



Year 1

	Autumn	Spring	Summer
	Focus: Digital Productivity (IT) <i>Typing skills, IT best practice, generic software, internet skills</i>	Focus: Computing (CS) <i>Computational thinking, gaming, programming & coding, models & simulations, technical terms, hardware & software</i>	Focus: Digital Creativity (DL) <i>Animation & video, 2D & 3D design, e-books, photography, movies</i>
Unit 1	- Digital Art - Doodle Buddy – canvas, pen colour. Free play creative piece – upload to Seesaw & comment - Seesaw Class Badge - Create basic pictures in Pages using shapes (introduction to basic formatting options, resize, move options and rotate)	- Introduction to coding: - Key terms (code, commands, stage, sprite, algorithm, sequence) - Role-play coding – create and use command cards (blank template) in groups to get one another to complete challenges e.g. start, move forward, turn left, jump, stop - Activity: Dance Algorithm - Daisy the Dino (challenge mode then free play mode) - Tynker Jr – Oceans Odyssey game	Typing skills – introduction to the keyboard. Show/hide, shift key, caps lock, return, delete. Use of Word Burst and Animal Typing: Lite
Unit 2	- Word processing basics – typing numbers, letters and symbols, move down a line (enter). Selecting text and click options. Basic formatting (font, size, bold, italic, underline, colour, alignment) - Activity: write name on different lines and use a range of formatting options. Upload to Seesaw (intro app, QR code, +, upload video/photo, annotation page, upload tick, pending approval, comment, journal). Learn how to take a screenshot	- Coding in Scratch Jr: Set background, select and delete sprites, trigger green flag, stop block, movement (forward/back/jump/turn), end loop, use of gridlines. Saving, removing code, full screen open/exit - Activity: Rocket on a continual loop through space. Screenshot and upload to Seesaw. - Hour of Code activities – Pre-reader e.g. Beaver Achiever	- Introduction to Keynote (Animals). 4 slides on 4 different animals. Title, image, description (background, text, image options, transition effects) - Internet explorer. Search engines and simple searches (Google). Result numbers and ranking. Tab options (image, video, news etc). - Activity – finding things online – how to use key words, ranking, adverts, tabs. Screenshot web search – upload to Seesaw Extension – basic image search. Screenshot image search – upload to Seesaw and annotate

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Unit 3	• Digiduck stories: 1) Digiduck Saves the Day and email, 2) Digiduck's famous friend and activities https://www.childnet.com/resources/digiduck-stories/ Activities: Create an online nickname, Seesaw Party Voting • iPad basics (open/close apps, navigate desktops, search apps, identify common apps, lock screen) • Saving and opening files • Christmas picture on pages		• Basic introduction to iPad camera and videos – selfie, photo, image editing options, techniques – positioning, be still. Deleting camera images. E-safety discussion.
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Year 2



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	Focus: Digital Productivity (IT) <i>Typing skills, IT best practice, generic software, internet skills</i>	Focus: Computing (CS) <i>Computational thinking, gaming, programming & coding, models & simulations, technical terms, hardware & software</i>	Focus: Digital Creativity (DL) <i>Animation & video, 2D & 3D design, e-books, photography, movies</i>
Unit 1	• iPad basics recap (lock screen, screenshot, double tap home, swipe close apps, swipe down search apps) • Recap Seesaw: 1) Class Badge 2) Guess The Alien – type clues for your partner to guess which alien you have chosen from the picture	• Coding: • Key terms: code, programming, commands, stage, sprite, algorithm, sequence, grid • Coding in Scratch Jr – editing sprites and backgrounds, using gridlines to calculate distance. Resize sprites, flip sprites. Trigger tap sprite. Speech, add scene, end block change scene. • Activities (upload Pages evidence to seesaw): 1. resize car and move along a road (include a character and speech). 2. Sun goes down scene change to night scene. 3. A spooky forest (tap sprites to trigger) 4. Program a race using speed blocks • Tynker Jr - Game Studio - Deep Sea Salvage	• Typing practice in Word Burst and Animal Typing: Lite • ‘Write a story’ activity – retell your summer/retell your favourite story. Typing practice and speed.
Unit 2	E-safety: • Smartie the Penguin ppt 1 with poster to colour Record an e-safety video with E-safety song and upload to Seesaw • Smartie the Penguin ppt 2 Do’s and Don’ts slides on Seesaw Drawing app, what you should and shouldn’t do on the internet	• Coding activities in Coding Safari alongside Keynote (title page, one screenshot per slide of each animal game with a title and explanation). Key presentation terms: slide, text, image options, layout options background, formatting options (font colour/style)	• Create a comic called “Animal Madness” in Book Creator (frames/gutters, speech/thought bubbles, add text, add image, add page, navigate). • Max 3 frames per page. Create scenes in Scratch Jr using backgrounds and Sprites. Use object sprites e.g. weather, plants etc



