Grangetown Primary School Computing Progression of Skills

E-safety

Year Group	Unit	National Curriculum	Skills	Resource	Vocabulary
Y1	E-Safety	*Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.*	1. Understand what personal information is and why we keep personal information private. 2. Understand why websites want personal information. 3. Identify when and where to go for help when concerned.	Activity 1-4 https://www.ilearn2.co.uk/e-safety---key-stage-1.html/	Personal Information Sharing Report Respect Trust
Y2	E-Safety		1. Understand what personal information is and why we keep personal information private. 2. Understand why websites want personal information. 3. Identify when and where to go for help when concerned. 4. Understand the dangers of sharing photos online? 5. Understand that people online are not always who they say they are. 6. Understand how to trust information online. 7. Learn to use the Internet responsibly. 8. Understand why we should be respectful.	Activity 1-6 https://www.ilearn2.co.uk/e-safety---key-stage-1.html/	Personal Information Sharing Report Respect Permission Trust

| Y3 | E-Safety | *Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies* | 1. Understand what to do if something upsets you online.
 2. Understand why and how people can be nasty online.
 3. Describe the term 'sharing online' and why we need to get permission to share photos and videos of other people.
 4. Understand why people pretend to be someone else online.
 5. Understand why we only talk to people we know in the real world, when online.
 6. Understand why we should not always trust what we read online and how to check
 7. Understand the importance of being kind in the real world and also online. | Age 7-9 Activity 1-4 <br> https://www.ilearn2.co.uk/e-safety---key-stage-2.html/ | Personal Information
 Sharing
 Report
 Respect
 Permission
 Trust |
| Y4 | E-Safety | | 1. Understand what to do if something upsets you online.
 2. Understand why and how people can be nasty online.
 3. Describe the term 'sharing online' and why we need to get | Age 7-9 Activity 1-4 <br> https://www.ilearn2.co.uk/e-safety---key-stage-2.html/ | Personal Information
 Sharing
 Report
 Respect
 Permission
 Trust |

				permission to share photos and videos of other people. 4. Understand why people pretend to be someone else online. 5. Understand why we only talk to people we know in the real world, when online. 6. Understand why we should not always trust what we read online and how to check 7. Understand the importance of being kind in the real world and also online.		
Y5	E-Safety			1. Keep personal information private. 2.Respect and protect again online bullies. 3. Understand the consequences of sharing photo/videos online. 4. Understand the term digital footprint. 5. How can we check online content is trustworthy. 6.How and where and who can we report concerns we have to.	Age 9-11 https://www.ilearn2.co.uk/e-safety---key-stage-2.html/	Personal Information Sharing Report Respect Trust In-app Purchasing Digital Footprint
Y6	E-Safety			1. Keep personal information private. 2.Respect and protect against online bullies.	Age 9-11 https://www.ilearn2.co.uk/e-safety---key-stage-2.html/	Personal Information Sharing Report Respect

			3. Understand the consequences of sharing photo/videos online. 4. Understand the term digital footprint. 5. How can we check online content is trustworthy. 6. How, where and who can we report concerns we have to. 7. Use suitable usernames and passwords for online accounts.		Trust In-app Purchasing Digital Footprint
			Mouse and Keyboard Skills		
Y1	Keyboard and Mouse Skills	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	1. Mouse and keyboard skills; move mouse, left/right click, drag and drop. 2. Typing; Find letters on keyboard and begin touch typing with home row keys.	https://www.ilearn2.co.uk/eyfsyear-1-mouse-and-keyboard-skills.html/ (4-6hours)	Mouse Trackpad Cursor Left Button Scroll Wheel Home Row
Y2	Typing		1. Mouse and keyboard skills; move mouse, left/right click, drag and drop. 2. Typing; Find letters on keyboard and begin touch typing with home row keys. 3. To use capslock and spacebar	https://www.ilearn2.co.uk/touch-typing.html/	Mouse Trackpad Cursor Left Button Scroll Wheel Home Row Capslock Space Bar

Y3	Typing	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	1. Mouse and keyboard skills; move mouse, left/right click, drag and drop. 2. Typing; Find letters on keyboard and begin touch typing with home row keys. 3. To use capslock and spacebar 4. Learn f d s a j k l ; g and h e l r u	https://www.ilearn2.co.uk/touch-typing.html/	Mouse Trackpad Cursor Left Button Scroll Wheel Home Row Capslock Space Bar
Y4	Typing		1. Mouse and keyboard skills; move mouse, left/right click, drag and drop. 2. Typing; Find letters on keyboard and begin touch typing with home row keys. 3. To use capslock and spacebar 4. Learn f d s a j k l ; g and h e l r u 5. Learn v m b n c x z , capital letters, ' \ .	https://www.ilearn2.co.uk/touch-typing.html/	Mouse Trackpad Cursor Left Button Scroll Wheel Home Row Capslock Space Bar
Y5	Typing		1. Mouse and keyboard skills; move mouse, left/right click, drag and drop. 2. Typing; Find letters on keyboard and begin touch	https://www.ilearn2.co.uk/touch-typing.html/	Mouse Trackpad Cursor Left Button Scroll Wheel Home Row

