

## Whole School Progression Document - Computing 2025 to 26 (detailing links to National Curriculum and Tier 3 Vocabulary)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>EYFS</b>	<b>Connect, Collect and Communicate</b>	<b>Coding Movement</b>	<b>Connect, Collect and Communicate</b>	<b>Coding Rotation</b>	<b>Connect, Collect and Communicate</b>	<b>Coding Debugging</b>
<b>Development Matters and Early Learning Goals</b>	<p>As the children settle into Foundation Stage, an informed decision is made as to when Ipdas are introduced.</p> <p><b>Reception: Personal, Social and Emotional</b> Development:</p> <ul style="list-style-type: none"> <li>Show resilience and perseverance in the face of a challenge.</li> <li>Know and talk about the different factors that support their overall health and wellbeing:</li> <li>sensible amounts of 'screen time'</li> </ul> <p><b>Physical Development:</b></p> <ul style="list-style-type: none"> <li>Develop their small motor skills so that they can use a range of tools competently,</li> </ul> <p><b>Expressive Arts and Design:</b></p> <ul style="list-style-type: none"> <li>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> </ul>	<p><b>Reception: Personal, Social and Emotional</b> Development:</p> <ul style="list-style-type: none"> <li>Show resilience and perseverance in the face of a challenge.</li> <li>Know and talk about the different factors that support their overall health and wellbeing:</li> <li>sensible amounts of 'screen time'</li> </ul> <p><b>Physical Development:</b></p> <ul style="list-style-type: none"> <li>Develop their small motor skills so that they can use a range of tools competently,</li> </ul> <p><b>Expressive Arts and Design:</b></p> <ul style="list-style-type: none"> <li>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> </ul>	<p><b>Reception: Personal, Social and Emotional</b> Development:</p> <ul style="list-style-type: none"> <li>Show resilience and perseverance in the face of a challenge.</li> <li>Know and talk about the different factors that support their overall health and wellbeing:</li> <li>sensible amounts of 'screen time'</li> </ul> <p><b>Physical Development:</b></p> <ul style="list-style-type: none"> <li>Develop their small motor skills so that they can use a range of tools competently,</li> </ul> <p><b>Expressive Arts and Design:</b></p> <ul style="list-style-type: none"> <li>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> </ul>	<p><b>Reception: Personal, Social and Emotional</b> Development:</p> <ul style="list-style-type: none"> <li>Show resilience and perseverance in the face of a challenge.</li> <li>Know and talk about the different factors that support their overall health and wellbeing:</li> <li>sensible amounts of 'screen time'</li> </ul> <p><b>Physical Development:</b></p> <ul style="list-style-type: none"> <li>Develop their small motor skills so that they can use a range of tools competently,</li> </ul> <p><b>Expressive Arts and Design:</b></p> <ul style="list-style-type: none"> <li>Explore, use and refine a variety of artistic effects to express their ideas and feelings.</li> </ul>	<p><b>Reception: Personal, Social and Emotional Development:</b></p> <ul style="list-style-type: none"> <li>Show resilience and perseverance in the face of a challenge.</li> <li>Know and talk about the different factors that support their overall health and wellbeing:</li> <li>sensible amounts of 'screen time'</li> </ul> <p><b>Physical Development:</b></p> <ul style="list-style-type: none"> <li>Develop their small motor skills so that they can use a range of tools competently,</li> <li>Explain the reasons for rules, know right from wrong and try to behave accordingly</li> </ul> <p><b>Expressive Arts and Design: Creating with Materials:</b></p> <ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> </ul>	<p><b>ELG:</b></p> <p><b>Personal, Social and Emotional Development: Managing self:</b></p> <ul style="list-style-type: none"> <li>Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</li> <li>Explain the reasons for rules, know right from wrong and try to behave accordingly</li> </ul> <p><b>Expressive Arts and Design: Creating with Materials:</b></p> <ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</li> </ul> <p><b>Understanding the World: Past and Present:</b></p> <ul style="list-style-type: none"> <li>Know some differences and similarities between things in the past and now, drawing on their experiences.</li> </ul>
<b>Tier 3 vocabulary</b>	communicate, instruction,	command, algorithm pattern, repeating patterns, sequences	communicate,	directional language, right, left	collect	Bug, debugging, solution

