# Computing Curriculum

# Year A - YEAR 1/2

Whole School Focus	Yo	rk	Disc	cover	Step Bacl	≀ In Time	
Class Focus	Homes Now and The	en / Location of York	Kings and Queens / Map	os to Mark Key Locations	Ice Age / Locat	ion (The Poles)	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	
Computing	<u>E-Safety</u>	<u>Internet Research</u>	Introduce Programming	<u>Design</u>	E-Book Creation	Music Creation	
Focus and Key	- I can understand what personal	- I understand how a web-page	- I can create and debug	- I can change the colour	- I can add a book cover	- I can create a rhythm	
Skills	information is and why we keep	displays information in different	simple programs	and pattern of elements.	with title, author, colour	using a pattern of beats.	
	personal information private.	ways; text, images, videos and	- I can use logical	- I can position and rotate	and image.	- I can create digital	
	- I know that I should respect	interactive elements.	reasoning to predict the	objects on a design.	- I can add multiple pages	sounds using patterns and	
	people online	- I can use a webpage to answer	behaviour of simple	- I can position objects in	based on a theme.	shapes.	
	- I can identify when and where	questions using key words	programs.	relation to each other.	- I can add text on different	- I can create a simple	
	to go for help when concerned.		- I can simplify a program	- I can resize, rotate, flip	pages.	melody using patterns and	
		<u>Digital Art</u>	by using a loop.	and arrange objects	- I can add images on	adjust tempo.	
	Chromebook and Google Skills	- I can change the colour of	- I can program	behind/in front of each	different pages to match		
	- I can log on to a chromebook	individual pixels to accurately	selection/conditions (if one	other.	the theme/text.	Introduction to Data	
	using a username and password	re-create basic and detailed	sprite hits another)		- I can add voice recordings	<u>Handling</u>	
	- I can hold, carry and store my	artwork		Recognise uses of IT	to match the text and	– I can understand what	
	chromebook safely.	- I can re-create graphics using		- I understand computers	theme	data is and collect it as a	
	- I can access Google docs, drive	pixels with different colours.		store and follow		tally.	
	and slides.			instructions.		– Use software to label a	
	- I can open saved files from			- I can spot digital		pictogram and add data to	
	Google Drive			technology in school.		each column.	
	- I can create a folder to store			- I can understand what		– Edit a table with correct	
	work on Google drive			makes a computer a		titles and numbers.	
				computer.		– Use software to create a	
	Mouse and Keyboard Skills			- I understand computers		bar chart/pie chart/line	
	- I can move the mouse or			store and follow		chart suitable for the data.	
	trackpad and left click to select			instructions.		– Interpret a pictogram/bar	
	an object.			- I can spot digital		chart/line chart.	
	- I can drag and drop with mouse			technology in school.			
	or trackpad to move objects			- I can understand how			
	around the screen.			different technology helps			
	- I can find letters or numbers on			us.			
	a keyboard.						
Key Vocabulary	Sharing	Webpage	Algorithm	Position	Title	Beats	
	Permission	Browser	Debug	Resize	Author	Pattern –	
	Respect	Pixel	Error	Rotate	Colour	Tempo	
	Report	Colour	Inputs	Arrange	Image _	Melody	
		Graphics	Outputs	51.1.1.1	Text		
	Username			Digital technology		Data	
	Password			Storing information		Interpret	
	Chromebook						
	Google Drive						
	Trackpad						
	Παοκραά						

