it to
General	Information Technology	 Can type simple sentences with a keyboard I can turn a computer on and off I can log on with a username and password I can use the keyboard I can open applications with help I can save and print my work I can use a mouse to point, click and drag objects around a screen I can use the mouse to select icons and items I can print my work I can save my work with help I can tell you why I used a computer to do something
	Digital Literacy	I can move around a website using buttons and picture links I can find answers to questions using a website I can put together pictures and words to tell you something











Year 2	National Curriculum Links	iCen - Computing
iProgram	tunderstand what algorithms are; how they are how implemented as programs on digital devices understand that programs execute by following precise and unambiguous instructions use logical reasoning to predict the behaviour of simple programs	I can sequence a set of instructions for making a sandwich I can create a sequence of instructions I can use repeat instructions I can draw my own sprite using software I can create a simple animation I can program two sprites to talk to each other I can make a simple animation which has a background and sprites moving and talking
iPub ipub image imag	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 To use technology purposefully to create, organise, store, manipulate and retrieve digital content	I can make a mind map about the World Wide Web I can make a timeline of events in computing history I can design my own vision of futuristic technology I can create a presentation I can create a basic eBook I can refine eBooks to include multimedia
iBlog	To use technology purposefully to create, organise, store, manipulate and retrieve digital content 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	I can use a username and password to access a blog I can write sentences that build on things others have written I can post a comment on the class blog responding to a post or comment I can post a response to a blog expressing an opinion I can justify my opinion I can write a blog post about a topic they know The review posts they have previously written and choose examples of good blog posts
iScarch	use technology purposefully to create, organise, store, manipulate and retrieve digital content use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	↑ I can find and move around a website ↑ I can use the information on a website to answer a question ↑ I can order things using information found online ↑ I can collect information from a part of a website and present my findings ↑ I can create a page for a class book











iAnimata	To use technology purposefully to create, organise, store, manipulate and retrieve digital content	⊕ I can create a flipping book ⊕ I can create character descriptions for a fairy tale ⊕ I can create a storyboard ⊕ I can create a script to retell a fairytale
iDo Mail	duse technology purposefully to create, organise, store, manipulate and retrieve digital content	1 can type and send an email 1 can read and reply to an email 1 can send an email with an attachment 1 can talk about why and when using email would be useful
	recognise common uses of information technology beyond school use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	
iSafe	use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	l can explain why I shouldn't open an email or attachment without permission l can talk about why I should not talk to strangers online l can use ICT to communicate online l can talk about some ways I can stay safe when using technology l know that some websites are aimed at me and some are better for what I'm looking for l understand the need to treat others as I would like to be treated online l know that some people are not nice online and can bully l can talk about when I would need to tell a trusted adult about something online l can search for things online l know that some websites are aimed at me and some are better for what I'm looking for
General	Information Technology	1 can move around things using touch, arrow keys or a mouse 1 can type with both hands 1 can use the backspace button and the delete button to remove text 1 can add titles and captions to my work 1 can find, change and save my work 1 can print my work











General	Digital Literacy	🕆 I can find things out on the world wide web
		🕆 I can pick a website for something in particular with help
(i)		🖰 I can find things online with help
PROTIZE LITERACY		🕆 I can show you how I found information online
		🕆 I can be careful about the information I get from websites
		🕆 I can use useful apps to help me with a task
		🕆 I can move around a website using links and buttons
		🕆 I can type addresses into a web browser
		🕆 I can favourite/bookmark pages online
		🕆 I can change colours, size and style of text in my work
		🕆 I can mix sound, words and pictures and tell you what I want them to mean
		🕆 I know that I might need permission to use things I have found online
		🖰 I can find websites with help
		🖰 I can tell you why I prefer one website to another
		🖰 I can sort things into an order
		🖰 I can make a graph or pictogram
		🕆 I can use a graph or pictogram to answer questions











