

Cudham Primary School Computing Overview



Honeysuckle Class



National Curriculum Aims KS1 and 2	The national curriculum for Computing aims to ensure that all pupils: • can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation • can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems • can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems • are responsible, competent, confident and creative users of information and communication technology.	
National Curriculum Objectives	Cycle A & B Pupils should be taught to: 1. design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts 2. use sequence, selection, and repetition in programs; work with variables and various forms of input and output 3. use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs 4. 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 5. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content 6. 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 7. use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	
Curriculum links	Cycle A English – non-narrative (Creating media – Audio Production) Science – Sound (Creating media – Audio Production) English – draft and write narratives (Creating media - Stop-frame animation)	Cycle B Maths (Computing and System Networks – Connecting Computers) Art & Design (Computing and System Networks – Connecting Computer) Maths (Data and Information – Data logging)
Context	Where they have been: • Developed an understanding of technology, computers, and digital devices, including how they are used safely and responsibly in everyday life. • Created digital content using tools such as digital painting and photography, while learning how images can be captured, edited, and interpreted. • Built early programming skills through sequencing, algorithms, animations, quizzes, and controlling devices, including predicting, testing, and debugging programs. • Learned how to collect, organise, group, and present data to answer questions and identify patterns.	Where they will go next: • Develop a deeper understanding of computer systems, networks, the internet, and how digital information is transferred, searched for, and shared safely online. • Create and evaluate digital media, including video production and website design, while considering audience, copyright, usability, and presentation. • Advance programming skills by using selection (if/else statements), variables, algorithms, and game design to create interactive programs. • Collect, organise, analyse, and present data using flat-file databases and spreadsheets, including formulas, charts, and data-driven decision-making.

	Developed problem-solving, logical thinking, and digital literacy skills through hands-on computing activities and creative projects.	Strengthen collaboration, communication, and problem-solving skills through shared online projects and the development of increasingly complex digital solutions.
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Cycle A

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit: Computing and System Networks – Connecting Computers (Year 3) & The Internet (Year 4)	Unit: Creating media – Desktop Publishing (Year 3)	Unit: Programming – Sequencing Sounds (Year 3)	Unit: Data and Information – Branching Databases (Year 3)	Unit: Programming – Repetition in Games (Year 4)	Unit: Creating Media – Audio Production (Year 4)
NC Objective/s: 2, 4, 5, 6, 7	NC Objective/s: 5, 6	NC Objective/s: 1, 2, 3, 6	NC Objective/s: 6	NC Objective/s: 1, 2, 3	NC Objective/s: 5, 6, 7
Vocabulary: digital device, input, process, output, program, digital, non-digital, connection, network, switch, server, wireless access point, cables, sockets internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts	Vocabulary: text, images, advantages, disadvantages, communicate, font, style, landscape, portrait, orientation, placeholder, template, layout, content, desktop publishing, copy, paste, purpose, benefits.	Vocabulary: Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, run the code, order, note, chord, algorithm, bug, debug, code.	Vocabulary: attribute, value, questions, table, objects, branching, database, objects, equal, even, separate, structure, compare, order, organise, selecting, information, decision tree.	Vocabulary: Scratch, programming, sprite, blocks, code, loop, repeat, value, infinite loop, count-controlled loop, costume, repetition, forever, animate, event block, duplicate, modify, design, algorithm, debug, refine, evaluate	Vocabulary: audio, microphone, speaker, headphones, input device, output device, sound, podcast, edit, trim, align, layer, import, record, playback, selection, load, save, export, MP3, evaluate, feedback.

Cycle B

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit: Computing and System Networks – Connecting Computers (Year 3) & The Internet (Year 4)	Unit: Creating Media – Stop Frame Animation (Year 3)	Unit: Programming – Events and Actions (Year 3)	Unit: Data Information – Data Logging (Year 4)	Unit: Programming – Repetition in Shapes (Year 4)	Unit: Creating Media – Photo editing (Year 4)
NC Objective/s: 2, 4, 5, 6, 7	NC Objective/s: 6, 7	NC Objective/s: 1, 2, 3, 6	NC Objective/s: 2, 6	NC Objective/s: 1, 2, 3, 6	NC Objective/s: 6, 7
Vocabulary: digital device, input, process, output, program, digital, non-digital, connection, network, switch, server, wireless access point, cables, sockets internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts	Vocabulary: animation, flip book, stopframe, frame, sequence, image, photograph, setting, character, events, onion skinning, consistency, evaluation, delete, media, import, transition.	Vocabulary: motion, event, sprite, algorithm, logic, move, resize, extension block, pen up, set up, pen, design, action, debugging, errors, setup, code, test, debug, actions	Vocabulary: data, table, layout, input device, sensor, logger, logging, data point, interval, analyse, dataset, import, export, logged, collection, review, conclusion.	Vocabulary: logo (programming environment), program, turtle, commands, code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, value, trace, decompose, procedure.	Vocabulary: image, edit, digital, crop, rotate, undo, save, adjustments, effects, colours, hue, saturation, sepia, vignette, image, retouch, clone, select, combine, made up, real, composite, cut, copy, paste, alter, background, foreground, zoom, undo, font.