

Computing overview - Long Term Plan

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 1	Fundamentals	I Program Unit 1	I Write	I Algorithm	I Data	I Model
Year 2	Fundamentals	I animate	I do mail	I Search	I Blog	I Program
Year 3	Fundamentals	I program	I Simulate	I Network	I Data	I Connect
Year 4	Fundamentals	I program	I animate	I Mail	I Program 2	I Data
Year 5	Fundamentals	I Program Unit 1	I Program Unit 2	I Model	I Crypto	I Web
Year 6	Fundamentals	I program Unit 1	I Network	I Data	I App Unit 1	I Learn AI

EYFS

EYFS	Use touch screen technology carefully and the correct way up Talk about and identify patterns around them. Explore how things work.	Enjoy an increasing range of digital books (fiction and non-fiction)	Understand what constitutes a sensible amount of screen time. Learn and use subject specific vocabulary (e.g. on/off)	
------	---	--	--	--

Year 1 - Medium Term Plans

Term 2 I Program Unit 1	iRobot LO: To understand that algorithms are implemented as programs on a range of digital devices.	iControl LO: To give instructions to a programmable toy.	iPlan LO: To plans simple algorithm that controls a toy.	iProgram LO: To program a virtual object to move n screen objects.	iHunt LO: To record a sequence of instructions in a common format.	
	Vocabulary: Device, signal, instruction, response	Vocabulary: Instruction, forward, back, left, right, step, program, input, output	Vocabulary: Forward, back, left, right, step, program, algorithm, debugging	Vocabulary: Forward, back, left, right, turn, program, instruction, command, debugging	Vocabulary: Sequence, instructions, forward, backward, left, right, turn	
	Skills & Knowledge: understand that programs execute by following precise and unambiguous instructions; Use logical reasoning to predict behaviour of simple programs; create and debug simple programs; use technology purposefully to create, organise, store, manipulate and retrieve digital content.					
Term 3 I Write	iText LO: To recognise that text can be created in a number of ways.	iSentence LO: To use word processing software to create text.	iSentence LO: To understand that a computer can be connected to a printer.	iTell LO: To select and insert text into a word processing application.	iTell LO: To open and save a word processing document.	iReview LO: To understand the value of using a word processor to produce text.
	Vocabulary: Return, backspace, spacebar, scroll, text	Vocabulary: mouse, click, keyboard, computer, printer, shift, space, backspace, return, connected, user	Vocabulary: mouse, click, keyboard, computer, printer, shift, space, backspace, return, connected, user	Vocabulary: mouse, click, word bank, space, shift, return, backspace, open, save, cut	Vocabulary: mouse, click, word bank, space, shift, return, backspace, open, save, cut	Vocabulary: word processor, type, keyboard, keys, font, centre, bold, save, print
	Skills & Knowledge: recognise common uses of technology beyond school; use technology purposefully to create, organise, store, manipulate and retrieve digital content.					
Term 4 I Model	iDress LO: To understand that computers can show real events happening.	iDress LO: To use a mouse of move things accurately on screen.	iDecide LO: To understand that computers can be used to make choices.	iVenture LO: To understand that a computer can be used to model an environment	iVenture LO: To understand that a computer model is not an exact replica of real-life environments or scenarios.	iRepresent LO: To create a representation of a real or fantasy game/story.

