St Swithun's Church of England VC Primary School
Curriculum Progression Grid

Computing Skill Progression							
This document aims to give guidance on the progression of Computing skills and knowledge across the year groups. It can also be used to support planning and adapt learning. As children progress across the school it is expected that they can demonstrate a wider range of independent skills and knowledge in the three strands of Computing, across the curriculum.							
In Computing, like all other subjects, we recognise the importance of other methods and practice of teaching (the pedagogy) we choose to use in enabling pupils to know more, understand more and remember more. **In Computing, the following approaches will be used, and be evident in pupil discussion, observations and work in books, in order to ensure that the Computing learning opportunities are as effective as possible and that pupils progress throughout the year and across year groups during their Computing experiences in school.**							
Teaching Sequence in Computing	Big picture: Look at and recap previous knowledge and skills that are relevant to the new learning.						
	Provide realistic and relevant information.						
	Specific key vocabulary to be used and its meaning.						
	Provide opportunities for the teacher to work interactively with the teacher acting as the facilitator.						
	Ongoing opportunities to apply learned skills and knowledge across the curriculum						
Learning, working and talking about Computing	Children will be introduced to the key vocabulary relating to Computing so that all children can confidently articulate their ideas, knowledge and skills within the three strands of digital literacy, information technology and computer science.						
Strand	**EYFS**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Digital Literacy *Knowledge and Skills*	Understand that they should only use advice / computer with an adults permission	**<u>Online Safety</u>** ✓ Create, name and date digital work (paint) ✓ Search safely for images online. ✓ Understand which personal information I need to keep safe ✓ Help to send an email **<u>Computer Skills</u>** ✓ Use a mouse / trackpad ✓ Switch a computer on and off	**<u>Online Safety</u>** ✓ Understand digital footprint ✓ Use keywords to find out about a topic ✓ Recognise whether a website is appropriate for children ✓ Identify kind and unkind behaviour online **<u>Using the Internet</u>** ✓ Safely search the internet using keywords	**<u>Online Safety</u>** ✓ Cyber bullying – understanding what it is and how to address it ✓ Recognise how websites use advertisements to sell products ✓ Creating strong passwords ✓ Know how to communicate online - including email **<u>Internet Research and Communication</u>** ✓ Use search	**<u>Online Safety</u>** ✓ Cyberbullying – know how to respond to hurtful messages ✓ Using search engines accurately ✓ Understand the term plagiarism and how to avoid it ✓ Creating a safe online profile ✓ Explain how to be a responsible digital citizen	**<u>Online Safety</u>** ✓ Understand danger of spam emails ✓ Know how to and why we make citations ✓ Creating and managing strong passwords ✓ Understand the risks of edited photographs **<u>Internet Research and Webpage Design</u>**	**<u>Online Safety</u>** ✓ Cyberbullying – identifying the most effective ways of addressing cyberbullying ✓ Website security – Know how to identify website privacy settings ✓ Online relationships – Knowing how to identify risks ✓ Sharing information safely

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		✓ Save a file ✓ Drag objects	✓ Safely follow links ✓ Create content for an online blog using photos and text ✓ Do we need to build in the beginnings section here	technologies – understand how word order affects searches ✓ Understand about safe communication online ✓ Saving and sharing web pages		✓ Evaluate webpages ✓ Create web layout including text, hyperlinks and images ✓ Publish webpage	✓ Online media and gender – know how media can impact perceptions about gender
Digital Literacy *Key Vocabulary*	Stranger permission	**Online Safety** Filter Google Search engine Image Keyboard Email Internet Subject Address Personal information **Computer Skills** Mouse Trackpad Save Drag Drop File	Digital footprint Search engine Links	Cyberbullying Advertisements Password Safe email	Cyberbullying Accuracy Plagiarism Personal information	**Online Safety** Spam email Citation Password Editing photographs Social media **Internet Research and Webpage Design** Webpage Domain Hyperlink Publish Gallery	Cyberbullying https privacy policy media social media

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Information Technology *Knowledge and Skills*	Can log onto the computer independently. Can use a mouse to select information. Can use a touch screen to input and select information. Can recognise that technology can be used at home and in school	**Painting** ✓ Use paint to create a simple poster containing different colours, images and text ✓ Use different brushes ✓ Know how to make changes to improve work **Word Processing Skills** ✓ Use keyboard to input, edit and format text, including symbols. ✓ Save files	**Computer Art** ✓ Create a piece of art using pixels ✓ Using tools in Paint to create different styles of art (make, edit and shade) ✓ Retrieve and edit a file **Presentation Skills** ✓ Create folders ✓ Create a presentation with text ✓ Add and format images ✓ Organise slides within presentation	**Drawing and Desktop Publishing** ✓ Drawing with different shapes and lines ✓ Order and group objects ✓ Manipulate shapes and lines ✓ Combine text and images to create effective layouts **Presentation Skills** ✓ Create slide templates and organise slides with hyperlinks ✓ Use transitions, animations and themes within presentations ✓ Inserting audio and video **Word Processing** ✓ Change between lower and upper case. ✓ Align text ✓ Use bullets and numbering ✓ Know some keyboard shortcuts (ctrl) ✓ Know how to insert and format	**Word Processing** ✓ Formatting images for a purpose ✓ Spellcheck – how to open and use ✓ Inserting and formatting tables ✓ Page layout – using formatting tools to create and edit ✓ Hyperlinks – knowing how to create these in a word document **Animation** ✓ Digital 2D animation – using software to create digital based animation (time sliders, moving characters) ✓ Stop motion animation – using cameras to create short sequences ✓ Analyse and evaluate software	**Vector Drawings** ✓ Add and remove objects to create a drawing with some detail, drawing shapes and lines ✓ Modify the position, size, colour, effects, proportion and rotation of objects ✓ Combine a range of objects, apply layers and groups to draw a whole image with some detail **3D Modelling: Sketch up** ✓ Draw 3D shapes using a variety of tools ✓ Edit and manipulate 3D drawings to add simple details, such as doors and windows ✓ Combine 3D shapes to create complex	**Spreadsheets** ✓ Enter data and formulae ✓ Order and present data based on calculations ✓ Add, edit and calculate data ✓ Solve problems using a spreadsheet ✓ Design a spreadsheet for a specific purpose **Film Making** ✓ Use software to write a film script ✓ Locate and check digital content for my own use ✓ Record and import digital recording into software ✓ Plan, edit, conduct and import interviews into a film using features such as transitions, captions and information cards.

