



	Online Safety and Digital Literacy <i>see Education for a Connected World</i>	Information Technology	Computer Science
<b>Y1</b>	<ul style="list-style-type: none"> <li>Know that the internet is accessed all over the World and know some devices are connected to the internet.</li> <li>Know that they should always ask a responsible adult if they want to use a device and ask for help if they see anything that worries them.</li> <li>With support from an adult be able to find information on the internet.</li> </ul>	<ul style="list-style-type: none"> <li>Be able to log onto a computer Or use a QR code to evidence work on a tablet</li> <li>Be able to navigate around the screen with a mouse or touchpad</li> <li>Know how to type text using space bar for separate words to create something meaningful</li> <li>Be able to independently find and use an app on a tablet for instance to take and view a video or photograph</li> </ul>	<ul style="list-style-type: none"> <li>Know which button on a device represents which action e.g. <b>Bee Bot</b></li> <li>Know how to program a robot to follow simple sequence of instructions (1- 2 turns)</li> <li>Make a simple sequence of instructions / algorithm</li> <li>Be able to make simple predications about an algorithm and a program. <b>The Bee Bot will go....</b></li> <li>Be able to change (debug) the program to improve the route</li> </ul>
<b>Y2</b> Builds on last years skills	<ul style="list-style-type: none"> <li>Know devices that enable direct communication between people through images and text.</li> <li>Know what personal information is and that they should never share this with anyone they don't know.</li> <li>Know that they should tell a trusted adult if they are upset or worried about anything on a device.</li> <li>With support be able to use a safe search engine e.g. <b>swiggle</b></li> </ul>	<ul style="list-style-type: none"> <li>Be able to save, retrieve and print work <b>PC or Tablet</b></li> <li>Know how to type and format text including basic punctuation and capital letters <b>Any suitable software</b></li> <li>Be able to confidently use pointing device <b>Mouse, Touchpad</b></li> <li>Be able to add and create simple images</li> <li>Be able to combine simple text and graphics, for instance create a poster for a purpose <b>Any suitable software</b></li> </ul>	<ul style="list-style-type: none"> <li>Know how to program a robot to achieve set goal (sequence of 6-7 instructions: maze, point collecting)</li> <li>Begin to use block programming e.g. <b>Scratch Junior (Alex, Daisy Dino)</b> to complete a simple program.</li> <li>Be able to debug more complex problems e.g. a route on a <b>Bee Bot / Blue Bot / Alex / Logo etc...</b> maze.</li> </ul>
<b>Y3</b> Builds on last years skills	<ul style="list-style-type: none"> <li>Know that some people on the internet should not be trusted</li> <li>Know that concerns about what they see on-line should be reported to a trusted adult</li> <li>Create and use a simple password</li> <li>Use a Search engine to find information given key words</li> <li>Know which websites are useful and begin to understand all might not be trustworthy.</li> <li>Be able to log in and out of websites used at school</li> </ul>	<ul style="list-style-type: none"> <li>Be able to log in to computer system as themselves and can find their documents (personal drive)</li> <li>Know how to open shared documents and pictures.</li> <li>Know how to use software to create a simple brochure or poster. <b>Publisher or Pages</b></li> <li>Know how to sequence and add to slides to make a simple presentation <b>Keynote, Powerpoint, iMovie</b></li> <li>Create a meaningful document that contains both pictures and text</li> </ul>	<ul style="list-style-type: none"> <li>Be able to use a block program (<b>Scratch Jun, Scratch, Microbit Blocks</b>) to make a simple programme using sequencing and timing.</li> <li>Inputs sets of instructions according to programming language and environment (<b>Logo, Scratch Jnr, Microbit etc..</b>)</li> <li>Use repeat loops for instance to create a program to draw regular 2D shapes (<b>Logo, Scratch</b>)</li> <li>Independently be able to debug basic mistakes</li> <li>Begin to use conditionals – If I click here then this happens...<b>Scratch Junior, Scratch, Microbit</b></li> </ul>
