

Computing Progression All Saints Church School



	EYFS 30 – 50 months 40 – 60 months Early Learning Goals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
DIGITAL LITERACY							
Logging in	<p>Adult guided: To begin to use a very simple passcode on a tablet or Chromebook (eg. 123).</p> <p>To begin to use home button on a tablet to exit apps with support.</p>	<p>With support: To use a password and username to login to a personal account <i>with support</i>.</p> <p>To use home button on a tablet.</p> <p>To browse as a guest on Chromebooks.</p>	<p>Increasingly independent: To use a password and username to login to a personal account.</p> <p>To use home button on a tablet.</p> <p>To browse as a guest on Chromebooks.</p>	See e- Safety Section			
Digital Citizenship: Use technology safely and respectfully.	<p>To talk about technology that is used at home or in school.</p> <p>To operate simple equipment such as remote control vehicles, remotes for TVs/IWBs, battery toys involving pressing</p>	<p>To recognise the ways we use technology in our classroom.</p> <p>Recognise ways that technology is used in my home and community.</p> <p>Begin to identify some of the</p>	<p>To discuss why I use technology in the classroom.</p> <p>Discuss why I use technology in my home and community.</p> <p>Starting to understand that other people have</p>	<p>To talk about the parts of a computer.</p> <p>To tell you ways to communicate with others online.</p> <p>To think about whether to use images that I find online in my own work (copyright).</p>	<p>To tell you whether a resource I am using is on the Internet, the school network or my own device.</p> <p>To identify key words to use when searching safely on the World Wide Web.</p>	<p>To describe different parts of the Internet.</p> <p>To use different online communication tools for different purposes.</p> <p>To find out who the information on a</p>	<p>To tell you the internet services I need to use for different purposes.</p> <p>To select an appropriate tool to communicate and collaborate online.</p>

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	<p>buttons to create an effect.</p> <p>Use a safe part of the Internet to play and learn.</p>	benefits of using technology.	<p>created the information I use.</p> <p>Identify benefits of using technology including finding information, creating and communicating.</p> <p>To talk about the differences between the Internet and things in the physical world.</p>		<p>I think about the reliability of information I read on the World Wide Web.</p> <p>To tell you how to check who owns photos, text and clipart.</p>	<p>webpage belongs to.</p> <p>I know which resources on the Internet To download and use.</p>	<p>To check the reliability of a website.</p> <p>To tell you about copyright and acknowledge the sources of information that I find online.</p> <p>To know that websites can use my data to make money and target their advertising.</p>
Web Searching	To suggest words for my teacher to search	<p>To use links to websites to find information with some support.</p> <p>To begin to use a safe search tool (through J2E) to find images with support.</p> <p>To begin to use keywords to filter results (eg. search animals kids)</p>	<p>To use links to websites to find information.</p> <p>To begin to use a safe search tool (through J2E) to find images with support.</p>	<p>To describe the World Wide Web as the part of the Internet that contains websites.</p> <p>To use search tools to find and use an appropriate website.</p>	<p>To recognise that websites use different methods to advertise products.</p> <p>To create a hyperlink to a resource on the World Wide Web (through J2E).</p>	<p>To describe the ways in which websites advertise their products to me.</p> <p>To use a search engine to find appropriate information and check its reliability.</p> <p>To recognise and evaluate different types of information I find on the World Wide Web.</p>	<p>To talk about the way search results are selected and ranked.</p> <p>To describe how information is transported on the Internet.</p>

