Q: What is 1101 + 1100?

A: 10001

Q: What is 11101 in Denary?

A: 29.

Q: What is 39 in binary?

A: 100111.

Q: What is Denary 29 in Hexadecimal?

A: 1D.

Q: Convert AA into Denary

A: 170

Q: Convert 11010111 into hexadecimal?

A: D7.

Q: How many bits in a byte?

A: 8

Q: How many bits in a nibble?

A: 4

Q: How many bytes in a Kilobyte?

A: 1024(1000 will do)

Q: What is ASCII?

A: American Standard Code for Information Interchange. The agreed standard list for codes that represent characters in a computer. “A” = 10000001

Q: What is a pixel?

A: A pixel is a tiny dot filled with colour generated by a computer and makes part of a picture.

Q: What is resolution?

A: It is the amount of pixels within a given area. For example you could have 300 DPI (Dots Per Inch)

Q: What is colour bit depth?

A: The amount of colours you can have in an image depends on the amount of bits you use. 1 bit depth you can have 2 colours. 2 bit depth you can have 4 colours. 3 bit depth you can have 8 colours. etc

Q: What is metadata?

A: BEFORE the binary bits are sent to the computer to make an image or to create a sound, metadata is sent. Metadata gives the computer information on HOW to use the bits to make the image or sound. It could have information on what the width/height is or how many DPI it is etc

Q: Is sound information in the real world analogue or digital?

A: Analogue. It is a signal that has lots of values and looks like a wave.

Q: Is sound information inside the computer analogue or digital?

A: Digital. It is a signal that has discrete values, 1 or 0.

Q: Explain “sampling” ie. how sound information recorded and stored by a computer?

A: The analogue wave sound wave is recorded in “samples” and its value stored as a binary value. When viewed on a graph these values look like the original analogue waveform. The more samples you use the better the quality of the sound. This is known as sample rate.

Q: What is the difference between sample rate and bit rate?

A: Sample rate is the amount of samples per second a recording makes. Bit rate is the amount of space available to store the sound per second, measured in kbits per second.