				where choices can be made.		
	Vocabulary: mouse, point, click, drag, algorithm, instructions, drop, left click	Vocabulary: mouse, point, click, drag, algorithm, instructions, drop, left click	Vocabulary: choose, decide, point, click, drag	Vocabulary: Choice, decision, adventure, real, imaginary	Vocabulary: Choice, decision, adventure, real, imaginary	Vocabulary: real, fantasy, model
	Skills & Knowledge: use technology purposefully to create, organise, store, manipulate and retrieve digital content.					
Term 5 I Data	iSurvey LO: To understand why pictograms are useful.	iSurvey LO: To collect and organise information to solve a problem.	iRepresent To create a graph using digital tools.	iPresent LO: To create a pictogram using collected data.	iSort LO: To sort information on a criterion.	iSort LO: To present data using a graph.
	Vocabulary: survey, tally, information, data, pictogram	Vocabulary: survey, tally, information, data, pictogram	Vocabulary: graph, data, software, select, click, icon	Vocabulary: pictogram, tally, information, select, click, icon, data	Vocabulary: graph, data, tally, column, click, icon, sort, print, classify	Vocabulary: graph, data, tally, column, click, icon, sort, print, classify
	Skills & Knowledge: use technology purposefully to create, organise, store, manipulate and retrieve digital content.					
Term 6 I Algorithm	iFollow LO: To understand that algorithms are precise instructions that can be followed. LO: To follow a simple algorithm.	iFollow LO: To devise a simple algorithm.	iSilly LO: To understand that programs execute by following precise and unambiguous instructions.	iSay LO: To plan, test and debug a simple algorithm.	iBuild LO: To make predictions about an outcome based on a simple algorithm.	iCompose LO: To understand conditions and outcomes. To understand that some statements can only be true or false.
	Vocabulary: instruction, sequence, forward, back, turn, up, down	Vocabulary: instruction, sequence, forward, back, turn, up, down	Vocabulary: Instruction, algorithm, forward, back, left, right	Vocabulary: Up, down, left, right, debug	Vocabulary: predict, debug, up, down, pattern, repeat	Vocabulary: sequence, if, true, repeat
	Skills & Knowledge: understand what algorithms are; understand how algorithms are 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					

Year 2 - Medium Term Plans

Term 2 I animate	iFlip LO: To understand what an animation is. To understand the premise of a stop-frame animation.	iDesign LO: To understand that an animation consists of characters, a stage, props, sound, text and a story.	iStoryboard LO: To understand the importance of a storyboard in the story planning process. To create my own storyboard.	iScript LO: To understand that animation needs to be scripted.	iCreate LO: To understand that stop-frame animations involve physical characters, settings and props. To work collaboratively as a group to achieve a common goal.	iFilm LO: To create a stop-frame animation.
	Vocabulary: stop motion, image, animation, movie, character, flip book	Vocabulary: Animate, stop-motion, character, stage, background, sound, audio, text	Vocabulary: animation, stop-motion, character, storyboard	Vocabulary: animation, character, scene, background, stop-motion, storyboard, script	Vocabulary: animation, character, scene, background, stop-motion, storyboard, script, background, setting, props	Vocabulary: animation, character, scene, background, stop-motion, storyboard, script, background, setting, props, shot
	Skills & Knowledge: use technology purposefully to create, organise, store, manipulate and retrieve digital content.					
Term 3 I Do Email	iSend LO: To understand that messages can be sent electronically over distances.		iReply LO: To understand that messages can be sent electronically over distances and that people can reply to them.		iAttach LO: To understand that communication can be images, sound and text.	
	Vocabulary: email, type, send, snail mail, to, from		Vocabulary: communication, email, send, reply, to, from		Vocabulary: Communication, send, reply, text, images, sound, attachment	
	Skills & Knowledge: 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 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.					
Term 4 I Search	iFind LO To know the internet contains large amounts of information To use links to navigate a website	iAnswer LO To know the internet can be used to answer questions	iAsk LO To navigate a website using hyperlinks	iLocate LO To locate specific information using a website	iResearch LO To collect information from a number of different internet sources and check they are the same	iResearch LO To collect information from a number of different internet sources and check they are the same
	Vocabulary: internet, website, web page, browsing, hyperlink, navigate, information, world wide web	Vocabulary: clue, solve, information	Vocabulary: clue, solve, information	Vocabulary: explore, navigate, scroll	Vocabulary: research, website, hyperlink, scroll, URL	Vocabulary: Research, website, hyperlink, scroll, URL
	Skills & Knowledge: use technology purposefully to create, organise, store, manipulate and retrieve digital content; use technology safely and respectfully, keeping 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.					