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						To describe the different parts of a webpage.	
Key Vocabulary: Teach new & revise all previous vocab.	Internet Equipment Apps Device Settings Online offline Log in Username Password	Sources Hyperlink Search engine Digital content Messaging Operate Personal-information Privacy	Email Forward Replay Send Carbon copy Attachments Recipient notification Text Index Content contact	Upload Download Copy Paste Share Skype Facetime Video chat Blog Pop-cast	Copyright Pop-ups Cookies Creditable Reliability Bias	Advertise Webpage Search engine Reliability	Encrypt Re-post Tagging Plagiarism Referencing Cyber attack
ONLINE SAFETY							
Safety & wellbeing	To talk about good & bad choices in real life e.g. taking turns, saying kind things, helping others, telling an adult if something upsets you. To play appropriate games on the Internet. To talk about good and bad choices when	To identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies To understand they need to follow certain rules to remain safe when visiting places online. To begin to understand that if	To stay safe online by choosing websites that are good for them to visit & not inappropriate sites. To explore what cyber-bullying means & what to do when they encounter it. To know that if they put information online it leaves a digital footprint or “trail” & that they	To agree sensible e-safety rules for the classroom. To discuss what actions could be taken if they are uncomfortable or upset online e.g. Report Abuse button. To talk about what games they enjoying playing and what good choices are when playing games e.g.	To agree sensible e-safety rules for the classroom. To discuss their own personal use of the Internet and choices they make. To discuss how to protect devices from virus threats. To discuss the importance of keeping an adult informed about what you’re doing	Safety & wellbeing	To talk about good & bad choices in real life e.g. taking turns, saying kind things, helping others, telling an adult if something upsets you. To play appropriate games on the Internet. To talk about good and bad choices when

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	using websites (being kind, telling a grown up if something upsets us & keeping ourselves safe by keeping information private /to our families).	you create something you own it.	<p>need to manage this so it's not hurtful.</p> <p>To understand that keyword searching is an effective way to locate online information & how to select keywords to produce the best search results.</p> <p>To discuss criteria for rating informational websites a site.</p> <p>To realise that not all websites are equally good sources of information.</p>	<p>content, screen time.</p> <p>To use a class blog to share information and talk about who can see it, and how to communicate safely and respectfully.</p> <p>To comment and provide positive feedback on the work of classmates in school or online, or the work of others online.</p>	<p>online, and how to report concerns.</p> <p>To explore using the safe and responsible use of online communication tools e.g. blogs, messaging.</p>		using websites (being kind, telling a grown up if something upsets us & keeping ourselves safe by keeping information private /to our families).
Privacy		<p>To keep personal information private.</p> <p>To name some types of personal information; (see vocab)</p> <p>To learn that many websites ask for information that is</p>	<p>To name many types of personal information</p> <p>To learn that directory sites with alphabetical listings offer one way to find things on the Internet.</p>	<p>With support:</p> <p>To choose a secure password for age-appropriate websites.</p>	<p>Independently:</p> <p>To Choose a secure password for age-appropriate websites.</p> <p>To change an old password for security.</p>	<p>To protect their password and other personal information</p> <p>With support:</p> <p>To judge what sort of privacy settings might be relevant to reducing different risks.</p>	<p>Increasingly independent:</p> <p>To discuss scenarios involving online risk</p> <p>To seek help from an adult when they see something that is</p>

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		private & discuss how to responsibly handle such requests.	To understand that if you create something you own it. To explore how email can be used to communicate with real people within their schools, families & communities. To know how to close pop-ups such as pop-up advertising in apps and on websites.			To seek help from an adult when they see something that is unexpected or worrying. To use key vocabulary to demonstrate knowledge and understanding in this strand	unexpected or worrying. To judge what sort of privacy settings might be relevant to reducing different risks. To use key vocabulary to demonstrate knowledge and understanding in this strand
Vocabulary:						spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.	
DATA HANDLING							
	Teacher-led To collect information such as photos or sound files. To with adult support, use a simple pictogram	To take photographs, video and record sound to record learning experiences. To look at how data is represented digitally.	To take and save photographs, video & record sound to capture learning. To use microscopes or other devices to	With support: To find out information from a pre-prepared database, asking straightforward questions.	To plan and create a database to answer questions. To identify different types of data. To ask questions carrying out simple	To collect and record information using spreadsheets and databases. To carry out complex searches	To use the whole data process – generate, process, interpret, store, and present information – realising the need for accuracy and