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Year 1</b>	<b>Coding</b>  <b>Movement</b>	<b>Communicate, Collect and Connect</b>  Evidence in learning Linked to Foundation Subject	<b>Coding</b>  <b>Rotations Sequencing</b>	<b>Communicate, Collect and Connect</b>  Evidence in learning Linked to Foundation Subject	<b>Coding</b>  <b>Debugging Looping Movement</b>	<b>Communicate, Collect and Connect</b>  Evidence in learning Linked to Foundation Subject
National Curriculum Objective	Pupils should be taught to:  <ul style="list-style-type: none"> <li>Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>Create and debug simple programs</li> </ul>	Pupils should be taught to:  <ul style="list-style-type: none"> <li>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>Recognise common uses of information technology beyond school</li> <li>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</li> </ul>	Pupils should be taught to:  <ul style="list-style-type: none"> <li>Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>Create and debug simple programs</li> </ul>	<ul style="list-style-type: none"> <li>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>Recognise common uses of information technology beyond school</li> <li>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</li> </ul>	Pupils should be taught to:  <ul style="list-style-type: none"> <li>Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>Create and debug simple programs</li> <li>Use logical reasoning to predict the behaviour of simple programs</li> </ul>	<ul style="list-style-type: none"> <li>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>Recognise common uses of information technology beyond school</li> <li>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</li> </ul>
Tier 3 Vocabulary	Unplugged, program, sequence, algorithm, debugging, bug, commands	Technology, present, creative, device, theme, style, resize, retrieve, safety rules, personal information, benefits, screen shot	Program, sequence, algorithm, debugging, bug, commands, , loops, optimal solution	Technology, present, creative, device, theme, style, resize, retrieve, safety rules, personal information, benefits, screen shot	Program, sequence, algorithm, debugging, bug, commands, , loops, optimal solution, functions	Technology, present, creative, device, theme, style, resize, retrieve, safety rules, personal information, benefits, screen shot
<b>Year 2</b>	<b>Coding</b>  <b>Sequencing Debugging</b>	<b>Communicate, Collect and Connect</b>  Evidence in learning Linked to Foundation Subject	<b>Coding</b>  <b>Loops Functions</b>	<b>Communicate, Collect and Connect</b>  Evidence in learning Linked to Foundation Subject	<b>Coding</b>  <b>Loops Debugging</b>	<b>Communicate, Collect and Connect</b>  Evidence in learning Linked to Foundation Subject
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Tier 3 vocabulary	algorithm, debugging, program, basic loop, repetition, optimal solution	organise, present, style, resize, rotate, desired effect, private, reader view, CEOP, benefits, crop, mark up, retrieve, store	algorithm, debugging, program, basic loop, repetition, optimal solution, functions, efficient	organise, present, style, resize, rotate, desired effect, private, reader view, CEOP, benefits, crop, mark up, retrieve, store	algorithm, debugging, program, basic loop, repetition, optimal solution, functions, efficient	organise, present, style, resize, rotate, desired effect, private, reader view, CEOP, benefits, crop, mark up, retrieve, store
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Tier 3 Vocabulary	debugging, basic loops, optimal, efficient, decomposition, functions	combine, graphics, mood-board, animation, transitions, export, schemes, evaluate, appropriate, copyright, stock, URL, crop, trim	debugging, basic loops, optimal, efficient, decomposition, functions	combine, graphics, mood-board, animation, transitions, export, schemes, evaluate, appropriate, copyright, stock, URL, crop, trim	debugging, basic loops, optimal, efficient, decomposition, functions	combine, graphics, mood-board, animation, transitions, export, schemes, evaluate, appropriate, copyright, stock, URL, crop, trim
Year 4	<p><b>Coding</b></p> <p><b>Sequencing</b></p> <p><b>Debugging</b></p> <p><b>Loops</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>	<p><b>Coding</b></p> <p><b>Loops</b></p> <p><b>Functions</b></p> <p><b>Debugging</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>	<p><b>Coding</b></p> <p><b>Debugging</b></p> <p><b>Nested Loops</b></p> <p><b>Selection - if statements</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>

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Tier 3 vocabulary	command, algorithm, sequence, debug, loops, nested loops, selection, if loops	atmosphere, modify, purpose, duplicate, merge, timed animations, gif, template	command, algorithm, sequence, debug, loops, nested loops, selection, if loops	atmosphere, modify, purpose, duplicate, merge, timed animations, gif, template	command, algorithm, sequence, debug, loops, nested loops, selection, if loops	atmosphere, modify, purpose, duplicate, merge, timed animations, gif, template
Year 5	<p><b>Coding</b></p> <p><b>Loops</b></p> <p><b>Functions</b></p> <p><b>Debugging</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>	<p><b>Coding</b></p> <p><b>Debugging</b></p> <p><b>Nested Loops</b></p> <p><b>Selection - if statements</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>	<p><b>Coding</b></p> <p><b>Functions and loops</b></p> <p><b>Loops - repeat until</b></p> <p><b>Variables</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>