Term 5 I Blog	iLogin LO: To know what a blog is and how it will be used in the classroom. To log in to the class blog.	iWrite LO: To know how to respond to the writing of others.	iPost LO: To know how to post on a log. To know how to respond to someone else's post on the class blog.	iJustify LO: To explain what I think and why.	iBlog LO: To use a blog to demonstrate learning.	iEvaluate LO: To reflect on work and make improvements.
	Vocabulary: blog, online, website, text, images, audio, video, webpage, hyperlink, login, username, password	Vocabulary: blog, online, website, text, images, audio, video, webpage, hyperlink, login, username, password, post, response	Vocabulary: blog, post, comment, respond, publish, login, username, password, communicating	Vocabulary: blog, post, response, comment, justify, evidence	Vocabulary: blog, post, login, comment	Vocabulary: blog, post, comment, evaluate, evidence
	Skills & Knowledge: 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.					
Term 6 I Program	iSequence LO: To understand that an algorithm is a process that consists of a series of steps that achieve a specific goal.	iInstruct LO: To understand that algorithms are made up of steps that can be repeated. To understand that computers need precise instructions.	iMonster LO: To use digital drawing tools to create images.	iMove LO: To program a simple animation involving movement.	iSpeak LO: To write a simple program that produces an output (text).	iCreate LO: To combine images and text to create a simple animation.
	Vocabulary: algorithm, instructions, sequence, input, output	Vocabulary: instruction, steps, order, repeat, forward, back, left, right	Vocabulary: cut, paste, undo, redo, copy, sprite	Vocabulary: input, output, statement, move, negative, steps, sprite	Vocabulary: duplicate, wait	Vocabulary: edit, undo, redo
	Skills & Knowledge: To understand what algorithms are; understand how algorithms are implemented as programs on digital devices; to create and debug simple programs; to use technology purposefully to create, organise, store, manipulate and retrieve digital content.					

Year 3 - Medium Term Plans

Term 2 I program	iMove To understand that a program is a sequence of statements written in a programming language. To program an animation that executes a sequence of statements	iExplore To understand that computer programs contain graphics, use x and y coordinates and turns are measured in degrees	iAnimate Program a sequence of statements that create visual effects	iMakeMusic LO: To import, create and record sounds. To understand that algorithms and programs can involve repetition.	iShapeUp LO: To predict the outcome of a simple algorithm. To use a repeat function to draw a 2D shape.	iCreate LO: To import pictures from a computer/the internet. To combine images, sounds and movement to create a personal animation.
	Vocabulary: sprite, blocks, programming, co-ordinates, up, down, right, left, if (conditional statement)	Vocabulary: sprite, up, down, left, right, x/y axis, co-ordinates	Vocabulary: sequence, animate, repeat, loop	Vocabulary: import, record, animate, repeat, loop	Vocabulary: 2D, pen, degrees, turn	Vocabulary: import, internet, image
Skills & Knowledge: 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 variable and various forms of input/output; use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs; understand computer networks, including the internet; 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 and evaluating and presenting data and information; use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.						
Term 3 I Simulate	iExplore LO: To understand that computer simulations can represent real or imaginary situations.	iRule LO: To understand that computer simulations are guided by rules.	iAdventure LO: To explore the effect of changing variables in a simulation using them to make and test predictions.	iCircuit LO: To understand that simulations can help people try things quickly and inexpensively.	iCircuit LO: To understand that simulations help us to understand difficult concepts.	iSim To design and produce a computer simulation or adventure game.
	Vocabulary: simulation, choice, rules, variables, model	Vocabulary: simulation, rule, pattern	Vocabulary: simulation, rules, adventure, choices, variables, predict	Vocabulary: simulation, choice, decision, rules, real life	Vocabulary: simulation, choice, decision, rules, real life	Vocabulary: simulate, design, program, choice, effect, decision, variables
Skills & Knowledge: simulating systems; use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs; use sequence, selection and repetition in programs; work with variables and various forms of input and output; simulating physical systems; 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.						
Term 4 I Network	iMap LO: To understand what a network is.	iConnect LO: To know key parts of a computer network.	iConnect LO: To understand how information is exchanged between devices.	iNet LO: To understand that the internet is the physical connections between computers and networks.	iNet LO: To understand how data travels throughout a network.	iAddress LO: To understand that devices on networks have a unique address.
	Vocabulary: network, connected, network switch, server, wireless access point (WAP)	Vocabulary: Device, network switch, server, wireless access point	Vocabulary: Device, network switch, server, wireless access point	Vocabulary: Internet, network, switch, wireless access point (WAP), WIFI, router	Vocabulary: Internet, network, switch, wireless access point (WAP), WIFI, router	Vocabulary: network, switch, router, internet protocol (IP) address, URL, DNS

