## St Martin's C of E Primary School Computing Curriculum 2022 - 2023

## Links to RSHE

## EYFS

At St Martin's our EYFS is made up of nursery and reception classes, where the EYFS curriculum is used to feed in and support the national curriculum. Computing is taught within the nursery setting where they focus on the key areas of staying safe online, using the camera to take photos and opening up apps on the iPads. When children move into reception, these skills are revisited but there is more focus on teaching points that link to the whole school progression. Although children are taught these skills at specific points in the year, it may be the case that during learning through play, children will be using these skills across a range of areas.

	Reception - Computer Science									
		Share	Арр							
Programming	Specific programming is taught towards the end of the year using BeeBots. However, the concept of following oral instructions, spotting patterns and sequencing items is something that is developed from the start of nursery. In the summer term, the children will then be able to use a simple sequence of commands to control a digital device.	https://drive.google.com/drive/fold ers/13Fw8B4hF iJ y0L71Exu BpJap 2PgYRA?usp=sharing	BeeBots							
Key Vocabulary	Instruction, follow, first, next, Mouse, touch screen, move, command, device									

	Reception - Information Technology		
		Share	Арр
Video Creation	What is the difference between a photograph and a video? How do I record and then re-watch my recording?	https://drive.google.com/drive/folders/1HI25NSkl wmESadzgE_bAqbQmv52BJtcS?usp=sharing	Camera App
Animation -	How can I make my image speak?		PuppetPals Chatterpix
Data Handling -	What is a chart? How can I use technology to take a picture of the objects to explain how I have sorted them?		Camera App
Word Processing	How can computers/keyboards/a mouse be used in role play? How do I type letters on a touch screen device? How can I record my voice saying simple sentences?		Pages
Key Vocabulary	Computer, Keyboard, Device, Tablet, Dictate, Type		

	Reception - Digital Literacy -											
Self-Image and Identity	Online Relationships	Online Reputation	Online Bullying	Managing Online Information	Health, Well-being and Lifestyle	Privacy and Security	Copyright and Ownership					
DL - What would I do if someone made me do something that		DL - How can we put information online?	DL - How might people be unkind	DL - What could I use to find things out?	DL - What rules will keep me safe and	DL - What is personal information? Who can I share this with?	DL - Does the work I create belong to me?					

makes me feel sad,	communicate with	online and how will it	healthy when I use	
embarrassed or	people I know?	make them feel?	technology at home?	
upset? When might				
they do this?		DL - <mark>Keeping Safe</mark>		
		Online - Scarf		

	Year 1 - Computer Science											
	Design Apply Refine Evaluate		Share	Link	Арр							
Programming -					https://drive.google.com/drive/folders/1	https://www.mrpict.com/uploads/1/8/7	Scratch Jnr					
Animations	How can codir	ng support me t	o create a simpl	e animation?	Sp95P0dvpgVGoj9FgsF3hnjNF11YAL2-?u	/2/18722690/year 1 programming - a	All devices					
					sp=sharing	nimations in scratchjr.pdf						
Programming -						https://www.mrpict.com/uploads/1/8/7	Daisy the					
Simple Algorithms	How can a sim	ple algorithm h	elp me to move	a character?		/2/18722690/year 1 programming dai	Dinosaur App					
with Daisy Dino						sy the dino 2 .pdf	iPads					
Key Vocabulary	Algorithm, sec	quence, order, b	oug, fix, precise,	Digital program	, follow, code, bugs, fix, order, Scratch Jnr							

				Year 1	- Information Technology		
	Design	Apply	Refine	Evaluate	Share	Link	Арр
Technology around us	How can tech	nology help us?				https://teachcomputing.org/curriculum/kev-stage-1/computing-systems-and-net	Raspberry Pi/Chromebook
us	now can tecm	nology neip us:				works-technology-around-us	S
Animation - Creating a Cartoon	How can I use	technology to a	nimate a chara	cter?	https://drive.google.com/drive/folders/1 Xp8hsbTOSisQ8HWNV09TDB_NGc-GM1 WW?usp=sharing	https://www.mrpict.com/uploads/1/8/7/2/18722690/year_1_animationchatterpix.pdf	Chatterpix Kids iPad
Data Handling - Pictograms	How can I use technology to present my results?				https://drive.google.com/drive/folders/1 UdXGdrTUX_mBMtGoKBcyybmqZe6bW QJx?usp=sharing	https://www.mrpict.com/uploads/1/8/7/2/18722690/year_1_data - pictogram_diagram.pdf	Pic Collage iPad
Digital Writing - Word Processing				g?		https://teachcomputing.org/curriculum/ key-stage-1/creating-media-digital-writin g	Pages/ Google docs
Key Vocabulary	Space bar, de	elete, return ke	y, enter, mous	se, trackpad, a	rrow keys, cursor, select	1	

