Year 9 Ways of Doing- Computing

	Creative	Computational	Technical
Exceeding	• Students present their work in creative ways demonstrating a high degree of originality • Students clearly demonstrate evidence of planning in their work, resulting in excellent programs and creative digital artefacts • Presentation of student work shows a high level of ingenuity • Students are able to create projects, which can be used across multiple platforms and devices • Students produce outstanding designs when creating their webpages • Students are able to employ their programming skills in a variety of ways, including physical and robotics programming	• Students understand how iteration and selection can increase the efficiency of their programs • Students are able to expand on the functionality of their programs without support. They always demonstrate 'computational thinking' when writing their programs • Students understand how programming techniques may affect the computer hardware • Students demonstrate a secure understanding of binary data and the importance of it in computer systems • Students understand the use of data storage in programming • Students independently investigate programming procedures to control physical output • Students are able to select the most appropriate language and environment to perform a task in a project-based environment - they support others in their work	• Students are able to create suitable folder structures using cloud storage • Students are able to appropriately name files without being reminded by their teacher • They can collaborate, edit and share documents with others without prompts • Students are role models when online, reflecting their own real-life behaviour • Students know how to, and advise others of how to protect their online identity • Students are able to recognise inappropriate content on the internet and how to report it • Students are able to collect, analyse and manipulate data to produce the desired result • Students know how to and can demonstrate to others how to reference their work - they do this independently
Expected	• Students present their work in creative ways demonstrating a high degree of originality • Students clearly demonstrate evidence of planning in their work, resulting in excellent programs and creative digital artefacts • Students' presentation of work is good • Students are able to create projects, which are used across multiple platforms and devices • Students produce excellent designs when creating their webpages • Students are able to employ their programming skills in a variety of ways, including physical and robotics programming, with teacher guidance	• Students understand how iteration and selection can increase the efficiency of their programs • Students are able to expand on the functionality of their programs without support. They always demonstrate 'computational thinking' when writing their programs • Students understand how programming techniques may affect computer hardware • Students demonstrate a secure understanding of binary data and the importance of it in computer systems • Students understand the use of data storage in programming • Students independently investigate programming procedures to control physical output • With teacher guidance, students select the most appropriate language on a project they decide	• Students are able to create suitable folder structures using cloud storage • Students are able to appropriately name files without being reminded by their teacher • Students are fully aware of the risks of online communication methods and know to tell an appropriate adult if they are at risk • Students know how to, and advise others on, how to protect their online identity • Students are able to recognise inappropriate content on the internet and how to report it • Students are able to collect data, and understand how to interpret results to draw informed conclusions
Developing	• Students present their work in creative ways demonstrating a high degree of originality • Students clearly demonstrate evidence of planning in their work, resulting in excellent programs and creative digital artefacts • Students produce work which is innovative and selects the most appropriate tool to present • Students are able to create projects, which are used across multiple platforms and devices	• Students are able to use iteration and selection in their programs • Students are able to expand on the functionality of their programs without support • Students routinely break problems down independently and methodically • Students demonstrate a secure understanding of binary data and the importance of it in computer systems • Students understand the use of data storage in programming • Students independently investigate programming procedures to control physical output • With teacher guidance, students select the most appropriate language on a project they are given	• Students are able to create suitable folder structures using cloud storage • Students are able to appropriately name files without being reminded by their teacher • Students are fully aware of the risks of online communication methods and know to tell an appropriate adult if they are at risk • Students know how to, and advise others on, how to protect their online identity • Students are able to recognise inappropriate content on the internet and how to report it • Students are able to collect data, and understand how to interpret results to draw informed conclusions
Supported	• Students present their work in creative ways with originality • Students often demonstrate evidence of planning in their work, resulting in excellent programs and creative digital artifacts • Students often produce work which is innovative and can select appropriate tools, sometimes with teacher guidance • Students are able to create projects, which can be used across multiple devices	• Students can demonstrate some debugging methods but may require peer/teacher support • Students are able to expand on the functionality of their programs with prompts • Students usually break problems down into smaller problems • Students understand how to manipulate binary data • Students understand the use of data storage in programming • With teacher guidance, students are able to investigate programming procedures to control physical output • Students require comprehensive instructions and guidance to be able to perform a programming project	• Students are able to create suitable folder structures using cloud storage • Students are able to appropriately name files with guidance • Students are mostly aware of the risks of online communication methods and know to tell an appropriate adult if they are at risk • Students know how to protect their online identity • Students are able to recognise inappropriate content • Students are able to collect data, and understand how to interpret results to draw conclusions