	Maria					
	Mouse					
	Keyboard					
Previous	EYFS	EYFS	EYFS	EYFS	EYFS	EYFS
	In EYFS children will begin to use	In EYFS children will use the	In EYFS children have	In EYFS children will use	In EFYS children have	In EYFS children will use
	iPads for taking photos and	interactive whiteboard for mark	access to BeeBots for simple	specific technology for a	access to voice recording	technology to play
	understand how to carry	making and drawing.	programming	purpose eg talking tins for	toys	music/watch videos and
	technology carefully around			voice recording, battery		listen to stories.
	school.			powered objects such as		
				torches etc		
Year B Focus	E-Safety	Digital Art	Develop Programming	Programming in Scratch	Introduction to Animation	
100. 5 10000		Jugital 7 ii c	Develop Fregramming	Junior	The caactor to miniation	
	Chromebook and Google Skills	Comic Creation		- Cartter		
	omoniesook and ooogie oknis	Contic Creation				
	Tout and Images					
	Text and Images					
Next	Year 3/4	Year 3/4	Year 3/4	Year 3/4	Year 3/4	Year 3/4
INEXL	-		•	-	·	·
	E-Safety	Internet Research	Programming in Scratch	3D Design	E-Book Creation	Music Creation
	- I can understand the	- I can understand why we	- I can design, write and	- I can understand and use	- I can choose a suitable	- I can create ascending
	importance of using avatars and	should not always trust what we	debug programs that	3D space on a grid.	page shape and add a title	and descending scales.
	how to make them.	read online and how to check	accomplish specific goals.	- I can design for a purpose	and subtitle.	- I can add chords evenly
	- I can describe the term 'sharing	- I can understand features of an	(Including outputs)	- I can re-create or design	- I can change the	across the scales.
	online' and why we need to get	Internet Browser.	- I can use repetition in	familiar 3D models using	background colour/texture	- I can add arpeggios and
	permission to share photos and	-I can be discerning in	programs.	cubes, such as tables and	of a page.	melodies.
	videos of other people.	evaluating digital content.	- I can work with various	chairs.	- I can add, resize and	- I can add a steady and
		- I can check the internet for fake	forms of inputs; keyboard,	- I can use chisel tool to	change the colour of a	even rhythm.
	Chromebook Skills	news by cross-referencing facts.	mouse and touch screen.	improve and adapt models.	shape then copy and paste	- I can use sampled sounds
	- I can share my work with		- I can write programs to	- I can colour individual	it.	to create an effective mix.
	others	<u>Digital Art</u>	simulate physical systems.	blocks or whole models.	- I can search for and add	- I can build beats, melody
	- I can collaborate with others on	- I can use various lines and fill	. 3 3	- I can resize, adjust height,	suitable images then resize	(tones) and effects
	the same document	tools plus copy/paste and		duplicate and use the	and position them.	, , , , , , , , , , , , , , , , , , , ,
		rotation to create pattern effects.		different perspective for 3D	- I can create another page	Data Handling
		- I can use shapes, fill,		shapes.	with a background, image,	- I can change appearance
		copy/paste, zoom and flip to		- I can change the	shapes and text.	of cells in a spreadsheet (fill
		create reflective symmetry		transparency of bricks.	- I can add an audio	colour and border) then
		1 5		in unspurency of bricks.		-
		effects.			recording of the page text.	add and align text.
		- I can use stamps, copy/paste,		Total de la Compa	- I can use hyperlinks for	- I can find and add data
		layers and multiple frames to		Inside a Computer	navigation between the	to a spreadsheet, resize
		create animated GIF computer		- I can understand what	pages	cells and use the software
		game graphics.		important parts of inside a		to create a suitable chart
		- I can add, resize and organise		computer or mobile device		with a title.
		colour or picture backgrounds.		do to help with the		
				performance (CPU, Fan,		
				[		

- I can add, resize, organise	Hard Drive, RAM, Graphics	
characters/objects to different	Card).	
panels.	- I can understand that	
'	memory is measured in	
	bytes and gigabytes.	
	bytes and gigasytes.	

Year B - YEAR 1/2

Whole School Focus	York		Disc	cover	Me, Myse	elf and I
Class Focus	Chocolate and Railways		Castles and Dragons		Dinosaurs	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	<u>E-Sαfety</u>	<u>Digital Art</u>	Develop Programming	Programming in Scratch	Introduction to Animation	
Focus and Key	- I can understand what personal	- I can change the colour of	- I can create and debug	<u>Junior</u>	- I can add a background	
Skills	information is and why we keep	individual pixels to accurately	simple programs	- I can program	and objects to a frame	
	personal information private.	re-create basic and detailed	- I can use logical	movements.	(including text)	
	- I know that I should respect	artwork	reasoning to predict the	- I can program outputs for	- I can copy/clone a frame	
	people online	- I can re-create graphics using	behaviour of simple	audio or text.	and move objects to create	
	- I can identify when and where	pixels with different colours.	programs.	- I can find errors in a	an animation, including	
	to go for help when concerned.		- I can simplify a program	program.	flipping objects.	
		Comic Creation	by using a loop.	- I can program inputs.	- I can create an animation	
	Chromebook and Google Skills	- I can add, resize and organise	- I can program		with multiple objects	
	- I can log on to a chromebook	colour or picture backgrounds.	selection/conditions (if one		moving simultaneously.	
	using a username and password	- I can add, resize, organise	sprite hits another)		- I can create screen-	
	- I can hold, carry and store my	characters/object to different			recording animation	
	chromebook safely.	panels.			(optional, requires iPad).	
	- I can access Google docs, drive	- I can add narration using text			- I can create stop-motion	
	and slides.	and direct speech using speech			animation with photos	
	- I can open saved files from	bubbles.			(optional, requires iPad).	
	Google Drive					

