## Topic Area 4 – Distribution considerations

4.2 Properties and formats of media files	
Content	Notes on breadth and depth required
4.2.1 Image files:  The properties of digital static image files:  DPI/PPI resolution pixel dimension  Static image file formats: raster/bitmap vector uncompressed compressed	<ul> <li>To include: <ul> <li>Know what is meant by DPI/PPI</li> <li>How DPI/PPI relates to resolution and image quality</li> <li>The relationship between pixel dimensions and</li> <li>quality for different image uses</li> <li>Know examples of raster/bitmap and vector image files</li> <li>The properties and limitations of uncompressed and compressed (lossy, lossless) file formats</li> <li>The properties and limitations of raster/bitmap and vector static image file formats</li> <li>How file format choice relates to use and context</li> </ul> </li> </ul>
<ul> <li>4.2.2 Audio Files:</li> <li>The properties of digital audio files: <ul> <li>bit depth</li> <li>sample rate</li> </ul> </li> <li>Audio file formats: <ul> <li>uncompressed</li> <li>compressed</li> </ul> </li> </ul>	<ul> <li>Know what is meant by sample rate and bit depth</li> <li>How sample rate and bit depth relate to sound quality</li> <li>What audio compression is and how it affects quality</li> <li>The properties and limitations of uncompressed and compressed (lossy, lossless) file formats</li> <li>How file format choice relates to use and context</li> </ul>
4.2.3 Moving image files:  The properties of digital moving image files:  • frame rate • resolution (SD, HD, UHD, 4K, 8K)  Moving image files formats:  • animation • video • uncompressed • compressed	<ul> <li>To include:</li> <li>Know what is meant by frame rate</li> <li>Know what is meant by SD, HD, UHD, 4K, 8K</li> <li>How frame rate affects the quality of a product</li> <li>Know examples of digital video and animation files</li> <li>The properties and limitations of video and animation file formats</li> <li>The properties and limitations of uncompressed and compressed (lossy, lossless) file formats</li> <li>How file format choice relates to use and context</li> </ul>
<ul><li>4.2.4 File compression:</li><li>lossy compression</li><li>lossless compression</li></ul>	To include:  • Know what is meant by lossy compression  • Know what is meant by lossless compression  • Why lossy and lossless compression are used