

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></p> <p>Story writing through the use of multimedia tools.</p> <ul style="list-style-type: none"> - Add clip art and their own images - Include their own voice recording and musical sounds - Playing their pages like a book and listening to the sounds added. 	<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><i>Understanding the world</i></p> <p>Use paint projects to explore different celebrations.</p> <ul style="list-style-type: none"> - Purposeful selection of colours - Purposeful mark making. <p>Begin to understand how to instruct using Bee Bots.</p>	<ul style="list-style-type: none"> - upload a photo to a digital folder -use the pen tool and text function -use the voice note function -upload a video to a digital folder -upload a note to a digital folder -upload a pdf to a digital folder 	<p>Effective Searching:</p> <ul style="list-style-type: none"> -Understand the internet and searching -Search the internet safely -Share our knowledge of the internet and effective searching <p>Creating digital art:</p> <ul style="list-style-type: none"> -Use tools to create a digital piece of art -create a digital piece of art by repeating patterns -Create a digital collage 	<p>Touch typing</p> <ul style="list-style-type: none"> -touch type using the home, top and bottom keys. -touch type using the left hand keys -touch type using the right hand keys <p>Email</p> <ul style="list-style-type: none"> -compose an email -Recognise how to stay safe when communicating via email -attach work to an email 	<p>Presentation</p> <ul style="list-style-type: none"> -create and save a document in a specified folder -create slides including items such as text and images. -add theme, transitions and animation to a presentation. -organise slides with hyperlinks. <p>Animation</p>	<p>Word processing</p> <ul style="list-style-type: none"> -apply skills from presentations to word processing. <p>Database</p> <ul style="list-style-type: none"> -understand how to search a database -enter information into a database -create our own database <p>Networks</p> <ul style="list-style-type: none"> -understand the network and how we access the internet 	<p>spreadsheets</p> <ul style="list-style-type: none"> -enter data into a spreadsheet. -use a spreadsheet to carry out basic calculations including formulae. -create graphs and charts based on inputted data. <p>Binary</p> <ul style="list-style-type: none"> -understand what binary is -count in binary

					-create a simple, paper-based animation -use appropriate tools to create an animated image -create a stop motion animation	-research the history of the internet	-convert from binary to decimal
<u>Online Safety</u>	-Recognise that anyone can say no to somebody who makes them feel sad, uncomfortable, embarrassed or upset. -Recognise ways to use the internet to communicate. -Identify ways that I can put information on the internet. -Describe ways that some people can be unkind online and offer examples of how this can make others feel. -Understand how to use the internet to find information and identify devices to use. -Identify rules that help keep us safe and healthy in and beyond the home when using technology. -Identify some simple examples of my personal information and can describe who would be trustworthy to share this information with. -Name work that belongs to us.	-Identify when it is necessary to ask permission when using the internet. -Consider what information is appropriate to share online. - Find simple information using digital technologies and understand that some things we may not like or may not be true. - Explain how passwords are used to protect information, accounts and devices. -Explain why work I create belongs to me.	-Explain how people may act differently online and give examples of how to get help. -Understand the importance of giving and requesting consent when communicating over the internet. -Explain how information put online can be seen by others and last for a long time. -Navigate simple webpages and understand voice activated searching. -Recognise that content on the internet may belong to other people.	- Be critical of online relationships when determining who we can trust. -Understand appropriate ways to behave towards others online. -Recognise the difference between fact and opinion and identify where we might find them. -Understand the potential negative effects of prolonged time spend using technology and the reasons for age restrictions that may be in place. -Describe simple strategies for creating and keeping passwords private.	-Recognise positive ways to interact with others online and understand that someone's online and offline identity may differ. -Be able to find information online and identify whether it is reliable. -Recognise when someone is unhappy online and describe ways online bullying may take place. -Recognise methods used to encourage online spending. -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.	-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. -Recognise how some online behaviours may upset others and identify a range of ways to deal with concerns. -Evaluate the reliability and motives of online information and the effect it can have on people. -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. -Explain how many free apps or services may read and share private information and know how to set permissions to protect my data.	-Be cautious of sharing content online and consider the consequences for all involved. -Explain ways in which we can positively build and protect our online reputation. -Know how to capture evidence of inappropriate online encounters and how to report it. -Define the terms 'influence', 'manipulation' and 'persuasion' and explain how someone might encounter these online. -Recognise the features of persuasive design and what strategies can be used to limit the impact of technology on health. -Describe effective ways people can manage passwords and explain what to do if a password is shared, lost or stolen.