

Computing Non Negotiables

Technology threads	Pos /Technology Strand	Year 4
Programming	<p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<ul style="list-style-type: none"> • Create and edit procedures • Evaluate and improve programs • Use if..... • Break a problem into smaller parts in order to build a procedure/program • Refine programs to improve efficiency • Use repeat to simplify programs • Use simple sensing to log a change • Understand and use input and output • Experiment with variables • Plan an algorithm to achieve a specific outcome • Step through program sequences to identify errors • Use a range of resources for programming
Data	<p>select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<ul style="list-style-type: none"> • Use technology to edit and organise ideas, collaborate and share ideas to achieve an agreed outcome • Use online spaces to share and collaborate • Select appropriate resources to present work • Evaluate own work and modify accordingly • Use appropriate tools to present data • Pose questions and collect specific data • Plan and create a database
Understanding	<p>understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration</p> <p>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>	<ul style="list-style-type: none"> • Differentiate storage areas for video, images, sound, text • Using links to the internet and the network • Begin to understand that information found online may not be accurate • Investigate a variety of sources for obtaining information and understand copyright. • Use a folder structure on a range of storage
Using Effectively	<p>select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and</p>	<ul style="list-style-type: none"> • Use a range of search techniques in order to acquire information

	<p>presenting data and information</p> <p>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>	<ul style="list-style-type: none"> • Evaluate results and information presented
<p>Keeping Safe</p>	<p>use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour</p>	<ul style="list-style-type: none"> • Develop a secure password • Keep personal information safe by hiding identity • Understand the procedures for reporting online incidents, share rules with others • Understand how to protect against viruses • Know who can view online information