The Hastings Academy: Grade Descriptors for use at Key Stage 3 – ICT

Yr 7 Expectations	Reporting	Yr 8 Expectations	Reporting	Yr 9 Expectations	Reporting	**Assessment Objective** **Computing** *Analysis (A), Systems (S), Development (D). Programming (P), Modelling (M) ICT*	**Assessment Objective** **ICT**
				Mastered	Well Above Expectations	• Be able to analyse real world problems and develop low-level and high-level plans for a solution (A) • Be able to show how elements of real life can be represented in programs and the difficulties that sometimes exist when doing this (S) • Make sure that the programs you develop have been fully tested (test plan). Suggest and implement improvements (D) • Be able to create your own relational databases and use them in your programs and be able to find, understand and use techniques for specific tasks (P) • Be able to create an accurate, detailed model for a complex problem (M)	• Learners recall, select and communicate (informed discussions) a thorough knowledge and understanding of a broad range of ICT including the impact of its social and commercial use. • They apply knowledge, understanding and skills to a variety of situations, selecting and using a range of ICT tools efficiently to solve problems and produce effective ICT-based solutions. • They manipulate and process data efficiently and effectively. They effectively model situations, sequence instructions, interpret information and creatively explore and develop ideas. They work systematically and understand and adopt safe, secure and responsible practices. • They systematically analyse problems, identifying needs and opportunities. They critically analyse and evaluate the way they and others use ICT. They iteratively review their work and make improvements where appropriate. They use ICT to communicate effectively, demonstrating a clear sense of purpose and audience
		Mastered	Well Above Expectations	Extended	Above Expectations	Be able to analyse real world problems and develop low-level and high-level plans for a solution (A) • Be able to show how elements of real life can be represented in programs and the difficulties that sometimes exist when doing this (S) • Make sure that the programs you develop have been written so they are unlikely to crash or cause errors (D) • Be able to create your own relational databases and use them in your programs and be able to find, understand and use techniques for specific tasks (P) • Be able to create an accurate model for a complex problem (M)	• Learners recall, select and communicate a good knowledge and understanding of ICT, including the impact of its social and commercial use. • They apply knowledge, understanding and skills in a range of situations, applying ICT tools appropriately to address problems and provide ICT-based solutions. They select information and process data. Make use of feedback to enhance their systems. • They model situations, sequence instructions, select and use information, and explore ideas. They work using safe, secure and responsible practices. • They analyse ways of addressing needs using ICT. They review and evaluate the way they and others use ICT. They review their work and make improvements where appropriate. They use ICT to communicate, demonstrating consideration of purpose and audience

Mastered	Well Above Expectations	Extended	Above Expectations	Secure	Meeting Expectations	• Be able to define an outline of a solution in terms of functions and global variables (A) • Understand how instructions can be written efficiently and be able to describe efficiency of your program (S) • Be able to test the different modules of your programs as you are developing them, reflect on the results and then improve them (D) • Be able to write programs in a text based language like Python and be able to create your own data structures (P) • Be able to create a simple model for a complex problem (M)	• Use a range of software efficiently to solve a problem. • Use assessment criteria provided for them to refine their work as it develops. • Search databases to test ideas. • Develop spreadsheets to model. • Discuss the impact of ICT on society.
Extended	Above Expectations	Secure	Meeting Expectations	Approaching	Below Expectations	• Be able to take a problem and divide it in to its main sub-problems and show this as a diagram (A) • Understand how instructions are run inside a computer (S) • Be able to develop solutions for problems that are described to you by someone else (D) • Correctly use procedures and functions with parameters in your programs (P) • Be able to take solutions to one problem and adapt them for similar problems (M)	• Use a range of software to solve a problem • Create work for various audiences and purposes. • Have a strong awareness of how a spreadsheet works. • Use ICT safely and responsibly. • They respond to needs using ICT. They sometimes review and provide comments on the way they and others use ICT. They make simple modifications to their work in the light of progress. They use ICT to communicate, demonstrating limited awareness of purpose and audience.
Secure	Meeting Expectations	Approaching	Below Expectations	Developing		• Be able to take a problem and divide it in to its main sub-problems (A) • Understand how data, such as numbers, sound and images are physically stored on a computer system (S) • Be able to plan, create, test and reflect on a solution to a problem that a computer can solve (D) • Correctly use variables, lists and simple procedures in your programs (P) • Be able to recognise similarities between simple problems and the ways in which the can be solved (M)	• Learners recall, select and communicate a basic knowledge and understanding of aspects of ICT, including its use in the wider world. • They apply limited knowledge, understanding and skills to address simple problems and create basic solutions using ICT tools. • They select and present data and information, and use simple models and instructions. • They demonstrate some awareness of the need for safe, secure and responsible practices. • Discuss their use of using ICT and their observations of its use outside school.
Approaching	Below Expectations	Developing		Beginning	Well Below Expectations	• Understand what is meant by a computational problem (A) • Be able to explain why we must be accurate when working with computers (S) • Write sequences of instructions and data in a way that a computer will understand (D) • Use selection and repetition correctly in your programs (P) Be able to trace instructions using variables, selection and repetition and predict what the result will be (M)	• Create work combining text, images, sounds and other media. Obtained from various sources. • Show awareness of the audience of a piece of work. • They question how trustworthy the information they find is. Use digital communication methods to collaborate and understand the risks of using digital communication. • Plan a simple computer program and test it. • Use a spreadsheet to answer more complex questions. • Describe the benefits and drawbacks of using ICT for a task
Developing		Beginning	Well Below Expectations			• Be able to describe the goals of a given problem (A) • Understand that computer systems work step-by-step and can only do what we tell them (S) • Be able to create a sequence of instructions and improve it if necessary (D) • Be able to plan a sequence of instructions for something that you want to happen (P) • Be able to read a sequence of instructions and predict what the result will be (M)	• Search for information and save it. Use this information in their work, using ICT to develop and present it. • Write a very simple computer program to control a device, like a traffic light. • Use a spreadsheet that has been created for them to answer simple questions. • Describe how ICT is used outside school

Beginning	Well Below Expectations					• Be able to describe the given problem (A) • Understand that computer systems work and can only do what we tell them (S) • Be able to create a sequence of instructions (D) • Be able to plan a sequence of instructions for something that you want to happen (P) • Be able to read a sequence of instructions and predict what the result could be (M)	• Search for information and save it. Use this information in their work. • Create a piece of work using ICT tools. • Use a spreadsheet that has been created for them. • Recognise how ICT can be used outside school.