West Norfolk Academies Trust (Primary) – Curriculum Map – Computing

	Autumn 1st	Autumn 2nd	Spring 1st	Spring 2nd	Summer 1st	Summer 2nd
	COMPUTING SYSTEMS AND NETWORKS		**DATA AND INFORMATION**		**PROGRAMMING**	
Year 1 **Knowledge**	**TECHNOLOGY AROUND US** **E- safety- privacy and security** Technology around us Using Technology Developing mouse skills Using a compute keyboard Developing keyboard skills Using a computer responsibly **Creating Media-Digital painting** **(Art lesson)** Selecting shape tools and colours	**Digital media- Digital writing *** Explore keyboard Adding and removing text Exploring tool bar Making changes to text	**GROUPING DATA** Label and match Group and count Describe an object Making different groups Comparing groups Answering questions	**Digital media- Digital writing *** Explore keyboard Adding and removing text Exploring tool bar Making changes to text	**MOVING A ROBOT** Buttons Directions Forwards and backwards Four directions Getting there Routes	**Digital media- Digital writing *** Explore keyboard Adding and removing text Exploring tool bar Making changes to text
Year 1 **Vocabulary**	Technology, electronic, manufactured, computer, mouse, keyboard, screen, click, safely, responsibly. paint program, tool, paintbrush, erase, fill, undo, Piet Mondrian, primary colours, shape tools, line tool, Henri Matisse, Wassily Kandinsky, feelings, colour, brush style Georges Seurat,	Word processor, keyboard, keys, letters, Microsoft Word, Google Docs, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo	Object, label, group, search, image, property, sort, colour, size, shape	Word processor, keyboard, keys, letters, Microsoft Word, Google Docs, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo	Forwards, backwards, turn, clear, go, commands Instructions, directions Left, right, Plan, algorithm, program, route	Word processor, keyboard, keys, letters, Microsoft Word, Google Docs, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo

	Pointillism, brush size Pictures, painting, computers, like, prefer, dislike					
Year 2 **Knowledge**	**INFORMATION TECHNOLOGY AROUND US** What is information technology? Where have we seen technology at home? Where have we seen information technology in the world? How does information technology improve our world? Demonstrate safe use of information technology Using information technology responsibly **Creating Media- digital photography (Geography)** Take a photography and use effects		**PICTOGRAMS** Counting & Comparing Entering Data Creating pictograms What is an Attribute Comparing people Presenting Information		**ROBOT ALGORITHMS** Giving instructions Same but different, Making predictions Mats and routes Algorithm design Debugging	**Creating Media-Creating Music (Music lesson)** Creating a piece of music using chrome music lab
Year 2 Vocabulary	Information technology, computer, file, image, bar code, scanner. Device, camera, photograph, capture, image, digital landscape, portrait, horizontal, vertical, field of view, narrow, wide, format, framing, focal point, subject matter, field of view, compose natural lighting, artificial lighting, flash, focus, background, foreground, editing, tools, colour, filter, images, Pixlr, changed, real		Attribute, block diagram, common, data, entre, pictogram, tally chart		Instruction, sequence, clear, unambiguous, algorithm, program, order, commands prediction, artwork, design, route, mat debugging.	Music, planets, Mars, Venus, war, peace, quiet, loud, feelings, emotions, pattern, rhythm, pulse, pitch, tempo, notes, instrument, Create, emotion, pitch, beat, open, edit

Year 3 **Knowledge**	**CONNECTING COMPUTERS** How does a digital device work? What parts make up a digital device? How do digital devices help us? How am I connected? How are computers connected? What does our school computing network look like?	**Digital media- Desktop publishing *** Words and pictures Can you edit it Create a template Can you add content Lay it out	**BRANCHING DATABASES** Yes or no questions Making groups Creating a branching database Structuring a branching database Using a branching database Presenting information	**Digital media- Desktop publishing *** Words and pictures Can you edit it Create a template Can you add content Lay it out	**SEQUENCE IN MUSIC** Introducing scratch Programming Sprites Sequencing Ordering commands	**Digital media- Desktop publishing *** Words and pictures Can you edit it Create a template Can you add content Lay it out
Year 3 Vocabulary	Digital devise, input, output, process, program, connection, network, network switch, server, wireless access point (WAP).	Text, images, animation, message, font, paint palette, slider, return, backspace, shift, chevron, character	Attribute, value, table, object, branching database, database, equal, structure, selecting, decision tree, question.	Text, images, animation, message, font, paint palette, slider, return, backspace, shift, chevron, character	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, run the code, order, note, chord, design, algorithm, bug, debug	Text, images, animation, message, font, paint palette, slider, return, backspace, shift, chevron, character
Year 4 **Knowledge**	**THE INTERNET** Connecting Networks What is the internet made of? Sharing information What is a website? Who owns the web? Can I believe what I read?	**Creating media- Audio editing*** Digital recording Creating a podcast Editing **Creating media- Photo editing*** Changes digital images Retouching images Making a publication	**DATA LOGGING** Answering questions Data Collection Logging Analysing Data Data for answers Answering my question	**Creating media- Audio editing*** Digital recording Creating a podcast Editing **Creating media- Photo editing*** Changes digital images Retouching images Making a publication	**REPETITION IN SHAPES** Programming a screen turtle Programming letters Patterns & repeats, Using loops to create shapes Creating a program	**Creating media- Audio editing*** Digital recording Creating a podcast Editing **Creating media- Photo editing*** Changes digital images Retouching images Making a publication

