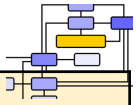
Yr 8.1 Assessment Grid- Advanced Binary



	Skill		*Knowledge*	
	Practical Skill Range and quality of ICT & programming skills and techniques	**Analysing and evaluating** Identifying areas for improvement and identifying where issues have developed and ways to resolve this. Both in their own work and others.	**Theory** Talking about Computational thinking and making IT connections in the real world .	**Computational thinking Level** Computational thinking allows us to take a complex problem, understand what the problem is and develop possible solutions. We can then present these solutions in a way that a computer, a human, or both, can understand.
Exceptional GCSE 8-9 in Y11	Fluent In: ● Can convert from Denary to Binary consistently, ensuring all calculations are correct ● Can convert from Binary to Denary consistently, ensuring all calculations are correct ● Can perform binary shifts consistently, ensuring all calculations are correct ● Can confidently Multiply or divide binary together	Fluent In: ● Justifying why binary shifts is important. ● Can confidently identify the links between how sound and images are stored as binary	Fluent In: ● Can define Binary, machine code, binary shifts and denary with confidence. ● Can confidently explain why binary is needed ● Using the correct terminology consistently ● Can name all logic gates and identify which gates have been used and why ● Understands the difference between analogue and digital ● Linking the use of these and esafety considerations consistently	Fluent In: ● Can discuss colour depth and how it is linked to binary which in turn relates to file size ● Can confidently describe how sound is stored as data, linking it to analogue and digital ● Can discuss what sample rate and resolution are and impacts these can have on sound quality
Higher GCSE 6-8 in Y11	Secure In: ● Can convert from Denary to Binary confidently ● Can convert from Binary to Denary confidently ● Can perform binary shifts confidently ● Can multiply and divide binary together but may need support	Secure In: ● Explaining to others the differences between a right and left binary shift ● Can identify how sound or images are stored as binary	Secure In: ● Can define Binary, machine code, binary shifts and denary with prompts ● Can explain why binary is needed but may need support. ● Using the correct terminology sometimes ● Can name all logic gates	SecureIn: . ● Can discuss colour depth and how it is linked to binary ● Can confidently describe how sound is storage as data ● Can explain what might affect the quality of a sound file but lacks terminology

			• Can define analogue and digital but struggles to link them together • Linking the use of these and esafety considerations consistently •	
Intermediate GCSE 4-6 in Y11	Growing In: • Can convert from Denary to Binary with guidance • Can convert from Binary to Denary with guidance • Can convert either a right or left binary shift with guidance • Can begin to multiply or divide binary together with support but struggle to understand the overflow error	Growing In: • With prompts can explain why Binary is important. • Explaining to others, with prompts the differences between a left and right binary shift • Can identify that sounds and images are stored as binary but cannot explain why	Growing In: • Can define either Binary, machine code, or denary. • They understand that binary is made up of 0s and 1s. • Using the correct terminology occasionally • Can name at least 2 logic gates • Linking the use of these and esafety considerations consistently	Growing In: • Can discuss colour depth and how it is linked to binary but needs prompts • Can identify that sound and images are stored as binary but lacks depth of understanding. • Can explain what might affect the quality of a sound file but needs support
Foundation GCSE 2-4 in Y11	Emerging In: • Can convert from Denary to Binary with support • Can convert from Binary to Denary with support • Can perform either a left or right binary shift with support	Emerging In: • With support can explain why Binary is important.	Emerging In: • Can define Binary or denary with guidance • They understand that binary is made up of 0s and 1s. • Using the correct terminology rarely • Can name at least 1 logic gate • Linking the use of these and esafety considerations rarely	Emerging In: • Can discuss colour depth and how it may affect how an image looks

Outstanding	Making outstanding progress relative to their starting point **(almost meeting expectations for next starting point)**
Above	Making more than expected progress relative to their starting point **(consistently meeting all expectations**)
Expected	Making expected progress relative to their starting point **(mostly meeting expectations for this starting point)**
Working towards	Working towards expected progress for their starting point **(below assigned starting point expectations consistently)**