

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Computer Science</b>	<ul style="list-style-type: none"> <li>Understand what algorithms are</li> <li>Create simple programs using Bee-bots and online software</li> <li>Give instructions following straight lines (forwards and backwards) including one turn at a time</li> </ul>	<ul style="list-style-type: none"> <li>Understand that algorithms are implemented as programs on digital devices</li> <li>Understand that programs execute by following precise instructions</li> <li>Explore what happens when sequences are changed and debug simple programs</li> <li>Use logical reasoning to predict the behaviour of simple programs</li> </ul>	<ul style="list-style-type: none"> <li>Write programs that accomplish specific goals</li> <li>Use sequence in programs</li> <li>Work with various forms of input</li> <li>Work with various forms of output</li> <li>Begin to use block coding to control an object or character in software</li> </ul>	<ul style="list-style-type: none"> <li>Design programs that accomplish specific goals</li> <li>Design and create programs</li> <li>Debug programs that accomplish specific goals</li> <li>Use repetition in programs</li> <li>Use conditional statements when block coding such as 'when....'</li> <li>Control or simulate physical systems</li> <li>Use logical reasoning to detect and correct errors in programs</li> <li>Appreciate how search results are selected</li> </ul>	<ul style="list-style-type: none"> <li>Solve problems by decomposing them into smaller parts</li> <li>Use selection in programs</li> <li>Work with variables</li> <li>Use external triggers and infinite loops to control objects when coding</li> <li>Use logical reasoning to explain how some simple algorithms work</li> <li>Use logical reasoning to detect and correct errors in algorithms</li> <li>Understand computer networks, including the internet</li> <li>Appreciate how search results are ranked</li> </ul>	<ul style="list-style-type: none"> <li>Design and write programs to solve problems</li> <li>Use sequences, repetition, inputs, variables and outputs in programs</li> <li>Detect and correct errors in programs</li> <li>Understand uses of networks for collaboration &amp; communication</li> <li>Be discerning in evaluating digital content</li> <li>Understand computer networks, including the internet</li> <li>Appreciate how search results are ranked</li> </ul>
<b>Working above the expected standard</b>	<ul style="list-style-type: none"> <li>Analyse where bugs are in their program and create a solution</li> </ul>	<ul style="list-style-type: none"> <li>Analyse the efficiency of algorithms</li> </ul>	<ul style="list-style-type: none"> <li>Create their own simulations of a simple physical system on screen</li> </ul>	<ul style="list-style-type: none"> <li>Design, create and debug a program using a block language to a given brief, including simple interaction</li> </ul>	<ul style="list-style-type: none"> <li>Create their own simple computer control application</li> </ul>	<ul style="list-style-type: none"> <li>Design, write and debug (analyse) own computer control application, using interactive development to make improvements.</li> </ul>
<b>Information Technology</b>	<ul style="list-style-type: none"> <li>Use technology purposefully to create digital content</li> <li>Use technology purposefully to organise digital content</li> <li>Use technology purposefully to retrieve digital content</li> </ul>	<ul style="list-style-type: none"> <li>Use technology purposefully to organise digital content</li> <li>Use technology purposefully to manipulate digital content</li> <li>Use technology purposefully to retrieve digital content</li> </ul>	<ul style="list-style-type: none"> <li>Use search technologies effectively</li> <li>Use a variety of software to accomplish given goals</li> <li>Collect information</li> <li>Design and create content</li> <li>Present information</li> </ul>	<ul style="list-style-type: none"> <li>Select a variety of software to accomplish given goals</li> <li>Select, use and combine internet services</li> <li>Design and create content</li> <li>Collect and present data</li> <li>Present information</li> </ul>	<ul style="list-style-type: none"> <li>Combine a variety of software to accomplish given goals</li> <li>Select, use and combine software on a range of digital devices</li> <li>Analyse information</li> <li>Evaluate information</li> <li>Collect and present data</li> <li>Present information</li> </ul>	<ul style="list-style-type: none"> <li>Combine a variety of software to accomplish given goals</li> <li>Select, use and combine software on a range of digital devices</li> <li>Create data and begin to analyse data</li> <li>Evaluate data with reasoning</li> <li>Design and create systems</li> <li>Choose from a range of software to best present information</li> </ul>
