iCompute – Computing Vocabulary Progression

Year 1	National Curriculum Links	Vocabulary	
iAlgorithm	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	algorithm instruction sequence program	debug repeat true false
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	algorithm instruction sequence program	debug repeat output
iWrite	To use technology purposefully to create, organise, store, manipulate and retrieve digital content	text word processor key keyboard	save print backspace return/enter
iData	use technology purposefully to create, organise, store, manipulate and retrieve digital content	information data tally pictogram	survey graph sort
iModel	To use technology purposefully to create, organise, store, manipulate and retrieve digital content	model algorithm instruction choice	real imaginary

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 recognise common uses of information technology beyond school	Personal information Trusted adult Permission Cyber bullying

iCompute – Computing Vocabulary Progression

Year 2	National Curriculum Links	Vocabulary	
iProgram	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	algorithm instruction sequence	program repeat test debug
iPub	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	World Wide Web network Internet	device eBook
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	blog post comment online audio video link	respond comment justify
iSearch	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	World Wide Web Network Internet Hyperlink Search URL	

iAnimate	To use technology purposefully to create, organise, store, manipulate and retrieve digital content	animation scene script motion storyboard props
iDo Mail	use technology purposefully to create, organise, store, manipulate and retrieve digital content 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	email email address to from attachment
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	Personal information trustworthy untrustworthy trusted adult Internet online

Year 3	National Curriculum Links	Vocabulary	
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	⦿ Program ⦿ Sequence ⦿ Selection ⦿ Repeat	⦿ Coordinates ⦿ x-y axis ⦿ Import ⦿ Test ⦿ Debug
iNetwork	⦿ 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	⦿ Network ⦿ Network Switch ⦿ Server ⦿ Wireless Access Point (WAP) ⦿ WIFI	⦿ Router ⦿ Internet ⦿ IP Address ⦿ URL ⦿ DNS
iConnect	⦿ 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 ⦿ use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	⦿ World Wide Web ⦿ Network ⦿ Internet ⦿ Hyperlink ⦿ Search	⦿ URL ⦿ IP Address ⦿ Web browser ⦿ Copyright
iData	⦿ use technology purposefully to create, organise, store, manipulate and retrieve digital content	⦿ Field ⦿ Record ⦿ Database	⦿ Data ⦿ Search ⦿ Sort
iPodcast	⦿ 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	⦿ Podcast ⦿ Audio ⦿ Record ⦿ Effects	⦿ Track ⦿ Edit ⦿ Trim/Crop

COMPUTER SCIENCE DIGITAL LITERACY INFORMATION TECHNOLOGY eSAFETY

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

Simulation	Pattern
Rules	Predict
Choice	Effect
Variables	

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

Like/dislike	Privacy settings
Safe/unsafe	Online sharing
Public	Consent
Private	Strong password
Share	Manipulation
Block	Pressure
	Advertising

Year 4	National Curriculum Links	Vocabulary	
iProgram (COMPUTER SCIENCE)	design, write and debug programs that accomplish specific goals Use sequence and repetition in programs Use logical reasoning to explain how a simple algorithm works and detect and correct errors in algorithms and programs Solve problems by decomposing them into smaller parts create and debug simple programs understand that programs execute by following precise and unambiguous instructions use technology purposefully to create, organise, store, manipulate and retrieve digital content	Program Sequence Selection Condition Repeat Test Debug	Code Instruction Command Variable Execute
iData (INFORMATION TECHNOLOGY)	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 (KS3 edited) understand how numbers can be represented in binary, and be able to carry out simple operations on	Data Database Record File Field	Search Sort Search Chart
iAnimate (INFORMATION TECHNOLOGY / COMPUTER SCIENCE)	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	animation frame Frame rate Frames per second (FPS) CGI	Layer Forward/backward

iMail	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	email	send
		email address	receive
		to	server
		from	attachment
		privacy	
		security	
		inbox	
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	Privacy	Spam
		Privacy settings	Virus
		Keywords	Cyberbullying
		Copyright	
		Strong password	

Year 5	National Curriculum Links	Vocabulary	
iCrypto	Solve problems by decomposing them into smaller parts Use logical reasoning to explain how a simple algorithm works and 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	Cryptography Encrypt Decrypt Cipher	Key Shift Binary Frequency Analysis
iDraw	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	Vector Canvas Resize Rotate Fill Stamp Group	Layer Zoom Send to front Send to back Bring Forward Send Backward
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	2D 3D Model Resize	Rotate Zoom In Zoom Out Group
iProgram	design, write and debug programs that accomplish specific goals Use sequence and repetition in programs Use logical reasoning to explain how a simple algorithm works and detect and correct errors in algorithms and programs	Sequence Selection Condition Repeat Boolean	

	Solve problems by decomposing them into smaller parts create and debug simple programs understand that programs execute by following precise and unambiguous instructions use technology purposefully to create, organise, store, manipulate and retrieve digital content	Variable Coordinates x-y axis
iWeb	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 world-wide 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	World Wide Web HTML CSS Element Tags
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	Communication Private Safe SMART Technology Trust Risk Bullying Benefit Cyberbullying Personal

Year 6	National Curriculum Links	Vocabulary	
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 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating 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, including collecting, analysing, evaluating and presenting data and information	Sequence Selection Condition Repeat Boolean Variable Procedure Execute Test Debug	
iApp	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	Input Output Events Properties Pseudo-code Syntax Assets Parameters Argument	Function Procedure Event handler Variable Test Debug

iNetwork

- 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

- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Network	Data
Router	Packet
Internet	Search Engine
World Wide Web	Rank
IP Address	HTML
URL	

iSafe

- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

privacy	bullying
privacy settings	cyberbullying
security	conflict
two-factor (or step) verification	bystander
encryption	upstander
hack	harassment
strong password	report
personal information	block
	abuse