				typing with home row keys. 3. To use capslock and spacebar 4. Learn f d s a j k l ; g and h e l r u 5. Learn v m b n c x z , capital letters, ' \ . 6. Finger reaches for the full alphabet 7. Using the finger reach method, introduce index and middle finger letter keys, Space Bar, and proper posture 8. Using the finger reach method, introduce beginning punctuation and more index, middle, ring, and little finger letter keys 9. Introduce remaining letter keys and Enter key		Capslock Space Bar Shit Button Posture Enter Key
Y6	Typing			1. Mouse and keyboard skills; move mouse, left/right click, drag and drop. 2. Typing; Find letters on keyboard and begin touch typing with home row keys. 3. To use capslock and spacebar 4. Learn f d s a j k l ; g and h	https://www.ilearn2.co.uk/touch-typing.html/	Mouse Trackpad Cursor Left Button Scroll Wheel Home Row Capslock Space Bar Shit Button Posture

					Enter Key Punctuation Keys
			e l r u 5. Learn v m b n c x z , capital letters, ' \ . 6. Finger reaches for the full alphabet 7. Using the finger reach method, introduce index and middle finger letter keys, Space Bar, and proper posture 8. Using the finger reach method, introduce beginning punctuation and more index, middle, ring, and little finger letter keys. 9. Introduce remaining letter keys and Enter key 10. Practice common English words and easy Home, Top, and Bottom Row words 11. Teach capitalisation, punctuation, sentences, and short paragraphs		

Computing in the Wider World

Y1	N/A	N/A	N/A	N/A	
Y2	Recognise the uses of IT	Recognise common uses of information technology beyond school	1. Understand what makes a computer a computer. 2. Understand computers store and follow instructions. 3. Spot digital technology in	[Preview - Year 2 Uses of IT - Primary Computing Resources - iLearn2](#)	Microprocessor Analogue Digital Laptop Desktop

			school. 4. Understand how different technology helps us.		Tablet Monitors
Y3	Document Editing and Creation	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.	1. Copy and paste text and images 2. Find and replace words 3. Format text for a purpose 4. Edit images inside documents 5. Add bullet points to make lists 6. Experiment with keyboard shortcuts	Preview - Year 3 Document Creation - Primary Computing Resources - iLearn2	Word Processor Find and Replace Format Text Wrapping Bullet Points Keyboard Shortcuts
Y4	Internet Research	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	1. Use search technologies to find specific pieces of information. 2. Understand features of an Internet Browser. 3. Reference the correct source of information. 4. Be discerning in evaluating digital content. 5. Check the internet for fake news by cross-referencing facts.	Year 4 Internet Research - Primary Computing Resources - iLearn2	Internet Browser Search Engine Web-address and Address bar WWW Ranking
Y5	Computer Networks + the Internet	Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for	1. Understand Computer Networks, Internet and Cloud Computing and how they help us. 2. What is email and how can we use it safely? 3. Understand how and why we collaborate online (including blogging)	Year 5 Computer Networks Activity Pack- Primary Computing Resources - iLearn2	Server Router Firewall IP Address Wireless Access Point Cloud Computing Email address Inbox Outbox

		communication and collaboration.	4. Understand the advantages and disadvantages of email 5. Understand that emails are stored on servers and we need an email address to send the mail to a person 6. Understand the different aspects of email software: inbox, outbox subject, cc, address book and attachments 7. Understand that we should only send and receive emails from people we know in the real world		Junk Address Book Attachments CC and BCC
Y6	Machine Learning and A.I	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.	1. Understand how computers use information to learn by solving new problems and following new instructions. 2. Understand and use examples of machine learning. 3. Understand how artificial intelligence is used to perform tasks often only performed by humans. 4. Discuss and show awareness of potential dangers of AI.	Year 6 Machine Learning Activity Pack - Primary Computing Resources - iLearn2	Machine Learning Artificial Intelligence

