

Subject: Computing		NOT IN TEACHING ORDER																			
Using Learn2 as a basis for our curriculum		Units to be taught across the year - please see individual year group overviews for where they will be taught in																			
E-Safety		COMPUTER SCIENCE		DIGITAL ART AND DESIGN		MUSIC VIDEO EDITING TECHNOLOGY		TEXT AND IMAGE EDITING		DATA HANDLING		HOW DO COMPUTERS WORK AND HELP US		GENERAL INFORMATION TECHNOLOGY							
Focus		Early Programming		Digital Art and Design		Early Digital Music		Text and Image Editing		Data Handling		Computer Discovery		Mouse and Keyboard Skills							
Strand		Computer Science		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology							
Skills		To understand directions. To understand sequences. To complete instructions.		To understand algorithms. To understand how to use directions. To complete sequences.		1. Use digital software to explore colours and re-create a style. (Activity 1) 2. Use digital software to move objects on the screen for a purpose. (Activity 2) 3. Use digital software to select objects and use tools to create 2D and 3D designs. (Activities 3 & 4) 4. Use digital software to experiment with the fill bucket tool to colour a picture. (Activity 4 and 7)		1. Understand the advantages and disadvantages of making music on a computer. (vivo video) 2. Understand that different instruments make their own sound and that instruments can be divided into groups (Activity 1) 3. Create a rhythm using a pattern of beats (Activity 2) 4. Create digital sounds using patterns and shapes (Activity 3) 5. Create a simple melody using patterns and adjust tempo (Activity 4 and 5)		1. Understand the advantages and disadvantages of making music on a computer. 2. Understand that different instruments make their own sound and that instruments can be divided into groups. 3. Create a rhythm using a pattern of beats. 4. Create digital sounds using patterns and shapes. 5. Create a simple melody using patterns and adjust tempo.		1. Change the background colour of a page. 2. Add, resize and position images (pictures) on a page. 3. Add pictures with text. 4. Use word-banks for writing sentences about pictures.		1. Identify parts of a computer and how they help us understand that computers need to be repaired and parts can be dangerous. 2. Use a mouse to select and move objects. 3. Use a mouse to select and move objects.		1. Move the mouse or trackpad and left click to select an object. (Activity 1 and 2) 2. Drag and drop with mouse or trackpad to move objects around the screen. (Activity 2 and 4) 3. Use double click or double tap (Activity 5) 4. Find letters or numbers on keyboard. (Activity 6) 5. Begin touch typing with home row keys. (Activity 7)					
Vocabulary		safety, online, websites.		forward, backwards, left, right, up, down.		click, double click, scroll, fill, tools, design 2d, 3d.		rhythm, melody, tempo		Monitor, mouse, printer, headphones, computer, digital camera, keyboard, speakers		Mouse and Keyboard skills		Mouse and Keyboard skills							
Focus		E-Safety		Introducing programming		Digital Art and Design		Comic creation		Music creation		Text and Images		Mouse and Keyboard skills							
Strand		Digital Literacy		Computer Science		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology							
Skills		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.		Understand what algorithms are, how they are implemented on programs on digital devices and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.		Change the colour of individual pixels to accurately re-create basic artwork. Add a variety of shapes (outlines and fill) and label them with text. Make changes where required. Change the colour of individual pixels to accurately re-create detailed artwork. Use zoom controls to help fit small shapes. Re-create graphics using pixels with different colours.		Comic creation Add, resize and organise colour or picture backgrounds. Add, resize, organise characters/objects to different panels. Add narration using text and direct speech using speech bubbles. Save comic with name and title.		Music creation Understand the advantages and disadvantages of making music on a computer. Understand that different instruments make their own sound and that instruments can be divided into groups. Create a rhythm using a pattern of beats. Create digital sounds using patterns and shapes. Create a simple melody using patterns and adjust tempo.		Change the background colour of a page. Add, resize and position images (pictures) on a page. Add pictures with text. Use word-banks for writing sentences about pictures.		1. Move the mouse or trackpad and left click to select an object. 2. Drag and drop with mouse or trackpad to move objects around the screen. 3. Use double click or double tap (Activity 5) 4. Find letters or numbers on keyboard. (Activity 6) 5. Begin touch typing with home row keys. (Activity 7)							
Vocabulary		private, personal information, sharing, permission, report, respect, safe		sequence, algorithm, debug, predict, execute		pixels, grid, fill, check, custom colours, zoom		Panel, narration, stickers, speak, arrange, fit		Rhythm, melody, tempo		resize, position, images, adjust, placement, drag, zoom, delete		cursor, mouse, drag, click, trackpad, left button, scroll wheel, home row							
Focus		E-Safety		Programming with Scratch Jnr (3-4hrs)		Develop Programming (4-5hrs)		Digital Art (3-4hrs)		Introduction to Animation (2-4hrs)		Ebook Creation (3hrs)		Introduction to Data Handling (2-3hrs)		Recognise uses of IT (3hrs)		Internet Research (1hr)			
Strand		Digital Literacy		Computer Science		Computer Science		Information Technology		Information Technology		Information Technology		Information Technology		Digital Literacy		Digital Literacy			
Skills		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.		Understand sequence and algorithms. Sequence instructions (commands) to achieve an objective. Predict, write, execute and debug a simple program. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.		Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.		Use lines and fill tools to make interesting patterns. Add a variety of shapes (outlines and fill) and label them with text. Re-create graphics using pixels with different colours.		Without younger pupils to stop-motion animation using free online resources that work on all devices. Add a book cover with title, author, colour and image. Add multiple pages based on a theme. Edit a table with correct files and numbers to create a bar chart and pie chart. Export audio recordings to match the beat and theme.		Add a book cover with title, author, colour and image. Add multiple pages based on a theme. Edit a table with correct files and numbers to create a bar chart and pie chart. Export audio recordings to match the beat and theme.		Data handling Label a pictogram and add data to each column. Edit a table with correct files and numbers to create a bar chart and pie chart. Export audio recordings to match the beat and theme.		Understand what makes a computer a computer. 1. Understand computers store and follow instructions. 2. Spot digital technology in school. 3. Use a web-page to answer questions using keywords.		1. Understand how web-page displays information in different ways: text, images, videos and interactive elements. 2. Use a web-page to answer questions using keywords.			
