



## Whole School Computing Overview

Class	Year A	Year B
<b>Holly Berries</b>	<p><b>Computer Science</b> Understand simple algorithms. Create simple programs e.g. Beebot.</p> <p><b>Word Processing</b></p> <p><b>Digital Literacy SWGFL</b> Keeping safe online.</p> <p>Keeping personal information private</p>	<p><b>Computer Science</b> Use logical reasoning to predict the behaviour of simple programs - Scratch</p> <p><b>Word Processing</b></p> <p><b>IT Database</b> Branching database/database sorting and identifying animals.</p> <p><b>Digital Literacy SWGFL</b> Staying safe online</p> <p>Cyberbullying</p>
<b>Chestnut</b>	<p><b>Computer Science</b> Design programs that accomplish specific goals – Scratch.</p> <p><b>Word Processing</b></p> <p><b>IT Data Collection</b> Surveys. Graphs, reports etc...</p> <p><b>Digital Literacy SWGFL</b> Powerful passwords/storing safely. Communicating online safely and responsibly.</p>	<p><b>Computer Science</b> Design programs that accomplish specific goals – Scratch.</p> <p><b>Word Processing</b></p> <p><b>IT Presentation</b> Linked to a topic (Power Point)</p> <p><b>Digital Literacy SWGFL</b> Showing respect online. Safe Internet searches (topic related).</p>
<b>Maple</b>	<p><b>Computer Science</b> Solving problems by decomposing them into smaller parts; Use logical reasoning to detect and correct errors in algorithms. STEM</p> <p><b>Word Processing</b></p> <p><b>IT</b> Understand the opportunities computer networks offer for collaboration. Questionnaires using Google forms.</p> <p><b>Digital Literacy</b> Appreciate how search results are ranked – topic related. Cyberbullying</p>	<p><b>Computer Science</b> Use selection in programs; Work with variables; Use logical reasoning to explain how some simple algorithms work. Scratch</p> <p><b>Word Processing</b></p> <p><b>IT</b> Combine a variety of software to accomplish given goals and select, use and combine software – topic related.</p> <p><b>Digital Literacy</b> Being discerning with digital content – challenging stereotypes.</p>

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<b>Year A</b>	<b>Year B</b>
<p><b>Computer Science</b> Understand simple algorithms. Create simple programs e.g. Beebot.</p> <p><b>Word Processing</b></p> <p><b>Digital Literacy SWGFL</b> Keeping safe online.</p> <p>Keeping personal information private</p>	<p><b>Computer Science</b> Use logical reasoning to predict the behaviour of simple programs - Scratch</p> <p><b>Word Processing</b></p> <p><b>IT Database</b> Branching database/database sorting and identifying animals.</p> <p><b>Digital Literacy SWGFL</b> Staying safe online</p> <p>Cyberbullying</p>
<b>Knowledge</b>	
<p>Children should be taught to:</p> <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> <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 online technologies.</li> </ul>	
<b>Skills</b>	
<p><b>Coding</b></p> <ul style="list-style-type: none"> <li>• Control motion by specifying the number of steps to travel, direction and turn.</li> <li>• Add text strings, show and hide objects and change the features of an object.</li> <li>• Select sounds and control when they are heard, their duration and volume.</li> <li>• Control when drawings appear and set the pen colour, size and shape.</li> <li>• Specify user inputs, such as clicks, to control events.</li> <li>• Create conditions for actions by waiting for a user input.</li> </ul>	<p><b>Word Processing</b></p> <ul style="list-style-type: none"> <li>• Move pre-written blocks of text round the screen.</li> <li>• Basic keyboard familiarity, entering text in the correct order.</li> <li>• Response to mouse/keyboard and monitor.</li> <li>• Print text using the most basic print option.</li> <li>• Word wrap at the end of the line (not pressing enter).</li> <li>• Be aware of how to achieve upper case letters (using CAPS lock initially then the shift key).</li> <li>• Know that text can be saved and retrieved.</li> <li>• Understand how to enter and save work.</li> <li>• Change font size and colour and centre text.</li> <li>• Edit in screen using the cursor key.</li> <li>• Develop basic editing skills – delete and insert.</li> </ul>

<p><b>Digital Literacy</b></p> <ul style="list-style-type: none"><li>• Understand online risks and the age rules for sites.</li><li>• Understand the strategies that can be used to keep themselves safe when online.</li></ul>	<p><b>Multimedia</b></p> <ul style="list-style-type: none"><li>• Move graphics around a screen (drag and drop).</li><li>• Add text to graphics (label and classify).</li><li>• Be aware that graphics and text can be saved, retrieved and printed out as a single piece of work.</li></ul>
<p><b>Collection</b> Use simple databases to record information in areas across the curriculum.</p>	

