

## Curriculum Progression – Computing

	<u>EYFS</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
<u>Coding</u>	<p>Be able to switch devices on and off.</p> <p>Take a photo of a particular item/person.</p> <p>Capture QR codes</p> <p><i>Expressive arts</i> Story writing through the use of multimedia tools.</p> <ul style="list-style-type: none"> <li>- Add clip art and their own images</li> <li>- Include their own voice recording and musical sounds</li> <li>- Playing their pages like a book and listening to the sounds added.</li> </ul>	<p>Arrange code blocks to create a set of instructions</p> <p>Create a simple program using object and action code blocks</p> <p>Incorporate event blocks into a simple code</p> <p>Notice when code executes when a program is run</p> <p>Set the scene of a program</p> <p>Create a design plan for a simple program</p>	<p>Recognise common uses of technology outside of school</p> <p>Plan an algorithm that includes collision detection</p> <p>Create a program that uses a timer command</p> <p>Create a program that includes different object types</p> <p>Create a program that includes a button object</p> <p>Explain what debugging is and debug a simple program</p>	<p>Explain and use a flowchart to create a program</p> <p>Recognise and use 'after' and 'every' timers in coding</p> <p>Create a program that includes repeat commands</p> <p>Apply prior knowledge to code, test and debug their own program</p> <p>Design and code an interactive scene (2 lessons)</p>	<p>Apply prior knowledge to plan an algorithm to program</p> <p>Create a program that incorporates an IF statements</p> <p>Consider and use coordinates when coding</p> <p>Understand and use IF/ELSE statements in code</p> <p>Understand and use variables in code</p> <p>Code a playable game</p>	<p>Consider how to use simplified code to code more efficiently</p> <p>Simulate a physical system</p> <p>Recognise the need to start coding at a basic level of abstraction to remove superfluous details</p> <p>Use functions when coding to increase efficiency</p> <p>Set and change variable values appropriately</p> <p>Use strings to produce a range of outputs in their program</p>	<p>Plan and code a program which includes a timer and a score</p> <p>Debug based on errors that occur when running a program</p> <p>Create a program that uses multiple functions with the code arranged in tabs</p> <p>Be able to interpret flowcharts purposefully and create flowcharts for procedures</p> <p>Code programs that attribute variables to user input</p> <p>Design and code a text-based adventure game</p>
<u>Digital Literacy</u>	<p>Use paint projects to explore different celebrations.</p> <ul style="list-style-type: none"> <li>- Purposeful selection of colours</li> <li>- Purposeful mark making.</li> </ul> <p>Begin to understand how to instruct using Bee Bots.</p>	<ul style="list-style-type: none"> <li>- upload a photo to a digital folder</li> <li>-use the pen tool and text function</li> <li>-use the voice note function</li> <li>-upload a video to a digital folder</li> <li>-upload a note to a digital folder</li> <li>-upload a pdf to a digital folder</li> </ul>	<p><b>Effective Searching:</b></p> <ul style="list-style-type: none"> <li>-Understand the internet and searching</li> <li>-Search the internet safely</li> <li>-Share our knowledge of the internet and effective searching</li> </ul> <p><b>Creating digital art:</b></p> <ul style="list-style-type: none"> <li>-Use tools to create a digital piece of art</li> <li>-create a digital piece of art by repeating patterns</li> <li>-Create a digital collage</li> </ul>	<p><b>Touch typing</b></p> <ul style="list-style-type: none"> <li>-touch type using the home, top and bottom keys.</li> <li>-touch type using the left hand keys</li> <li>-touch type using the right hand keys</li> </ul> <p><b>Email</b></p> <ul style="list-style-type: none"> <li>-compose an email</li> <li>-Recognise how to stay safe when communicating via email</li> <li>-attach work to an email</li> </ul>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>-create and save a document in a specified folder</li> <li>-create slides including items such as text and images.</li> <li>-add theme, transitions and animation to a presentation.</li> <li>-organise slides with hyperlinks.</li> </ul> <p><b>Animation</b></p>	<p><b>Word processing</b></p> <ul style="list-style-type: none"> <li>-apply skills from presentations to word processing.</li> </ul> <p><b>Database</b></p> <ul style="list-style-type: none"> <li>-understand how to search a database</li> <li>-enter information into a database</li> <li>-create our own database</li> </ul> <p><b>Networks</b></p> <ul style="list-style-type: none"> <li>-understand the network and how we access the internet</li> </ul>	<p><b>spreadsheets</b></p> <ul style="list-style-type: none"> <li>-enter data into a spreadsheet.</li> <li>-use a spreadsheet to carry out basic calculations including formulae.</li> <li>-create graphs and charts based on inputted data.</li> </ul> <p><b>Binary</b></p> <ul style="list-style-type: none"> <li>-understand what binary is</li> <li>-count in binary</li> </ul>

