

KNOWLEDGE ORGANISER :: IMAGES

KEY WORDS

Compression	Reduction in file size to lessen download times and storage requirements
Lossy	Compression which loses data (and therefore quality)
Lossless	Compression which preserves the original data
Metadata	Data about data

Image Types

Bitmap	The representation of an image by converting it to pixels and each pixel to a binary number
Vector	The representation of an image by splitting it into shapes and storing each shape as a binary number
Pixel	The smallest element of an image. One dot of one colour
Resolution	The level of detail in an image, measured in pixels (dots) per inch (dpi)
Color Depth	The number of bits used per pixel to record colour.
File Size	width (px) × height (px) × colour depth

METADATA

Metadata is information about the image
It could include the file format, image dimensions, colour depth, resolution or location

LOSSY COMPRESSION



Original Lena Image
(12KB size)

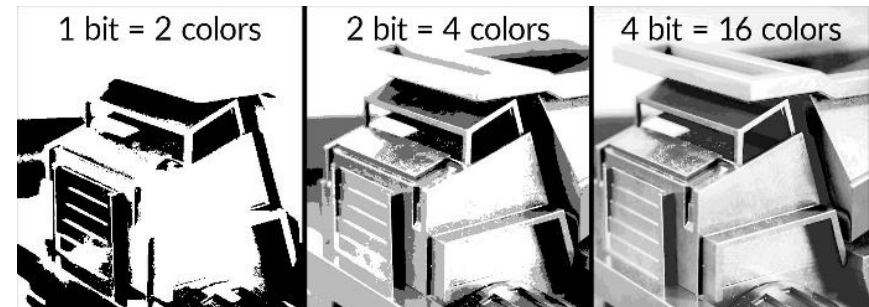


Lena Image, Compressed (85%
less information,
1.8KB)



Lena Image, Highly
Compressed (96%
less information,
0.56KB)

COLOR DEPTH



1 bit = 2 colors
4 bits = 16 colors
24 bits = 16, 777, 216 colors