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Unit 3

- Word processing basics (Pages) – zoom, spelling/grammar checks, font basics, shapes, font size, alignment, add objects (image/shape/text/line) - Christmas Advent Calendar on Pages (images from the internet hidden behind numbered shapes) - Activity: Create a character – draw your character using the drawing tool in pages, use text boxes to annotate with adjectives, format the text (colour/size/font)		'This year was incredible' activity – camera for selfie, pen tools to create mask, text box options (colour, text) to enter highlights. Further coding: - Hour of Code - AI for Oceans - Hour of Code – Flappy Bird Game Extension extras: - Isle of Tune/Garage Band music lessons



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Unit 1	Seesaw activities: 1) Create a class logo – text box, emojis. Colour, font, alignment, background, shapes 2) Typing activity in notes: 'A Typical Day' (using emojis)	- Recap coding terms from KS1: 1. what is an algorithm? https://www.youtube.com/watch?v=Da5TOXCwLSg Students to call out commands for the teacher (move around room and complete a task) 2) What is coding? https://www.youtube.com/watch?v=XMZFUnAgOqs Key things to remember: Not just digital, need to be specific, must include every step, must follow syntax rules. Computers follow commands – this could result in no output/wrong output due to human error. - Space Cadets programming in Tynker – upload evidence to Seesaw: 1) Simple algorithm – annotate screenshot to show use of commands in a correct sequence 2) Loops (screenshots and a Pages PDF explaining the use of as repeat block) 3) Debugging – annotate to explain what debugging is (debugging theory https://www.youtube.com/watch?v=CGPjraqX_ac)	- Word processing - formatting (font style, colour, highlight, emphasis bold/italic/underline, text effects glow/reflection/shadow/outline, line weight) 7 sentences activity and short story – upload to Seesaw
Unit 2	- Typing skills – Dance Mat typing, home row, recap alternative keys - Word Burst typing game		- Creating simple drawings in Doodle Buddy (1. Import background, 2. Creative piece) - Create a stain glass window in Paint (jspaint.app)

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Unit 3

		Sketch.io – interface overview (background options, transparent canvas, tools, undo) 1) Create 6 shapes: fill/outline colour (solid, linear, radial, pattern), line bevel/mitre/round, line width, noise, opacity, rotate, resize, delete, settings sliders (spread/whirl/sides/cutout). Upload to Seesaw and annotate 2) Editing Clipart: fill options (vector/pixel), adjust hue/tint/warmth. Upload to Seesaw and annotate.
Presentation basics in Keynote (sport/hobby) –backgrounds, Word Art, formatting text, use of text boxes, custom animation, slide transitions, effective use of images. Export as a movie to Seesaw. Link to internet explorer – tab options, blocked sites, moving between applications, followed hyperlinks	- Coding in Scratch Jr – progress to harder concepts: 1) Animation using wait 2) Parallel algorithms (basketball move across and bounce) https://www.youtube.com/watch?v=I5YTqvbyH3E (theory) https://www.youtube.com/watch?v=aJetEiEueEQ (example)	Photography using iPads and PicCollage – ‘My School’: 1) Photography skills (range, focus, angle, foreground, background, frame) 2) Editing skills (crop, filters, delete, adjust, brightness, cool/warm, noir) 3) PicCollage – backgrounds, layout, stickers, text (font, colour text and box), animate Extension extras: - Hour of Code – Minecraft, Star Wars, Make your own Kodable Mazes