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Tier 3 Vocabulary	command, algorithm, sequence, debug, loops, nested loops, selection, if loops, repeat until loops, if/else loops, conditional loops	refine, hyperlink, presenter notes, exact matches, png, plagiarism, reliability, ranked, spreadsheet, database, increments, conditional highlighting, cell formula	command, algorithm, sequence, debug, loops, nested loops, selection, if loops, repeat until loops, if/else loops, conditional loops	refine, hyperlink, presenter notes, exact matches, png, plagiarism, reliability, ranked, spreadsheet, database, increments, conditional highlighting, cell formula	command, algorithm, sequence, debug, loops, nested loops, selection, if loops, repeat until loops, if/else loops, conditional loops, variables	refine, hyperlink, presenter notes, exact matches, png, plagiarism, reliability, ranked, spreadsheet, database, increments, conditional highlighting, cell formula
Year 6	<p><b>Coding</b></p> <p><b>Functions and Loops</b> <b>Loops - repeat until</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>	<p><b>Coding</b></p> <p><b>Variables - tracking changes</b> <b>Selection - if else</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>	<p><b>Coding</b></p> <p><b>Loops - while</b> <b>Debugging - variables</b> <b>Prototypes</b></p>	<p><b>Communicate, Collect and Connect</b></p> <p>Evidence in learning Linked to Foundation Subject</p>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
National Curriculum Objective	<p><b>Pupils should be taught to:</b></p> <ul style="list-style-type: none"> <li>- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve</li> <li>- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> </ul>	<p><b>Pupils should be taught to:</b></p> <ul style="list-style-type: none"> <li>- 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</li> <li>- Use search technologies effectively, appreciate how search results are ordered and ranked, and be discerning in evaluating digital content</li> <li>- 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 collect, analysing, evaluating and presenting data and information</li> <li>- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>	<p><b>Pupils should be taught to:</b></p> <ul style="list-style-type: none"> <li>- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve</li> <li>- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> </ul>	<p><b>Pupils should be taught to:</b></p> <ul style="list-style-type: none"> <li>- 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</li> <li>- Use search technologies effectively, appreciate how search results are ordered and ranked, and be discerning in evaluating digital content</li> <li>- 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 collect, analysing, evaluating and presenting data and information</li> <li>- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>	<p><b>Pupils should be taught to:</b></p> <ul style="list-style-type: none"> <li>- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve</li> <li>- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> </ul>	<p><b>Pupils should be taught to:</b></p> <ul style="list-style-type: none"> <li>- 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</li> <li>- Use search technologies effectively, appreciate how search results are ordered and ranked, and be discerning in evaluating digital content</li> <li>- 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 collect, analysing, evaluating and presenting data and information</li> <li>- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>
Tier 3 vocabulary	command, algorithm, sequence, debug, loops, nested loops, selection, if loops, repeat until loops	atmosphere, concept, media, conditional highlighting, photoshopped, fake news	command, algorithm, sequence, debug, loops, nested loops, selection, if loops, repeat until loops, if/else loops, conditional loops, parameters, arrays, prototypes	atmosphere, concept, media, conditional highlighting, photoshopped, fake news	command, algorithm, sequence, debug, loops, nested loops, selection, if loops, repeat until loops, if/else loops, conditional loops, parameters, arrays, prototypes	atmosphere, concept, media, conditional highlighting, photoshopped, fake news