Year 3	National Curriculum Links	iCan - Computing
iAlgorithm	tuse logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs	1 can sort objects 1 can identify ways to make sorting easier 1 can compare and spot patterns 1 can follow instructions to create things
iProgram	understand that programs execute by following precise and unambiguous instructions use logical reasoning to predict the behaviour of simple programs create and debug simple programs use technology purposefully to create, organise, store, manipulate and retrieve digital content	Can make a sprite move using programming blocks and loops Clican move a sprite on stage programming using coordinates Clican create an animation where a sprite changes costume Clican make an animation with sound effects that are repeated Clican predict the shape a drawing function will make when executed Clican amend a program to draw shapes using repeats and the pen tool Clican make an animation combining images, sounds and movement
iSimulate	To use technology purposefully to create, organise, store, manipulate and retrieve digital content use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs 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	 I understand that computer simulations allow people to try things that would be difficult or impossible to do in real life I can use a simulation to identify patterns and rules I can use and explore an adventure game based on an imaginary world I can use an simulation to try out combinations of things I can make my own simulation
iSafe	use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	I can give examples of how online actions can affect others I can talk about how privacy settings can be used to help stay safe online I can give examples about appropriate/inappropriate content for online sharing I can explain the consequences of sharing without consent I can identify appropriate people to turn to for help I can identify some tactics that a person may use to manipulate another online I can talk about what to do if someone tries to pressure or manipulate me I share ideas about how technology can be used positively I understand that companies can target advertising I can talk about how online adverts can make people feel I know some of the ways to avoid seeing too many adverts online











		l can explain why it is important to keep password safe
		1 can identify what makes a strong password
		⁴ I can give examples of strong and safe passwords
General	Digital Literacy	1 can search online with help
	Digital Literacy	1 can change what I'm searching for to get better results
NOTAL LITERACY		⁴l can present information and my ideas using different tools
		[™] I can enter a URL for a website
		⁴ I can point out some links on web pages and use them
		⁴ I can talk about how useful websites and apps have been to my work
		⁴l can talk about my work and explain why I used particular tools
	Information Technology	[™] I can combine images with text
INFORMATION TECHNOLOGY		⁴ I can use appropriate effects and re-size graphics
		⁴ I can copy text from an internet page to a document
		🖰 I can copy images from a web page
		⁴l can save, print and retrieve work
		🕆 I can use software, computers and devices to make simple presentations and create things
		⁴ I can save my work on the network and online
		1 can scroll or swipe
		1 can collect data and talk about its accuracy
		1 can organise and present data using different tools











Year 4	National Curriculum Links	iCen - Computing
iProgram	design, write and debug programs that accomplish specific goals	1 can draw simple shapes using programming blocks containing direction and loops
	1 Use sequence and repetition in programs	1 can create and test a sequence of statements that make letters of the alphabet
CONTRACTOR	Use logical reasoning to explain how a simple algorithm works and detect and correct errors in algorithms and programs	1 can create programs that change the size of a shape
	1 Solve problems by decomposing them into smaller parts	⁴ I can program a robot to draw letters of the alphabet
	create and debug simple programs	1 can use if then else statements in my programs
	tunderstand that programs execute by following precise and unambiguous instructions	↑ I can plan a number of commands in order to solve a puzzle ↑ I can plan algorithms and test programs systematically
	duse technology purposefully to create, organise, store, manipulate and retrieve digital content	1 can program functions and call them more than once
iConnect	understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Can name some of the activities you can do online Clan use hyperlinks on a website Clan visit and move around websites to answer questions Clan choose and bookmark a favourite Clan use search terms and a search engine to answer questions
COUNTY LOCAL TO THE PARTY OF TH	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 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 understand the risks associated with visiting non-credible websites Clandecide whether a website is reliable
iData	select, use and combine a variety of software (including internet services) on a range of digital devices to design	1 can count in Binary from 1 to 26 (5 bit) 1 can assign a letter of the alphabet to a binary code











iAnimate Line Control	and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information (KS3 edited) understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition] 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	Can answer questions using information contained on records Can sort information on records Can use computers to add a record to a database Can use a database to create charts representing answers to questions Can use a database to create charts representing answers to questions Can use a database to answer a question Can create a flipping book animation Can draw a series of images on frames with each showing a figure in a different pose Can animate a sequence of digital images Can design and add backgrounds to an animated scene Can plan and make an animation
isafe (included in the control of t	use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	↑ I can talk what digital media I use ↑ I know the five-step method for conducting an online search ↑ I can use search criteria ↑ I can identify some of the ways online content can be evaluated for reliability ↑ I can give examples about appropriate/inappropriate content for online sharing ↑ I can explain the consequences of sharing without consent ↑ I can identify appropriate people to turn to for help ↑ I can talk about copyright ↑ I can talk about strategies for recognising and responding to risky online interaction ↑ I can rate the riskiness of online scenarios ↑ I know some solutions for dealing with cyberbullying ↑ I can identify ways information can be found online about people ↑ I can determine the accuracy of information and know the difference between assumption, opinion, and fact ↑ I know that personal information you share online becomes part of your reputation, which can last a long time ↑ I know to speak to a trusted adult if I think my identity has been stolen ↑ I am careful about how and whom I share my personal information with











