



# WORTH PRIMARY SCHOOL

“lifelong learning”

## Computing Curriculum Skills and Knowledge Progression

### EYFS

Children will;

- Start to reason about the world around them and know that technology can be used in a range of places.
- Know how to use mechanical and electronic toys and simple equipment. They will start to understand how they work through cause and effect.
- Begin to understand algorithms through sequencing for example lining up, tidying up and taking turns or through sequencing events during role play.
- Select and use technology to perform simple tasks.

	Years 1 and 2	Years 3 and 4	Years 5 and 6
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	<p>Children will</p> <ul style="list-style-type: none"> <li>• use applications and devices in order to communicate ideas, work, messages and demonstrate control;</li> <li>• save, retrieve and organise work;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present.</li> </ul> <p>Children will:</p> <ul style="list-style-type: none"> <li>• use software to record sounds;</li> <li>• change sounds recorded;</li> <li>• save, retrieve and organise work;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• create different effects with different technological tools, demonstrating control;</li> <li>• use appropriate keyboard commands to amend text on a device;</li> <li>• use applications and devices in order to communicate ideas, work, and messages;</li> <li>• save, retrieve and evaluate work, making amendments;</li> <li>• insert a picture/text/graph/hyperlink from the internet or a personal file; use key vocabulary to demonstrate knowledge and understanding in this strand: 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.</li> </ul> <p>Children will:</p> <ul style="list-style-type: none"> <li>• use software to record, create and edit sounds and capture still images;</li> <li>• change recorded sounds, volume, duration and pauses;</li> <li>• use software to capture video for a purpose;</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• use the skills already developed to create content using unfamiliar technology;</li> <li>• select, use and combine the appropriate technology tools to create effect;</li> <li>• review and improve their own work and support others to improve their work;</li> <li>• save, retrieve and evaluate their work, making amendments;</li> <li>• insert a picture/text/graph/hyperlink from the internet or personal file; use key vocabulary to demonstrate knowledge and understanding in this strand: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide.</li> </ul> <p>Children will:</p> <ul style="list-style-type: none"> <li>• collect audio from a variety of resources including own recordings and internet clips;</li> <li>• use a digital device to record sounds and present audio;</li> <li>• trim, arrange and edit audio levels to improve quality;</li> <li>• publish their animation and use a movie editing package to edit/refine and add titles;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this</li> </ul>
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		<ul style="list-style-type: none"><li>• crop and arrange clips to create a short film;</li><li>• plan an animation and move items within each animation for playback;</li><li>• use key vocabulary to demonstrate knowledge and understanding in this strand: audio, sound, video, movie, embed, link, file format, animate, animation, still image, thaumatrope, zoetrope, zoopraxiscope, stereoscope, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.</li></ul>	<p>strand: audio, record, edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload.</p>
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Technology in our lives	<p>Children will:</p> <ul style="list-style-type: none"> <li>• recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping;</li> <li>• use links to websites to find information;</li> <li>• recognise age-appropriate websites;</li> <li>• use safe search filters;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• explain ways to communicate with others online;</li> <li>• describe the world wide web as the part of the internet that contains websites;</li> <li>• add websites to a favourites list;</li> <li>• use search tools to find and use an appropriate website and content;</li> <li>• use strategies to improve results when searching online;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• search for information using appropriate websites and advanced search functions within Google;</li> <li>• use strategies to check the reliability of information (cross-check with another source such as books);</li> <li>• talk about the way search results are selected and ranked;</li> <li>• check the reliability of a website, including the photos on site;</li> <li>• tell you about copyright and acknowledge the sources of information;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar.</li> </ul>
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Data Handling		<p>Children will:</p> <ul style="list-style-type: none"><li>• sort and organise information to use in other ways;</li><li>• use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table.</li></ul>	<p>Children will:</p> <ul style="list-style-type: none"><li>• construct data on the most appropriate application;</li><li>• know how to interpret data, including spotting inaccurate data and comparing data;</li><li>• use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets;</li><li>• add data to an existing database;</li><li>• use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending.</li></ul>
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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Online safety</p>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• identify what things count as personal information;</li> <li>• identify what is appropriate and inappropriate behaviour on the internet;</li> <li>• agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords;</li> <li>• seek help from an adult when they see something that is unexpected or worrying;</li> <li>• demonstrate how to safely open and close applications and log on and log off from websites;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• reflect on their own digital footprint and behaviour online;</li> <li>• identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying;</li> <li>• agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords;</li> <li>• seek help from an adult when they see something that is unexpected or worrying;</li> <li>• demonstrate understanding of age-appropriate websites and adverts;</li> <li>• 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.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• protect their password and other personal information;</li> <li>• be a good online citizen and friend;</li> <li>• judge what sort of privacy settings might be relevant to reducing different risks;</li> <li>• seek help from an adult when they see something that is unexpected or worrying;</li> <li>• discuss scenarios involving online risk;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.</li> </ul>
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<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Programming</p>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• give commands one at a time to control direction and movement, including straight, forwards, backwards, turn;</li> <li>• control the nature of events: repeat, loops, single events and add and delete features;</li> <li>• give a set of instructions to follow and predict what will happen;</li> <li>• improve/change their sequence of commands by debugging;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• use logical thinking to solve an open-ended problem by breaking it up into smaller parts;</li> <li>• write a program, putting commands into a sequence to achieve a specific outcome;</li> <li>• give a set of instructions to follow and predict what will happen;</li> <li>• keep testing a program and recognise when it needs to be debugged;</li> <li>• use variables to create an effect, e.g. repetition, if, when, loop;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: 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.</li> </ul>	<p>Children will:</p> <ul style="list-style-type: none"> <li>• use external triggers and infinite loops to demonstrate control;</li> <li>• follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols;</li> <li>• use conditional statements and edit variables;</li> <li>• decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program;</li> <li>• keep testing a program and recognise when it needs to be debugged;</li> <li>• use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise.</li> </ul>
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