## Progression Map Computing Key Knowledge - Retrieval Practice/Spaced Learning

	<b>Coding</b>	<b>Communicate</b>	<b>Connect</b>	<b>Collect</b>
EYFS	<p>Explore that 2 step instructions have to be completed in order they were given.</p> <p>Know some positional language - e.g. under, beneath, beside, forward, backward.</p>	<p>Explore how an Ipad can be used to support learning in the classroom.</p>	<p>Explore how an IPad can be used for different reasons in school and at home.</p> <p>Know that I pads are fragile and need to be treated with care.</p>	<p>Explore how to collect information using an Ipad - know how to take a photo and video and access this afterwards.</p>
Year 1	<p>Know than an algorithm is a set of instructions used to solve a problem/achieve an outcome.</p> <p>Know that loops repeat a command a set number of times.</p> <p>Create and debug simple programs.</p>	<p>Know how to communicate a piece of learning to their teacher via the Showbie app.</p> <p>Know how to create a keynote using text, shape and pictures.</p>	<p>To know what personal information is and know where to go for help and support when they have concerns.</p>	<p>Know how to sort, collate, edit and store simple digital content. e.g. children can name, save and retrieve their work</p> <p>Know how to add a voice note to a piece of work</p>
Year 2	<p>Explain than an algorithm is a set of instructions used to solve a problem/achieve an outcome.</p> <p>Know that functions are a group of commands that perform a specific task.</p> <p>Create and debug simple programs using commands, loops and functions.</p> <p>Know to use the run-step-fix method of debugging</p>	<p>Use Keynote as a method of evidencing learning (add voice notes, add photo, add drawing, animate simple drawings)</p> <p>Know how to share a Keynote with their teacher.</p>	<p>Know some of the dangers of speaking to people online.</p> <p>Know that the internet can be used for many different uses such as: information, creating and communicating.</p> <p>Recognise acceptable and unacceptable behaviour online.</p>	<p>Know how to create, organise, store, manipulate and retrieve digital content eg. Showbie, keynote and pages.</p>

<p>Year 3</p>	<p>Know what basic loops, decomposition and functions are.</p> <p>Design, write and debug programs including basic loops, decomposition and functions.</p> <p>Know to use the run-step-fix method of debugging</p>	<p>Use Keynote as a method of evidencing learning (as above and lock/unlock shapes, use animation commands)</p> <p>Know what build-in, action and build-out buttons are.</p>	<p>Know what is meant by an appropriate photo.</p> <p>Know how to use search engines safely and understand what a website is.</p>	<p>Know how to use technology effectively to collect and edit relevant information.</p> <p>Know how to collect and present data using numbers.</p>
<p>Year 4</p>	<p>Know what a nested loop and an if loop are (selection).</p> <p>Design, write and debug programs including nested and if loops.</p> <p>Know to use the run-step-fix method of debugging</p>	<p>Use Keynote as a method of evidencing learning (using previous year learning and duplicating slides, creating slide transitions, animations -which can be timed- and export the Keynote)</p> <p>Know that the atmosphere of presentations can be changed and how this affects the audience.</p>	<p>To know safety features on websites such as:</p> <ul style="list-style-type: none"> <li>- Safe search toggle</li> <li>- CEOP button</li> <li>- URL padlock</li> </ul> <p>To know that anything they post online can be seen by others and can stay there forever.</p>	<p>Know how to use search technologies effectively.</p> <p>Know how to collect and present data using numbers.</p>
<p>Year 5</p>	<p>Know what nested loops, conditional loops, parameters and arrays are.</p> <p>Design, write and debug programs including nested and conditional loops and parameters and arrays.</p>	<p>Use Keynote as a method of evidencing learning (as above and add a hyperlink, add a table and use a chart to represent data)</p> <p>Know the purpose of presenter notes.</p>	<p>Know what plagiarism is and retell some examples of this in law.</p> <p>Know the consequences of sharing too much information about themselves online or on apps.</p> <p>Know the consequences of not being kind and respectful online.</p>	<p>Know how to use search technologies effectively and be discerning in evaluating digital content. i.e. children can analyse the reliability of information gained from online searches.</p> <p>Know how to collect and present data using numbers including: creating graphs, conditional highlighting and cell formulas.</p>

<p>Year 6</p>	<p>Know what conditional code loops are.</p> <p>Design, write and debug programs including all elements from previous learning.</p> <p>Know what an app prototype is and how to create one.</p>	<p>Name various types of media and explain how each contributes to particular purposes.</p> <p>Know what makes an effective presentation.</p>	<p>Know the consequences of sharing too much information about themselves online or on apps.</p> <p>Know the consequences of not being kind and respectful online.</p> <p>Know what a computer virus is and where this can come from (pop ups, emails, scams etc).</p>	<p>Know that search engines and social media can display fake news and how to critically analyse the information eg. Photoshop, misinformation, conspiracies etc.</p> <p>Know that not all websites are reliable and explain ways in which this can be checked.</p>
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