West Norfolk Academies Trust (Primary) – Curriculum Map – Computing 22-23

	Autumn 1st COMPUTING SYSTEMS AND NETWORKS	Autumn 2nd	Spring 1st DATA AND INFORMATION	Spring 2nd	Summer 1st PROGRAMMING	Summer 2nd
Pre School Knowledge	**My friends and family Technology around us** **Role Play - laptop, phone and keyboard in role play indoor and outdoor CD player for music**	Light and celebration Explore Keyboard Adult model scribing of childs words using keyboard to type Talking buttons for recording talk	Read a story? Buttons directions Use an algorithm on Bee bots for direction and control as they make a path through the characters in Handas Surprise Group and label	**Are we there yet? Technology around us** **Listening to and recording sounds from online, from film and CD, searching for pictures of old vehicles**	**Minibeasts Digital and media** **Drawing using an ipad to represent a creature** **Beebots for simple two or three step algorithm**	**The Seaside Technology around us** Use role play indoors and outdoors to emulate RNLI coastguards. Mobile phones, messaging, laptop and keyboard.
Pre School Vocab	control, on, off, play, keyboard, type	**record, on, off, stop, switch, socket**	**instructions, direction, program, group and label**	**Internet search, filter, enter, select**	**touch, tools, pad, draw, select**	Revisit- control, on, off, play, keyboard, type
EYFS Knowledge	**Marvellous Me** Using google maps to locate school. Role play area – home with IT included (eg. microwave, laptop with keyboard). Taking photos of faces/emotions on iPads. CD player to sing songs. Charanga – music.	**Light & Celebrations** Light box to create pattens linked to stained glass windows. iPads to take photos of our visit to local church. Shadow puppets using torches to retell Rama & Sita story. Battery powered tealights for diva lamps. Using internet to look at pictures of Christmas trees from the past. CD player to sing songs. Charanga - music	**King, Queen & Country** Video images of London landmarks online. Virtual tour of Sandringham. Program beebots to visit landmarks on a map. CD player to sing songs. Charanga - music	**Air, Land & Sea** Online clips of planes, Barnaby Bear, lifeboat rescue. Use laptops to crate a word document about a vehicle. Using a phone to dial 999 in an emergency. CD player to sing songs. Charanga - music	**Living & Growing** Photos of living things to compare as they grow. Photos on iPads to record the changes in caterpilllars. Use ipad to make a drawing of a plant CD player to sing songs. Charanga - music	**The Ocean** Program beebots on sea themed mat. Digital sea themed pictures using laptops. CD player to sing songs. Charanga - music
EYFS Vocabulary	Internet, google maps, search, zoom, photo, image, delete	Light box, switch, on & off, internet, search, photo, image	Record, film, program, instructions, algorithm,	Internet, online, film, phone call, press	Record, image, photo, playback, delete	Program, instructions, algorithm, mouse, cursor, keys, move, select

Year 1 **Knowledge**	**TECHNOLOGY AROUND US** **E- safety- privacy and security** Technology around us Using Technology Developing mouse skills Using a computer 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, Pointillism, brush size Pictures, painting, computers, like, prefer, dislike	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
Year 2 **Knowledge**	**Reinforcing Knowledge**		**PICTOGRAMS** Counting & Comparing Entering Data Creating pictograms What is an Attribute Comparing people Presenting Information	**INFORMATION TECHNOLOGY AROUND US** What is information technology? Where have we seen technology at home?	**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

				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		
Year 2 Vocabulary			Attribute, block diagram, common, data, entre, pictogram, tally chart	Information technology, computer, mouse, resize,file, image,drag and drop, barcode, scanner, internet safety	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**	**Systems and Searching** Systems Computer systems and us. Searching the web. Selecting search results. How search results are ranked. How are searches influence.	**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, connection, digital, input, process, output, search engine, refine, index, crawler, bot, server, wireless, access point, network cables, network sockets	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,	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,	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		end credits, timeline, transitions, audio, soundtrack, content, retake/reshoot special effects, screen, constructive feedback		end credits, timeline, transitions, audio, soundtrack, content, retake/reshoot special effects, screen, constructive feedback
Year 6 **Knowledge**	**COMMUNICATION AND COLLABORATION** Internet addresses Data packets Working together Shared working 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	Digital device, input, process, output, program, digital, non-digital, connection, network, network switch, server, wireless access point, network cables, network sockets.		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.