		(WAP), WIFI, router, local area network (LAN)	(WAP), WIFI, router, local area network (LAN)			
	Skills & Knowledge: understand computer networks including the internet; understand how networks can provide multiple services such as the world wide web; understand how networks offer opportunities for communication and collaboration.					
Term 5 I Data	iRecord LO: To understand how information is organised in a database.	iAdd LO: To understand the advantages of a computer-based database over a paper one.	iCompare LO: To find and enter information to create additional records in a database.	iTravel LO: To demonstrate the knowledge, skills and understanding I have learned.		
	Vocabulary: database, record, question, field, data	Vocabulary: database, record, field, data	Vocabulary: internet, database, record, enter, question, field, data	Vocabulary: internet, database, record, enter, question, field, data		
	Skills & Knowledge: 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.					
Term 6 I Connect	Iconnect LO: To understand some of the services available on the internet and move around the web using hyperlinks.	iSurf LO: To use basic navigation skills to browse the world wide web.	IBrowse LO: To know the main features of web browsers.	iSearch LO: To understand how to find information using a search engine and what search terms to use.	iCheck LO: To understand that not all information on the web is reliable and to know how to distinguish safe and credible websites.	iHunt LO: To apply the skills learnt throughout the unit and understand the concept of copyright.
	Vocabulary: network, internet, world wide web, email, communicate, connected, forward, back, home, router, data, images, text, audio, video	Vocabulary: surfing, hyperlinks, forward, back, home, browser, world wide web	Vocabulary: browser, world wide web, navigate, default, homepage, forward, back, refresh/reload, home, address bar, url, favourite, icon	Vocabulary: world wide web, website, webpage, search engine, data, spider, crawl, sort, hits, tab	Vocabulary: world wide web, reliable, up-to-date, safe, author, domain	Vocabulary: world wide web, up-to-date, safe, author, domain, copyright
	Skills & Knowledge: understand computer networks, including the internet; understand how networks 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 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; use technology safely, respectfully and responsibly					

Year 4 - Medium Term Plans

Term 2 I Program	I makeblocks LO: To understand the need to reuse code in programming.	Isync LO: To understand that action can be programmed to synchronise	Iscene LO: To understand that broadcasts can be used to change scenes in scratch.	Idebug LO: To detect and correct errors in a computer program.	Icreate LO: To understand that code can be remixed and reused to create new content.	
	Vocabulary: turtle, forward, back, left, right, repeat, angle, degrees, repeat	Vocabulary: turtle, sequence, angle, forward, back, left, right, degrees	Vocabulary: sequence, angle, forward, back, right, left, value	Vocabulary: robot, forward, backward, right, left, paint, remote control	Vocabulary: condition, if, then, true, false, execute, statement, left, right, forward, back, repeat	
	Skills & Knowledge: design, write and debug programs that accomplish specific goals; use sequence, selection and repetition in programs; use logical reasoning to explain how a simple algorithm works; detect and correct errors in algorithms and programs; solve smaller problems by decomposing them into smaller parts.					
Term 3 I Animate	iFlip LO: To understand what an animation is.	iDraw LO: To create a scene for an animation.	iFrame LO: To understand that animations can be created using digital tools.	iScene LO: To create an animated scene	iProduce LO: To storyboard and create a short animation.	
	Vocabulary: image, camera, animation, stop, motion, illusion, onion skin	Vocabulary: animation, animator, frame, dimension, effects, onion skinning	Vocabulary: animation, frame, sequence, frame rate, frames per second, CGI, GIF	Vocabulary: animation, sequence, frame rate, frames per second, CGI, GIF, effects, 3D	Vocabulary: design, plan, animate, storyboard, test, debug, edit	
	Skills & Knowledge: Select, use and combine a variety of software (including internet services) on a range of digital devices; design and create a range of programs, systems and content that accomplish given goals; collecting, analysing, evaluation and presenting data and information.					
Term 4 I Mail	iMessage LO: To understand that messages can be used to communicate over distance a number of ways.	iRetrieve LO: To understand how email travels and how to retrieve it.	ISend LO: To send and reply to emails.	iAttach LO: To attach a file to an email.	iAttach LO: To understand the advantages of attaching files to emails.	iCollaborate LO: To use email to communicate ideas.
	Vocabulary: message, private, security	Vocabulary: email, send, receive, internet, mail; inbox, log on, log out,	Vocabulary: Email, send reply, internet, mail, inbox, log on, log out,	Vocabulary: email, attachment, browse	Vocabulary: email, attachment, browse	Vocabulary: email, send, receive, attachment, reply, forward