	<ul> <li>I can create a folder to store work on Google drive</li> <li>Text and Images</li> <li>I can change the background colour of a page.</li> <li>I can add, resize and position images (pictures) on a page.</li> <li>I can type and position text on a page, if possible using capital letters and punctuation.</li> <li>I can label pictures with text.</li> <li>I can use word-banks for writing sentences about pictures.</li> </ul>				- I can create animated drawings of characters by cropping photos and adjusting points of movement.	
Key Vocabulary	Sharing Permission Respect Report  Username Password Chromebook Google Drive  Crop Resize Position Label Text	Webpage Browser Pixel Colour Graphics Resize Background Narration	Algorithm Debug Error Inputs Outputs	Loop Logical Reasoning	Animate Stop Motion Frames Slides	Beats Pattern Tempo Melody  Data Interpret
D	FVEC	FVEC	TVFC	TVFC	EVEC.	ריירכ
Previous	EYFS In EYFS children will begin to use iPads for taking photos and understand how to carry technology carefully around school.	EYFS In EYFS children will use the interactive whiteboard for mark making and drawing.	EYFS In EYFS children have access to BeeBots for simple programming	EYFS In EYFS children have access to BeeBots for simple programming	EYFS In EFYS children will use the iPads to watch animated videos	EYFS
Year A Focus	E-Safety	Digital Art	Introduce Programming	Design	E-Book Creation	Music Creation
	Chromebook and Google Skills	Internet Research		Recognise uses of IT		Introduction to Data Handling
Next	Mouse and Keyboard Skills Year 3/4	Year $\frac{3}{4}$	Vog	r 3/4	Year 3/4	
ivext	Infographics  - I can understand what an infographic is and why we use them.  - I can search for and add suitable graphic elements.	Digital Art  - I can use various lines and fill tools plus copy/paste and rotation to create pattern effects.  - I can use shapes, fill, copy/paste, zoom and flip to	Programmir - I can design, write ar accomplish specific go - I can use repeti - I can work with various mouse and t	ng in Scratch and debug programs that als. (Including outputs) ition in programs. forms of inputs; keyboard, touch screen.	Animation  - I can create a stop-motion video by duplicating slides that include backgrounds and shapes.  - I can create animation	
	- I can add and format suitable titles and text.	create reflective symmetry effects.		simulate physical systems.	using transition and animation effects (morph,	

- I can label an image with	- I can use stamps, copy/paste,	motion paths, pulse etc),	
arrows and text.	layers and multiple frames to	including taking and	
	create animated GIF computer	editing a screenshot.	
	game graphics.	- I can animate individual	
	- I can add, resize and organise	elements of objects.	
	colour or picture backgrounds.	- I can create animated GIF	
	- I can add, resize, organise	files by animating pixels.	
	characters/objects to different		
	panels.		