		☐ I know that personal information you share online becomes part of your reputation, which can last a long time ☐ I know to speak to a trusted adult if I think my identity has been stolen ☐ I am careful about how and whom I share my personal information with ☐ I know that some people online may not be who they say they are
General	Information Technology	l can use a keyboard with increasing confidence l can vary fonts, colours and effects l can cut, copy and paste l can import text, audio and graphics from devices, networks and online l can change images: crop, resize and edit them l insert and edit hyperlinks l can create things for a particular audience l can evaluate my own and other's work and suggest improvements l can create diagrams and graphs to answer questions l can talk about what data I need to collect to answer a question l can use and compare graphs and charts l can organise, present and interpret data
THE ALTERIST OF THE ALTERIST O	Digital Literacy	I can open, create, send and forward email I can attach files to digital communications – like email and blogs I can open and save attachments I use a range of digital tools to communicate (E.g. blogs, chatting, commenting) with purpose I use search engines to find things online I can use effective search terms to find specific information I can check the accuracy and reliability of information I know the difference between opinion, assumption and fact











Year 5	National Curriculum Links	iCan - Computing
iDraw E	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	☐ I can create vector images out of shapes and lines ☐ I can duplicate, move, resize, and rotate graphical objects ☐ I can zoom in and out to add detail to graphical objects ☐ I can change the order of layers in a vector drawing
iModel	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	☐ I can use graphical modelling software to create 3D shapes ☐ I can group 3D objects to create a model ☐ I can zoom in and out to add detail ☐ I can explore possibilities using graphical models
iProgram	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	I can use conditional if then else statements I can use x-y coordinates to program movement I know that boolean statements can only be true or false I know that variables are stored and be used to keep track of values (E.g. scores) I can use variables in programs I use sequence, selection, conditions and repetition in my programs I can design a algorithms before I program them I test my programs in a systematic way to help me find bugs I debug my programs I can evaluate my work and make improvements
iWab	To use technology purposefully to create, organise, store, manipulate and retrieve digital content understand computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration 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	I can act out the Internet I can talk about ways different services on the internet can be used to work with others I can tell you the difference between the Internet and the World Wide Web I can talk about how HTML code tells the computer what to put in a space on a web page I can edit HTML code to change the text appearing on a web page I recognise basic HTML and can identify what some item are (e.g. an image) I can change an image on a website I can read basic HTML and predict what a website would look like
	computer science	BOUTAL INTERLACY BOUTAL INTERLACY GRAPHY GRAPHY



iCrypto	use logical reasoning to explain how some simple algorithms work and to detect and correct errors in	l can encrypt and decrypt simple messages
		l can communicate simple messages through signals
Computer Science	algorithms and programs	l know that messages can be sent electronically
		1 can send and decode messages using Morse Code
		l can encode and decode messages using a cipher
		l know the importance of cryptography throughout time
iSafc	technology safely and respectfully, keeping personal	ी। can talk about the risks and benefits of using various forms of communication
	information private; identify where to go for help and	l know what makes information personal and private
	support when they have concerns about content or contact on the internet or other online technologies	follow safety rules and behave responsibly when using technology
DEGITAL LITERACY CELLETY	off the internet of other offline technologies	CALL CALARY In CALARY In real life and online
		↑ I know the SMART rules for communicating online ↑ I can check the validity of online content
		1 am sensible about which information I can trust
		1 can compare different sources of information
		t can communicate online safety and sensibly
		of can communicate online safety and sensibly
		ी know that people can be bullied online and this is called cyberbullying
		can talk about the different ways people can be bullied online
		h know what to do if I come across cyberbullying
		I can cross-check information provided on one website against that provided on another can create digital content for specific purposes
		t can use basic safety measures when using technology and working online
		can use appropriate search criteria to find information and check if it is reliable and useful
		I know that personal information should only be given to trusted sources
		l know that some information on the internet may be misleading or inaccurate and that it needs
		to be checked
		! use technology and online services to communicate and collaborate
		l can identify some of the risks involved in communicating online and take steps to avoid them