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<p><u>Online Safety</u></p>	<ul style="list-style-type: none"> <li>-Recognise that anyone can say no to somebody who makes them feel sad, uncomfortable, embarrassed or upset.</li> <li>-Recognise ways to use the internet to communicate.</li> <li>-Identify ways that I can put information on the internet.</li> <li>-Describe ways that some people can be unkind online and offer examples of how this can make others feel.</li> <li>-Understand how to use the internet to find information and identify devices to use.</li> <li>-Identify rules that help keep us safe and healthy in and beyond the home when using technology.</li> <li>-Identify some simple examples of my personal information and can describe who would be trustworthy to share this information with.</li> <li>-Name work that belongs to us.</li> </ul>	<ul style="list-style-type: none"> <li>-Identify when it is necessary to ask permission when using the internet.</li> <li>-Consider what information is appropriate to share online.</li> <li>- Find simple information using digital technologies and understand that some things we may not like or may not be true.</li> <li>- Explain how passwords are used to protect information, accounts and devices.</li> <li>-Explain why work I create belongs to me.</li> </ul>	<ul style="list-style-type: none"> <li>-Explain how people may act differently online and give examples of how to get help.</li> <li>-Understand the importance of giving and requesting consent when communicating over the internet.</li> <li>-Explain how information put online can be seen by others and last for a long time.</li> <li>-Navigate simple webpages and understand voice activated searching.</li> <li>-Recognise that content on the internet may belong to other people.</li> </ul>	<ul style="list-style-type: none"> <li>- Be critical of online relationships when determining who we can trust.</li> <li>-Understand appropriate ways to behave towards others online.</li> <li>-Recognise the difference between fact and opinion and identify where we might find them.</li> <li>-Understand the potential negative effects of prolonged time spend using technology and the reasons for age restrictions that may be in place.</li> <li>-Describe simple strategies for creating and keeping passwords private.</li> </ul>	<ul style="list-style-type: none"> <li>-Recognise positive ways to interact with others online and understand that someone’s online and offline identity may differ.</li> <li>-Be able to find information online and identify whether it is reliable.</li> <li>-Recognise when someone is unhappy online and describe ways online bullying may take place.</li> <li>-Recognise methods used to encourage online spending.</li> <li>-Understand that when searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.</li> </ul>	<ul style="list-style-type: none"> <li>-Recognise that there are some people I communicate with online who may want to do me or my friends harm and that this is not my / our fault.</li> <li>-Recognise how some online behaviours may upset others and identify a range of ways to deal with concerns.</li> <li>-Evaluate the reliability and motives of online information and the effect it can have on people.</li> <li>-Recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals.</li> <li>-Explain how many free apps or services may read and share private information and know how to set permissions to protect my data.</li> </ul>	<ul style="list-style-type: none"> <li>-Be cautious of sharing content online and consider the consequences for all involved.</li> <li>-Explain ways in which we can positively build and protect our online reputation.</li> <li>-Know how to capture evidence of inappropriate online encounters and how to report it.</li> <li>-Define the terms ‘influence’, ‘manipulation’ and ‘persuasion’ and explain how someone might encounter these online.</li> <li>-Recognise the features of persuasive design and what strategies can be used to limit the impact of technology on health.</li> <li>-Describe effective ways people can manage passwords and explain what to do if a password is shared, lost or stolen.</li> </ul>