Curriculum Progression – Computing

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Coding	Be able to switch devices on and off. Take a photo of a particular item/person. Capture QR codes *Expressive arts* Story writing through the use of multimedia tools. - 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. - *Understanding the world* Use paint projects to explore different celebrations. - Purposeful selection of colours - Purposeful mark making. Begin to understand how to instruct using Bee Bots.	Arrange code blocks to create a set of instructions Create a simple program using object and action code blocks Incorporate event blocks into a simple code Notice when code executes when a program is run Set the scene of a program Create a design plan for a simple program	Explain what an algorithm is Plan an algorithm that includes collision detection Create a program that uses a timer command Create a program that includes different object types Create a program that includes a button object Explain what debugging is and debug a simple program	Explain and use a flowchart to create a program Recognise and use 'after' and 'every' timers in coding Create a program that includes repeat commands Apply prior knowledge to code, test and debug their own program Design and code an interactive scene (2 lessons)	Apply prior knowledge to plan an algorithm to program Create a program that incorporates an IF statements Consider and use coordinates when coding Understand and use IF/ELSE statements in code Understand and use variables in code Code a playable game	Consider how to use simplified code to code more efficiently Simulate a physical system Recognise the need to start coding at a basic level of abstraction to remove superfluous details Use functions when coding to increase efficiency Set and change variable values appropriately Use strings to produce a range of outputs in their program	Plan and code a program which includes a timer and a score Debug based on errors that occur when running a program Create a program that uses multiple functions with the code arranged in tabs Be able to interpret flowcharts purposefully and create flowcharts for procedures Code programs that attribute variables to user input Design and code a text-based adventure game
Digital Literacy		- 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	**Effective Searching:** -Understand the internet and searching -Search the internet safely -Share our knowledge of the internet and effective searching **Creating digital art:** -Use tools to create a digital piece of art -create a digital piece of art by repeating patterns -Create a digital collage	**Touch typing** -touch type using the home, top and bottom keys. -touch type using the left hand keys -touch type using the right hand keys **Email** -compose an email -Recognise how to stay safe when communicating via email -attach work to an email	**Presentation** -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. **Animation**	**Word processing** -format text as desired -Insert and edit images -Present information using tables **Database** -understand how to search a database -enter information into a database	**spreadsheets** -enter data into a spreadsheet. -use a spreadsheet to carry out basic calculations including formulae. -create graphs and charts based on inputted data. -plan and calculate a spending budget.

					-create a simple, paper-based animation -use appropriate tools to create an animated image -create a stop motion animation	-create our own database	-design a spreadsheet for a specific purpose.
<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.