Danson Primary School- Information Technology

	Computer Science		Digital Literacy			Information Technology	
	Reception	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Word Processing & Typing	• I can play on a touch screen game and use computers/keyboards/mouse in role play • I can type letters with increasing confidence using a keyboard and tablet. • I can dictate short, clear sentences into a digital device.	• I can confidently type words quickly and correctly on a digital device. • I can use the spacebar to make space and delete to delete letters/words • I can make a new line using enter/return • I can dictate into a digital device more accurately and with punctuation.	• I can use the space bar only once between words and use touch to navigate to words letter to edit • I can copy and paste images and text • Use caps locks for capital letters. • I can add images alongside text in a word-processed document. • I can dictate longer passages into a digital device with accurate punctuation.	• I can use index fingers on keyboard home keys (f/j), use left fingers for a/s/ d/f/g, and use right fingers for h/j/k/l • I can edit the style and effect of my text and images to make my document more engaging and eye-catching. For example, borders and shadows. • I can use cut, copy and paste to quickly duplicate and organise text.	• I can combine digital images from different sources, objects, and text to make a final piece of a variety of tasks: posters, documents, eBooks, scripts, leaflets. • Confidently and regularly use text shortcuts such as cut, copy and paste and delete to organise text • Use font sizes appropriately for audience and purpose.\Use spell check and thesaurus including through Siri and other AI technology	• I can start to apply other useful effects to my documents such as hyperlinks. • I can import sounds to accompany and enhance the text in my document. • I can organise and reorganise text on screen to suit a purpose	• I can confidently choose the best application to demonstrate my learning. • I can format text to suit a purpose. • I can publish my documents online regularly and discuss the audience and purpose of my content.
Data Handling	.• I can identify a chart. • I can present simple data on a digital device as part of the class work	• I can sort images or text into two or more categories on a digital device. • I can collect data on a topic. • I can create a tally chart and pictogram. • I can record myself explaining what I have done and what it shows me.	• I can sort digital objects into a range of charts such as Venn diagrams, carroll diagrams and bar charts using different apps and software. • I can orally record myself explaining what the data shows me. • I can create a branching database using questions	• I can create my own sorting diagram and complete a data handling activity with it using images and text. • I can start to input simple data into a spreadsheet. • I can create a feelings chart exploring a story or character's feelings.	• I can create my own online multiple-choice questionnaire. • I can input data into a spreadsheet and export the data in a variety of ways: charts, bar charts, pie charts. • I understand how data is collected.	• I can create and publish my own online questionnaire and analyse the results. • I can use simple formulae to solve calculations including =sum and other statistical functions • I can edit and format different cells in a spreadsheet.	• I can write spreadsheet formulas to solve more challenging maths problems. • I can create and publish my own online quiz with a range of media (images and video)
Presentations, web design and eBook Creation	• I can record my voice over a picture. • I can move and resize images with my fingers or mouse.	• I can add labels to an image • I can order images to create a simple storyboard. • I can create a simple spider diagram. • I can sequence a series of pictures to explain my understanding of a topic.	• I can add voice labels to an image. • I can add a voice recording to a storyboard. • I can add speech bubbles to an image to show what a character thinks • I can import images to a project from the web and camera roll	• I can create an interactive comic with sounds, formatted text and video. • I can annotate an image with videos • I can create a simple web page. • I can create a simple digital timeline/mind map	• I can create an interactive quiz eBook introducing hyperlinks. • I can create an eBook with text, images and sound. • I can create a presentation demonstrating my understanding with a range of media. • I can create a digital timeline/mind map and include different media - sound and video.	• I can collaborate with peers using online tools, e.g. blogs, Google Drive, Office 365 • I can create and export an interactive presentation including a variety of media, animations, transitions and other effects. • I can create an interactive guide to an image by embedding digital content and publishing it online. • I can create a web page and embed video.	• I can create a web site which includes a variety of media. • I can design an app prototype that links multimedia pages together with hyperlinks. • I can choose applications to communicate to a specific audience. • I can evaluate my own content and consider ways to improve it
Animation		• I can add filters and stickers to enhance an animation of a character. • I can create an animation to tell a story with more than one scene. • I can add my own pictures to my story animation.	• I can create multiple animations of an image and edit these together. • I can create a simple stop motion animation. • I can explain how an animation/flip book works	• I can create animations of faces to speak in role with more life-like realistic outcomes. • I can improve stop motion animation clips	• I can take multiple animations of a character I have created and edit them together for a longer video. • I can use software to create a 3D animated story. • I can use line draw tool to create animations.	• I can record animations of different characters and edit them together to create an interview. • I can add green screen effects to a stop motion animation.	• I can mix animations and videos recordings of myself to create video interviews. • I can plan, script and create a 3D animation to explain a concept or tell a story.