# Year A Year 3/4

Whole School Focus	York		Disc	cover	Step Back In Time	
Class Focus	A Changing City		Japan and Stone Age		Egypt	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	<u>E-Safety</u>	<u>Internet Research</u>	Programming in Scratch	3D Design	<u>Infographics</u>	Music Creation
Focus and Key	- Understand what to do if	- I can understand why we	- I can design, write and	- I can understand and use	- I can understand what an	- I can create ascending
Skills	something upsets you online.	should not always trust what we	debug programs that	3D space on a grid.	infographic is and why we	and descending scales.
	- I can describe the term 'sharing	read online and how to check	accomplish specific goals.	- I can design for a purpose	use them.	- I can add chords evenly
	online' and why we need to get	- I can use search technologies to	(Including outputs)	- I can re-create or design	- I can search for and add	across the scales.
	permission to share photos and	find specific pieces of	- I can use repetition in	familiar 3D models using	suitable graphic elements.	- I can add arpeggios and
	videos of other people.	information.	programs.	cubes, such as tables and	- I can add and format	melodies.
	- I can understand why people	- I can use search filters on	- I can work with various	chairs.	suitable titles and text.	- I can add a steady and
	pretend to be someone else	websites to find suitable	forms of inputs; keyboard,	- I can use chisel tool to	- I can label an image with	even rhythm.
	online.	information.	mouse and touch screen.	improve and adapt models.	arrows and text.	- I can use sampled sounds
			- I can write programs to	- I can colour individual		to create an effective mix.
	Chromebook and Google Skills	<u>Comic Creation</u>	simulate physical systems.	blocks or whole models.	<u>Data Handling</u>	- I can build beats, melody
	- I can share my work with	- I can add, resize and organise		- I can resize, adjust height,	- I can change appearance	(tones) and effects
	others	colour or picture backgrounds.		duplicate and use the	of cells in a spreadsheet (fill	
	- I can collaborate with others on	- I can add, resize, organise		different perspective for 3D	colour and border) then	
	the same document	characters/objects to different		shapes.	add and align text.	
	- I can use a range of digital	panels.		- I can change the	- I can find and add data	
	devices to take pictures	- I can add narration using text		transparency of bricks.	to a spreadsheet, resize	
		and direct speech using speech			cells and use the software	
	<u>Document Editing and Creation</u>	bubbles.			to create a suitable chart	
	- I can copy and Paste text and	- I can save comic with name			with a title.	
	images.	and title.				
	- I can find and replace words.					
	- I can format text for a purpose.					
	- I can add bullet points to make					
	lists.					
	- I can experiment with keyboard shortcuts.					
	- I can change appearance of					
	cells in a spreadsheet (fill colour					
	and border) then add and align					
	text.					

Key Vocabulary	- I can find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title.  Avatar Sharing Report Collaborate  Spreadsheet Cell Format	Web Address Search engine Panel Arrange Flip Narration Scale	Sequencing Repletion Variables Blocks Sprites	Duplicate Transparency Adapt Design Adjust	Infographic Text Label	Scales Rhythm Arpeggios Chords
Previous	Year 1/2  E-Safety  I can understand what personal information is and why we keep personal information private.  I know that I should respect people online  I can identify when and where to go for help when concerned.  Chromebook and Google Skills  I can log on to a chromebook using a username and password  I can hold, carry and store my chromebook safely.  I can access Google docs, drive and slides.  I can open saved files from Google Drive  I can create a folder to store work on Google drive	Year 1/2  Internet Research  I understand how a web-page displays information in different ways; text, images, videos and interactive elements.  I can use a webpage to answer questions using key words  Comic Creation  I can add, resize and organise colour or picture backgrounds.  I can add, resize, organise characters/object to different panels.  I can add narration using text and direct speech using speech bubbles.	Year 1/2  Introduce Programming  - I can create and debug simple programs  - I can use logical reasoning to predict the behaviour of simple programs.  - I can simplify a program by using a loop.  - I can program selection/conditions (if one sprite hits another)	Year 1/2 <u>Design</u> - I can change the colour and pattern of elements.  - I can position and rotate objects on a design.  - I can position objects in relation to each other.  - I can resize, rotate, flip and arrange objects behind/in front of each other.	Year 1/2  Introduction to Data  Handling  I can understand what data is and collect it as a tally.  Use software to label a pictogram and add data to each column.  Edit a table with correct titles and numbers.  Use software to create a bar chart/pie chart/line chart suitable for the data.  Interpret a pictogram/bar chart/line chart.	Year 1/2  Music Creation  - I can create a rhythm using a pattern of beats.  - I can create digital sounds using patterns and shapes.  - I can create a simple melody using patterns and adjust tempo.
Year B Focus	E-Safety Inside a Computer E-Book Creation	Digital Art	Programming in Scratch	3D Design	Video Editing Graphic Design Branching Databases	Animation

