



Hummersea Primary School
Computing Curriculum Theme Progression Map



Curriculum Scope	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Computer Science	<p>I can show awareness of iPads in the setting.</p> <p>I can interact with the iPads with adults support.</p> <p>I can press buttons to explore sounds on iPads.</p> <p>I can explore how toys move in different ways e.g. buttons or flaps.</p>	<p>I can describe the actions I need to do to make something happen and begin to use the word, algorithm.</p> <p>I can give instructions to my friend and follow their instructions to move around as if we are robots.</p> <p>I can begin to predict what will happen for a short sequence of instructions.</p>	<p>I can tell you the order I need to do things to make something happen and talk about this as an algorithm.</p> <p>I can program a robot (Bee-Bot) and software (Bee-Bot app) to do a particular task by using precise instructions.</p> <p>I can use my knowledge of programming to look at my friend's program and tell you what will happen.</p>	<p>I can describe the algorithm I will need for a simple task.</p> <p>I can use the Scratch Jnr programming environment.</p> <p>I can put programming commands into a sequence to achieve a specific outcome (such as making a character move across the screen).</p> <p>I can keep testing my program and can recognise when I need to debug it.</p> <p>I can detect a problem in an algorithm which could result in unsuccessful programming.</p>	<p>I can create a background and sprite for a program (Scratch Jnr).</p> <p>I can use the 'repeat' (loop) command within a series of instructions.</p> <p>I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts.</p> <p>I know that I need to keep testing my program while I am putting it together.</p> <p>I can recognise an error in a program and debug it.</p>	<p>I can design a simple game (Hopscotch).</p> <p>I can use sound and movement to achieve an output.</p> <p>I can use conditional statements by using 'when' commands.</p> <p>I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program.</p> <p>I can use logical reasoning to detect and debug mistakes in a program.</p> <p>I use logical thinking, imagination and creativity to extend and improve my program.</p> <p>I can make a physical system move (<i>Sphero Robot</i>).</p>	<p>I can design my own game including sprites and backgrounds (Hopscotch).</p> <p>I can deconstruct a problem into smaller steps, recognising similarities to solutions used before.</p> <p>I can explain and program each of the steps in my algorithm.</p> <p>I can use a variable to create a score for my game.</p> <p>I can evaluate the effectiveness and efficiency of my algorithm while I continually test and debug the programs and algorithms.</p> <p>I can plan how I want a physical system to move and program it to move (<i>Sphero Robot</i>).</p>	
	<p>I can explore the interactive whiteboard.</p> <p>I can turn on the iPad and navigate with adult support.</p> <p>To follow and act out simple instructions (real life algorithms).</p>	<p>I can press the buttons in the correct order to make my Bee-Bot do what I want.</p>	<p>I can use the word debug when I correct mistakes when I program or watch a program execute.</p>					
	<p>I can explore how to operate activities on the interactive whiteboard.</p> <p>I can turn on the iPad and navigate using the home button.</p> <p>I can start to explore how that instructions need to go in the correct order e.g. making a sandwich (real life algorithms).</p> <p>I can start to explore how to use a Bee-Bot.</p>							