Year 4 Vocabulary	Search engine, internet, internet browser, website, network switch, server, wireless access point (WAP), router.	Audio, record, playback, microphone, speaker, input, output, Composition, digital image, edit, retouch, publication, elements	Data, input devise, sensor, data pint, interval, import, export, analyse.	Audio, record, playback, microphone, speaker, input, output, Composition, digital image, edit, retouch, publication, elements	Program, turtle, commands code snippet, algorithm, design, debug, pattern, repeat, repetition, count-controlled loop, algorithm, value, trace, decompose, procedure	Audio, record, playback, microphone, speaker, input, output, Composition, digital image, edit, retouch, publication, elements
Year 5 **Knowledge**	**SHARING INFORMATION** Systems Computer systems and us Transferring information Working together Better working together Shared working	**Creating media- Video editing*** Create a storyboard Use a devise to record their video Import and edit video	**FLAT-FILE DATABASES** Creating a paper-based database Computer databases Using a database Using search tools Comparing data visually	**Creating media- Video editing*** Create a storyboard Use a devise to record their video Import and edit video	**SELECTION IN PHYSICAL COMPUTING** Connecting crumbles Combining output devices Controlling & conditions Drawing designs Writing & testing algorithms	**Creating media- Video editing*** Create a storyboard Use a devise to record their video Import and edit video
Year 5 Vocabulary	System, input, process, output, IP address, collaboration, algorithm, packet.	Video, audio, recording, storyboard, script, soundtrack, dialogue, capture, zoom, storage, digital, tape, AV (audio-visual), save, videographer, video techniques: pan, tilt, angle, Video, lighting, setting, YouTuber, content, light, audio/sound, camera, colour, export, computer, Microsoft Movie Maker, split, trim/clip, edit, titles, end credits, timeline, transitions, audio, soundtrack, content, retake/reshoot special effects, screen, constructive feedback	Information, data, database, criteria ,record, field, compare, filter.	Video, audio, recording, storyboard, script, soundtrack, dialogue, capture, zoom, storage, digital, tape, AV (audio-visual), save, videographer, video techniques: pan, tilt, angle, Video, lighting, setting, YouTuber, content, light, audio/sound, camera, colour, export, computer, Microsoft Movie Maker, split, trim/clip, edit, titles, end credits, timeline, transitions, audio, soundtrack, content, retake/reshoot special effects, screen, constructive feedback	Microcontroller, Crumble controller, components, LED, sparkle, crocodile clips, connect, battery box, program, repetition, infinite loop, output devices, motor, count-controlled loop, switch, condition, true, false, input, selection, condition, action, task, design, selection, algorithm, debug, evaluate	Video, audio, recording, storyboard, script, soundtrack, dialogue, capture, zoom, storage, digital, tape, AV (audio-visual), save, videographer, video techniques: pan, tilt, angle, Video, lighting, setting, YouTuber, content, light, audio/sound, camera, colour, export, computer, Microsoft Movie Maker, split, trim/clip, edit, titles, end credits, timeline, transitions, audio, soundtrack, content, retake/reshoot special effects, screen, constructive feedback

Year 6 **Knowledge**	**COMMUNICATION** Searching the web Selecting search results How search results are ranked How are searches influenced? How we communicate Communicating responsibly		**SPREADSHEETS** What is a spreadsheet Modifying spreadsheets What's the formula? Calculate and Duplicate Event planning Presenting data		**VARIABLES IN GAMES** Introducing variables Variable programming Designing a games Designing a code Improving & sharing	**Creating Media- 3d modelling** **(DT Lesson)** Create the 3d model using Tinkercad
Year 6 **Vocabulary**	Search engine, uniform resource locate (RUL), web crawler, index, ranking, optimisation, privacy, information security.		Cell, row, column, spreadsheet, tab, formula, function, manual input, output		Variable, change, name, value, set, design, event, algorithm, code, task, artwork, program, project, test, debug, improve, evaluate, share.	2D, 3D, 3D object, 3D space, view, resize, colour, lift, rotate, position, select, duplicate, dimensions, placeholder, hole, group, ungroup, resize, design, modify, evaluate, improve.