<b>Working above the expected standard</b>	<ul style="list-style-type: none"> <li>Use digital technology to organise, store and retrieve content</li> <li>Create and edit original content</li> </ul>	<ul style="list-style-type: none"> <li>Show some understanding that different types of information are all stored in a digital format on</li> </ul>	<ul style="list-style-type: none"> <li>Use and combine a range of programs on a computer.</li> <li>Design and create content on a computer in</li> </ul>	<ul style="list-style-type: none"> <li>Use and combine a range of programs on multiple devices.</li> <li>Design and create content on a computer in</li> </ul>	<ul style="list-style-type: none"> <li>Select, use and combine a range of programs on multiple devices.</li> <li>Design and create programs on a</li> </ul>	<ul style="list-style-type: none"> <li>Show some understanding of the differences between, and relative merits of, different</li> </ul>

	using digital technology.	<p>computers.</p> <ul style="list-style-type: none"> <li>• Create and edit original content for a given purpose using digital technology and paying attention to the intended audience.</li> </ul>	response to a given goal.	response to a given goal, paying attention to the needs of a known audience.	computer in response to a given goal and paying attention to the needs of a known audience.	<p>applications, operating systems and hardware.</p> <ul style="list-style-type: none"> <li>• Design and create systems in response to a given goal, paying attention to the needs of a known audience.</li> </ul>
<b>Digital Learning</b>	<ul style="list-style-type: none"> <li>• Use technology safely</li> <li>• Keep personal information private</li> <li>• Recognise common uses of information technology beyond school and encountered in everyday life</li> </ul>	<ul style="list-style-type: none"> <li>• Use technology respectfully</li> <li>• Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies</li> <li>• Use websites and show awareness of how to manage content (back button, home button)</li> </ul>	<ul style="list-style-type: none"> <li>• Use technology responsibly</li> <li>• Identify a range of ways to report concerns about contact</li> <li>• Use websites and manage common features (hyperlinks, playing video, sharing webpages)</li> <li>• Begin to show an understanding of URLs</li> </ul>	<ul style="list-style-type: none"> <li>• Use technology responsibly</li> <li>• Understand the opportunities computer networks offer for communication</li> <li>• Identify a range of ways to report concerns about content</li> <li>• Use a range of search engines and understand why results may vary</li> </ul>	<ul style="list-style-type: none"> <li>• Use technology responsibly</li> <li>• Understand the opportunities computer networks offer for collaboration</li> <li>• Be discerning in evaluating digital content</li> <li>• Show an awareness of the need for accuracy to search effectively</li> <li>• Recognise acceptable/unacceptable behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• Use technology responsibly</li> <li>• Understand the opportunities computer networks offer for collaboration</li> <li>• Be discerning in evaluating digital content</li> <li>• Show an understanding of how filtering and monitoring tools affect their use of the internet and vary results</li> </ul>
<b>Working above the expected standard</b>	<ul style="list-style-type: none"> <li>• Keep safe and show respect to others while using digital technology.</li> <li>• Start to understand what information about themselves should be kept private.</li> </ul>	<ul style="list-style-type: none"> <li>• Stay safe and act respectfully and responsibly when using digital technology.</li> <li>• Have a range of strategies for dealing with concerns over content or contact online.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate that they can act responsibly when using computers.</li> <li>• Understand the difference between acceptable and unacceptable behaviour when using digital technology.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate that they can act responsibly when using the internet.</li> <li>• Discuss the consequences of particular behaviours when using digital technology.</li> </ul>	<ul style="list-style-type: none"> <li>• Show that they can think through the consequences of their actions when using digital technology.</li> <li>• Identify principles underpinning acceptable use of digital technologies.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider critically some of the wider implications of the use of digital technology.</li> <li>• Consider questions of ethics and morality in relation to digital technology.</li> </ul>