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.

Describe how an image can be represented as a sequence of bits.

Recall that sound is a wave.

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

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

Define 'compression' and describe why it is necessary.

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

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

Describe the trade-off between size and perceived quality for digital images.

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

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

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

Explain how sound can be represented as a sequence of bits.

Describe how sound can be represented as a sequence of bits.

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

Describe the trade-off between size and perceived quality for digital sound.

Explain how the manipulation of digital sound amounts to arithmetic operations.

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

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Resources are updated regularly — the latest version is available at: ncce.io/tcc

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