



#### **Information Technology**

NC Objectives	Computing strand	Skills/Knowledge	Apps/Software	Subject/Lessons
Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Word processing / typing	<ul> <li>Use the spacebar only once between words</li> <li>Copy and paste images and text</li> <li>Use caps lock for capital letters</li> <li>Add images beside text in a word processed document</li> <li>Dictate longer passages into a digital device with punctuation</li> </ul>	Pic collage Seesaw Google Docs Book creator Popplet	Literacy History Geography
	Data handling	<ul> <li>Sort images or text into venn diagrams, carroll diagrams and charts</li> <li>Orally record what the data means</li> <li>Create a branching database using questions</li> </ul>	Seesaw Pic collage Graphs Plickers Purple Mash	Science Maths
	Presentations, web design and eBook creation	<ul> <li>Add voice labels to an image and storyboard</li> <li>Add speech bubbles to an image to show thoughts</li> <li>Import images to a project from the web and camera</li> </ul>	Seesaw Puppet Edu Pic collage	Literacy
	Animation	<ul> <li>Create multiple animations of an image and edit these together</li> <li>Create a simple stop motion animation</li> <li>Explain how an animation works</li> </ul>	Puppetpals Chatterkid Seesaw	Literacy
	Video Creation	<ul> <li>Write and record a script (using a teleprompter?)</li> <li>Use tools to add effects to a video</li> <li>Begin to use green screen techniques with support</li> </ul>	iPad camera Puppet Edu Dolnk	PSHE Literacy
	Photography and digital art	<ul> <li>Edit a photo (cropping/filters/colours/stickers/etc)</li> <li>Select and use tools to create digital imagery</li> <li>Control the drawing pen and using the fill tool</li> <li>Cut images with accuracy</li> </ul>	iPad camera Puppet Edu Pic collage Photobooth	Art
	Augmented reality and virtual reality	<ul> <li>Explore an interactive 360 image</li> <li>Bring objects into their surroundings using AR</li> <li>Create their own QR code</li> </ul>	AR makr Figment AR Google expeditions	Geography
	Sound	<ul> <li>Create a musical composition using software</li> <li>Record sound effects</li> <li>Record voice over compositions to perform a song</li> </ul>	Seesaw Keezy Voice Memos Garageband	Literacy Music





#### **Computer Science**

NC Objectives	Computing strand	Skills/Knowledge	Apps/Software	Subject/Lessons
Understand what algorithms are, how they are implemented as programs on digital devices and that	Computational thinking	<ul> <li>Write algorithms for everyday tasks</li> <li>Use logical reasoning to predict the outcomes of algorithms</li> <li>Understand that decomposition is breaking objects/processes down</li> <li>Implement simple algorithms on digital devices (Beebots, Daisy the Dino)</li> <li>Debug algorithms</li> </ul>	Beebots Daisy the Dino Code Studio	Computing unplugged week Literacy
programs execute by following precise and unambiguous instructions  Create and debug simple programs	Coding and programming	<ul> <li>Understand that programs execute by following precise and unambiguous instructions</li> <li>Create programs on a variety of digital devices</li> <li>Debug programs of increasing complexity</li> <li>Use logical reasoning to predict the outcome of simple programs</li> </ul>	BeeBots Kodable ScratchJR Code Studio	Computing
Use logical reasoning to predict the behaviour of simple programs				





<b>NC Objectives</b>	Computing strand	Skills/Knowledge	Apps/Software	Subject/Lessons
Recognise common uses of information	Self-image and identity	<ul> <li>Explain people's identity online can be different to real life</li> <li>Describe how people might make themselves look different online</li> <li>Recognise issues online that might make me feel sad, worried, uncomfortable or frightened; give examples of how I might get help</li> </ul>	Puppet Edu Chatterkid iPad Video	PSHE 'Being Me' PSHE 'Relationships' Safer Internet Day
technology beyond school  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 of other online technologies	Online relationships	<ul> <li>Use the internet to communicate with people I don't know well (e.g. email a penpal in another school/ country)</li> <li>How to use technology to communicate with others I don't know well</li> </ul>	Puppet Edu iPad Video Chatterkid Social Media (Snapchat, Facebook, Tik Tok) Messaging/Video Chat Email Google Maps Translate	PSHE 'Relationships' PSHE 'Celebrating Differences' Geography Safer Internet Day
	Online reputation	<ul> <li>Explain how information put online about me can last for a long time</li> <li>Know who to talk to if someone has made a mistake about putting something online</li> </ul>	Social Media School Website (class pages) School Twitter iPads	Safer Internet Day Mental Health Week
	Online bullying	<ul> <li>Recognise bullying behaviour and how it could look online</li> <li>Understand how bullying can make someone feel</li> <li>Talk about how someone can/would get help about being bullied online or offline</li> </ul>	Voice Memos Puppet Edu Video Recording Chatterkid	PSHE 'Relationships' PSHE 'Celebrating Differences' Anti-Bullying Week Mental Health Week
	Managing online information	<ul> <li>Use keywords in search engines</li> <li>Navigate a simple webpage to get to information I need (e.g. home, forward, back buttons; links, tabs and sections)</li> </ul>	Search Engines Google Maps YouTube iPads	All subjects Safer Internet Week Computing Literacy



	<ul> <li>Explain what voice activated searching is and how it might be used (e.g. Alexa, Google Now, Siri)</li> <li>Know the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real'</li> <li>Explain why some information I find online may not be true</li> </ul>	Computer Voice activated Searching (Siri, Alexa)	
Health, well-being and lifestyle	<ul> <li>Explain simple guidance for using technology in different settings and say how those rules/guides can help me</li> </ul>	Stopwatch Alarm YouTube IWB	Safer Internet Day P.E. Timetable
Privacy and security	<ul> <li>Describe how online information about me could be seen by others</li> <li>Explain rules for keeping my information private</li> <li>Know what passwords are and can use passwords for accounts and devices</li> </ul>	iPad Games Social Media Purple Mash	Safer Internet Day
Copyright and ownership	<ul> <li>Describe why other people's work belongs to them</li> <li>Recognise that content on the internet may belong to other people</li> </ul>	Seesaw Social Media Search Engines Pic Collage Purple Mash	All Subjects