Year 4

	Autumn	Spring	Summer
	Focus: Digital Productivity (IT) <i>Typing skills, IT best practice, generic software, internet skills</i>	Focus: Computing (CS) <i>Computational thinking, gaming, programming & coding, models & simulations, technical terms, hardware & software</i>	Focus: Digital Creativity (DL) <i>Animation & video, 2D & 3D design, e-books, photography, movies</i>
Unit 1	- Typing Skills – Typing.com practice and tests. - Typing games e.g. typing.com - Recap touch typing theory	- Recap coding terms. - Recap broadcasts, sprite editing and change scene: 2 pages – background on scene one, ‘the end’ on scene two (use of text settings) - Insert 2 sprites - scene 1: sprite X change colour fill, sprite Y add detail using pen options e.g. hat/flower. Flip to face each other, resize, position - Code: move toward (use of gridlines), simple conversation using envelopes (X, Y, X) - Sprite X change scene - Scratch Jr Project -create animation using up to 4 scenes. Must use movement, speech and broadcasts. Try and use loops and parallel coding e.g. basketball motion or resize as move up the stage (to give impression of moving away) - Importance of planning – design sheets for layout, backgrounds, sprite and code - Book Creator – overview of final animation. Title page and scene pages. Background, images, text boxes, font options. Extension – annotate screenshots to explain code. Convert to PDF (single pages) – upload to Seesaw.	- Introduction to Apple Pencil – pairing a device - Using Apple Pencil in Apple Notes – pen to text, pen, highlighter, crayon, open settings, lasso, ruler, eraser (object/pixel). Learn how to use shape recognition to create clouds, hearts, stars and common shapes. - Introduction to Procreate: brush library, blend, opacity, colours options. - Experiment with brush options (ink technical and thylacine, pencil shading, paint flat brush opacity blobs, abstract stormbay, spraypaint splatter and drip) - Texture wood, materials furnaux, industrial stone wall, organic paper daisy & swordgrass, - Half black, half blue. Black luminance and flame. Blue oceans and clouds - Annotate screenshot to show tools Activities to practice layers, background adjustments & symmetry, colour select and fill: - Trace a picture - Trace an inspirational quote - Create a symmetrical picture.



		Extension if needed: • Sketch.io – exploring pen options: Exploring font options (name). Decorate with shapes and clipart • Paintz.app – Experiment with tools and design a picture
Unit 2	• Information sheet on networks and the internet: PAN/LAN/WAN, URLs & IP addresses, bits/bytes, bandwidth ethernet/fibre-optic/WIFI, network topologies (star/ring/bus/mesh). Ppt for theory/videos. 'Networks and the Internet' exemplar. • Apple Pages word processing skills – shapes (fill/outline/shadow/line width, reflection, opacity, arrange, fonts (and editing), tables (and editing), bullets (personalised), image options, rotate • Internet – image searches (key words, filter options, tools, transparency, copy to new app)	• Scratch 3.0 activities: 1) Basic joke (using wait or broadcast). Explore all new options for backgrounds and sprites, introduce costumes, rotate, coordinates and resize. 2) Animate a name (rotate, colour, size, trigger options) • Quizzes in Scratch – stage and sprite options, code: ask and wait; if/else; say for x secs; operators (=); sprite settings (say, change colour, clear graphics, extension: loops to rotate 360/whirl, glide to multiple coordinates), sensing (answer), variables (scoring: set; change; show; hide) • Code testing and debugging • Screenshot evidence and annotate
Unit 3	• Presentation advanced (PC Basics topic) – progression to tables, custom animation settings, shape art, timings, click/with/after options • Theory covered – hardware, software, operating systems, input/output/process, input devices, output devices	• Flowcharts in PureFlow – create flowcharts for brushing your teeth and making a cup of tea (ppt available). Upload to Purple Mash. Extension extras for the year: • Use the annotation tools in Seesaw to decorate a picture e.g. Christmas Tree • Create a collage using PicCollage features – background, text, stickers, animation, frames