	Year 1 - Digital Literacy											
Self-Image and	Online	Online Reputation	Online Bullying	Managing Online	Health, Well-being	Privacy and	Copyright and					
Identity	Relationships			Information	and Lifestyle	Security	Ownership					
DL - How can people make me feel online? DL - How do I ask adults for help when I am worried about something online? DL - Who can help? (1)	DL - How can adults help us to contact people online? DL - Why do we need to be kind online?	DL - What happens to my online information? DL - What should I put online?	DL - How should I behave online?	DL - How can I use the internet to find things out? DL - What if I find something that makes me feel sad, uncomfortable, worried or frightened?	DL - What rules do I need to keep safe when using technology in the home and beyond?	DL - What is my more detailed personal information and what should I share? DL - How does a password protect us? DL - Sharing Pictures - Scarf	DL - If I create it using technology, is it mine? Why do we save our work?					

				Yea	r 2 - Computer Science		
	Design Apply Refine Evaluate			Evaluate	Share	Link	Арр
Programming - Knock Knock Joke	How can codir	ng help me to cr	reate an interact	ive joke?	https://drive.google.com/drive/folders/1 cFeact_dWjxhsCOyFjUFr8p-B4nDSKCf?us	https://www.mrpict.com/uploads/1/8/7/ 2/18722690/ks1_knock_knock_joke_scra	Scratch Jnr All devices
					p=sharing	tchjr.pdf	
Programming - BeeBot App	How can I use	algorithms to c	omplete challer	nges?		https://www.mrpict.com/uploads/1/8/7/ 2/18722690/year 2 programming bee- bots app 2 .pdf	
Key Vocabulary	Decompositio	n, debug, reaso	n , detail, break	down, task, Pre	cise, logical reasoning, predication, debug, se	equence	

				Year 2	- Information Technology		
	Design	Apply	Refine	Evaluate	Share	Link	App
Information	How is infor	mation technolo	ogy being used f	or good in our		https://teachcomputing.org/curriculum/k	
technology around	lives?					ey-stage-1/computing-systems-and-netw	
us						orks-it-around-us	
Photography -						https://www.mrpict.com/uploads/1/8/7/	PicCollage
Simple	How can I photoshop an image?					2/18722690/year_2_photophotoshop	
Photoshopping						ping.pdf	
Data Handling -					https://drive.google.com/drive/folders/1	https://www.mrpict.com/uploads/1/8/7/	Pic Colllage
Venn Diagram	How can tec	hnology help m	e to sort my dat	a?	QoJbcdGmfJSKhbFvh1qC7WUOjAB8TWr3	2/18722690/year 2 data - venn diagra	iPad
					?usp=sharing	<u>m.pdf</u>	
Presentation -						https://www.mrpict.com/uploads/1/8/7/	
Interactive Images	How can I m	ake my image ir	nteractive?			2/18722690/year 2 presentation - thin	
						glink.pdf	
Key Vocabulary	Cut, copy, pa	aste, caps lock, i	nsert, image, sa	ve, clipboard, edi	ting, header, highlight		

	Year 2 - Digital Literacy											
Self-Image and	Online	Online	Online Bullying	Managing Online	Health, Well-being	Privacy and Security	Copyright and					
Identity	Relationships	Reputation		Information	and Lifestyle		Ownership					
DL - Are all people the same online as they are in real life? DL - How can people make themselves appear different online?	DL - What do I need to make sure of when contacting someone online who I don't know	DL - How long does my information stay online? Who can help me if there is a problem?	DL - What does online bullying look like? How does it make others feel?	DL - How does a keyword help me find the information that I want? DL - Can I use my voice to	DL - How can guidance/rules help me be safe online?	DL - Who can see my personal information when it is online? What rules would keep my personal information private?	DL - Who owns the content that I find online					
DL - What things make me feel sad, worried, uncomfortable online and how can I get help?	well? (Penpal in another school/country) How may I contact someone I don't know well?	DL - <mark>Playing Games -</mark> Scarf	DL - What support is there for online bullying?  DL - Types of bullying - Scarf	search? DL - Is everything online true?		DL - What is a password and where can it be used? What devices connect to the internet?						

