

Progression of Computing Skills

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Digital Literacy		<u>Online Safety</u> Understand how and why we keep 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.		<u>Systems and Searching</u> Understand the words: network and system. Explain what the internet is. Explain what a website is and who owns the web. Understand how search engines work, how results are ranked and influenced. Use BOOLEAN operators to enhance their searches. Be discerning in evaluating digital content.	<u>Online Safety</u> Revise the term Cyberbullying. Understand how identify, self-image and photos may not be true. To be aware of the dangers of sharing information, strangers and communicating online. Understand how to report inappropriate messages from online sources. Digital footprint - how what we do now can affect us in the future. Know how to protect yourself when gaming	<u>Computer Networks and AI</u> Learn about computer systems. Explain the terms input, output and process. Understand computer networks including the internet Explain how networks can provide multiple services, such as the world wide web Explore the opportunities they offer for communication and collaboration. Explore AI and the possibilities and limitations. Understand how AI works.
	See also: Online Safety Progression Document based on Education for a Connected World Framework. Project Evolve online safety starters to begin every lesson.					

Computing Skills	<u>iPad Skills</u> Turn iPad on and off. Unlock screen. Turn off screen. Find apps in folders. Open and close apps. Switch between apps. Open the camera and take a photo. Find the photo. Edit a photo with mark up tools. Open Safari. Search on Google. Search for an image. Save image to gallery. Use Siri to ask a question. Change the volume. Understand how to carry and charge an iPad. <u>Word Processing</u> Open a word processor and identify keys on the keyboard. Know how to use the space bar, return key, back space. Write words in upper case and lower case. Use bold, italic and underline. Use a full stop. Change the font. Understand the uses of Word beyond school.	<u>Presentations</u> <i>Understand the purpose of a presentation.</i> <i>Type and create slides for a presentation.</i> Add text and pictures to a presentation <i>Know how to change text size, font and font colour.</i> <i>Understand when you might use a presentation beyond school.</i>	<u>iPad Skills</u> Recap basic iPad skills (see year 1 curriculum). Understand how and why we close apps. Use QR codes to access websites and explain how they work. Know when and how to use 'pinch zoom' Use Siri to answer a question. Use the screen record feature. Use camera to read and copy text. Use the timer / stopwatch feature. Know how to use the Split Screen feature. <u>Word Processing</u> Practise typing, including use of the return key, capital letters and punctuation. Change the font, font size, and colour. Use voice typing to write a sentence. Use italic/bold/ underline tools. Use Word Art and copy and paste images from the internet. Save a document in the correct area with a suitable name. Open documents saved on the server.	<u>Presentations</u> <i>Familiarise with features of presentations.</i> <i>Implement transitions from slide to slide.</i> <i>Use animations so that specific information appears simultaneously.</i> <i>Include images and text.</i> <i>Understand how to make a presentation engaging.</i> <i>Learn presenting skills and practise sharing information.</i>	<u>Databases</u> <i>Record information on a form.</i> <i>Understand how to input data.</i> <i>Compare paper and computer-based databases.</i> <i>Answer questions by grouping and sorting data.</i> <i>Create graphs to display data visually.</i> <i>Save and Open Databases.</i>	