		telecommunications, email address, server, inbox	email address, server, inbox			
	Skills & Knowledge: recognise common uses of information technology beyond school; 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 the content or contact on the internet or other inline technologies.					
Term 5 I Program Unit 2	Idraw LO: To understand that a program is a sequence of statements written in a programming language.	iwrite LO: To understand that computer programs consist of statements that perform a specific task.	ishapeup LO: To amend an algorithm to change the size of a shape.	irobot LO: To program a virtual robot to move and draw.	idesign LO: To design a program that makes choices.	ifollow LO: To develop algorithms.
	Vocabulary: design, engineering, hub, motor, program, robot, input, output	Vocabulary: repeat, loops, if, however, until, execute, sequence, parameter	Vocabulary: repeat, sense, sensor, respond, data, choice, decisions, condition, conditional, if	Vocabulary: repeat, sense, sensor, respond, data, choice, decisions, condition, conditional, if	Vocabulary: design, test, debug, program	Vocabulary: repeat, if, else, left, right, forward, back
	Skills & Knowledge: 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 repetitions in programs; work with variables and various forms of input and output; use logical reasoning to explain how some simple algorithms work; detect and correct errors in algorithms and programs; understand how computer networks work, including the internet; understand how they can provide multiple services 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 a given goal, including collecting, analysing, evaluating and presenting data.					
Term 6 I Data	Ibinary LO: To understand that computers represent data as numbers.	Isort LO: To sort record names using field names.	Ienter LO: To understand that information can be stored as numbers, text and choices.	Ienter LO: To understand that storing information in an organised way helps answer questions.	iSearch LO: To search a database to answer a question.	iChart LO: To use the information in a database to create a simple chart.
	Vocabulary: binary, series, base, on, off, data, digital	Vocabulary: data, information, record, field, file	Vocabulary: information, record, field, file, database	Vocabulary: information, record, field, file, database	Vocabulary: database, file, record, field, search	Vocabulary: database, record, field, search, chart
	Skills & Knowledge: 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 a given goal, including collecting, analysing, evaluating and presenting data.					