				Year 3	- Computer Science		
	Design Apply Refine Evaluate			Evaluate	Share	Link	App
Programming - Animation	How can coding	g help me to crea	ate an animation	?	https://drive.google.com/drive/folders/ 15PmE4R_Jv157oD35Rr2NziGpYXIHeHV	https://www.mrpict.com/uploads/1/8/7/2/18722690/ks2_animations_in_scrat	Scratch 3.0 CB
Programming - Sequencing Sounds	How can I use sequencing in programming to create a piano?				W?usp=sharing	ch.pdf https://teachcomputing.org/curriculum /key-stage-2/programming-a-sequence- in-music	Scratch CB
Key Vocabulary	Abstraction, inf	ormation, releva	ınt, pattern, sam	e, different, com	plex, Sequence, inputs, outputs, code, desi		<u>!</u>

				Year 3 - I	nformation Technology		
	Design	Apply	Refine	Evaluate	Share	Link	Арр
Computer Networks - Network Explorer	How do compu	iter networks wo	ork?	•		https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year 3 network explor	Adobe Spark Video
rection Explorer	Tion do compo	ree neeworks we	, , , , , , , , , , , , , , , , , , ,			er_1_pdf	Video
Animations - Stop Motion Animation	How can I anim	nate an object to	tell a story?			https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year 2 animatio - stop motion_animation.pdf	iCan Animate iPads
Presentations - Digital Comic	How can I use	technology to m	nake my comic (	digital?	https://drive.google.com/drive/folders/ 1c1WH2NS5NDL74hq9iihX0CJEF9OvLAc h?usp=sharing	https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year 3 presentation - book creator comic.pdf	Book Creator Pic Collage All devices
Data Handling - Interactive Story Graphs	How can I use technology to represent information?			ation?		https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year 3 data - story gr aphs.pdf	
Key Vocabulary	Touch type, ed	it, format, font,	size, borders, sh	nadows, duplicate	e, organise, undo, redo, autocorrect, clipart		_

		,	Year 3 - Digital Litera	Су			
Self-Image and Identity	Online Relationships	Online Reputation	Online Bullying	Managing Online Information	Health, Well-being and Lifestyle	Privacy and Security	Copyright and Ownership
DL - What does identity mean? DL - How can I represent myself online and why?	DL - What different technology-specific ways may I communicate with people online? (emojis, acronyms, text speak) DL - What risks are there with talking to someone online/ who can you trust? DL - How can my actions impact others online?Is it ok to stop communicating online? DL - Trust and Liking - Is there a diff.?	DL - How should I treat information about me when I am online?  DL - Is it worth checking first? DL - None of your business - Scarf	DL - What is online bullying and what is the impact?  DL - What rules about how to behave online should be followed?	DL - What is a search phrase?  DL - Belief, opinion, fact - what's the difference? DL - Super Searcher - Scarf	DL - Why can technology have a negative impact on me?	DL - Who do I share with? DL - Why are passwords important? DL - What does every connected device collect and share?	DL - What happens if I copy someone else's work from the internet?

	Year 4 - Computer Science											
	Design Apply Refine Evaluate				Share	Link	App					
Programming -						https://teachcomputing.org/curriculu	Logo					
Repetition in shapes	What is repetiti	on? What are loo	ps? in programmi	ng		m/key-stage-2/programming-a-repetit	programming					
						<u>ion-in-shapes</u>	All devices					
Programming -					https://drive.google.com/drive/folders	https://www.mrpict.com/uploads/1/8	Crumbles					
Robot Orchestra	How can coding	g help me to creat	e an orchestra?		/1-h8Ha88DmuzMuqUNd5MtUw3hUb	/7/2/18722690/ks2 crumble powere	(Paid)					
					xpgvYK?usp=sharing	d robot orchestra .pdf						
Key Vocabulary	Logical reasonir	ogical reasoning, design, algorithmic thinking, selection, repeat Repetition, loop, foreverloop, count controlled loop, selection, condition, systematic										

