Tatsfield Primary School – Skills Progression in Computing

Progression of Skills in KS1

	EYFS	Year 1	Year 2
Digital Literacy/Online Safety • recognise common uses of information technology beyond school • 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	**Understanding the World**: Staying safe on the Internet	- Show awareness that information on the Internet is not private - Understand that the Internet is not always a reliable source	- Understand that the Internet and technology has dangers associated with it. - Know what to do if something does not *feel right* - *SID lessons*: respect, kindness
ICT • use technology purposefully to create, organise, store, manipulate and retrieve digital content: 1. Typing 2. Using Microsoft Office 3. Email 4. Graphics 5. Sound	- Use the mouse to complete a simple game - To use keyboard keys to complete a simple game	- Create a document, save/retrieve it - Font manipulation – size and colour - LearnPads *Annotate*: manipulate pictures and photographs - Logging on to the system, finding and retrieving a saved document - Find a specified webpage using a browser	- Researching a topic (dinosaurs) Chn use a search engine to find specific relevant information to us in a powerpoint presentation - Revelation natural art (graphics software) - Create and store a document in the correct area - Google Earth - Short animation, stop motion pro
Computer Science • understand algorithms • create and debug simple programmes • predict behaviour of simple programmes	**Technology:** - Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	**Algorithms** - Use a range of simple tools, beebots, and LearnPads to control devices on or off screen	**Algorithms** - Predict the outcome of an algorithm - Debug programmes

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Progression of Skills in KS2

	Year 3	Year 4	Year 5	Year 6
Digital Literacy/Online Safety • understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	- Locating information from the Internet - Sending and receiving emails - Showing awareness of potential dangers, such as attachments, links in emails - Showing awareness of etiquette when corresponding online - Knowing what details are *not* safe to share online - Staying safe when gaming online	- Understanding the benefits of online technology - Showing awareness of potential dangers: phishing, identify theft, virus software - Knowing what details *are* safe to share online - Knowing what to do if things go wrong - How to create a secure password - Online etiquette	- Using technology safely, especially online - Knowing how to spot potential threats on the internet and in emails and how to combat these - Being able to share confidently online - Knowing how to use the internet respectfully - Understanding computer networks, including clouds, hosting servers, Wi-Fi, proxy servers and firewalls	- Internet Safety reminders, focussing on staying safe on mobile phones and apps/gaming - Revisit year 5 curriculum to ensure recall - Safer internet day - Being kind and appropriate online *Strong links with PSHEE*
ICT • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • 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	- Word processing, increasingly complex font manipulation - Combining text and graphics - Copy and paste, using mouse control	- Graphics, repeating patterns: copy, paste (including keyboard short cuts) resize and rotate - Word processing, including the history of vocabulary, such as type font, set, shift, caps lock, and the order of letters on a keyboard. Comparing type writer with computer keyboard - Simple Touch typing - MS Excel spreadsheets; basic formulae - Flow charts - Branching databases (link to science/classification and English/Instructions) - MS PowerPoint End of Unit quiz, link to history - MS Publisher: Creating a	- MS Excel, spreadsheets and formulae with more complexity - Spreadsheet presentation - Word processing and touch typing - Paint & draw graphics	- MS Excel spreadsheets, more complex formulae and operations - MS office as and when appropriate – cross curricular links to topics and English

		leaflet (link to residential trip)		
Computer Science • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and 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	**Algorithms** - Scratch Repeats and loops *Animate your name* - Selection, repetition, debugging (own and others' algorithms)	**Algorithms and programming** - Scratch Repeats and loops - Introducing variables (link to flowcharts, ICT) - Create a maths quiz using sequencing, repetitions, loops and variables - Detect and debug errors in ready-made code, as well as being able to debug your own code.	**Programming and Coding** - Scratch: planning and coding a variety of increasingly complex games and activities - Debugging and improving your own work - Use decomposition to solve problems	**Programming and Coding** - Revisit Scratch - Further coding elements, pulling together the strands of previous learning by using the skills on alternative platforms (e.g. appinventor.mit.edu, code.org - Hour of Code, turtleacademy.org…)