Meden School Curriculum Planning							
Subject	Computing	**Year Group**	9	**Sequence No.**	MTP 1	**Topic**	Graphics

Retrieval	Core Knowledge	Student Thinking
What do teachers need to **retrieve** from students before they start teaching **new content**?	What **specific ambitious knowledge** do teachers need to teach students in this sequence of learning?	What real life examples can be applied to this sequence of learning to **develop our students' thinking, encouraging them to see the inequalities around them** and 'do something about them!'
Pupils' prior knowledge of binary representation of text, and binary to decimal conversion in other units which would help to reinforce their understanding of how image data can be represented. Students' proficiency with accessing programs and using different interfaces. Students' ability to save work and upload/download images.	This unit is an introduction to graphics and graphic file types. The unit explores how bitmap and vector images are represented and stored by the computer. There is also opportunities for pupils to practise skills in design, photo-editing and image manipulation using a suitable graphics package e.g. Pixlr X/E. **Core knowledge and application** Students understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits Students undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users Students create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability	Students learn about how to respond to an industry style brief and meet the requirements of a client. Students develop language related to image manipulation software which they then use confidently and can apply to class tasks but also to deconstruct media texts around them. Students are given opportunities to discuss the moral implications involved in image manipulation by analyzing real-world examples of where celebrities have been air-brushed or skin has been lightened for certain effects e.g. Beyoncé.

	At the end of this Unit all pupils should understand the knowledge of and be able to: Explain that bitmap images are made up of individual pixels Explain that in the case of a vector graphic, properties such as position, fill, stroke colour and dimensions are stored Create and manipulate a simple group of objects to form a logo design Change the saturation, brightness and contrast in an image Add text to a graphic Use a graphics package to create an artwork; for example, a movie poster Describe the characteristics of bitmap and vector graphics, state the advantages of each and give examples of situations in which each would be appropriate Use fonts consistently and carefully to convey a particular message or image Use white space effectively Use layers in the creation of an artwork Use the advanced facilities of a graphics package, for example to manipulate, cut out, and alter images Create a series of two or more posters in the same style, using a combination of layered images and fonts effectively to convey a message	Students have a clear understanding of how to upload an image and edit, refine, combine and add to it to create something new. This helps develop students' digital literacy skills. Students are given opportunities to present and review work of peers. They also create their own adverts/media products that they can share with peers.

	Tier 3 vocabulary associated with this unit include: Graphics Graphic file types Vector Bitmap Properties Scalable Analogous Complementary and monochromatic colour schemes Pixel Bit Byte, Dpi Gradient fill effects Saturation Brightness Contrast Resolution Layer White space	

	General knowledge taught/reviewed includes: • How to set up a folder and store work. • How to upload/download and save content to Pixlr as PNG, JPEG and PXZ files for future editing. • How to use Pixlr X and E to create and/or reimagine a pre-existing adverts/brand logo and turn it into something new. • To be able to email using the school email account • To be able to confidently use Microsoft Teams when needed to access and send work	