Computing Non Negotiables

Technology threads	Pos /Technology Strand	Year 4
Programming	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	• 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	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.	• 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	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 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	• 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	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. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	• Use a range of search techniques in order to acquire information • Evaluate results and information presented
Keeping Safe	use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour	• 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