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	or set of photos to count and organise information.	To contribute to and interpret a pictogram.	<p>capture and save magnified images.</p> <p>To ask questions and consider how they will collect information.</p> <p>To collect data, generate graphs and charts to find answers.</p> <p>To save & retrieve the data to show to others.</p> <p>To create paper/object decision trees & explore a branching database.</p> <p>To investigate different types of digital data e.g. online encyclopaedias</p>	<p>To contribute towards a database.</p> <p>To construct and use a branching database.</p> <p>To record data in a variety of ways.</p> <p>To present data for others.</p> <p>To use a data logger to monitor changes and talk about the outcomes seen.</p>	<p>searches on a database.</p> <p>To identify inaccurate data.</p> <p>To present data in appropriate format for an audience.</p> <p>To use a data logger to record and compare individual readings.</p>	<p>(e.g., using and/or \leq / \geq)</p> <p>To solve problems and present answers using data tools.</p> <p>To analyse information and question data. Identify poor quality data.</p> <p>To select appropriate use of a data logger for an investigation and interpret the findings.</p>	<p>checking plausibility.</p> <p>To select appropriate data tool.</p> <p>To identify and present results. Interrogate a database, refining searches to provide answers to questions.</p> <p>To plan investigations using the outcomes from a data logger to show findings</p>
MULTIMEDIA							
	To use a mouse to rearrange objects and pictures on a screen.	To record their own voices and play back to an audience.	To use an increasing variety of tools and effects in paint programs and talk about their choices.	To explore & begin to evaluate the use of multimedia to enhance communication.	To explore how multimedia can create atmosphere & appeal to different audiences.	To select an appropriate ICT or online tool to create and share ideas.	To identify the purpose for selecting an appropriate online tool.

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	<p>To recognise text, images and sound when using ICT.</p> <p>To use a camera or sound recorder to collect photos or sound.</p> <p>To use paint programs (J2E.com) to create pictures.</p> <p>To begin to use a keyboard (see programming)</p> <p>To develop an interest in ICT by using age appropriate websites or programs.</p>	<p>To use a video or stills camera to record an activity.</p> <p>To create sounds and simple music phrases using ICT tools.</p> <p>To add text and images to a template document using an image & word bank</p> <p>To use index fingers (left and right hand) on a keyboard to build words & sentences.</p> <p>To know when & how to use the SPACE BAR (thumbs) to make spaces between words.</p> <p>With support: To use keyboard to enter text (index fingers left & right hand).</p>	<p>To use templates to make electronic books individually and in pairs.</p> <p>To explore the effects of sound and music in animation and video.</p> <p>To create own documents, adding text and images (begin using JIT and move to J2e5 by the end of the year).</p> <p>Increasing independence: To use keyboard to enter text (index fingers left & right hand).</p> <p>To know when and how to use the RETURN/ ENTER key. Use SHIFT & CAPS LOCK to enter capital letters.</p>	<p>To create & begin to edit presentation documents & text, experimenting with fonts, size, colour, alignment for emphasis & effect.</p> <p>To use a range of effects in art programs including brush sizes, repeats, reflections</p> <p>To explore the use of video, animation & green screening.</p> <p>To use ICT tools to create musical phrases.</p> <p>To amend text & save changes.</p> <p>To use individual fingers to input text & use SHIFT key to type characters.</p> <p>To amend text by highlighting & using SELECT/ DELETE & COPY/ PASTE.</p>	<p>To be confident in creating & modifying text & presentation documents to achieve a specific purpose.</p> <p>To use art programs & online tools to modify photos for a specific purpose using a range of effects.</p> <p>To explore the use of video, animation, & green screening for a specific audience.</p> <p>To use ICT tools to create music phrases for a specific purpose.</p> <p>To use a keyboard effectively, including the use of keyboard shortcuts.</p>	<p>To explore the effects of multimedia (photos, video, sound) in a presentation or video and show how they can be modified.</p> <p>To develop skills using transitions and hyperlinks to enhance the structure of presentations.</p> <p>To use a wide range of effects in art programs and online tools, discussing the choices made and their effectiveness.</p> <p>To know how to use text and video editing tools in programs to refine their work.</p> <p>To use online tools to create and share</p>	<p>To discuss audience, atmosphere and structure of a presentation or video.</p> <p>To collect information and media from a range of sources (considering copyright issues) into a presentation for a specific audience.</p> <p>To use sound, images, text, transitions, hyperlinks and HTML code effectively in presentations.</p> <p>To store presentations and videos online where they can be accessed by themselves and shared with others.</p>