				Year 4 - Infor	mation Technology		
	Design	Apply	Refine	Evaluate	Share	Link	Арр
Computer Networks - Understanding the internet	How does the i	nternet work?				https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year_4_networksthe _internet.pdf	Green Screen - iPads
Presentations - Digital Posters	How can technology and engaging w	• .	present my work i	n an interesting	https://drive.google.com/drive/folders /1k9dv2PSTUhVyC5JpZ8rhPgUG_G4oIE 34?usp=sharing	https://www.mrpict.com/uploads/1/8/7/2/18722690/year_4_presentationposters.pdf	PicCollage
Data Handling - Online Questionnaire	How can I use t	echnology to crea	ate an online ques	tionnaire?	https://drive.google.com/drive/folders/1JxFcciTVdVejUlvmIoADPHdsoJznFYyP?usp=sharing	https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year 4 data - online guestionaire .pdf	Google Forms All devices
Video Creation - Visual Storytelling	Creation -					https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year 4 video - adobe spark video.pdf	
Key Vocabulary	Group, crop, so	urce, object, post	ers, documents, e	Books, scripts, le	aflets, CTRL, spell check, thesaurus, record		

	Year 4 - Digital Literacy												
Self-Image and	Online	Online Reputation	Online Bullying	Managing Online	Health, Well-being	Privacy and	Copyright and						
Identity	Relationships			Information	and Lifestyle	Security	Ownership						
DL - How can your online	DL - How can I stay safe	DL - Can others easily find	DL - Where might online	DL - How do I decide if it is a fact?	DL - Is it important to	DL - What makes a	DL - If I find it						
identity be different to how	and have fun online?	you online?	bullying happen? How?	DL - Where can I search for	limit our time online?	password strong?	online, can I reuse						
you present in 'real life'?	DL - Why is it important	DL - How can my online	DL - What consequences	information?	How can we do this?	DL - How do I keep my	it?						
How are you and others	to be respectful?	information be created,	can my actions have?	DL - How are people persuaded to		personal information							
perceived online?		copied or shared by		buy things online?		private?							
		others?		DL - Why aren't all online opinions		DL - Who monitors our							
DL - Picture Wise - Scarf				and beliefs fact?		internet use?							

	Year 5 - Computer Science											
	Design Apply Refine Evaluate				Share	Link	Арр					
Programming - Platform Game	collect points?				https://drive.google.com/drive/folders/1/GyQGv-q1HWOD-4RBv0IRbn1hrx_0	https://www.mrpict.com/uploads/1/8/ 7/2/18722690/ks2_platform_game_in	Scarcth 3.0 CB					
Programming - Quiz					<pre>ltv?usp=sharing https://drive.google.com/drive/folders</pre>	scratch.pdf https://www.mrpict.com/uploads/1/8/	Scratch 3.0					
	How can coding help me to create an interactive quiz?				/1FQ1Bwn7oG3hcj-pLux5MUZqxoqixTV sN?usp=sharing	7/2/18722690/ks2 quizzes in scratch. pdf	СВ					
Key Vocabulary	Evaluation, effectiveness, complexity, data, predication, condition. Data, memory, variables, value, initialization, control, simulate, physical system											

				Year 5 - Infor	mation Technology		
	Design	Apply	Refine	Evaluate	Share	Link	Арр
Computer Networks - Search Engine	How do search e	engines work?				https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year_5_search_engines _1_pdf	Adobe spark post
Video Creation - Green Screen	How does Green	nscreen improve I	ny movie?		https://drive.google.com/drive/folders /14THVf8XJAPDCtJymsli0AmD89L7wa UsV?usp=sharing	https://www.mrpict.com/uploads/1/8/7/2/18722690/year_5_video greenscreen_news_report.pdf	Doink Greenscreen and iMovie iPAd
Data Handling	How can we us	se simple formu	las to solve calc	ulations?	https://drive.google.com/drive/folders/1LdbL1ZOJHDuZ1QTEK5nxwjMuH4kqsAle?usp=sharing	https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year 5 - data handlin g -google sheets.pdf	
Animation - Character Interview	How can I use to	echnology to inte	rview someone fr	om the past?	https://drive.google.com/drive/folders/1EhtKieg2ZYK1T7SnFvODEvCzw7SZGHL?usp=sharing	https://www.mrpict.com/uploads/1/8/7/2/18722690/year 5 animation - character interviews.pdf	Animate Anything & Apple Clips iPad
Key Vocabulary	Import, export,	hyperlinks, anima	te, build in, build	out, italics, bold,	arrange, bullets.		