Information Technology	<p>I can start to explore listening to music using devices e.g. iPad, laptop, speaker.</p>	<p><u>Creating Media</u></p> <p>I can create digital artwork (art set / pic collage).</p> <p>I can save and retrieve my digital work.</p> <p>I can begin to use the keyboard on my device to enter text.</p>	<p><u>Creating Media</u></p> <p>I can create digital content which includes sound (garageband).</p> <p>I can organise and manipulate sounds to create a final piece.</p> <p>I can save and open files on the device I use.</p> <p>I can evaluate my work.</p> <p>I can use the keyboard on my device to add, delete and space text for others to read.</p>	<p><u>Creating Media</u></p> <p>I can save images from the internet or take photos for a purpose.</p> <p>I can use the print screen function to capture an image.</p> <p>I can edit pictures using various tools (pic edu / photos / camera).</p> <p>I can evaluate my work and improve its effectiveness.</p> <p><u>Data Handling</u></p> <p>I can create a branching database (j2data).</p> <p>I can work with a partner to test my branching database.</p> <p>I can suggest real-world uses for branching databases.</p>	<p><u>Creating Media</u></p> <p>I can plan what I would like to happen in my animation (Stop Motion).</p> <p>I can take a series of pictures to form an animation.</p> <p>I can move items within my animation to create movement on playback.</p> <p>I can edit/improve my animation.</p> <p>I can evaluate my work and identify areas for improve for its effectiveness.</p> <p><u>Data Handling</u></p> <p>I can name some benefits of using a computer to create charts (j2data/numbers).</p> <p>I can collect data.</p> <p>I can suggest how to structure my data.</p> <p>I can enter data into simple spreadsheet.</p>	<p><u>Creating Media</u></p> <p>I can plan and capture videos for a purpose.</p> <p>I can use text, photo, sound and video to create a video project (iMovie / Apple Clips).</p> <p>I can trim and arrange clips and images.</p> <p>I can add titles, transitions and special effects.</p> <p>I can export my video project.</p> <p>I can review and improve my own work and support others to improve their work.</p> <p><u>Data Handling</u></p> <p>I can collect data (j2data/numbers).</p> <p>I can input data into a spreadsheet and export the data in a variety of ways: charts, bar charts, pie charts (j2data/Numbers).</p> <p>I can analyse and evaluate my data through the use of the exported data.</p>	<p><u>Creating Media</u></p> <p>I can talk about audience, atmosphere and structure when planning a particular outcome.</p> <p>I can confidently identify the potential of unfamiliar technology to increase my creativity.</p> <p>I can combine a range of media, recognising the contribution of each to achieve a particular outcome.</p> <p>I can explain why I select a particular online tool.</p> <p>I can evaluate the effectiveness of my own work and the work of others.</p> <p><u>Data Handling</u></p> <p>I can collect data from multiple sources and input it into a spreadsheet (numbers).</p> <p>I can use simple formulae to solve calculations including =sum.</p> <p>I can edit and format different cells in a spreadsheet.</p> <p>I can analyse and evaluate the effectiveness of my formulae.</p>
	<p>I can start to look at the difference between photographs and videos.</p> <p>I can start to explore using a painting app (SketchesSchool) to make marks with adult support.</p> <p>I can explore touch screen games with adult support.</p>	<p>I can evaluate my work.</p>	<p>I can evaluate my work.</p>	<p>I can evaluate my work and improve its effectiveness.</p>	<p>I can evaluate my work and identify areas for improve for its effectiveness.</p>	<p>I can review and improve my own work and support others to improve their work.</p>	<p>I can explain why I select a particular online tool.</p>
	<p>I can take a picture using the camera on the iPad.</p> <p>I can use a painting app to make marks (SketchesSchool).</p> <p>I can play a touch screen games independently.</p> <p>I can use a 360 image with adult support.</p>						