Vocabulary		private, personal information, sharing, permission, report, respect, safe		sequence, algorithm, debug, predict, execute		pixels, grid, fill, check, custom colours, zoom		Panel, narration, stickers, speak, arrange, fit		Rhythm, melody, tempo		resize, position, images, adjust, placement, drag, zoom, delete		cursor, mouse, drag, click, trackpad, left button, scroll wheel, home row							
Focus		E-Safety (1 hour)		Programming in Scratch (4-6 hours)		3D design (3-5 hours)		Digital Art (5-6 hours)		Music Creation		Storyboard (1 hour)		Comic Creation		Branching databases (1 hour)		Infographics (1-2 hours)			
Strand		Digital Literacy		Computer Science		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology			
Skills		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.		Design, write and debug programs that accomplish specific goals, including simulating physical systems. Use sequence, selection, and repetition in programs, work with various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.		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. Re-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.		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. Re-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.		Create ascending and descending scales. Add chords every across the scales. Add progression and melodies. Add a melody and use rhythm. Use learned sounds to create an effective mix. Build beats, melody (rhythms) and effects.		1. Add and edit backgrounds. 2. Add and edit characters, including changing posture, expression and clothing. 3. Add narration and speech bubbles, including recording text. 4. Duplicate objects to match scenes. 5. Search for objects to use.		1. Add, move and organise colour or picture backgrounds. 2. Add, resize, organise characters/objects to different panels. 3. Add narration using text and direct speech using speech bubbles. 4. Save comic with name and title.		1. Add and edit backgrounds. 2. Add and edit characters, including changing posture, expression and clothing. 3. Add narration and speech bubbles, including recording text. 4. Duplicate objects to match scenes. 5. Search for objects to use.		1. Add and edit backgrounds. 2. Add and edit characters, including changing posture, expression and clothing. 3. Add narration and speech bubbles, including recording text. 4. Duplicate objects to match scenes. 5. Search for objects to use.		1. Understand how web-page displays information in different ways: text, images, videos and interactive elements. 2. Use a web-page to answer questions using keywords.	
Vocabulary		Design, repetition, keyboard, mouse, touch screen, physical systems		Design, repetition, keyboard, mouse, touch screen, physical systems		Design, repetition, keyboard, mouse, touch screen, physical systems		Design, repetition, keyboard, mouse, touch screen, physical systems		Scale, chords, progression, bars and beats, sampled sounds, effects		Panel, narration, stickers, speak, arrange, fit		Panel, narration, stickers, speak, arrange, fit		Collect, classify and present data.		Infographic, graphic elements, text			
Focus		E-Safety		Programming in Scratch		3D design		Graphic design		Video Editing		Animation		Ebook Creation		Data Handling		Inside a computer		Internet Research	
Strand		Digital Literacy		Computer Science		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology		Information Technology	
Skills		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.		Design, write and debug programs that accomplish specific goals, including simulating physical systems. Use sequence, selection, and repetition in programs, work with various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.		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. Re-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.		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. Re-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.		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. Re-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.		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. Re-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.		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. Re-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.		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. Re-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.		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. Re-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 what important parts of inside a computer or mobile device do to help with the performance (CPU, Fan, Hard Drive, RAM, Graphics Card). 2. Understand how memory is measured in bytes and gigabytes. 3. Use search filters on websites to find suitable information.	
