

Computing Long Term Overview – KS2



Year 3

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Curriculum Strand	Computing Systems and Networks	Creating Media	Programming A	Data and Information	Programming B	Creating Media
Topic	Connecting Computers	Desktop Publishing (including basic skills)	Sequence in Music (Scratch)	Branching Databases (j2e)	Events and Actions (Scratch)	Animation (Stop Motion Studio- iPad)
Unit Summary	Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	Creating documents by modifying text, images, and page layouts for a specified purpose	Creating sequences in a block-based programming language to make music	Building and using branching databases to group objects using yes/no questions.	Writing algorithms and programs that use a range of events to trigger sequence	Capturing and editing digital still images to produce a stop-frame animation that tells a story.
Vocabulary	Digital device, input, output, process, process, pictogram, connection, network, network switch, server, wireless access point,	Text, images, advantages, disadvantages, communicate, font, font style, communicate, template, landscape, portrait, orientation, placeholder, layout, content, desktop publishing, copy, paste, purpose, benefits	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, code, run the code, order, note, chord, stage, costume, backdrop, design, algorithm, bug, debug	Branching database, database, attribute, value, questions, objects, equal, even, separate, structure, compare, order, organise, j2data, selecting, pictogram, information, decision tree	Motion, event, sprite, algorithm, logic, move, resize, algorithm, extension block, pen up, set up, pen, design, event, action, debugging, errors, design, code, test	Animation, flip book, stop-frame animation, frame, sequence, image, photograph, setting, character, events, onion skinning, consistency, evaluation, delete, media, import, transition

Year 4



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Curriculum Strand	Computing Systems and Networks	Programming A	Creating Media		Programming B	
Topic	The Internet	Repetition in Shapes (Logo)	Audio Editing (Audacity)		Repetition in Games (Scratch)	
Unit Summary	Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	Using a text-based programming language to explore count-controlled loops when drawing shapes.	Capturing and editing audio to produce a podcast, ensuring that copyright is considered.		Using a block-based programming language to explore count-controlled and infinite loops when creating a game.	
Vocabulary	Internet, network, router, network security, network switch, server, wireless access point, website, web page, web address, routing, browser, World Wide Web, content, website, links, files, use, content, download, sharing, ownership, permission, Information, sharing, accurate, honest, content, adverts,	Program, turtle, Logo, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, value, trace, value, decompose, procedure	Audio, record, playback, microphone, speaker, headphones, input, output, sound, start, pause, stop, podcast, save, file, edit, selection, open, mixing, time shift, export, MP3, audio, editing, evaluate, feedback		Scratch, programming, sprite, blocks, code, loop, repeat, value, block, repeat, forever, infinite loop, count-controlled loop, costume, repetition, forever, infinite loop, count-controlled loop, animate, costume, event block, duplicate, repeat, forever, modify, design, sprite, algorithm, duplicate, debug, refine, evaluate	

Year 5



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Curriculum Strand	Computing Systems and Networks	Creating Media	Creating Media		Programming B	
Topic	Sharing Information	Vector Drawing (word processing)	Video Editing (iMovie/Adobe)		Selection in Quizzes (Scratch)	
Unit Summary	Recognising IT systems around us and how they allow us to search the internet.	Creating images in a drawing program by using layers and groups of objects.	Planning, capturing, and editing video to produce a short film.		Exploring selection in programming to design and code an interactive quiz.	
Vocabulary	System, connection, digital, input, process, output, protocol, address, packet, chat, explore, slide deck, reuse, remix, collaboration	Vector, drawing tools, shapes, object, icons, toolbar, object, move, resize, colour, rotate, duplicate/copy, organise, zoom, select, rotate, alignment grid, resize, handles, consistency, modify, layers, object, front, back, order, copy, paste, group, ungroup, duplicate, reuse, improvement, evaluate, alternatives	Video, audio, recording, storyboard, script, soundtrack, dialogue, capture, zoom, storage, digital, tape, audio, AV (audio-visual), save, videographer, video techniques: Zoom, pan, tilt, angle, lighting, setting, YouTuber, content, light, audio/sound, camera angle, colour, Export, computer, Microsoft Movie Maker, split, trim/clip, edit, titles, end credits, timeline, transitions, soundtrack, content, retake/reshoot (choose agreed language), special effects, title screen, end credits, export, constructive feedback		Selection, condition, true, false, count-controlled loop, outcomes, conditional statement (the linking together of a condition and outcomes), algorithm, program, debug, question, answer, debug, task, design, input, implement, design, test, run, test, setup, share, evaluate, constructive	

Year 6



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Curriculum Strand	Computing Systems and Networks	Creating Media	Data and Information		Programming A	
Topic	Communication	3D Design (TinkerCAD)	Spreadsheets (excel)		Variables in Games (Scratch)	
Unit Summary	Identifying and exploring how data is transferred and information is shared online.	Planning, developing, and evaluating 3D computer models of physical objects.	Answering questions by using spreadsheets to organise and calculate data.		Exploring variables when designing and coding a game.	
Vocabulary	Search, search engine, Google, Bing, Yahoo!, Swisscows, DuckDuckGo, refine, index, crawler, bot, search engine, ranking, optimisation, links, content creator, selection, communication, internet, public, private, one-way, two-way, one-to-one, one-to-many, SMS, email, WhatsApp, blog, YouTube, Twitter, BBC Newsround	2D, 3D, 3D object, 3D space, view, resize, colour, lift, rotate, position, select, duplicate, dimensions, placeholder, hole, group, ungroup, resize, ungroup, design, modify, evaluate, improve	Spreadsheet, data, data heading, data set, cells, columns and rows, data item, data set, object, spreadsheet application, format, common attribute, formula, calculation, input, output, cell reference, calculate, operation, cell, range, duplicate, sigma, propose, question, organised, graph, chart, evaluate, results, comparison, questions, software, tools		Variable, change, name, value, set, design, event, algorithm, code, task, algorithm, artwork, program, project, code, test, debug, improve, evaluate, share	

Extra Units:

Y4: Data Logging: Link to Science

Y5: Programming A: Selection in Physical Computing: Links to D&T (Crumbles)

Y6: *Programming B: Sensing (micro:bit)*

Y6: *Web Page Creation (Google Sites)*