	<p>I can start to show awareness of different forms of technology e.g. iPads, interactive screens within the setting.</p>	<p><u>Computer systems and networks</u></p> <p>I know what a digital device is.</p> <p>I can identify some examples of information technology / digital devices which can be found at home and in the classroom.</p> <p>I can use links to websites to find information (QR codes).</p>	<p><u>Computer systems and networks</u></p> <p>I can identify examples of information technology and digital devices in the school and community.</p> <p>I can tell you why we use technology in the classroom, at home or in the community.</p> <p>I can identify benefits of using technology.</p>	<p><u>Computer systems and networks</u></p> <p>I can tell you some ways to communicate with others online.</p> <p>I can describe the World Wide Web as the part of the Internet that contains websites.</p> <p>I can use search tools to find and use an appropriate website.</p>	<p><u>Computer systems and networks</u></p> <p>I can tell you whether a resource I am using is on the internet or my own device.</p> <p>I can identify key words to use when searching safely on the World Wide Web.</p> <p>I think about the reliability of information I read on the World Wide Web.</p>	<p><u>Computer systems and networks</u></p> <p>I can use an online communication / collaboration tool for a purpose (e.g. Padlet).</p> <p>I can use a search engine to find appropriate information and check its reliability.</p> <p>I can describe the different parts of a webpage.</p>	<p><u>Computer systems and networks</u></p> <p>I can tell you the Internet services I need to use for different purposes.</p> <p>I can describe how information is transported on the Internet.</p> <p>I can talk about the way search results are selected and ranked.</p>
	<p>I can role play using technology in the provision e.g. phones/iPods.</p>	<p><u>Online Safety</u></p> <p>I can identify some pieces of personal information.</p> <p>I can talk about why it's important to be kind and polite.</p> <p>I can tell an adult when I see something unexpected or worrying online (e.g. pop ups, purchasing options etc).</p>	<p>I can make basic searches on the internet (kiddle).</p> <p><u>Online Safety</u></p> <p>I can explain why I need to keep my password and personal information private.</p>	<p>I can type in a URL to find a website.</p> <p><u>Online Safety</u></p> <p>I can talk about what makes a secure password and why they are important.</p> <p>I can explain examples of 'good' and 'bad' behaviour online.</p>	<p>I can tell you how to check who owns photos, text and clipart.</p> <p><u>Online Safety</u></p> <p>I can recognise social networking sites and social networking features built into other things (such as online games and handheld games consoles).</p>	<p><u>Online Safety</u></p> <p>I can judge what sort of privacy settings might be relevant to reducing different risks.</p> <p>I can explain why and how to be a good online citizen and friend.</p>	<p>I can tell you about copyright and acknowledge the sources of information that I find online.</p> <p>I can select an appropriate tool to communicate and collaborate online.</p>
<p>Digital Literacy</p>	<p>I can start to explore internet safety.</p> <p>I know to talk to somebody if I feel worried whilst using technology.</p> <p>I can talk about how I can use the internet to find things out.</p> <p>I can explore how to add sound buttons on an iPad.</p> <p>I can start to explore QR codes with adult support.</p>	<p>I can agree and follow sensible e-Safety and iPad rules.</p>	<p>I can identify what to do when I'm concerned/worried about something I have seen on the internet or on a digital device.</p> <p>I can talk about why it is important to be kind and polite online.</p> <p>I am starting to understand that other people have created the information I use on the internet and digital devices.</p>	<p>I understand how 'bad' behaviours can make people feel.</p> <p>I can protect my personal information when I do different things online.</p> <p>I can recognise the safety features of websites as well as reporting concerns to an adult.</p> <p>I ask an adult before downloading files and games from the Internet.</p>	<p>I can identify dangers when presented with scenarios, social networking profiles, etc.</p> <p>I can explain examples of 'good' and 'bad' behaviour online.</p> <p>I know that anything I post online can be seen by others.</p> <p>I know which websites and games are appropriate for my age and those which are not.</p> <p>I can talk about why I need to ask a trusted adult before downloading files and games from the Internet.</p> <p>I understand the need to comment positively and respectfully online.</p>	<p>I can explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult.</p> <p>I know that anything I post online can be seen, used and may affect others.</p> <p>I can discuss the importance of choosing an age-appropriate website or game.</p>	<p><u>Online Safety</u></p> <p>I can find report and flag buttons in commonly used sites and name sources of help (Childline, Cybermentors, etc).</p> <p>I can discuss scenarios involving online risk.</p> <p>I can act as a role model for younger pupils.</p> <p>I can explain the consequences of sharing too much about myself online.</p> <p>I can explain the consequences of spending too much time online or on a game.</p> <p>I can explain the consequences to myself and others of not communicating kindly and respectfully.</p> <p>I understand how some people negatively behave online (e.g. bullying, trolling).</p>



Hummersea Primary School
Computing Curriculum Theme Progression Map



					I understand the risks of talking to people online who I have never met.		
--	--	--	--	--	--	--	--