	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						
Term 4 I Model	Ishape LO: To understand the difference between 2D and 3D shapes and become familiar with basic 3D modelling tools.	iDesign LO: To understand that graphical models can easily be changed.	iDevelop LO: To use features of graphical modelling software to develop a 3D model.	iEvaluate LO: To evaluate and improve 3D models.			
	Vocabulary: 2D, 3D dimensions, model, graphic	Vocabulary: Graphic, model, 2D, 3D, resize, rotate, design, evaluate	Vocabulary: Graphic, model, 2D, 3D, resize, rotate, group, workspace, workplane, view.	Vocabulary: Graphic, model, 2D, 3D, resize, rotate, group, workspace, work plane, view, amend, evaluate, improve			
	Skills & Knowledge: 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.						
Term 5 I Crypto	iDecipher LO: To understand that messages can be sent and received secretly. LO: To learn to encrypt/decrypt simple messages.	iSignal LO: To understand signalling is a form of communication and communicate simple messages through signals.	iCode LO: To understand that messages can be sent electronically over distances and they are transmitted as binary. To encode and decode Morse code.	iShift LO: To encode/decode messages using a simple shift cipher.	iCrackcodes LO: To understand the algorithm of a simple shift cipher. To use frequency analysis to decipher encrypted text.	iEnigma LO: To understand the importance of cryptography and understand how the Enigma Machine operates.	
	Vocabulary: cipher, code, encrypt, decrypt, code, cryptography, key	Vocabulary: signalling, semaphore, down, low, out, high, up, across	Vocabulary: communication, signal, message, data, binary, encode, decode, morse, dots, dashes, dit, dah, on, off	Vocabulary: encode, decode, encrypt, decrypt, cipher, decipher, key, shift	Vocabulary: encryption, decryption, encode, decode, cipher, decipher, key, pattern, frequency, analysis, shift	Vocabulary: cryptography, cipher, shift, key, polyalphabetic, enigma, plaintext, ciphertext	
	Skills & Knowledge: 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; 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, including collecting, analysing, evaluating and presenting data and information						
Term 6 I Web	IShare LO: To understand the world wide web is one of many services offered on the internet.	iRemix LO: To understand that many people remix content on the world wide web and	iHack LO: To know that HTML gives a web page structure. To change the picture on a webpage,	iDecode LO: To read basic HTML code.	iPresent LO: To use research for the creation of a website.		

Year 6 - Medium Term Plans

Term 2 I Program Unit 1	iControl LO: To understand the difference between games and simulations To identify the various inputs that computer games can use	iGame LO: To program a computer game by sequencing conditional statements	iPlan LO: To understand that behaviour of a computer program should be planned To understand that programs are developed according to a plan	iCode LO: To program an algorithm according to a plan	iDevelop LO: To develop a program according to a plan	iTest LO: To develop strategies for testing and debugging computer programs
	Vocabulary: control, input, output, simulation	Vocabulary: control, input, output, process, condition, statement, if, then	Vocabulary: design, plan, logical operators, variables	Vocabulary: algorithm, plan, sprite, costume, variable, iteration, test, bug	Vocabulary: algorithm, plan, sprite, costume, variable, iteration	Vocabulary: test, bug, debug, amend, systematically
	Skills & Knowledge: Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller arts; use sequence, selection and repetition in programs; Work with variables and various forms of input and output; Detect and correct errors in algorithms and programs.					
Term 3 I Network	iConnect LO: To understand that a computer network is a group of computers that are connected, which allows users to communicate and share	iRoute LO: To understand that the internet is many networks that are connected to each other. To know that a router sends/receives information as packets of data.	iTrace LO: To know that computers connected to the internet have their own address. To understand that services involving web pages on the internet are known as the World Wide Web and that websites can be traced to a particular webserver.	iSearch LO: To know that internet search engines maintain, and rank, a list (or index) of other websites available on the world wide web. To use clear search items when conducting internet searches in order to find things out.	iCreate LO: To know that web pages are written in HTML. To recognise the basic HTML syntax.	
	Vocabulary: network, internet, wired, wireless, data, devices, communicate, connected, LAN, WAN, network switch, router	Vocabulary: network, connect, internet, router, packet, data, address	Vocabulary: IP address, router, website, webserver, trace, url, World Wide Web, internet service providers (ISP)	Vocabulary: internet, world wide web, search engine, search terms, spider, crawling, algorithm	Vocabulary: website, webpage, browser, world wide web, hyperlink, image link, HTML, CSS, tags, URL, copyright	
	Skills & Knowledge: 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.					
Term 4 I Data	iCell LO: To identify some parts of a spreadsheet. To identify cell references.	iWorkItOut LO: To understand that spreadsheets can be used to store numerical data and to make calculations. To understand that recalculations with different values can be done quickly.	iCalculate LO: To enter a formula to calculate totals. To enter numerical data into cells.	iRecord LO: To understand that graphs and charts can be created and easily changed from spreadsheet data.	iSum LO: To understand the SUM function can be used to create formulas at will. To use a spreadsheet to model a costing exercise.	

