

DIGITAL LITERACY INCLUDING ONLINE SAFETY

		<u>Y1</u>	<u>Y2</u>	<u>Y3</u>	<u>Y4</u>	<u>Y5</u>	<u>Y6</u>
Knowledge & Skills	I AM LEARNING TO...	<p><u>Knowledge:</u> How can we be safe online ? How can we communicate online Can you give advice on how to keep others safe online</p> <p><u>Skills:</u> I can explain what 'Online Safety' means. I can explain how to communicate safely online. I can explain who to tell if I feel unsafe online. I can recall the 'SMART' rules for online safety. I can understand what personal information should be kept safe online.</p>	<p><u>Knowledge:</u> How can we make sure information we share is used responsibly? Understand how to identify unsafe online content</p> <p><u>Skills:</u> I can explain what a 'digital footprint' is. I can understand that people can use the information I put online. I can begin to identify possible dangers online. I can identify websites suitable/unsuitable for my age. I can explain when I should ask an adult for their advice. I can begin to explain who a website is aimed at.</p>	<p><u>Knowledge:</u> Understand what the term cyber bullying means How can we keep our personal information safe? Understand what adverts are and how companies use them How are websites and search engines different?</p> <p><u>Skills:</u> I can explain 'Cyberbullying' I can explain where cyberbullying can take place. I can identify adverts online including how a website is organised including (hyperlinks, graphics and text) I can find specific information from a website safely. I can explain how companies use</p>	<p><u>Knowledge:</u> How can we prevent cyber bullying? Understand what is meant by plagiarism Understand what a good digital citizen is.</p> <p><u>Skills:</u> I can confidently define, and recognise, cyberbullying. I can explain the appropriate response to hurtful messages/comments online. I can access, and use, a trusted search engine. I can explain what 'plagiarism' is. I can explain what 'digital citizenship' is. I can explain how to be a good digital citizen. I can identify comments that may be hurtful to others.</p>	<p><u>Knowledge:</u> What impact does emailing have on today's society? How has the internet changed over time? How do you know data is accurate?</p> <p><u>Skills:</u> I can explain what 'phishing' is and can recognise the signs. I can identify a 'spam' email. I can explain what to do with spam email. I can explain the steps to take to avoid spam emails. I can create a strong password using a set of given rules. I can understand that not everything I see online is true. I can identify unsafe online behaviour.</p>	<p><u>Knowledge:</u> How can we identify unsafe websites? Understand the effects of cyberbullying</p> <p><u>Skills:</u> I can understand that not all websites are 'secure'. I can identify warning signs that suggest an unsecure website. I can confidently explain what to do if I am asked or told something online which makes me uncomfortable. I can identify a situation that I may find myself in where I need to remain vigilant. I can explain how cyberbullying can be as harmful as in-person bullying.</p>

	<p>I can give advice to others about keeping safe online.</p>	<p>I can identify unkind online behaviour.</p>	<p>websites for their products.</p> <p>I can create a strong password.</p> <p>I can explain why a strong password is important.</p> <p>I can explain what privacy settings are.</p> <p>I can identify online communities I am part of.</p> <p>I can discuss the positive and negative aspects of online communities.</p>	<p>I can reflect on my own messages to ensure they are kind.</p>	<p>I can collaborate and create an online blog and discuss its features.</p> <p>https://www.squarespace.com/templates</p> <p>I can use a range of sources for research to check validity and the impact of incorrect data.</p>	
<p><u>Vocabulary</u></p>	<p>'Communicate safely' Unsafe Online 'SMART rules' Personal information Top tip/advice Search Internet</p>	<p>Digital footprint, Keywords, In/Appropriate Website/webpage 'Rate and review' 'Kind/unkind behaviour' Results, 'Possible danger' Information, Links 'online content' Blog, Search engine, Navigate, Permission</p>	<p>Word order Communicate Bookmark Favourite Technology Cyberbullying Advertisements Promote Privacy Online Communities Targeted Devices</p>	<p>URL Plagiarism 'Online profile' Digital citizen(ship) Trusted/reliable</p>	<p>Phishing SPAM Virus Trojan</p>	<p>Crediting/Citation Cross-check Warning signs Privacy Policy</p>

Expectation of skills
progression

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COMPUTER SCIENCE

Knowledge & Skills I AM LEARNING ...