Multimedia Text and Images

Y1	Comic Creation	*Use technology purposefully to create, organise, store, manipulate and retrieve digital content.* Recognise common uses of information technology beyond school	1. Comic creation covers a wide range of objectives including: 2. Add, resize and organise colour or picture backgrounds 3. Add, resize, organise characters/objects to different panels 4. Add narration using text and direct speech using speech bubbles.	https://www.ilearn2.co.uk/comiccreationteacher.html/ (3-4 hours)	Icon Sticker Bigger Smaller Delete Mistake Text Size Panel Flip Sticker
Y2	E-Book Creation		1. Add a book cover with title, author, colour and image. 2. Add multiple pages based on a theme. 3. Add text on different pages. 4. Add images on different pages to match the theme/text. 5. Add voice recordings to match the text and theme.	https://www.ilearn2.co.uk/eboookcreationks1.html/ (3-4 hours)	Fill Record New Page Share Delete Images
Y3	Comic Creation	*Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.*	1. Add, resize and organise colour or picture backgrounds. 2. Add, resize, organise characters/object to different panels. 3. Add narration using text and direct speech using speech bubbles.	https://www.ilearn2.co.uk/comiccreationteacher.html/ (3-4 hours)	Icon Sticker Bigger Smaller Delete Mistake Text Size Panel Flip

					Narration Scale Arrange
Y4	E-Book Creation	*Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.*	1. Add page colour and style then position and format text. 2. Add and position images from camera/internet. 3. Add audio, including hiding it behind an object. 4. Add hyperlinks to text and images. 5. Add and format shapes. 6. Use hyperlinks for navigation.	https://www.ilearn2.co.uk/year-4-ebook-creation.html/ (3-5 hours)	Page Shape Add Content Inspector Hyperlinks Preview
Y5	Ebook Creation	*Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.*	1. Add page colour and style then position and format text. 2. Add and position images from camera/internet. 3. Add audio, including hiding it behind an object. 4. Add hyperlinks to text and images. 5. Add and format shapes. 6. Use hyperlinks for navigation.	https://www.ilearn2.co.uk/year-5-ebook-creation.html/ (3-5hours)	Page Shape Add Content Inspector Hyperlinks Preview
Y6	Web Design	*Design and create digital content to accomplish goals.*	1. Add and format text within a website. 2. Organise sections of web-pages and multiple page with relevant titles. 3. Add and edit images. 4. Include other features such as hyperlinks, buttons and files. 5. Evaluate other websites and provide constructive	https://www.ilearn2.co.uk/year-6-web-design.html/ (5-8 hours)	Wordpress Static Page Theme Header Sidebar Widgets Navigation Domain name

			feedback. 6. Make necessary changes to the website based on feedback.		
Y1	Digital Art	*Use technology purposefully to create, organise, store, manipulate and retrieve digital content.*	1. Change the colour of individual pixels to accurately re-create basic artwork. 2. Make changes where required. 3. Change the colour of individual pixels to accurately re-create detailed artwork.	https://www.ilearn2.co.uk/year1digitalart.html/ (1-2 hours)	Pixels Grid Fill Check Zoom
Y2	Digital Art		1. Use lines and fill tools to make interesting patterns. 2. Add a variety of shapes (outlines and fill) and label them with text. 3. Re-create graphics using pixels with different colours.	https://www.ilearn2.co.uk/year-2-digital-art.html/ (3-4 hours)	Pixels Fill Text PNG and GIF
Y3	Digital Art	*Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.*	1. Use various lines and fill tools plus copy/paste and rotation to create pattern effects. 2. Use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects. 3. Use stamps, copy/paste, layers and multiple frames to create animated GIF computer graphics.	https://www.ilearn2.co.uk/year3digitalart.html/ (4-6 hours)	Rotation Zoom Flip Symmetry Stamp GIF
Y4	3D Design (3D village)		3D Village Modelling 1. Understand 3D spacial awareness. 2. Add 3D shapes, resize, adjust height, duplicate and	https://www.ilearn2.co.uk/3ddesignteacher.html/ (3-4 hours)	Readjust Resize Duplicate Perspective

			use the different perspective. 3. Re-create different types of buildings using 3D shapes. 4. Create roads/paths by adjusting the height of 3D shapes. 5. Add windows and door shapes.		3D
Y5	App Design		1. Adjust slide size to mimic a phone/tablet size. 2. Add text and images to a slide. 3. Add icons and text to use as navigation. 4. Duplicate slides to create multiple pages of the app. 5. Create hyperlinks to create navigation.	https://www.ilearn2.co.uk/appdesignteacher.html/ (4-6 hours)	Screen Dimensions Icons Navigation Hyperlinks Duplicate
Y6	Graphic Design	*Design and create digital content to accomplish goals.*	1. Add, adjust and fill shapes. 2. Group shapes to improve accuracy and speed. 3. Add and customise gradient effects. 4. Adjust transparency/opacity for a purpose. 5. Use a colour picker correctly. 6. Accurately rotate shapes.	https://www.ilearn2.co.uk/year6graphicdesign.html/ (2-3 hours)	Grouping Gradient Transparency/Opacity Colour Picker Arrange
			Data Handling		
Y1	Data Handling	*Use technology purposefully to*	1. to understand how data can be displayed in various ways including pictograms,	Top Marks https://www.topmarks.co.uk/maths-games/5-7-years/data-handling	Data Pictograms Bar Charts

