

KS3 Computing Assessment Grid Year 9

	Computational Thinking	Programming	Physical Computing	Using and Applying Technology	Digital Literacy
	Looking at a problem and how we can solve it.	Programming executes precise instructions.	Performs processes, calculations and operations.	Digital content can be represented in many forms.	Communicating safely and respectfully online.
Emerging	You can design solutions by decomposing a problem. You can recognise that different solutions exist for the same problems.	You can detect and correct simple semantic errors i.e.: debugging, in programs.	You understand the different parts of a computer and their uses and types of networks. You understand the main functions of the operating system.	You can demonstrate a limited variety of tools to create digital artefacts. You provide limited explanation for the target audience, genre, and purpose of digital artefacts.	You can explain how to protect online identity and privacy. You can self/peer assess the digital artefact You can identify the narrative and mise-en-scene of media products.
Developing	You can evaluate the effectiveness of algorithms and models. You can detect and correct errors i.e.: debugging, in algorithms/flowcharts.	You can use arithmetic operators, if statements, and loops within programs.	Describe the function of hardware components that make up computer systems. You can identify the different protocols e.g.: SMTP, POP, TCP/IP etc.	You can demonstrate a selection of software tools to create graphics. You can demonstrate the target audience, purpose and genre of a digital artefact.	You can provide a link between the narrative and the mise-en-scene for media products. You can explain the terms such as data protection, computer misuse, copyright, creative commons etc.
Secured	You can understand at least one key sort and one key search algorithm that reflect computational thinking.	You can develop programs that use procedures or functions. You understand the difference between 'while' loop and 'for' loop. You can convert denary to binary, binary to hexadecimal.	You can describe the role of the software components. You can explain the process of the CPU, Fetch, Decode, Execute. You can explain the relationships between resolution, colour depth and file size etc.	You can use a variety of editing software to manipulate images with justification, considering file format. You can describe the representation of the media products using examples.	You can design digital artefacts with appropriate validation routines to ensure trustworthiness of data. You are able to describe the consequences of inappropriate content and conduct.
Exceeded	You can understand uses of Boolean logic, truth tables for single gates.	You can design and write nested programs. You complete binary/addition.	You can explain Von Neumann architecture. You can explain WANs, and LANs.	You can demonstrate imaginative application of pre-production, production and post production skills.	You can explain and justify how the use of technology impacts on society.

		TERM 1	
		DATE	MARK
		END OF TERM	

		TERM 2	
		DATE	MARK
		END OF TERM	

		TERM 3	
		DATE	MARK
		END OF YEAR	