<b>Chestnut</b>	
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<p><b>Computer Science</b> Design programs that accomplish specific goals – Scratch.</p> <p><b>Word Processing</b></p> <p><b>IT Data Collection</b> Surveys. Graphs, reports etc...</p> <p><b>Digital Literacy SWGFL</b> Powerful passwords/storing safely. Communicating online safely and responsibly.</p>	<p><b>Computer Science</b> Design programs that accomplish specific goals – Scratch.</p> <p><b>Word Processing</b></p> <p><b>IT Presentation</b> Linked to a topic (Power Point)</p> <p><b>Digital Literacy SWGFL</b> Showing respect online. Safe Internet searches (topic related).</p>
<b>Knowledge</b>	
<p>Children should be taught to:</p> <ul style="list-style-type: none"> <li>• Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</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 simple algorithms work and to detect and correct errors in algorithms and programs.</li> <li>• Understand computer networks including the Internet; how they can provide multiple services, such as the worldwide web; and the opportunities that they offer for communication and collaboration.</li> <li>• Use search technologies effectively, appreciating how results are selected and ranked, and be discerning about 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 collecting, 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>	
<b>Skills</b>	
<p><b>Coding</b></p> <ul style="list-style-type: none"> <li>• Use specified screen coordinates to control movements.</li> <li>• Set the appearance of objects and create sequences of changes.</li> <li>• Create and edit sounds. Control when they are heard, their volume and duration and rests.</li> <li>• Control the shade of pens.</li> <li>• Specific conditions to trigger events.</li> <li>• Use IF THEN conditions to control events or objects.</li> </ul>	<p><b>Word Processing</b></p> <ul style="list-style-type: none"> <li>• Understand the use of scroll bars, arrow keys and word wrapping.</li> <li>• Import a single graphics image and add text to print out as a whole piece of work.</li> <li>• Use Word Art features.</li> <li>• Load, retrieve and save work independently to own folder.</li> <li>• Justify/align text as appropriate.</li> <li>• Delete words using backspace.</li> <li>• Make use of simple spell checking facilities.</li> </ul>
<p><b>Digital Literacy</b></p> <ul style="list-style-type: none"> <li>• Understand the necessity for strong passwords and for keeping them private.</li> <li>• Use the Internet to search for relevant topic information in a safe manner.</li> <li>• Recognise acceptable and unacceptable online behaviour.</li> </ul>	<p><b>Multimedia</b></p> <ul style="list-style-type: none"> <li>• Combine graphics and text independently (Power Point Presentation).</li> <li>• Save and retrieve a multimedia presentation.</li> </ul>

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| <ul style="list-style-type: none"><li>• Understand the strategies that can be used to report concerns about online content or contact.</li></ul> |  |
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<b>Maple</b>	
<b>Year A</b>	<b>Year B</b>
<p><b>Computer Science</b> Solving problems by decomposing them into smaller parts; Use logical reasoning to detect and correct errors in algorithms. STEM</p> <p><b>Word Processing</b></p> <p><b>IT</b> Understand the opportunities computer networks offer for collaboration. Questionnaires using Google forms.</p> <p><b>Digital Literacy</b> Appreciate how search results are ranked – topic related. Cyberbullying</p>	<p><b>Computer Science</b> Use selection in programs; Work with variables; Use logical reasoning to explain how some simple algorithms work. Scratch</p> <p><b>Word Processing</b></p> <p><b>IT</b> Combine a variety of software to accomplish given goals and select, use and combine software – topic related. Power Point.</p> <p><b>Digital Literacy</b> Being discerning with digital content – challenging stereotypes. Understanding copyright.</p>
<b>Knowledge</b>	
<p>Children should be taught to:</p> <ul style="list-style-type: none"> <li>• Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</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 simple algorithms work and to detect and correct errors in algorithms and programs.</li> <li>• Understand computer networks including the Internet; how they can provide multiple services, such as the worldwide web; and the opportunities that they offer for communication and collaboration.</li> <li>• Use search technologies effectively, appreciating how results are selected and ranked, and be discerning about 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 collecting, 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>	
<b>Skills</b>	
<p><b>Coding</b></p> <ul style="list-style-type: none"> <li>• Set IF coordinates for movement. Specify types of rotation giving the number of degrees.</li> <li>• Change the position of objects between screen layers (send to back, bring to front).</li> <li>• Upload sounds from a file and edit them. Add effects such as fade in and out and then control their implementation.</li> <li>• Combine the use of pens with movement to create interesting effects.</li> <li>• Set events to control other events by 'broadcasting' information as a trigger.</li> </ul>	<p><b>Word Processing</b></p> <ul style="list-style-type: none"> <li>• Develop more advanced spell checking skills to include search facility.</li> <li>• Combine two or more graphics images (including tables) and text boxes to produce a more complex piece of work.</li> <li>• Use print preview.</li> <li>• Understand the use of tabs, margins, overwrite and indent as appropriate.</li> <li>• Alter page layout (portrait/landscape).</li> <li>• Alter page size and be aware of whole page view.</li> <li>• Use bold text to highlight a statement.</li> </ul>

<ul style="list-style-type: none"> <li>• Use a list to create a set of variables.</li> </ul>	<ul style="list-style-type: none"> <li>• Cut and paste between applications.</li> </ul>
<p>Digital Literacy</p> <ul style="list-style-type: none"> <li>• Use search engines effectively to locate information.</li> <li>• Understand how search results are ranked.</li> <li>• Use online tools effectively, such as Google forms.</li> <li>• Understand how to use online tools safely, respectfully and responsibly.</li> <li>• Have strategies in place in case they come into contact with concerning content or contacts.</li> <li>• To understand copyright rules and what they mean in terms of Internet use.</li> </ul>	<p>Multimedia</p> <ul style="list-style-type: none"> <li>• Plan layout on a multimedia presentation.</li> <li>• Link screens together using html links or buttons.</li> <li>• Use a range of transition effects (Power Point) to move between screens.</li> </ul>