Computing Progression

	Topic	Skills progression	**Computer science** Sequence, selection, repetition How they work	**Information Technology** How they can be used	**Digital literacy** How computers can be used safely and effectively. Project evolve?	Vocabu
EYFS						
KS1 curriculum			Co2/1.1 understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Co2/1.2 create and debug simple programs Co2/1.3 use logical reasoning to predict the behaviour of simple programs	Co2/1.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content Co2/1.5 recognise common uses of information technology beyond school	Co2/1.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies	
Year 1	Paws Claws and Whiskers (1)	• To know how to switch a range of digital devices on and off correctly. • Load programs (office, apps) with support/open and close apps. • Use a mouse to navigate an age-appropriate website/know how to navigate programmes. • Use a mouse to select/ drag/ position an object. Left/ right/ double click and scroll. http://www.mouseprogram.com/practice.html https://www.bbc.co.uk/cbbc/games/little-roy-wonder-doodler		Inserting images into a presentation.		Algorithr sequenc debug,
	Moon Zoom (4)		Programme simple instructions on floor bee bot.	Use JIT5 to draw aliens. Make a presentation with pictures and text.	Write and send an email.	

	Dinosaur Planet (3)	•Talk about what they are doing with Computers/ Digital Media using appropriate vocabulary according to equipment available e.g screen/keyboard/laptop/computer/mouse/headphones	Programme simple instructions on floor bee bot to go to a specific location.	Make a presentation with pictures and text. Make a stop motion animation.		
	Childhood (1)			Drag and drop pictures.		
	Splendid Skies					
	Bright Lights Big City (3)		Programme simple instructions on floor bot and go to a specific place. Write instructions first then debug where necessary.	**To investigate a website.** **To use a google earth to explore different landmarks.**		
Year 2	Muck Mess and Mixtures (3)	To be able to save/ edit and open versions of their work. •To develop awareness of keyboard layout and use of a mouse e.g. use the mouse or arrow keys to insert words and sentences • To know backspace/undo/ • shift for capital letters/enter/upload • Changing font/ size/colour and style of text. • Logging on/off digital devices use navigation skills to access appropriate parts of a website/ simple program/ app		**Stop motion animation with sound effects or narration.** **Presentation with pictures and sentence/ short paragraph to describe.**	Write an email with pictures attached.	
	Street Detectives (2)		Write an algorithm to direct a partner then use the same algorithm to direct the bee bot. (Unplugged and plugged)	**Download and save photos in a folder. Create a photo story.**		
	Wriggle and Crawl (8)		Programming a partner to collect an item. Write full set of instructions before giving. (Unplugged)	Watch live webcam? Is this a knowledge or		

			Programme bee bot to go on a specific route. (Plugged) Fill in missing elements of an algorithm. (Unplugged) Write an algorithm using language and abbreviations such as repeat. (Unplugged)	skill for computing? Stop motion animation for how ants move. Create presentation with pictures and links to videos.		
	Magnificent Monarchs (1)			Explore website.		
	Coastline					
	Scented Garden (1)			Presentation with pictures.		
KS2 Curriculum		Skills Progression	**Computing science**	**Information technology**	**Digital literacy**	
			Co2/1.1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Co2/1.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output Co2/1.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Co2/1.4 understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration Co2/1.5 use search technologies effectively,	Co2/1.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	

				appreciate how results are selected and ranked, and be discerning in evaluating digital content Co2/1.6 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.		
Year 3	Through the Ages	• typing skills (use two hands when typing) Use BBC Dance Mat typing to supplement word processing skills.				
	Urban Pioneers (4)	• To upload from digital devices and the Internet to a shared space. •To insert/cut/ copy/paste	Programme a traffic light sequence. Egg box controller, link to buy one below. http://www.clc-control.lancsngfl.ac.uk/index.php?category_id=8 (Plugged)	Use mapping tools to locate different		

		• Use ctrl+c and ctrl+v to copy and paste • To use 'save as' to create another version of their work	Programme a sensor activated barrier with light and warning sound. (Plugged)	areas of the country. Use the internet to research.		
	Mighty metals(0)					
	Predator (6)		Programme a floor bot to avoid a route. Test and debug their programmes. (Plugged) Programming through obstacles. (Unplugged)	Create a flow diagram using shapes tool adding arrows. Use the internet to research and produce a poster. Draw using a simple graphics package edit using cut tool. Presentation with videos, pictures and speech bubbles.		

	Rocks Relics and Rumbles (1)			**Create a database. J2data.**		
	Emperors and Empires					
Year 4	Playlist (1)			**Presentation images, text, animation, add music effects.**		
	Misty Mountain Winding River					
	Gods and Mortals (1)			Presentation to reflect on learning.		
	Burps Bottoms and Bile (3)		Algorithm to show process of digestion. (Flow chart) (Unplugged)	Editing images using drawing software. Make a video use simple editing software.		
	Traders and Raiders (1)			Presentation using downloaded images.		

				Writing a paragraph to go with the text.		
	Blue Abyss (3)		Programming submarine 'move' 'turn' 'repeat' 'go to' adding visual backgrounds.	Create a promotional video inserting clips from online. Add a title page and credits (noting the origin of any online video clips used for their film), transitions, narration, sound effects and music as appropriate. Create a presentation on one marine animal following real life data.		
Year 5	Pharoahs					
	Stargazers (1)		Programme floor bot to avoid obstacles.			

			(Instead could they use programmable leg to create their own lunar robot to programme?)			
	1066 (3)			Internet research. Using online maps. Download images, make a digital map showing locations.	Checking trusted websites.	
	Tudors (2)			Record data in bar graph or pie chart. Presentation, text, images and music.		
	Sow Grow Farm					
	Dominican Republic		Debugging a programme.	**Take photos and edit them.** **Create music. (Audacity)** **Take a photo and edit the photo.**		

Year 6	A child's War (2)			Internet research and create a timeline. Presentation- animations, transitions, sounds and images.		
	Tomorrow's world (10)		Writing an algorithm as a flow diagram for a robot. (Unplugged) Use a sorting algorithm. Write a basic algorithm for a partner. (Unplugged) (This seems way to easy for a year 6 child this needs to be more complex.)	Learn how computer networks work. Internet research bookmarking websites. Create a mock homepage. To use text speak and emoticons.	Meet a blogger to find out how to safely use the internet as a platform. Learn safe searching and making sure websites are trustworthy. Copyright music.	
	Frozen Kingdom (4)			Downloading images creating a digital scrapbook.		

				Presentation- images, sound effects and transitions. Create a video. Presentation using images from digital scrap book.		
	Darwin's Delights (3)			Internet research. Edit images using morphing software. Research and present		
	Bloodheart (1)		Create a flow diagram for circulation. (Same as year 4)			
	Hola Mexico (3)			Research and use copy and paste. Explore Mexico using the internet.		

				Presentation using images, maps, text, sound files. Using translation software online.		