Next	Year 5/6	Year 5/6	Year 5/6	Year 5/6	Year 5/6	Year 5/6
	<u>E-Safety</u>	Computer Networks and the	<u>Programming in Scratch</u>	App Design	<u>Data Handling</u>	<u>Music Creation</u>
	- I can keep personal information	<u>Internet</u>	- I can program inputs for	- I can adjust the slide size	- I can select and use non-	- I can layer tracks using
	private.	- I can understand Computer	control, selection	to mimic a phone/tablet	adjacent cells plus resize	sounds and effects.
	- I can respect and protect	Networks, Internet and Cloud	(conditions) and sensing for	size.	multiple cell widths and	- I can create effective
	against online bullies.	Computing and how they help	interaction and data	- I can add text and images	copy/paste cells.	instrument tracks.
	- I understand the consequences	us.	variables for scoring	to a slide.	- I can use formulae to find	- I can edit tracks and
	of sharing photo/videos online.	- I know what email is and how	- I can program distance	- I can add icons and text	totals, averages and	effectively adjust volume
	- I understand the term digital	we can use it safely.	sensing and movement.	to use as navigation.	maximum/minimum	and add effects.
	footprint.	- I understand how and why we	- I can program Inputs,	I can duplicate slides to	numbers.	
	- I know how to check online	collaborate online (including	outputs, loops, conditions,	create multiple pages of the	- I can find data and create	
	content is trustworthy	blogging).	sensing and variables.	арр.	a spreadsheet to suit it.	
	- I know where and who we can			- I can create hyperlinks to	- I can search a database	
	report concerns we have to.			create navigation.	for specific information.	
	- I can use suitable usernames					
	and passwords for online					
	accounts.					
	- I understand the pitfalls of in-					
	app purchases.					

## Year B - YEAR 3/4

Whole School Focus	York		Discover		Me, Myself and I	
Class Focus	Archit	ecture	Myths, Legends	s and Folk Tales	Romans	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	<u>E-Safety</u>	<u>Digital Art</u>	Programming in Scratch	<u>3D Design</u>	<u>Video Editing</u>	<u>Animation</u>
Focus and Key	- Understand what to do if	- I can use various lines and fill	- I can design, write and	- I can understand and use	- I can add scene images.	- I can create a stop-motion
Skills	something upsets you online.	tools plus copy/paste and	debug programs that	3D space on a grid.	- I can add scripted	video by duplicating slides
	- I can describe the term 'sharing	rotation to create pattern effects.	accomplish specific goals.	- I can design for a purpose	voiceover audio, adjust the	that include backgrounds
	online' and why we need to get	- I can use shapes, fill,	(Including outputs)	- I can re-create or design	volume and crop clips	and shapes.
	permission to share photos and	copy/paste, zoom and flip to	- I can use repetition in	familiar 3D models using	(including splitting a clip).	- I can create animation
	videos of other people.	create reflective symmetry	programs.	cubes, such as tables and	- I can add more clips and	using transition and
	- I can understand why people	effects.	- I can work with various	chairs.	use transition effects.	animation effects (morph,
	pretend to be someone else	- I can use stamps, copy/paste,	forms of inputs; keyboard,	- I can use chisel tool to	- I can use elements such	motion paths, pulse etc),
	online.	layers and multiple frames to	mouse and touch screen.	improve and adapt models.	as shapes.	including taking and
		create animated GIF computer	- I can write programs to	- I can colour individual	- I can add music	editing a screenshot.
	<u>Inside a Computer</u>	game graphics.	simulate physical systems.	blocks or whole models.	background music and	- I can animate individual
	- I can understand what	- I can add, resize and organise		- I can resize, adjust height,	adjust the volume.	elements of objects.
	important parts of inside a	colour or picture backgrounds.		duplicate and use the	- I can export a project.	- I can create animated GIF
	computer or mobile device do to	- I can add, resize, organise		different perspective for 3D		files by animating pixels.
	help with the performance (CPU,	characters/objects to different		shapes.	<u>Graphic Design</u>	
	Fan, Hard Drive, RAM, Graphics	panels.		- I can change the	- I can create an icon using	
	Card).			transparency of bricks.	different shapes and fill	
					tools.	

