Describe how digital images are composed out of individual elements.

Recall that the colour of each picture element is represented using a sequence of bits.

Define key terms such as 'pixels', 'resolution', and 'colour depth'.

Describe how colour can be represented as a mixture of red, green, and blue.

Define key terms such as 'sample', 'sampling rate', and 'sample size'.

Recall that sound is a wave.

Explain the function of microphones and speakers.

Define key terms such as 'sample', 'sampling rate', and 'sample size'.

Describe how digital images and sounds can be represented as a sequence of bits.

Calculate the representation size of a (bitmap) digital image.

Calculate the representation size of a (PCM-coded) digital sound.

Explain how the manipulation of digital images and sounds amounts to arithmetic operations.

Describe the link between file size and quality for digital media.

Use software to perform basic image editing tasks and combine them to solve problems.

Use software to perform basic sound editing tasks and combine them to solve problems.

Define 'compression' and describe why it is necessary.

Describe and assess the creative benefits and ethical drawbacks of digital manipulation.

Describe the learning graph for Year 9 – Representations: going audiovisual.