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Coding	<u>BeeBots</u> <u>BeeBot App</u> <u>Code-a-pillar</u> Understand what algorithms are. Know where some algorithms are used in our lives. Predict the outcome of a command on a device. Program a BeeBot to move in all four directions. Debug my program.	<u>BlueBots</u> <u>Scratch Jr</u> Identify an algorithm and know what debugging is. Understand that programs execute by following precise and unambiguous instructions Debug algorithms in real life situations - using written or verbal instructions. Create and debug simple algorithms. Use logical reasoning to predict the outcome of different algorithms. Learn to create code using blocks in ScratchJr (movement, change size, turn, green flag)	<u>Scratch</u> Debug programs to ensure they accomplish specific goals Write programs that accomplish specific goals Solve problems by deconstructing them into smaller parts Use Scratch to code movement, sound, clicking control and backdrop changes.	<u>Scratch</u> Code sprites to react with other sprites. Be able to change controls by editing numbers in blocks. Be able to code an interactive game by following instructions. Debug errors in their code using logical reasoning. Design their own version of the original game. Use Scratch to code variables to create a scoreboard. Use sequence, selection, and repetition in programs	<u>Micro:Bit</u> Understand the features of a Micro:Bit. Learn to create algorithms on Make:Code and download to device. Code LED display to create images and animations. Use loop and if-then blocks to create more efficient and complex algorithms. Learn to code using the accelerometer and radio functions. Plan, design and create complex algorithms to complete specific tasks. <u>Sphero</u> Learn to make Sphero move in a variety of ways. Code Sphero to turn. Code Sphero to change colour. Make Sphero move through a channel. Take Sphero through a simple maze.	<u>Sphero</u> Design a challenge for Sphero to complete. Code Sphero's LED lights in a variety of patterns. Detect and correct a range of errors with algorithms in Sphero. Control Sphero through a complex course. Understand that code can be written in words.

Creation	<u>ChatterPix</u> Take a photo on the app. Animate the photo by adding a mouth. Edit the photo with stickers, frames, and text. Record their voice. Save the animation to the device. Save a picture from the internet. Upload from Gallery. <u>Stop Motion Animation</u> <i>Plan a short movie scene.</i> <i>Create characters and backdrops.</i> <i>Use small movements to create smooth animation.</i> <i>Add a title using capital letters appropriately</i> <i>Discuss careers in animation e.g. Aardman Studios</i>	<u>Digital Photography</u> Explain how to take a good photograph. Know the difference between landscape and portrait. Explore different light sources. Retake a photo to improve it. Know how to focus a photo. Experiment with editing a photo. Discuss possible careers in photography. Understand about careers using photography. <u>Digital Art</u> <i>Use paint tools to draw a picture.</i> <i>Use the shape and line tools.</i> <i>Make careful colour and paint tool choices.</i> <i>Change the size of the brush.</i> <i>Compare computer art and painting.</i>	<u>Book Creator</u> <i>Type and edit text using appropriate size, colour and font style.</i> <i>Add pictures and other media e.g. voice recording.</i> <i>Use the draw feature</i> <i>Save and print their work</i> <u>Comic Creator</u> <i>Discuss why technology may create a quality comic.</i> <i>Create layouts - add and edit boxes.</i> <i>Add pictures from camera and the camera roll.</i> <i>Create narrations, thoughts and dialogue using bubbles.</i> <i>Include captions, change font and colour of titles.</i>	<u>Photo Editing</u> Recap Photography skills (Year 2) Save an image and open in image editing software. Rotate and Crop images. Use mark-up tools. Understand how colours, filters and effects affect an image. Choose appropriate effects to suit an image. <u>Stop Motion Animation</u> <i>Identify the various way animation is done.</i> <i>Create duplicate slides and use onion skin feature</i> <i>Use transitions with times</i> <i>Animate individual elements</i> <i>Add sound to your animation</i> <i>Create short gifs and appraise content</i>	<u>Photo Manipulation</u> Use the Green Screen to create a photo with a chosen background. Edit a photo to change the appearance of a person. Explore Augmented Reality and Virtual Reality. Understand how AI can create or change images.	<u>Podcasting</u> Research podcasts and understand what they are. Plan their podcast and write a script. Use the voice recording feature. Use audio editing software to crop files. Add music and jingles to their recordings. <u>Movie Making</u> Learn to insert photos and movie clips into a movie. Learn to edit photos using cropping, duplicate, filter and timing tools. Add text to relevant parts of the movie. Add trailers to movie. Learn to add music to movie Learn to edit music using fade and cropping tools.
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