Key Stage 3 Subject Assessment Grid			
Subject: Computer Science Year: 8 Unit: Computer Systems			
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can: • Understand the difference between computer hardware and application software. • Identify the different input and output devices. • Understand why computers are used.	Secure The student can: • Understand that computers can collect data using various input devices and sensors • Explain when a particular input/output device should be used. • Explain the different components to connect to a network. • Know a range of application software that can run on the same hardware. • Explain the advantages and disadvantages of a computer network.	Secure The student can: • Provide details explanation of the internal parts of a computer. • Provide details advice with justifications about technology related issues. • Able to carry out details self and peer assessments by reviwing work.
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
Subject: Computer Science Year: 8 Unit: Data Representation			
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can: • Recall the digital content can be represented in many forms. • Explain different types of data: text, number etc. • Know that digital computers use binary to represent all data	Secure The student can: • Know how bit patterns represent numbers and images • Convert numbers from binary to denary and vice versa. • Perform simple operations using bit patterns e.g. binary addition.	Secure The student can: • Perform binary multiplication and division • Explain how characters are stored in binary using ASCII • Be able to explain the limitations of ASCII and the need for Unicode.
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
Subject: Computer Science Year: 8 Unit: Web Development (HTML and CSS)			
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can: • Plan appropriate web design structure • Use HTML to create a simple page of information • Define a website • Use appropriate names for pages	Secure The student can: • Use and adapt HTML to add hyperlinks and different colouts • Create a website with no broken links or assets containing 2 pages minimum. • Use a range of appropriate assets for audience. • Use a consistent layout for each web page • Evaulate their finished website.	Secure The student can: • Research and apply different HTML coding to enhance web page. • Create a website with at least 3 pages which can be navigates between in a consistent and sensible manner. • Use internal and external hyperlinks which enhance the website. • Fully evaluate their own website. • Comparing own website to renowned websited such as the BBC to improve final product.
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
Subject: Computer Science Year: 8 Unit: Python Programming			
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
	Secure The student can: • Describe what algorithms are • Understand the a program written in a programming language needs to be translated to be executed by a machine.	Secure The student can: • Create a program with simple selection (if/else) • Know the different data types	Secure The student can: • Create programs that include multi-branch selection (if/elif/else) • Use iteration to control the flow of program execution

To be assessed as secure, students must achieve competence in all statements.	• Write simple python programs to display messages. • Write simple python programs that assign values to variables and receive keyboard inpput.	• Describe how iteration controls the flow of program execution. • Locate and correct simple syntax errors.	• Use variables as counters in iterative programs. • Apply casting to code to execute programs correctly • Combine iteration and selection to control the flow of program execution. • Confidently debug programs.
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
Subject: Computer Science	Year: 8	Unit: Cryptography	
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can: • Understand the term 'cyptography' • Identify 2 early methods of cryptography • Explain the reasons of encryption	Secure The student can: • Be able to explain the reasons of encryption including advantages and disadvantages • Research and investigate real life scenarios where cryptography was used • Explain the term 'cryptography' • To be able to extract information from a barcode • Explain how personal information is securely transmitted over the internet by using encryption methods	Secure The student can: • Confidently explain why companies encrypt their network with advantages and disadvantages • Understand the purpose and use of check digit • Understand how public and private keys are used as part of the encryption and decryption process • Explain how DRM makes use of encryption and authentication techniques
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps

Key Stage 3 Subject Assessment Grid			
Subject: Computer Science	Year: 8	Unit: Mobile App Development	
KS4 target direction	4	6	8
Advanced	Achieving aspects of pathway 6 competence statements	Achieving aspects of pathway 8 competence statements	Achieving outcomes beyond secure competence statements for pathway 8
To be assessed as secure, students must achieve competence in all statements.	Secure The student can: • Add at least one extra measurable success criterion to the list. • Create a basic outline of what is to be included on each screen. Little to no annotation. • Attempt to decompose the problem into more manageable steps. • Create a partially functional app and only meets some of the success criteria • Successfully use an event handler to perform an action triggers by the user.	Secure The student can: • Add sucess criteria to the list, most of which are relevant and measurable. Some criteria are subjective. • Create appropriate screen designs provided, both of which act as a guide to style and layout. • Fully decompose the problem into sensible steps. • App is mostly functional and meets most of the success criteria. • Successfully implement: event handling, variables and selection.	Secure The student can: • Has added success criteria to the list, all of which are relevant and measurable. • Create screen designs with full annotations to provide clear guidance on style, postions, ids and any linked events. • Fully decompose the problem into sensible steps. • App is fully functionsal and meets all of the success criteria. • Successfully implement and extended the project to include: event handling, variables, selection and iteration.
Developing	Mostly secure – one or more gaps	Mostly secure – one or more gaps	Mostly secure – one or more gaps
Foundation	Significant gaps	Significant gaps	Significant gaps