



CURRICULLUM PROGRESSION GRID: COMPUTING

LOWER KEY STAGE 2

Computer Science/Coding	Information Technology	Online Safety
<p>NC Link</p> <ul style="list-style-type: none"> 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; 	<p>NC Link</p> <ul style="list-style-type: none"> 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; 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; 	<p>NC Link</p> <ul style="list-style-type: none"> Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
<p>Theme links Autumn 1, Spring 1 & Summer 1</p>	<p>Theme links Autumn 2, Spring 2 & Summer 2</p>	<p>Theme links Ongoing throughout the year</p>
<p>Builds on KS1</p> <ul style="list-style-type: none"> understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions; create and debug simple programs; use logical reasoning to predict the behaviour of simple programs; 	<p>Builds on KS1</p> <ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate and retrieve digital content; Recognise common uses of information technology beyond school 	<p>Builds on KS1</p> <ul style="list-style-type: none"> 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.

<p>Intent</p> <ul style="list-style-type: none"> • use logical thinking to solve an open-ended problem by breaking it up into smaller parts; • write a program, putting commands into a sequence to achieve a specific outcome; • give a set of instructions to follow and predict what will happen; • keep testing a program and recognise when it needs to be debugged; • use variables to create an effect, e.g. repetition, if, when, loop; <p>Extended Write: Instructions for how to do something A 'how to' guide to writing code</p>	<p>Intent</p> <p><u>Technology in Our Lives</u></p> <ul style="list-style-type: none"> • explain ways to communicate with others online; • describe the world wide web as the part of the internet that contains websites; • add websites to a favourites list; • use search tools to find and use an appropriate website and content; • use strategies to improve results when searching online; <p><u>Multimedia, Text and Images</u></p> <ul style="list-style-type: none"> • create different effects with different technological tools, demonstrating control; • use appropriate keyboard commands to amend text on a device; • use applications and devices in order to communicate ideas, work, and messages; • save, retrieve and evaluate work, making amendments; • insert a picture/text/graph/hyperlink from the internet or a personal file; <p><u>Multimedia, Sound and Motion</u></p> <ul style="list-style-type: none"> • use software to record, create and edit sounds and capture still images; • change recorded sounds, volume, duration and pauses; • use software to capture video for a purpose; • crop and arrange clips to create a short film; • plan an animation and move items within each animation for playback; <p><u>Data Handling</u></p>	<p>Intent</p> <ul style="list-style-type: none"> - reflect on their own digital footprint and behaviour online; - identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying; - agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords; - seek help from an adult when they see something that is unexpected or worrying; - demonstrate understanding of age-appropriate websites and adverts; - use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public. <p>Extended Write: E-Safety information poster</p>
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	<p>Children can:</p> <ul style="list-style-type: none"> • talk about the different ways data can be organised; • sort and organise information to use in other ways; • search a ready-made database to answer questions; <p>Extended Write: Multimedia story with images/sounds combined with text Information about examples of technology in our lives</p>	
<p>Vocabulary decompose, decomposing, logical sequence, flowchart, sprite, block, command, algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable.</p>	<p>Vocabulary draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck.</p> <p>audio, sound, video, movie, embed, link, file format, animate, animation, still image,, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.</p> <p>filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media. Google Docs, insert, table.</p>	<p>Vocabulary safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.</p>