## **Ebchester CE Primary School**

## Progression of Learning – Computing Upper KS2



By the end of KS2			
	Breadth of Study	Knowledge and Skills	
Online Safety and Digital Literacy	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content  use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	<ul> <li>Year 5</li> <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 online without their permission.</li> <li>Understand what cyberbullying is and how they can help to prevent it.</li> <li>Know how to report concerns online and on apps.</li> <li>Know how to compare information from different websites and know that some sites may show bias.</li> <li>Know the risks of sharing personal information including location e.g. snapmaps.</li> <li>Year 6</li> <li>Know how to reduce the risks posed by using Social Media by managing their friends lists and privacy settings.</li> <li>Understand the rights and responsibilities they have when using Social Media apps.</li> <li>Understand the impact of their digital footprint on their own future.</li> <li>Know how to screenshot worrying content/ to report bullying online or on apps.</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>	
Information Technology	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	<ul> <li>Year 5</li> <li>To be able to share their work from their personal folder to work collaboratively.</li> <li>Know how to use publisher templates to create an effective brochure or leaflet.</li> <li>To be able to use two or more programmes to create a final piece of work (e.g. edit a picture before inserting into a document).</li> <li>Know how to add data into a prepared spreadsheet to answer simple questions.</li> <li>Independently, prepare an effective presentation to show their learning to others which includes elements of timing and sequence.</li> </ul>	

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	<ul> <li>Year 6</li> <li>Know how to use the main features of office software to produce suitable documents and presentations for an audience.</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 PowerPoint with hyperlinks.</li> <li>Year 5</li> <li>Uses loops and IF statements to achieve goals (Scratch – shapes, letters)</li> <li>Uses variables, external triggers to achieve set goals (creating game in Scratch or Kodu and keeping a score).</li> <li>Can use a variety of outputs, e.g. changing a score in a game and playing a sound</li> <li>Be able to explain what a complex Scratch or Kodu program might do</li> <li>Can confidently explain how data is broken into packets and how packets are routed</li> </ul>
		<ul> <li>Year 6</li> <li>Use conditional sentences (when/then) to program objects.</li> <li>Use the broadcast command in Scratch to run additional code.</li> <li>Use a scoring system which uses a variable (e.g. a scratch game) to define winning conditions or programme a Microbit as a reaction timer.</li> <li>Be able to annotate a flowchart or screenshot (Scratch or Kodu) to explain how it works.</li> </ul>