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				text boxes		models, such as completed designs for outside and inside a house	
Information Technology *Key Vocabulary*	Mouse Screen Keyboard Computer tablet	**Paint** Image Text Paint Colour Brush Tools **Word Processing** Text Keyboard Keys Font Image Word processing	**Computer Art** Folder File Paint Drawing tool Fill tool Shape tool **Presentation skills** Presentation Text Images Microsoft powerpoint / Google slides	**Drawing and Desktop publishing** Shapes Lines Order Group Layout **Presentation Skills** Template Hyperlink Transition Animation Theme **Word Processing** Screenshot Shift Caps lock Text box Keyboard shortcut	**Word Processing** Format Spellcheck Table Hyperlinks **Animation** 2d animation Stop motion animation Imovie Record Video editing Filter Transition Video file	**Vector Drawings** Vector Layers Groups Object Justify **3D Modelling** 3d Modelling CAD (computer aided design) Model Move Scale Push Pull	**Spreadsheet** Spreadsheet Microsoft Excel Data Formula Sum function Min function Max function Average function **Film Making** Import Export Mp3 (audio file) Mp4 (video file) media

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Computer Science *Knowledge and Skills*		**Programming with Scratch Jr** ✓ Instruct a character to grow, shrink, move (speed and distance) ✓ Use repeat to create a sequence of instructions ✓ Create a programme that plays a sound **Programming toys** ✓ Create simple and precise instructions using pictures ✓ Programme a person using instructions ✓ Programme and debug a bee bot	**Preparing for Turtle Logo** ✓ Give and follow an algorithm to turn right, left, make half and quarter turns (including right 90 and left 90 commands) ✓ Use recognised language for programming turtle ✓ Create, test and debug algorithms to create accurate instructions **Programming Turtle Logo and Scratch** ✓ Use algorithms to move and rotate the turtle ✓ Use repeat command ✓ Programme a sprite to move and play sound ✓ Change backdrop and add sprites using correct commands	**Programming Turtle Logo and Scratch** ✓ Use turtle logo to draw more complex shapes, including regular polygons ✓ Use scratch to draw shapes and patterns, using the penup, pendown, rotate and repeat commands	**Scratch: Questions and Quizzes** ✓ Decompose a problem into smaller parts to debug an algorithm ✓ Use sequence and selection, for example by using 'if…then…else …' commands ✓ Work with variables to change colour, shape, size and backdrop ✓ Design, write and debug programmes **Programming Turtle Logo** ✓ Create and debug an algorithm ✓ Create an algorithm that uses setpos to draw a shape ✓ Create algorithms with different colours ✓ Create algorithms to fill areas with colour ✓ Create algorithms to create text ✓ Create an algorithm to draw an arc	**Scratch 3.0 – Developing Games** ✓ Design and program a game which includes character sprite and enemies ✓ Add and use effects in Scratch to create interactions between sprites ✓ Create a game with a specific goal and level ending ✓ Add different levels using created backdrops	**Kodu Programming** ✓ Control characters, including the use of 'when' and'do' ✓ Analyse and deconstruct code to solve problems ✓ Develop a game to increase and reduce the challenge ✓ Use tools to add landscapes **Scratch: Animated Stories** ✓ Create animations by controlling when objects need to be visible ✓ Structure and control timings of different events ✓ Add voice and sounds to enhance story ✓ Add interactive user features

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Computer Science *Key Vocabulary*		Sprite Algorithm Ordered instructions Sound Scratch Jr	Algorithm Turn command Repeat function Backdrop Debug Scratch Turtle logo sprite	Algorithm Repeat function Debug Scratch Turtle logo Sprite Sequence Code	Algorithm Repeat function Debug Variable Arc Scratch Turtle logo Sprite Sequence code	Algorithm Repeat function Debug Variable Scratch Sprite Score Sequence code	Iteration Broadcast Receive Algorithm Repeat function Debug Variable Scratch Sprite Sequence code
Using skills		Using and Applying	Using and applying	Using and Applying Skills	Using and Applying Skills	Using and Applying Skills`	Using and Applying Skills
Technology in the Wider Curriculum	Apply knowledge and skills associated with the three strands with increasing independence across the wider curriculum.						