<b>Y4</b> Builds on last years skills	<ul style="list-style-type: none"> <li>Know that pictures and text share on-line can end up with strangers</li> <li>Reliably know what to do if they are exposed to unpleasant materials on any device</li> <li>Know that having a balance of online and offline activities is important.</li> <li>Reliably uses a more complex password to access resources.</li> <li>Know what the key words are to enter into a Search engine to find information they want.</li> <li>Can select useful websites from the results of a search.</li> </ul>	<ul style="list-style-type: none"> <li>Be able to save a document in a shared folder and retrieve this to continue working on it. <b>Computer. On an iPad work could be shared by Airdrop or equivalent.</b></li> <li>Be able to organise their personal folder effectively for instance by <b>organising work into folders for each year at school</b></li> <li>Know how to change font size and style; include shapes and backgrounds and to use the Spellcheck function</li> <li>To be able to use sequence to create an effective presentation or video <b>Keynote, Powerpoint or iMovie.</b></li> <li>Be able to deliver a simple presentation to their peers</li> </ul>	<ul style="list-style-type: none"> <li>Be able to use a program to sequence, use conditionals and use a variety of inputs and outputs (<b>Scratch- steer an object by using keys /Microbit – show an image when shaken</b>)</li> <li>Be able to explain how their program works for instance by <b>annotating a print out</b></li> <li>Be able to modify their program and be able to predict the effects of any changes</li> <li>Know how to break sets of instructions into short steps to achieve goal. <b>For instance drawing repeated squares to make a pattern,</b></li> </ul>
<b>Y5</b> Builds on last years skills	<ul style="list-style-type: none"> <li>Know the risks posed to them by using Social Media, including understanding that people may not be who they say they are.</li> <li>Know that it is irresponsible to share images of friends on-line without their permission.</li> <li>Know that a balance of online and offline activities is important to maintain good health.</li> <li>Know how to report concerns on-line.</li> <li>Effectively use a search engine to find multiple criteria using AND/OR to refine searches</li> <li>Know how to compare information from different websites and know that some sites may show bias</li> </ul>	<ul style="list-style-type: none"> <li>To be able to share their work from their personal folder to work collaboratively with others.</li> <li>Know how to use software to create an effective poster or leaflet.</li> <li>Be able to select the best program for the task.</li> <li>Using software know how to add data into a prepared spreadsheet to answer simple questions. <b>For instance using Excel</b></li> <li>Independently, prepare an effective presentation to show their learning to others which includes some elements of timing or sequence. <b>For instance in Keynote, Powerpoint, iMovie</b></li> </ul>	<ul style="list-style-type: none"> <li>Use customisation to change a working program to change its effect for instance <b>backgrounds and sprite in scratch</b>)</li> <li>Uses loops to achieve goals (<b>Scratch – shapes, letters</b>)</li> <li>Uses variables, conditional sentences (when/then), external triggers and loops to achieve set goals (<b>creating game in Scratch, an interactive slides in Powerpoint or Keynote for instance to create an interactive story, Creating a game in Kodu with a scoring system, Creating an electronic die with a Microbit</b>)</li> </ul>
<b>Y6</b> Builds on last years skills	<ul style="list-style-type: none"> <li>Know how to reduce the risks posed by using Social Media by managing their friends lists and privacy settings.</li> <li>Be able to maintain a healthy balance of online and offline activities and know that some activities may affect their emotional wellbeing.</li> <li>Know that it is illegal to post or view 'rude' images of children.</li> <li>Know that hacking or misusing someone else's account is illegal.</li> <li>Know that search results can be manipulated by sponsorship and advertising.</li> <li>Know how to validate information found through searches by checking more than one source.</li> <li>Know that some news is 'fake.'</li> </ul>	<ul style="list-style-type: none"> <li>Know how to use the main features of office software to produce suitable documents and presentations for an audience. <b>Microsoft Office or Apple suite or equivalent.</b></li> <li>Know how to edit a picture. <b>For instance in Paint.net</b></li> <li>Know how to create a simple formula in a spreadsheet to work out given mathematical tasks such as adding a set of numbers.</li> <li>to create and sequence a video, add sound effects, transitions and title/subtitles. <b>iMovie – much harder in Windows software.</b></li> <li>To be able to use two or more programmes to create a final piece of work. (eg, edit a picture before inserting into a document).</li> </ul>	<ul style="list-style-type: none"> <li>Use conditional sentences (when/then) to program objects (<b>Kodu, Scratch, Microbit</b>)</li> <li>As above but use mathematical expressions when constructing conditionals e.g. trigger winning when (If loops &gt;5 then...)</li> <li>Be able to explain what a program will do and accurately predict the effect of changes.</li> <li>Be able to reliably modify existing algorithms and code to change the effect of the program.</li> <li>Be able to make an efficient program by using an effective algorithm and techniques such as loops and procedures</li> </ul>