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Year 5

	Autumn	Summer	Spring
	Focus: Digital Productivity (IT) <i>Typing skills, IT best practice, generic software, internet skills</i>	Focus: Computing (CS) <i>Computational thinking, gaming, programming & coding, models & simulations, technical terms, hardware & software</i>	Focus: Digital Creativity (DL) <i>Animation & video, 2D & 3D design, e-books, photography, movies</i>
Unit 1	- Typing Skills (Touch typing practice on Typingclub.com) - Recap touch typing theory - Online typing games to increase speed and accuracy	- Refresh coding terms Q&A: command, algorithm, sequence, iteration, debugging. - New terms introduced throughout unit: abstraction, decomposition, conditionals, functions, variables - Dragon Spells in Tynker – upload evidence to seesaw: - Pages PDF demonstrating iteration and explaining 3 options (repeat set number, repeat forever, repeat forever until) - PDF theory/evidence of a conditional (e.g. IF icefly) – annotate to show understanding. - Screenshot evidence: - abstraction (eliminate dragons) https://www.youtube.com/watch?v=N1A9qkWs538&t=13s - function (create own) https://www.youtube.com/watch?v=3JIZ40yuZL0 (Class discussion real life function examples (reusable, multi-steps): brush teeth, cup of tea. Create function diagrams in Word and upload to Seesaw (see exemplar) - decomposition (long level) https://www.youtube.com/watch?v=8HFqzzZxV9k	- Sketch.io - complete 4 challenges using various techniques: name in rainbow calligraphy; snowflake/pattern; animal ('fur'); tree ('sketchy' & stamp shade variations) - Procreate activities: - Flower (layers, alpha mask, airbrushing, layer mask) - Rain drop animation - Snail animation - Creative animation
Unit 2	- Digital Wellbeing – pair/group/class discussions on the positive/negative of technology on: relationships, health, work, the environment - Information sheet on digital wellbeing created in Microsoft Word – use of font	Further Coding: - Scratch 3.0 – create a pong game (go to coordinates, wait until, sensor touching colour, play sound, point in direction, turn angle, if on edge bounce, forever loop, stop all, variables) - Hour of Code: dance party (annotated evidence in Pages), Minecraft (annotated screenshot)	Stop Motion Animation - Animate your name - Creative project (pair/group work) Use of frames, stills, onion skin, timeline, speed (frames/sec), playback Photography skills - angle, range, landscape/portrait, capture, timer, grid

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Unit 3

options, crop, rotate, image effects, wrap text, emojis, tables, header/footer • Use of internet (information/images) – moving content between applications		
Christmas activities: • Create an Emoji quiz in Pages using tables, emoji keyboard, font options and formatting • Create a quiz in kahoot: use of internet to research topic and gather images/YouTube video clips; create a combination of multiple choice and true/false questions, adjust quiz settings. Test on a group.		

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Year 6

	Autumn	Spring	Summer
	Focus: Digital Productivity (IT) <i>Typing skills, IT best practice, generic software, internet skills</i>	Focus: Computing (CS) <i>Computational thinking, gaming, programming & coding, models & simulations, technical terms, hardware & software</i>	Focus: Digital Creativity (DL) <i>Animation & video, 2D & 3D design, e-books, photography, movies</i>
Unit 1	- Typing Skills - practice touch typing skills on Typing Club. Play typing games on typing.com - Refresh coding terms (poster in Word for following terms: abstraction, decomposition, conditionals, functions, variables)	- Swift Playground - decomposition, pattern recognition, functions, debugging (logical reasoning), loops, conditionals. Nested loops demo https://studio.code.org/s/course3/lessons/13/levels/3 - Upload/annotate screenshot evidence to Seesaw: 1) Commands–shortest route (efficient coding) 2) Create own function (turn right) 3) Nested function (nested patterns level) 4) Using loops level – annotate benefit (saves time, reduces errors, saves storage/memory) 5) Advanced – ‘branch out’ level: repeats within a function	- Procreate 1) Create a landscape activity https://www.youtube.com/watch?v=y3klIAxxlu0 2) 4 challenges – ink tattoo, pencil sketching (fruit), cartoon-style tracing, creative piece 3) Light picture animation 4) sketch.metademolab alien animation 5) Bouncing ball animation (include frame hold and image freeform snapping to squash ball)
Unit 2	- Digital Footprints: What is it and why should I care? https://www.bbc.co.uk/programmes/p06z2lvy 1) Create your own digital footprint (seesaw activity) 2) Social Media age dilemma (seesaw activity) – do you agree with 12 plus? - PowerPoint Project - Social Media Apps and risks 1) Theory – cyberbullying, age restrictions, privacy settings, subscriptions, scroll addiction, desensitisation, popups, targeted marketing, notifications, block, like, share, chat, post, catfishing	- SpriteBox Coding 1. Create an avatar 2. Complete SpriteBox:Code Hour 3. Progress to SpriteBox Coding 4. Create a user guide in Book Creator 5. Export as a movie to Seesaw	- Group Project 1. Create a movie trailer in iMovie (theme, storyboard, structure, edit shot, title style, logo style, captions) 2. Videography skills – closeup/medium/wide, landscape, action, group - BBCMicro:Bit Coding (models & simulations) 1) Create an LED message 2) Operate a traffic light

Computing Curriculum Y1 & 2 & KS2

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| <ul style="list-style-type: none">• 2) Presentation techniques – formatting options for text/images/shapes, slide layout, text/image/button navigation hyperlinks, animation/transition effects | | |
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