	- I can understand that memory is measured in bytes and gigabytes.  E-Book Creation - I can choose a suitable page shape and add a title and subtitle I can change the background colour/texture of a page I can add, resize and change the colour of a shape then copy and paste it I can search for and add suitable images then resize and position them I can create another page with a background, image, shapes and text I can add an audio recording of the page text, including hiding it behind an object I can use hyperlinks for navigation between the pages.				- I can combine shapes and lines, then arrange them in front/behind each other I can combine shapes, colour and text to re-create an icon I can change the colour, size and style of text to match an icon, then arrange images and use masking and opacity tools.  Branching Databases - I can add and label objects within a branching database I can ask questions to sort (classify) objects.	
Key Vocabulary	Avatar Sharing Report Hard Drive RAM Bytes Gigabytes  Hyperlink Stamps Copy Paste	Fill tool Copy Paste Resize Background Panels Symmetry	Sequencing Repletion Variables Blocks Sprites	Duplicate Transparency Adapt Design Adjust	Export Voiceover Volume Format Audio  Icon Fill tool Arrange Opacity	Edit Motion path Background Transition Frames Duplicate
Previous	Year 1/2  Recognise uses of IT  - I understand computers store and follow instructions.  - I can spot digital technology in school.  - I can understand what makes a computer a computer.  - I understand computers store and follow instructions.  - I can spot digital technology in school.	Year 1/2 <u>Digital Art</u> - I can change the colour of individual pixels to accurately re-create basic and detailed artwork  - I can re-create graphics using pixels with different colours.	Year 1/2  Develop Programming  I can create and debug simple programs  I can use logical reasoning to predict the behaviour of simple programs.  I can simplify a program by using a loop.  I can program selection/conditions (if one sprite hits another)	Year 1/2  Design  I can change the colour and pattern of elements.  I can position and rotate objects on a design.  I can position objects in relation to each other.  I can resize, rotate, flip and arrange objects behind/in front of each other.	Year 1/2  Introduction to Data  Handling  I can understand what data is and collect it as a tally.  Use software to label a pictogram and add data to each column.  Edit a table with correct titles and numbers.	Year 1/2  Introduction to Animation  - I can add a background and objects to a frame (including text)  - I can copy/clone a frame and move objects to create an animation, including flipping objects.  - I can create an animation with multiple objects moving simultaneously.

	- I can understand how different technology helps us.  E-Book Creation  - I can add a book cover with title, author, colour and image.  - I can add multiple pages based on a theme.  - I can add text on different pages.  - I can add images on different pages to match the theme/text.  - I can add voice recordings to match the text and theme				<ul> <li>Use software to create a bar chart/pie chart/line chart suitable for the data.</li> <li>Interpret a pictogram/bar chart/line chart.</li> </ul>	<ul> <li>I can create screen-recording animation</li> <li>(optional, requires iPad).</li> <li>I can create stop-motion animation with photos</li> <li>(optional, requires iPad).</li> <li>I can create animated drawings of characters by cropping photos and adjusting points of movement.</li> </ul>
Year A Focus	E-Safety	Internet Research	Programming in Scratch	3D Design	Infographics	Music Creation
	Chromebook and Google Skills	Comic Creation			Data Handling	
	Document Editing and Creation					
Next		Year 5/6 Graphic Design  - I can adjust the colours, brightness and contrast to improve a photo.  - I can create a before and after slide in presentation software.  - I can take and crop a screenshot.  - I can add drawing and text layers.  - I can import new images as layers and resize them to fit.	Year 5/6 Programming in Scratch  - I can program list variables that chooses randomly.  -I can work with multiple sprites to send broadcast messages between them - I can program a loop - I can use co-ordinates in Logo turtle.  - I can write text-based commands to program digital art I can write text commands/functions to program keyboard inputs in a game	Year 5/6  Web Design  - I can create a static homepage.  - I can choose a suitable theme for your website.  - I can change the site identity to a suitable title, tagline and website icon.  - I can upload a suitable header and/or background image.  - I can adjust the website sidebar and add suitable widgets.  - I can add text and images to a page and edit them.  - I can add multiple pages and edit the navigation, including sub-menus.  - I can provide constructive feedback for your classmates' websites.	Year 5/6  Data Detectives  I can use comprehension skills to find clues that match the column headings of a spreadsheet.  I can use spreadsheet tools (filters and conditional formatting) to find the specific data to match the clues.  I can use Google sheets, drawing and sights	Year 5/6  Virtual Reality  I can understand what virtual reality is and how it can be used to help people.  I can add, move and resize objects in a virtual reality environment.  I can animate objects for realism.  I can use code blocks to add movement (with grouping) and interactions (conditions).  I can create multiple scenes of VR environments.