			bar charts, pie charts and tally charts. 2. Create own bar and tally charts.		Tally Charts
		create, organise, store, manipulate and retrieve digital content			
Y2	Data Handling		1. Understand what data is and collect it as a tally. 2. Label a pictogram and add data to each column. 3. Edit a table with correct titles and numbers. 4. Create a bar chart/pie chart/line chart suitable for the data. 5. Interpret a pictogram/bar chart/line chart.	https://www.ilearn2.co.uk/year-2-data-handling.html/ (3-4 hours)	Table Bar Chart Pictogram Pie Chart Data
Y3	Data Handling	*Collect, classify and present data.*	1. Add and label objects within a branching database. 2. Ask questions to sort (classify) objects.	https://www.ilearn2.co.uk/year3branchingdatabases-html/ (1hour)	Branching Database Data Sort Classify Yes/no Questions
Y4	Data Handling	*Collecting, analysing, evaluating and presenting data and information.*	1. Change appearance of cells in a spreadsheet (fill colour and border) then add and align text. 2. Find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title.	https://www.ilearn2.co.uk/year4datahandling.html/ (3-4 hours)	Spreadsheet Cell Pic Chart Bar Chart Line Graph
Y5	Data Handling	*Select, use and combine a variety of software (including internet services). Collecting, analysing, evaluating and*	1. Select and use non-adjacent cells plus resize multiple cell widths and copy/paste cells. 2. Find data and create a spreadsheet to suit it.	https://www.ilearn2.co.uk/year5datahandling-html/ (3-4 hours)	Spreadsheet Cell Formula Database Record Field

			3. Use formulae to find totals, averages and maximum/minimum numbers. 4. Search a database for specific information.		Sort
Y6	Data Handling	*Select, use and combine a variety of software (including internet services). Collecting, analysing, evaluating and presenting data and information*	1. Write spreadsheet formula to solve more challenging maths problems. 2. I can create and publish my own online quiz with a range of media (images and video)	https://applieddigitalskills.withgoogle.com/c/middle-and-high-school/en/guide-to-an-area/overview.html https://kahoot.com/schools/	Area Guide Column Spreadsheet
			Coding/Programming		
Y1	Introduce Programming	*Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs.*	1. Understand sequence and algorithms. (All activities) 2. Sequence instructions (commands) to achieve an objective. (All activities) 3. Use distances in commands. (extension task of activity 4) 4. Predict, write, execute and debug a simple program. (Activity 3 onwards)	https://www.ilearn2.co.uk/year-1-programming.html/ 5-7 hours	Sequence Algorithm Predict Execute Debug
Y2	Develop Programming	*Use logical reasoning to*	1. Create and debug simple programs by	https://www.ilearn2.co.uk/year-2-programming.html/ (3-4 hours)	Outputs Inputs

			selecting code blocks, placing them in the correct sequence and executing a program. 2. Use logical reasoning to predict the behaviour of simple programs. 3. Simplify a program by using a loop.		Execute Debug Selection (sending messages) Loops
		predict the behaviour of simple programs.			
Y3	Programming In Scratch	*Design, write and debug programs that accomplish specific goal, including simulating physical systems.* *Use sequence, selection, and repetition in programs; work with various forms of input.*	1. Design, write and debug programs that accomplish specific goals. (Including outputs) 2. Use repetition in programs. (Activity 2) 3. Work with various form of inputs; keyboard, mouse and touch screen. (Activity 3 and 4 below) 4. Write programs that simulate physical systems (Activity 5)	https://www.ilearn2.co.uk/y3scratch.html/ (4-6 hours)	Sprite Stage Sequence Debug Loops or Repetition Inputs
Y4	Programming in Scratch	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	1. Use sequence, selection, and repetition in programs. 2. Work with variables and various forms of input and output. 3. Debug programs that accomplish goals. 4. Work with variables and conditions.	https://www.ilearn2.co.uk/y4scratch.html/ (6-8 hours)	Inputs Selection Sensing Variables Debug

Y5	Programming in Scratch		1. Program list variables that chooses randomly. 2. Program inputs, conditions and sensing for interaction, data variables for scoring and a game timer. 3. Program Inputs, outputs, loops, conditions, sensing and variables.	https://www.ilearn2.co.uk/y5scratch.html/ (5-7 hours)	Inputs Selection Sensing Variables Debug
Y6	Programming in Scratch		1. Program inputs, conditions, random variables for unpredictability, game timer. 2. Program inputs, conditions, sensing, random variables, operators for direction and data variables for scoring. 3. Use inputs, conditions, loops, sensing, costume changes and broadcasts. 4. Work with multiple sprites to send broadcast messages between them.	https://www.ilearn2.co.uk/y6scratch.html/ (6-8 hours)	Inputs Operators Sensing Variables Broadcasts