	Vocabulary: spreadsheet, cell, cell reference	Vocabulary: calculate, formula, cell, cell reference	Vocabulary: formula, sum, formula bar	Vocabulary: formula, cell, calculate, chart, graph	Vocabulary: calculate, formula, formulae, sum, modelling, variable	
	Skills & Knowledge: Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluation and presenting data and information.					
Term 5 I App Unit 1	iMobile LO: To understand the value of mobile technology and its future development.	iExplore LO: To use development tools to create an app.			iTap LO: To use algorithms to develop a solution to a problem.	
	Vocabulary: mobile, smart, phone, tablet, apps, technology, touch, communication, input, output	Vocabulary: components, events, properties, test, debug, program, code, android, iOS, operating system, hardware, software, conditional, handler			Vocabulary: sprite, component, event, event handler, co-ordinates, x and y, procedure, function, variables, data, value, type, call, argument	
	Skills & Knowledge: design, write and debug programs that accomplish specific goals, including controlling or simulation physical systems; solve problems by decomposing them into smaller parts; use sequence, selection, and repetition in programs; work with various 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.					
Term 5 I App Unit 1	iPlan LO: To understand that apps are developed according to a plan.	iDevelop LO: To develop an app according to a plan			iDebug LO: To develop strategies for testing computer games.	
	Vocabulary: design, plan, decomposition, algorithm, interface, interact, pseudo-code	Vocabulary: plan, algorithm, component, events, properties, test, bug			Vocabulary: test, bug, debug, amend, systematically	
	Skills & Knowledge: design, write and debug programs that accomplish specific goals, including controlling or simulation physical systems; solve problems by decomposing them into smaller parts; use sequence, selection, and repetition in programs; work with various 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 Compute Unit 1 I Learn AI	iAmNotARobot	iTrain	iChat
	LO: To understand what AI is, how it helps people, and how to be a responsible and kind digital citizen.	LO: To train an AI model using data and simple examples.	LO: To interact with an AI chatbot, ask good questions, and use it to solve problems and get information.
	Vocabulary: AI, human, robot, algorithm, data, bias, privacy, responsible, digital citizen	Vocabulary: data, dataset, input, output, model, train, example, label, accuracy, improve	Vocabulary: prompt, question, chatbot, response, helpful, refine, conversation, context, clarity
	Skills & Knowledge: recognize what AI can and cannot do, identify real-life examples of AI, understand the importance of data privacy and responsible use, and explain how to be a kind and ethical user of AI.	Skills & Knowledge: collect and prepare data, give examples and labels, train a simple AI model (e.g., using a block-based or visual tool), test the model with new data, and explain how training helps the AI make better predictions.	Skills & Knowledge: write clear and specific prompts, have a conversation with an AI chatbot, evaluate the response, refine questions, and explain how better questions lead to more accurate and useful results.
I Compute Unit 1 I Learn AI	iLearn	iDance	iJudge
	LO: To understand how AI can help me learn, find information and be more creative.	LO: To use AI to create and organise music and movement.	LO: To explore how AI can help me make fairer and better decisions.
	Vocabulary: information, search, generate, content, AI tool, prompt, learn, creative	Vocabulary: create, generate, music, rhythm, movement, prompt, output, style, remix	Vocabulary: decision, judge, bias, fairness, data, evidence, reasoning, choice
	Skills & Knowledge: find reliable information using AI tools; ask good questions; create and share simple content; explain how AI helps learning.	Skills & Knowledge: use AI tools to generate music and movement ideas; experiment with styles; refine and improve creations.	Skills & Knowledge: analyse information from AI tools; compare options; explain how AI can help with fairer decisions; identify potential bias.