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		To know when and how to use the RETURN/ ENTER key. Use SHIFT & CAPS LOCK to enter capital letters. To use DELETE & BACKSPACE buttons to correct text. Create sentences, SAVE & edit later.	To use DELETE & BACKSPACE buttons to correct text. Create sentences, SAVE & edit later.	To look at own work & consider how it can be improved for effectiveness	To use font sizes & effects such as bullet points appropriately. To know how to use a spell check. To look at their own, and a friend's work & provide feedback that is constructive & specific.	presentations and films.	To evaluate the effectiveness of their own work and the work of others.
PROGRAMMING							
	To help adults operate equipment around the school, independently operating simple equipment. To use simple software to make things happen. To press buttons on a floor robot and talk about the movements.	To physically follow & give each other instructions to move around. To explore outcomes when buttons are pressed in sequences on a robot. To begin to use software to create movement & patterns on a screen.	To physically follow and give each other forward, backward & turn (right-angle) instructions. To articulate an algorithm to achieve a purpose To plan and enter a sequence of instructions to achieve an algorithm, with a robot specifying distance & turn and drawing a trail.	To plan & enter a sequence of instructions on a robot specifying distance & turn to achieve specific outcomes, debug the sequence where necessary. To test & improve / debug programmed sequences. To begin to type Turtle (J2E) commands to achieve outcomes.	To create & edit procedures typing Turtle (J2E) commands including pen up, pen down & changing the trail of the turtle. To solve open-ended problems with a floor robot, Turtle (J2E) & other software using efficient procedures to create shapes & letters.	To explore procedures using repeat to achieve solutions to problems with Turtle (J2E) & a floor robot. To talk about procedures as parts of a program To Refine procedures to improve efficiency. To use a variable to replace number	To record in some detail the steps (the algorithm) that are required to achieve an outcome & refer to this when programming. To re-dict the outputs for the steps in an algorithm Increase confidence in the process to plan, program, test & review a program.

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	<p>To explore options and make choices with toys, software and websites.</p>	<p>To begin to identify an algorithm to achieve a specific purpose.</p> <p>To execute a program on a floor robot to achieve an algorithm.</p> <p>To use the word debug to correct any mistakes when programming a floor robot.</p> <p>To begin to predict what will happen for a short sequence of instructions in a program.</p>	<p>To explore outcomes when giving instructions in a simple Turtle (J2E) program.</p> <p>To watch a Turtle (J2E) program execute & debug any problems.</p> <p>To predict what will happen & test results.</p> <p>To talk about similarities & differences between floor robots and Turtle (J2E) on screen.</p>	<p>To explore outcomes when giving sequences of instructions in Turtle software (J2E).</p> <p>To use repeat to achieve solutions to tasks.</p> <p>To solve open-ended problems with a floor robot & Turtle (J2E) including creating simple regular polygons, making sounds & planning movements such as a dance.</p> <p>To sequence pre-written lines of programming into order</p> <p>To talk about algorithms planned by others & identify any problems & the expected outcome.</p>	<p>To experience a variety of resources to extend knowledge & understanding of programming.</p> <p>To create an algorithm & a program that will use a simple selection command for a game.</p> <p>To begin to correct errors (debug) as they program devices & actions on screen & identify bugs in programs written by others.</p> <p>To use an algorithm to sequence more complex programming into order.</p> <p>To link the use of algorithms to solve problems to work in Maths, Science & DT.</p>	<p>of sides in a regular shape.</p> <p>To explore instructions to control software or hardware with an input & using if... then... commands.</p> <p>To explore a computer model to control a physical system.</p> <p>To change inputs on a model to achieve different outputs.</p> <p>To refine & extend a program.</p> <p>To identify difficulties & articulate a solution for errors in a program.</p> <p>To group commands as a procedure to achieve a specific outcome within a program</p>	<p>To write a program which follows an algorithm to solve a problem for a floor robot or other model.</p> <p>To write a program which follows an algorithm to achieve a planned outcome for appropriate programming software.</p> <p>To control on screen mimics & physical devices using one or more input & predict the outputs.</p> <p>To understand how sensors can be used to measure input in order to activate a procedure or sequence & talk about applications in society.</p>

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						To write down the steps required (an algorithm) to achieve the outcome that is wanted and refer to this when programming.	To create variables to provide a score/trigger an action in a game. To link errors in a program to problems in the original algorithm.