Year A - YEAR 5/6

Whole School	York	Discover	Step Back In Time
Focus			

Class Focus	WW1 Then and Now		Titanic		Myans	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus and Key Skills	E-Safety  I can keep personal information private.  I can respect and protect against online bullies.  I understand the consequences of sharing photo/videos online.  I understand the term digital footprint.  I know how to check online content is trustworthy  I know where and who we can report concerns we have to.  I can use suitable usernames and passwords for online accounts.  I understand the pitfalls of inapp purchases.  Data Handling  I can select and use nonadjacent cells plus resize multiple cell widths and copy/paste cells.  I can use formulae to find totals, averages and maximum/minimum numbers.  I can find data and create a spreadsheet to suit it.  I can search a database for specific information.	Computer Networks and the  Internet  I can understand Computer Networks, Internet and Cloud Computing and how they help us.  I know what email is and how we can use it safely.  I understand how and why we collaborate online (including blogging).  Image Editing I can adjust the colours, brightness and contrast to improve a photo.  I can create a before and after slide in presentation software. I can take and crop a screenshot.  I can add drawing and text layers.  I can import new images as layers and resize them to fit.  I can add colour elements to a black and white photo using layers and eraser tools.	Programming in Scratch - I can program inputs for control, selection (conditions) and sensing for interaction and data variables for scoring - I can program distance sensing and movement I can program Inputs, outputs, loops, conditions, sensing and variables.	App Design - I can adjust the slide size to mimic a phone/tablet	Virtual Reality  - I can understand what virtual reality is and how it can be used to help people.  - I can add, move and resize objects in a virtual reality environment.  - I can animate objects for realism.  - I can use code blocks to add movement (with grouping) and interactions (conditions).  - I can create multiple scenes of VR environments.	Music Creation  - I can layer tracks using sounds and effects.  - I can create effective instrument tracks.  - I can edit tracks and effectively adjust volume and add effects.
Key Vocabulary	Personal information Report Usernames Passwords Formulae Averages	Sever Wireless Access Point Router Firewall IP Address Cloud	Broadcasting Sensing Operators	Icons Hyperlink Navigate	VR Environment Grouping Interaction Scene	Bars Effects Layers Volume
Previous	Year 3/4  E-Safety  - Understand what to do if something upsets you online.  - I can describe the term 'sharing online' and why we need to get	Year 3/4  Inside a Computer  - I can understand what important parts of inside a computer or mobile device do to help with the performance (CPU,	Year 3/4  Programming in Scratch  I can design, write and debug programs that accomplish specific goals.  (Including outputs)	Year 3/4  3D Design  - I can understand and use 3D space on a grid.  - I can design for a purpose  - I can re-create or design familiar 3D models using	Year 3/4 Animation - I can create a stop-motion video by duplicating slides that include backgrounds and shapes.	Year 3/4 <u>Music Creation</u> - I can create ascending and descending scales.  - I can add chords evenly across the scales.

	permission to share photos and videos of other people.  - I can understand why people pretend to be someone else online.  Data Handling  - I can change appearance of cells in a spreadsheet (fill colour and border) then add and align text.  - I can find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title.	Fan, Hard Drive, RAM, Graphics Card).  - I can understand that memory is measured in bytes and gigabytes.  Graphic Design  - I can create an icon using different shapes and fill tools.  - I can combine shapes and lines, then arrange them in front/behind each other.  - I can combine shapes, colour and text to re-create an icon.  - I can change the colour, size and style of text to match an icon, then arrange images and use masking and opacity tools.	- I can use repetition in programs I can work with various forms of inputs; keyboard, mouse and touch screen I can write programs to simulate physical systems.	cubes, such as tables and chairs.  - I can use chisel tool to improve and adapt models.  - I can colour individual blocks or whole models.  - I can resize, adjust height, duplicate and use the different perspective for 3D shapes.  - I can change the transparency of bricks.	<ul> <li>I can create animation using transition and animation effects (morph, motion paths, pulse etc), including taking and editing a screenshot.</li> <li>I can animate individual elements of objects.</li> <li>I can create animated GIF files by animating pixels.</li> </ul>	<ul> <li>I can add arpeggios and melodies.</li> <li>I can add a steady and even rhythm.</li> <li>I can use sampled sounds to create an effective mix.</li> <li>I can build beats, melody (tones) and effects</li> </ul>
Year B Focus	E-Safety HTML	Web Design	Programming in Scratch	Binary Code  Text Based Programming	Graphic Design Physical Devices	Data Detectives
Next						

