

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

	Autumn 1 st	Autumn 2 nd	Spring 1 st	Spring 2 nd	Summer 1 st	Summer 2 nd
	COMPUTING SYSTEMS AND NETWORKS		DATA AND INFORMATION		PROGRAMMING	
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 patters 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 caterpillars. 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 Technology around us Using Technology Developing mouse skills Using a compute keyboard Developing keyboard skills Using a computer responsibly	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

	<p>Creating Media-Digital painting (Art lesson) Selecting shape tools and colours</p>					
<p>Year 1 Vocabulary</p>	<p>Technology, electronic, manufactured, computer, mouse, keyboard, screen, click, safely, responsibly.</p> <p>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</p>	<p>Word processor, keyboard, keys, letters, Microsoft Word, Google Docs, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo</p>	<p>Object, label, group, search, image, property, sort, colour, size, shape</p>	<p>Word processor, keyboard, keys, letters, Microsoft Word, Google Docs, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo</p>	<p>Forwards, backwards, turn, clear, go, commands Instructions, directions Left, right, Plan, algorithm, program, route</p>	<p>Word processor, keyboard, keys, letters, Microsoft Word, Google Docs, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, undo</p>
<p>Year 2 Knowledge</p>	<p>INFORMATION TECHNOLOGY AROUND US</p> <p>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</p> <p>Creating Media- digital photography (Geography)</p>		<p>PICTOGRAMS</p> <p>Counting & Comparing Entering Data Creating pictograms What is an Attribute Comparing people Presenting Information</p>		<p>ROBOT ALGORITHMS</p> <p>Giving instructions Same but different, Making predictions Mats and routes Algorithm design Debugging</p>	<p>Creating Media- Creating Music (Music lesson) Creating a piece of music using chrome music lab</p>

	Take a photography and use effects					
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	<p>THE INTERNET</p> <p>Connecting Networks What is the internet made of? Sharing information What is a website? Who owns the web? Can I believe what I read?</p>	<p>Creating media- Audio editing*</p> <p>Digital recording Creating a podcast Editing</p> <p>Creating media- Photo editing*</p> <p>Changes digital images Retouching images Making a publication</p>	<p>DATA LOGGING</p> <p>Answering questions Data Collection Logging Analysing Data Data for answers Answering my question</p>	<p>Creating media- Audio editing*</p> <p>Digital recording Creating a podcast Editing</p> <p>Creating media- Photo editing*</p> <p>Changes digital images Retouching images Making a publication</p>	<p>REPETITION IN SHAPES</p> <p>Programming a screen turtle Programming letters Patterns & repeats, Using loops to create shapes Creating a program</p>	<p>Creating media- Audio editing*</p> <p>Digital recording Creating a podcast Editing</p> <p>Creating media- Photo editing*</p> <p>Changes digital images Retouching images Making a publication</p>
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	<p>SHARING INFORMATION</p> <p>Systems Computer systems and us Transferring information Working together Better working together Shared working</p>	<p>Creating media- Video editing*</p> <p>Create a storyboard Use a devise to record their video Import and edit video</p>	<p>FLAT-FILE DATABASES</p> <p>Creating a paper-based database Computer databases Using a database Using search tools Comparing data visually</p>	<p>Creating media- Video editing*</p> <p>Create a storyboard Use a devise to record their video Import and edit video</p>	<p>SELECTION IN PHYSICAL COMPUTING</p> <p>Connecting crumbles Combining output devices Controlling & conditions Drawing designs Writing & testing algorithms</p>	<p>Creating media- Video editing*</p> <p>Create a storyboard Use a devise to record their video Import and edit video</p>
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 (audiovisual), save, videographer, video techniques: pan, tilt, angle,	Information, data, database, criteria ,record, field, compare, filter.	Video, audio, recording, storyboard, script, soundtrack, dialogue, capture, zoom, storage, digital, tape, AV (audiovisual), save, videographer, video techniques: pan, tilt, angle,	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,	Video, audio, recording, storyboard, script, soundtrack, dialogue, capture, zoom, storage, digital, tape, AV (audiovisual), 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		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	condition, action, task, design, selection, algorithm, debug, evaluate	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.