



## Computing Skills Progression

Year 1	Year 2
<ul style="list-style-type: none"><li>• I understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</li><li>• I can create and debug simple programs.</li><li>• I can use logical reasoning to predict the behaviour of simple programs.</li><li>• I recognise common uses of information technology beyond school.</li><li>• I use technology purposefully to create, organise, store, manipulate and retrieve digital content.</li><li>• I can use technology safely and respectfully, keeping personal information private; identify where to go for help and support when I have concerns about content or contact on the internet or other online technologies.</li></ul>	<ul style="list-style-type: none"><li>• I understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</li><li>• I can create and debug simple programs.</li><li>• I can use logical reasoning to predict the behaviour of simple programs.</li><li>• I can use search engines to locate information, understanding what to do if I find inappropriate content.</li><li>• I recognise common uses of information technology beyond school.</li><li>• I use technology purposefully to create, organise, store, manipulate and retrieve digital content.</li><li>• I can receive and send emails.</li><li>• I can use cameras and other technology to take and edit photos.</li><li>• I can use technology safely and respectfully, keeping personal information private; identify where to go for help and support when I have concerns about content or contact on the internet or other online technologies.</li></ul>



## Computing Skills Progression

Year 3	Year 4
<ul style="list-style-type: none"><li>• I can design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts.</li><li>• I can use sequence in programs; work with variables and various forms of input and output.</li><li>• I can use logical reasoning to detect and correct errors in algorithms and programs.</li><li>• I can select, use and combine a variety of software to design and create content that accomplishes given goals, including presenting information.</li><li>• I can 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.</li><li>• I can work with various forms of input and output.</li><li>• I understand computer networks, including the internet; how they can provide multiple services.</li><li>• I can use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li></ul>	<ul style="list-style-type: none"><li>• I can design, write and debug programs that accomplish specific goals.</li><li>• I can use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</li><li>• I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</li><li>• I understand computer networks, including the internet; and the opportunities they offer for communication and collaboration.</li><li>• I can be discerning in evaluating digital content.</li><li>• I can 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.</li><li>• I can use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour. I can identify a range of ways to report concerns about content and contact.</li><li>• I can solve problems by decomposing them into smaller parts.</li><li>• I can use search technologies effectively. I can appreciate how results are selected and ranked, and be discerning in evaluating digital content.</li></ul>



## Computing Skills Progression

Year 5	Year 6
<ul style="list-style-type: none"><li>• I can research, plan and draft digital content</li><li>• I can select, use and combine a variety of software/websites to create blogposts</li><li>• I can use technology safely, respectfully and responsibly</li><li>• I can recognise acceptable/unacceptable behaviour</li><li>• I can identify a range of ways to report concerns about content and contact.</li><li>• I have become discerning in evaluating digital content.</li><li>• I have become familiar with blogs as a medium and a genre of writing</li><li>• I can create a sequence of blog posts on a theme incorporate additional media</li><li>• I can comment on the posts of others</li><li>• I can develop a critical, reflective view of a range of media, including text.</li><li>• I can generate ideas and plan different levels of a computer game</li><li>• I can create original artwork and sound for a game</li><li>• I can generate sequence, selection repetition and variables in code</li><li>• I can test, detect and correct errors in their computer game</li><li>• I can use se iterative development techniques (making and testing a series of small changes) to improve my game.</li><li>• I can assess the work of others and debug errors in their code develop an appreciation of the links between geometry and art</li><li>• I can become familiar with the tools and techniques of a vector graphics package and terrain rendering tools</li><li>• I can develop an understanding of turtle graphics experiment with the tools available, refining and developing my work as I apply my own criteria to evaluate it and receive feedback from my peers</li><li>• I can develop awareness of computer-generated art, in particular fractal-based landscapes.</li><li>• I use research skills to discern appropriate information and content from internet</li><li>• I understand some elements of how search engines select and rank results</li><li>• I can discuss and question reliability and plausibility of content found online.</li><li>• I can develop and refine my ideas and text collaboratively</li><li>• I can develop my understanding of e-safety and responsible use of technology.</li></ul>	<p>Digital literacy</p> <ul style="list-style-type: none"><li>• I understand the importance of using technology safely, respectfully and responsibly</li><li>• I can identify a range of ways to report concerns about content and contact</li><li>• I appreciate how search engines results are ranked</li><li>• I am discerning in evaluating digital content</li><li>• I understands the basic workings of computer networks including the internet</li><li>• I understands the opportunities computer networks offer for collaboration</li></ul> <p>Information technology</p> <ul style="list-style-type: none"><li>• I can combine a variety of software to accomplish given goals on a range of digital devices</li><li>• I can analyse and evaluate information and data</li><li>• I can design and create systems that accomplish given goals</li></ul> <p>Computer Science</p> <ul style="list-style-type: none"><li>• I can work with variables</li><li>• I can solve problems in writing programs by decomposing them into smaller parts</li><li>• I can use selection and repetition in programs</li><li>• I can simulate physical systems</li><li>• I can use logical reasoning to explain how some simple algorithms work and detect and correct errors in them</li></ul>



## Computing Skills Progression

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| <ul style="list-style-type: none"><li>• I understand the work of architects, designers and engineers working in 3D</li><li>• I can develop familiarity with a simple CAD (computer aided design) tool Sketchup</li><li>• I can develop spatial awareness by exploring and experimenting with a 3D virtual environment</li><li>• I can develop greater aesthetic awareness.</li><li>• I can revisit and review judgement on quality of and reliability of content found online</li><li>• I can revisit concepts of page ranking for search engines</li><li>• I can use and be familiar with semaphore and Morse code</li><li>• I understand the need for private information to be encrypted and how it is encrypted</li><li>• I can encrypt and decrypt messages in simple ciphers</li><li>• I appreciate the need to use complex passwords and to keep them secure</li><li>• I have some understanding of how encryption works on the web.</li></ul> |  |
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