Y1	Y2	Y3	Y4	Y5	Y6
<p><u>Knowledge:</u></p> <p>Understand the purpose of a range of different technology, e.g. tablets, laptops, microphones, cameras etc.</p> <p>To understand what algorithms are and how we use them</p> <p><u>Skills</u> <i>Children to continue using BeeBots to develop understanding of coding and programming moving onto using Scratch JNR as an iPad/laptop based program.</i></p> <p>I can create instructions using pictures</p> <p>I know what an algorithm is</p> <p>I can see how a product changes when I change the instructions.</p> <p>I can de-bug my work.</p> <p>I can program a Bee Bot to move</p>	<p><u>Knowledge:</u></p> <p>Understand algorithms Use and apply coding knowledge</p> <p><u>Skills</u> <i>Children to apply growing programming skills into 'Turtle Logo' program.</i></p> <p>I can apply my understanding of algorithms within a different program</p> <p>I can give, follow and complete an algorithm.</p> <p>I can give and follow an algorithm to turn right or left.</p> <p>I can give and follow an algorithm to make half and quarter turns.</p> <p>I can give and follow an algorithm using the commands right 90 and left 90.</p> <p>I can use recognised language in an algorithm.</p>	<p><u>Knowledge:</u></p> <p>Design and create a range of programs, systems and content</p> <p><u>Skills</u> I can create and debug using the move, repeat and rotate commands</p> <p>I can create and debug algorithms using pen up and pen down</p> <p>I can create and debug algorithms that draw regular polygons</p> <p>I can create and debug algorithms to draw shapes</p> <p>I can create and debug algorithms to draw patterns</p> <p>I can write a variable value where required (input/output)</p> <p>I can use calculations as variables</p>	<p><u>Knowledge:</u></p> <p>Use debugging methods and solve problems</p> <p><u>Skills</u> I can decompose programs into smaller parts.</p> <p>I can use logical reasoning to detect and correct errors in algorithms and programs.</p>	<p><u>Knowledge:</u></p> <p>Develop understanding of how technology works; how computers process instructions and commands, including the use of coding languages. (Scratch)</p> <p>Deconstruct and investigate the effect of changing variables in simulations. (Scratch and Program)</p> <p>Use assisted programming software, then more complex programming software which interacts with external controllers, and elements on screen, creating algorithms and using logic and calculations. (program)</p> <p><u>Skills</u> I can design and program a character game</p>	<p><u>Knowledge:</u></p> <p>Create and use variables Detect and correct errors during debugging</p> <p><u>Skills</u> I can solve problems by decomposing them into smaller parts.</p> <p>I can create programs using variables. I can use sequences, selection and repetition to explore real world problems.</p> <p>I can use logical reasoning to explain how increasingly complex algorithms work.</p> <p>I can detect and correct errors in algorithms and programs efficiently.</p>

	<p>I can describe and use instructions to program a character</p> <p>I can program a character to grow and shrink</p> <p>I can use instructions to make characters move at different speeds and distance</p> <p>I can use a repeat instruction</p> <p>I can create programs with a sequence of linked instructions</p>	<p>I can create, test and debug an algorithm</p> <p>I can create an algorithm to move or rotate the turtle.</p> <p><i>Children to apply growing programming skills by being introduced to Scratch.</i></p>			<p>I can design my own characters and backdrops</p> <p>I can add features or effects to enhance a game</p> <p>I can create an original animated game with a specific goal</p> <p>I can program costume changes for a sprite</p> <p>I can add point scoring and levels to game code.</p> <p>I can create events as a consequence to another action</p> <p>I can use code to code to increase the value of a variable</p>	
<p><u>Vocabulary</u></p>	<p>Algorithms Debug Data Program precise evaluate, arrow buttons</p>	<p>Execute an action' Half turn Quarter turn Commands Test Abbreviation Rotate Variable Backdrop</p>	<p>clear screen (sc) variable rotate sprite block background/backdrop decompose logical sequence</p>	<p>Animation Timing/Time slider Stop-motion Frames/linked frames Webcam Digital device Interaction Procedure Setpo</p>	<p>script gradient animate animation iteration transition</p>	<p>'Interactive User Feature' Succession 'When' and 'Do' instructions Automatic path Virtual environment Playability</p>

		Project	variables input output	Decompose Repetition Scoring system Numerical		
<u>Expectation of skills</u> progression						

