Subject	Computing	Year Group		9	
	Unit 1	Unit 2		Unit 3	Unit 4
Scheme title	**Effecient Programming**	**Applying programming in physical systems**		**Asset Creation: Developing image creation skills**	**Applying Asset Creation in relation to a brief**
Knowledge in sequence	Introduction to turtle using Blockly. How to use Turtle in Python? How to use loops to program effeciently? How to use subroutines to program effeciently?	How to flash hardware? How to identify errors on hardware? How to program light, sound and movement using effecient programming techniques?		*Two units will be taught concurrently to deliver a blended theoretical and practical body of learning*. Develop digital artefacts that are fit for purpose and audience combining existing assets and creating new graphics and apply these to a working brief.	
Purpose of scheme	To explore how loops and subroutines can be used to solve problems in an effecient manner.	To explore how programming can be used to manipulate physical systems. To apply and consolidate sequence, selection and looping programming skills.		To develop image manipulation and asset creation skills.	Applying image manipulation and asset creation skills to a real world scenario.
Skills	Students can apply For loops To choose and implement effecient programming techniques such as loop and subroutines.	To be able to write, transfer and test programs for the Move:Motor robots. To choose and implement effecient programming techniques such as loop and subroutines.		Applying Image masks. Applying airbrushing and AI tools. Applying various image editing and manipulation tools to reimagine assets. Original image creation using vector graphics.	Students to be able to understand and break down a given brief. Students to select appropriate tools and assets to create a product.
Key words	Python Translator / Editor Syntax Sequence, selection, looping	Python Translator / Editor Syntax Sequence, selection, looping Flash		Rasterization, Marks, manipulation, cropping, trimming. vector.	Audience, purpose, asset.
End point	To be able to write programs with inputs, outputs and variables. To be able to fix syntax and logic errors. To be able to produce an effecient programming solution.	To be able to write programs with inputs, outputs and variables. To be able to fix syntax and logic errors. To be able to produce an effecient programming solution.		To be able to create, edit and manipulate images in Photoshop.	Imagine and create a solution to a client brief that will involve creativity and technical application. This could be a logo, album artwork, game desing concept.
Assessment Methods	Skills are teacher assessed.	End of unit assessment online. Key skills - teacher assessed		Skills are teacher assessed. A completed design project that demonstrates creativity and technical knowledge.	