	Year 5 - Digital Literacy												
Self-Image and Identity	Online Relationships	Online Reputation	Online Bullying	Managing Online Information	Health, Well-being and Lifestyle	Privacy and Security	Copyright and Ownership						
DL - Can your online identity be copied, modified or altered?  DL - Why do you need to be	DL - Does everyone want to be your friend?  DL - What is an online community?	DL - How can I find information about someone online?  DL - How can online	DL - How do you know if someone is upset, hurt or angry online?  DL - How can I help? What can I do to help stop it? Who can help?	DL - Which is the best online search result for me? DL - What do we mean by the following: data, information, fact, opinion, belief, true, false, valid, reliable, evidence? DL - What is the difference between mis- and dis- information? DL - Why do we need to be 'sceptical'?	DL - How does technology impact my sleep? What tips, advice or strategies could help with healthy sleep?	DL - How would we create a strong and secure password? DL - What do apps want from me?	DL - When is it acceptable to use the work of others?						

responsible		information		DL - Communication - Scarf		
online with your	DL - <mark>Play, like,</mark>	impact character	DL - <mark>Spot Bullying - Scarf</mark>	DL - <mark>Is it true? - Scarf</mark>		
identity?	share - Scarf	judgement?				

	Year 6 - Computer Science											
	Design Apply Refine Evaluate				Share	Link	Арр					
Programming - Video Game	How can coding	g allow me to mak	ce my own video į	game?	https://drive.google.com/drive/folders/ 1KXu-4HFgDR6D2aNsG7PKl0o3sHVxEov z?usp=sharing	https://www.mrpict.com/uploads/1/8/ 7/2/18722690/ks2_game_project_inn_ scratch.pdf	Scratch 3.0					
Programming - Crumbles (Links to DT)	How can coding be used to create electrical systems that cause lights to flash and parts to move?						Crumbles					
Key Vocabulary	Generalisation,	pattern, reuse, m	odify, remix, criti	cal Procedure, al	ostraction, conditional loop, logic, operator,	, implement						

				Year 6 - Info	rmation Technology		
	Design	Apply	Refine	Evaluate	Share	Link	Арр
Computer Networks - HTML	What is HTML?					https://www.mrpict.com/uploads/1/8/ 7/2/18722690/year 6 networks html. pdf	Glitch X-Ray goggles
Webpage Creation	What do I need	to think about w	hen I create my o	wn webpage?		https://teachcomputing.org/curriculum/key-stage-2/creating-media-web-page-creation	
Data Handling -	What formulas	will help solve mo	ore challenging m	aths problems?	https://drive.google.com/drive/folders/	https://teachcomputing.org/curriculum	Google
Spreadsheets	Where would I	publish my own o	nline quiz?		1WWeFlFUz2ncQ3uqaPLyDD7FMTY0dQ	/key-stage-2/data-and-information-spre	Sheets
					<u>lcQ?usp=sharing</u>	<u>adsheets</u>	СВ
Animation - 3D Animation	How can I use technology to create a 3D animation?				https://drive.google.com/drive/folders/ 1HMdNw_AqlbReqjOAP5HrDVczAl0oQq E5?usp=sharing	https://www.mrpict.com/uploads/1/8/7/2/18722690/year_6_animation - plotagon_animation.pdf	Plotagon iPad
Key Vocabulary	Alignment, app	lication, tabs, too	lbar, layout, shift	key, PDF, columns	S		

	Year 6 - Digital Literacy											
Self-Image and Identity	Online Relationships	Online Reputation	Online Bullying	Managing Online Information	Health, Well-being and Lifestyle	Privacy and Security	Copyright and Ownership					
DL - How do the media shape ideas about gender? DL - How can issues online impact mine and others feelings? What can I do to get help? DL - Fakebook friends - Scarf	DL - How can my online actions impact others' well-being? DL - What can I do to support others online?	DL - What is my online reputation?  DL - How can I build a positive online reputation?	DL - How can a screen grab help stop bullying?  DL - How many ways are there to report a concern?  DL - Think before you click - Scarf	DL - How do search engines work? DL - How do I know if my internet search is any good? DL - What do the terms' 'influence', 'manipulation', and 'persuasion' mean? DL - How do I identify, flag and report inappropriate content?	DL - How can technology impact my life?  DL - What can I do to look after my health?	DL - What's in a password?  DL - How can my app privacy be protected? DL - What is phishing? DL - It's a puzzle - Scarf	DL - How do I reuse work that is not mine?					

DL	<mark>To share or not</mark>		DL -	Traffic lights - Scarf		
to s	share? - Scarf					