INFORMATION TECHNOLOGY

Knowledge & Skills I AM LEARNING TO...	<u>Y1</u>	<u>Y2</u>	<u>Y3</u>	<u>Y4</u>	<u>Y5</u>	<u>Y6</u>
	<p><u>Knowledge:</u></p> <p>To use technology purposefully to create digital content, begin to save and retrieve pictures and text (PowerPoint, Microsoft Word - children will need to already have prior knowledge of login on to a laptop, locating and launching the programs needed)</p> <p><u>Skills:</u></p> <p>I can use two hands to type on a keyboard</p> <p>I can use the shift key for capital letters</p> <p>I can type symbols</p> <p>I can edit text</p> <p>I can use undo and redo</p> <p>I can select and format text</p>	<p><u>Knowledge:</u></p> <p>Know how to use formatting tools in different programs</p> <p><u>Skills:</u></p> <p>I can change the font within Microsoft Word.</p> <p>I can alter the font size and colour within Microsoft Word.</p> <p>I can use bold, underline and italic on Microsoft Word.</p> <p>I can insert, and write within, a text box (Microsoft Publisher)</p> <p>I can move, resize and rotate text boxes (Word/Publisher)</p>	<p><u>Knowledge:</u></p> <p>Know that ICT enables access to a wider range of information & tools to help find specific information quickly.</p> <p><u>Skills:</u></p> <p>I can use <shift>, <CAPS LOCK> and <space> correctly</p> <p>I can edit using <backspace>, <delete>, the arrow keys, undo and redo</p> <p>I can align text</p> <p>I can use bullets and numbering</p> <p>I can insert and format text boxes</p> <p>I can create slide templates and organise slides with hyperlinks</p> <p>I can add theme, transitions and animation to a presentation</p>	<p><u>Knowledge:</u></p> <p>Use technology to create images</p> <p><u>Skills:</u></p> <p>I can layer objects for a purpose</p>	<p><u>Knowledge:</u></p> <p>Know that ICT can be used for a range of purposes including presentation and formatting</p> <p><u>Skills:</u></p> <p>I can format images for a purpose (snipping tool adding to a document)</p> <p>I can use formatting tools to create an effective layout (publisher)</p> <p>I can use the spellcheck tool (word)</p> <p>I can insert and format a table in a word processing document (Microsoft word)</p> <p>I can change a page layout for a purpose-orientation, size and using columns.</p>	<p><u>Knowledge:</u></p> <p>Know that ICT can be used for a range of purposes and that it can be used to collate data.</p> <p><u>Skills:</u></p> <p>I can format a table</p>

	<p>I can format the font- colour, size, style bold, italics and underline</p> <p>I can create a simple presentation</p> <p>I can use a search engine (Google) to research information</p> <p>I can use navigation skills to access the correct parts of a website</p> <p>I can follow links made by the teacher to research information</p> <p>I can combine pictures and text</p>		<p>I can insert audio and video into slides.</p>		<p>I can create hyperlinks with a word document</p> <p>I can create the layout of a comic strip using photos in a desktop (publisher)</p> <p>I can edit and enhance photos and text for presentation (iMovie) (Adobe)</p> <p>I can arrange and layer objects, including titles and backgrounds</p> <p>I can add and arrange photos to a movie presentation.</p>	
<p><u>Vocabulary</u></p>	<p>Word processor launch type shift key caps lock undo, redo, bold, italic, edit, backspace, arrow keys, format, font, layout, insert.</p>	<p>Shift Presentation Add/format Reorder Slide Microsoft PowerPoint Layout Source Text box Border Outline</p>	<p>align copyright bullets review spelling spellcheck highlight, audio embed</p>	<p>Spellcheck Table Word processing Orientation Columns/rows Cells Desktop publisher/Microsoft Publisher Enhance Layer Soundtrack Caption</p>	<p>production audio and video segments timeline transitions publish convert</p>	<p>Microsoft Excel Spreadsheet Formula Function Data Calculations Cell reference Graph Running total</p>

Expectation of skills progression						
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	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<u>Year 1</u>	Computer skills	Painting (Art)	Online safety	Word Processing	Programming with toys	Programming with ScratchJR
<u>Year 2</u>	Internet research	Computer art (Art)	Online safety	Presentation skills	Preparing for Turtle Logo	Programming with Turtle logo and Scratch
<u>Year 3</u>	Internet research & communication (Geography)	Drawing & desktop publishing (Art)	Online safety	Presentation skills	Word Processing	Programming with Turtle logo and Scratch
<u>Year 4</u>	Word processing	Animation (Art)	Online safety	Programming Turtle Logo Data logging	Scratch: questions and quizzes	Scratch: questions and quizzes
<u>Year 5</u>	Internet research and website design	Radio station (science, music & literacy)	Online safety	FloWol (DT)		Scratch 3.0 developing games
<u>Year 6</u>	Spreadsheets (science & maths)	Film-making	Online safety	Scratch- animated series	KoDu programming	KoDu programming