General	Information Technology	☐ I understand that information in the form of text, sound and pictures can be combined to create digital content and communicate with an audience ☐ I can design and create digital content for a particular purpose and audience ☐ I can create digital content that uses both text and images ☐ I can choose and use the appropriate advanced features of word processing or presentation software
(É)		l know that a computer network consists of a number of computers and devices that are connected l can suggest a range of activities you can do using the internet, including web browsing l can find information by navigating around a number of websites using hyperlinks and button











Year 6	National Curriculum Links	iCan - Computing
iProgram	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	Can identify a range of input devices used in playing computer games I can write and change computer programs to make them do a number of things I can use loops, variables and conditional statements (ifthen) in computer programs I can design a program and detail the objects, interactions and rules for a game I can use variables and program the rules necessary to progress in a game I can program a game that has more than one level I can identify mistakes in my own and other's computer programs I can systematically test my programs to find bugs and correct them
iApp	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 design, write and debug programs that accomplish	Collaboration, social, business etc.)
	specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	I can use variables, loops, conditionals (if then), procedures and functions in my programs I can identify mistakes in my own and other's computer programs I can make changes to my code when things do not execute as expected I can write code using a text-based programming language I can split a problem into smaller steps to help solve it and know this is called decomposition I can use algorithms to come up with solutions to problems











	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	
	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	
iNetwork		1 can talk about the benefits of being connected
	dunderstand computer networks including the internet;	I know a computer network is a group of computers that are connected
	how they can provide multiple services, such as the world-	I can talk about how the Internet is many networks connected and is a Wide Area Network
CORROLTED SCIENCE	wide web; and the opportunities they offer for	(WAN)
	communication and collaboration	1 know that a router sends and receives data as packets
		🖰 I know that websites have an address and are located on web servers around the world
	use technology safely, respectfully and responsibly;	$^{\circ}$ I can tell you the difference between the World Wide Web and the Internet
	recognise acceptable/unacceptable behaviour; identify a	🖰 I can find the location of a website using a computer
	range of ways to report concerns about content and	🖰 I can talk about the number of routers (hops) a request to visit a website passes through before
	contact	reaching its location
		l can describe how search engines 'crawl' links on websites to find out which web pages are available on the world wide web
		ी। know that search results are organised in order of popularity and this is called being 'ranked'
		1 can explain how search results are ranked by search engines
		I can use effective search terms to find things online
		1 can set out content on a web page using basic HTML
		1 can style content on a web page using basic CSS
'C-2	duse technology safely, respectfully and responsibly;	ी। can talk about the risks and benefits of communicating online
ISATE	recognise acceptable/unacceptable behaviour; identify a	1 understand what is personal and private information and when/where to share it
	range of ways to report concerns about content and	1 can give you examples of situations that would call for getting help
DIGITALLITERACY	contact	1 can identify one or more people I can trust (E.g. police officer or teacher)
		🖰 I can talk about the importance of never sharing passwords, except with parents or guardians
		1 can talk about the importance of screen locks that protect devices
		ी। know how to create passwords that are hard to guess, yet easy to remember
		1 can make decisions about information sharing on the sites and services I use











		☐ I can identify situations of harassment or bullying online ☐ I know what it means to be a bystander or upstander online ☐ I can talk about specific ways to respond to bullying when I see it ☐ I can explain how to behave if I experience harassment ☐ I can choose how to respond from options that feel safe and appropriate to me ☐ I know how to respond to negativity online ☐ I can identify situations when it's better to communicate face-to-face rather than to message ☐ I recognise that looking for help for myself or other people is a sign of strength ☐ I know that there are tools available to report online abuse ☐ I can talk about when and why it would be appropriate to use online reporting
General	Information Technology	☐ I can use a keyboard quickly and accurately ☐ I can create interactive presentations that combine text, images, sound and video ☐ I can use hyperlinks in my presentations ☐ I can format and edit my work to make it better ☐ I can create, improve and understand graphs and charts ☐ I can design questions and perform searches using more than one criteria on databases/spreadsheets ☐ I can check the reliability of data ☐ I can investigate the effects of changing variables ☐ I can make and test predictions using digital tools
	Digital Literacy	Can present data to a given audience and display findings using a range of digital tools I can communicate and collaborate online at schools and outside of it (E.g. messaging, gaming) I can share my work with a wide audience (E.g. blogging, publishing web pages) I understand when and where I can use the Internet to find things out I can explain what copyright is and how it applies to things I would like to use I know that I need permission to use other people's work in mine I can tell you how to check whether information online is reliable or useful I can explain how online research involves putting information together, understanding it and working out whether it is useful or good