				with techniques like onion skinning. • I can use animation tools in presenting software to create simple animations.		• I can create flip book animation using digital drawings and export as a Gif or video	• I can choose and create different types of animations to best explain my learning.
Video Creation	• I know the difference between photography and video. • I can record a short film using the camera • I can record and play a film • I can watch films back	• I can record a film using the camera app. • I can select images and record a voiceover. • I can highlight and zoom into images as I record.	• I can write and record a script using a teleprompter tool. • I can use tools to add effects to a video • I can begin to use green screen techniques with support	• I can sequence clips of mixed media in a timeline and record a voiceover • I can trim and cut film clips and add titles and transitions • I can independently create a green screen clip. • I can create my own movie trailer.	• I can add music and sound effects to my films • I can add animated titles and transitions • I can add simple subtitles to a video clip. • I can confidently use a green screen adding animated backgrounds.	• I can use cutaway and split screen tools in iMovie. • I can evaluate and improve the best video tools to best explain my understanding. • I can further improve green screen clips using crop and resize and explore more creative ways to use the tool - wearing green clothes and the masking tool.	• I can use the green screen masking tool with more than one character. • I can use picture in picture tools in iMovie. • I can add animated subtitles to my film to further enhance my creation.
Photography & Digital Art	• I can take a photograph • I can take a photograph and use it in an app • I can use a painting app and explore the paint and brush tools	• I can edit a photo with simple tools • I can use a paint/drawing app to create a digital image • I can begin to cut out an image to layer on another image.	• I can edit a photo (crop, filters, mark up etc) • I can select and use tools to create digital imagery - controlling the pen and using the fill tool • I can cut images with accuracy to layer on other images.	• I can confidently take and manipulate photos • I can create a digital image using a range of tools, pens, brushes and effects • I can create transparent images with Instant Alpha	• I can enhance digital images and photographs using crop, brightness, contrast & resize • I can manipulate shapes to create digital art. • I can draw a series of images and export as an animated GIF	• I can make a digital photo using camera settings • I can enhance digital photos and images using crop, brightness and resize tools • I can link and explain how to photoshop images and how this is used in the media	• I can edit a picture to remove items, add backgrounds, merge 2 photos • I can evaluate and discuss images explaining effects and filters that have been used to enhance the media. • Use a 3D drawing app to create a realistic representation of world objects
Augmented Reality and Virtual Reality		• I can explore an interactive 360 image. • I can scan a trigger image to begin a AR experience. • I can pretend to interact with AR objects.	• I can draw my own 360 image and explore it in VR. • I can bring objects into my surroundings using Augmented Reality. • I can create my own QR code.	• I can create my own digital 360 image and explore it in VR • I can create my own images and bring it into my surroundings through AR.	• I can create my own 360 videos. • I can use the camera to create a 360 image. • I can add multiple objects into my surroundings through AR to explain a concept.	• I can create an interactive VR experience. • I can create an animated object and bring it into my surroundings through AR • I can create an AR experience using objects I have created to explain a concept.	• I can create and upload my own VR Google Expedition. • I can create an interactive poster using AR • I can explain how VR and AR works.
Sound	• I can record sounds with different resources • I can find ways to change your voice (tube, tin can, shouting to create an echo) • I can record sounds/voices in storytelling and explanations	• I can create a sequence of sounds (instruments, apps/software) • I can explore short and long sounds. • I can record my voice and add different effects.	• Create a musical composition using software • I can record my own sound effects. • I can record my voice over compositions to perform a song.	• I can create and edit purposeful compositions using music software to create mood or a certain style • I can experiment with live loops to create a song.	• Edit sound effects for a purpose. • Create a simple four chord song following the correct rhythm. • I can record a radio broadcast or audiobook.	• Add voice over and edit sound clips (volume, pitch, fade, effect) to create a podcast. • Create a remix of a popular song.	• Add voice over and edit sound clips (volume, pitch, fade, effect) to use in a film or radio broadcast (podcast) • Compose a soundtrack that can be added to a film project.
Vocabulary	camera, record,, tools, image, keyboard, mouse, sound	audio, digital, message, microphone, MIDI, piano roll, repetition, sample, sequencer, speaker, sprite, track, virtual, database, dataset, field, filter, form, leaf, record, sort, table, tree	animation, background, character, flipbook animation, frame, media assets, onion- skinning, prop, soundtrack, stage, stop-motion, storyboard, binary, binary tree, branching database, classification key, data, database, geolocation data, Global Position System (GPS), pixels, tally charts.	data, data centre, data production, digital footprint, filter, personal information, survey	Creative Commons, hyperlinks, hypertext mark-up language (HTML), internet, uniform resource locator (URL), web server, abstraction, bitmap, fractal, pixel, repetition, sprite, tessellation, transform, turtle, vector graphics, analogue, data, dataset, digital, field, filter (database), form, input,	computer-aided design (CAD) Creative Commons, photorealistic, render Creative Commons, hyperlinks, hypertext mark-up language (HTML), hypertext transfer protocol (HTTP), internet, internet protocol (IP) addresses, network switch, abstraction, colour value, Creative Commons, hyperlink, MP3, pixel, safe search,	Creative Commons, desktop publishing (DTP), eBook, e pub, folder, image, portable document format (PDF), text, artificial intelligence, classifier, decision tree, image recognition, label, layer, machine learning, model, natural language processing.

				interface, record, sensor, table	accelerometer, augmented reality (AR), global positioning system (GPS), Google cardboard, photosphere, QR code, share code, stereographic, virtual reality (VR)	
National Curriculum	**Development Matters** **Reception** •Show resilience and perseverance in the face of a challenge. •Develop their small motor skills so that they can use a range of tools competently, safely and confidently. •Explore, use and refine a variety of artistic effects to express their ideas and feelings. **Early Learning Goals** •Be confident to try new activities and show independence, resilience and perseverance in the face of challenge (ELG - Managing Self). •Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (ELG - Creating with Materials)	•use technology purposefully to create, organise, store, manipulate and retrieve digital content		•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.	•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.	