Vocabulary		research, responsible		Repetition, loop, input, output, variables, debug		3D design, perspective, zoom, perspective mode, orthographic mode		Shapes, arrange, fit, text, masking, transparency		Indicate, perspective, format text, hyperlinks, caption		step motion, duplicate, transition, GIFs, panels		resize, voiceover, voiceover, film, export		table, chart, axis, resize, edit		on processing unit, fan, hard drive, graphics card		browser, digital content, cross-reference	
Focus		E-Safety (1-2 hrs)		Programming in Scratch (5-7 hrs)		Text based Programming (4-5hrs)		App Design (4-5hrs)		Music creation (2-3hrs)		Ebook creation (3-5hrs)		Data Handling (3-4hrs)		Operating Systems (1-2hrs)		Physical devices (1-3hrs)		Computer networks and the internet (2-3hrs)	
Strand		Digital Literacy		Computer Science		Computer Science		Information Technology		Information Technology		Text and Image Editing		Information Technology/Digital Literacy		Information technology		Digital Literacy		Information Technology/Digital Literacy	
Skills		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.		Design, write and debug programs that accomplish specific goals, including simulating physical systems. Use sequence, selection, and repetition in programs, work with various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.		Use sequence, selection, and repetition in programs, work with variables. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.		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. Re-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.		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. Re-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.		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. Re-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.		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. Re-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.		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. Re-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 the importance of an operating system and its key features. 2. Demonstrate important operating system skills, such as the Windows Start Menu, and the opportunities they offer for communication and collaboration.		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.	
Vocabulary		private, personal information		Repetition, loop, input, output, variables, debug		Text based, digital commands, functions, inputs, pens, copy, paste, formulae, break, average, program		adjust, icons, duplicate, hyperlinks		Formal links, hyperlinks, navigations, preview		resize, voiceover, voiceover, film, export		table, chart, axis, resize, edit		on processing unit, fan, hard drive, graphics card		browser, digital content, cross-reference			
Focus		E-Safety		Programming in Scratch		Graphic design		Web Design		Photograph and image editing		Data detection		Computer, Past, Present and Future (inc AI and machine learning)							
Strand		Digital Literacy		Computer Science		Digital art and design		Computer Science/Information Technology		Information Technology		Information technology		Computer, Past, Present and Future (inc AI and machine learning)							
Skills		1. Keep personal information private. 2. Respect and protect against online bullying. 3. Understand the consequences of sharing photos/videos online. 4. Understand the terms digital footprint. 5. How can we check online content is trustworthy? 6. How, when and who can we report concerns we have? 7. Use suitable usernames and passwords for online accounts. 8. Understand the pitfalls of in-app purchases. 9. Understand how and why companies track our online behaviour and how we can prevent this. 10. Understand how clones, trojans and hackers can steal our online identity.		1. Program keyboard/mouse sensors, inputs, selection (conditions), loops and random variables for unpredictability (operations). 2. Program inputs, selection, sensing, random variables, operators for direction and data variables for scoring. 3. Add and customise gradient effects. 4. Use variables to store data for a purpose. 5. Use a colour picker correctly. 6. Accurately resize shapes.		1. Create a table for your website. 2. Choose a suitable font for your website. 3. Change the site identity to a suitable site, layout and website content. 4. Add a suitable header and/or background image. 5. Add the website skeleton and add suitable widgets. 6. Add text and images to a page and edit them. 7. Add multiple pages and edit the navigation. 8. Provide constructive feedback for your classmates' websites.		1. Create a table for your website. 2. Choose a suitable font for your website. 3. Change the site identity to a suitable site, layout and website content. 4. Add a suitable header and/or background image. 5. Add the website skeleton and add suitable widgets. 6. Add text and images to a page and edit them. 7. Add multiple pages and edit the navigation. 8. Provide constructive feedback for your classmates' websites.		1. Adjust the colour, brightness and contrast to improve a photo. 2. Create a before and after slide in presentation software. 3. Use and crop a screenshot. 4. Add overlays and text layers. 5. Import new images as layers and resize them to fit. 6. Add colour elements to a black and white image using layers and vector tools. 7. Use Artificial Intelligence (AI) to remove objects from photographs and expand them.		1. Use comparison tools to find charts that match the column headings of a spreadsheet. 2. Use the Word Wrap, Bold and Conditional Formatting to find the specific data to match the data. 3. Use and crop a screenshot. 4. Add overlays and text layers. 5. Import new images as layers and resize them to fit. 6. Add colour elements to a black and white image using layers and vector tools. 7. Use Artificial Intelligence (AI) to remove objects from photographs and expand them.		1. Show awareness of how computers and digital technology help us today. 2. Understand how technology has changed our lives and represent it as an interactive timeline. 3. Understand the impact (positive/negative) technological changes have on society. 4. Predict how technology will change in the future.							
Vocabulary		private, personal information		condition, sensing, random variables, loops, board/borders		Grouping, gradient, transparency/opacity, color picker, arrange		hyperlinks, external links, code blocks		add, adjust, fit, transparency, opacity, rotate, gradient, contrast, filters, adjust, resize, screenshot, layers		private, personal information		Technological change, predictions Virtual reality, immersive, animals, scenes, grouping, interactions							