# Year B - YEAR 5/6

Whole School	York		Discover		Step Back In Time	
Focus						
Class Focus	Settlements		WW2		Ancient Greece	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing	<u>E-Safety</u>	<u>Web Design</u>	Programming in Scratch	<u>Binary Code</u>	<u>Graphic Design</u>	<u>Data Detectives</u>
Focus and Key	- I can keep personal information	- I can create a static homepage.	- I can program list	- I can understand why	- I can adjust the colours,	- I can use comprehension
Skills	private.	- I can choose a suitable theme	variables that chooses	computers/electronics use	brightness and contrast to	skills to find clues that
	- I can respect and protect	for your website.	randomly.	binary.	improve a photo.	match the column headings
	against online bullies.	- I can change the site identity	-I can work with multiple	- I can catch a sequence of	- I can create a before and	of a spreadsheet.
	- I understand the consequences	to a suitable title, tagline and	sprites to send broadcast	binary code to create	after slide in presentation	- I can use spreadsheet
	of sharing photo/videos online.	website icon.	messages between them	digital art.	software.	tools (filters and
	- I understand the term digital	- I can upload a suitable header	- I can program a loop	- I can convert binary code	- I can take and crop a	conditional formatting) to
	footprint.	and/or background image.	- I can use co-ordinates in	to denary numbers	screenshot.	find the specific data to
			Logo turtle.			match the clues.

	<ul> <li>I know how to check online content is trustworthy</li> <li>I know where and who we can report concerns we have to.</li> <li>I can use suitable usernames and passwords for online accounts.</li> <li>I understand the pitfalls of inapp purchases.</li> <li>HTML</li> <li>I can add and align text and change colour.</li> <li>I can program background colour.</li> <li>I can add and align images.</li> <li>I can add hyperlinks to other websites.</li> <li>I can add an iframe (such as a Google Map) and adjust the height and width.</li> </ul>	- I can adjust the website sidebar and add suitable widgets I can add text and images to a page and edit them I can add multiple pages and edit the navigation, including sub-menus I can provide constructive feedback for your classmates' websites.	- I can write text-based commands to program digital art I can write text commands/functions to program keyboard inputs in a game.	(decimal numbers) and visa versa.  Text Based Programming  I can change the variables of text based commands.  I can write text-based commands to program digital art.  I can write text commands/functions to program keyboard inputs in a game.  I can use Turtle Logo to program a loop	- I can add drawing and text layers I can import new images as layers and resize them to fit.  Physical Devices - I understand that computers use physical inputs and outputs and give examples I can program physical inputs, outputs (e.g program LED lights), loops and random variables (Microbit activities) I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.	- I can use Google sheets, drawing and sights
Key Vocabulary	Personal information Report Usernames Passwords Hyperlink iframe	Static Homepage Header Edit Navigate Menus	Sequencing Repletion Variables Blocks Sprites	Binary Denary numbers Translate  Loop Variables Commands Functions	Crop Screenshot Layers Edit  Microbit Output Input Processor Accelerometer	Databases Spreadsheet Headings Formatting
Previous	Year 3/4 E-Safety - Understand what to do if something upsets you online I can describe the term 'sharing online' and why we need to get permission to share photos and videos of other people I can understand why people pretend to be someone else online.	Year 3/4  3D Design  - I can understand and use 3D space on a grid.  - I can design for a purpose  - I can re-create or design familiar 3D models using cubes, such as tables and chairs.  - I can use chisel tool to improve and adapt models.  - I can colour individual blocks or whole models.  - I can resize, adjust height, duplicate and use the different perspective for 3D shapes.  - I can change the transparency of bricks.	Year 3/4  Programming in Scratch  - I can design, write and debug programs that accomplish specific goals.  (Including outputs)  - I can use repetition in programs.  - I can work with various forms of inputs; keyboard, mouse and touch screen.  - I can write programs to simulate physical systems.	Year 3/4	Year 3/4  Digital Art  I can use various lines and fill tools plus copy/paste and rotation to create pattern effects.  I can use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects.  I can use stamps, copy/paste, layers and multiple frames to create animated GIF computer game graphics.	Year 3/4  Branching Databases  - I can add and label objects within a branching database.  - I can ask questions to sort (classify) objects.

					<ul> <li>I can add, resize and organise colour or picture backgrounds.</li> <li>I can add, resize, organise characters/objects to different panels.</li> </ul>	
Year A Focus	E-Safety Data Handling	Computer Networks and the Internet	Programming in Scratch	App Design	Virtual Reality	Music Creation
	Data Hartating	Image Editing				
Next						