

Bitmap File Types

	JPEG	GIF	PNG
Compression	Lossy, adjustable	Lossless (low file size is achieved by limited colour depth)	Lossless
Animation	Not possible	Possible	Not possible
Transparency	Not possible	Individual pixels can be fully transparent or not at all	Individual pixels can have their level of transparency set. Transparency level can vary.
Colour depth	24 bit allows $2^{24} = 16,777,216$ colours	8 bit allows $2^8 = 256$ colours	24 bit allows $2^{24} = 16,777,216$ colours

Vector Graphics

Work by storing objects and their attributes as **text** (using ASCII). Each computer's software and hardware then interprets these as the shapes on the screen

E.g. (`<circle cx="50" cy="50" r="40" stroke="black" stroke-width="3" fill="red" />`) - these are stored in a SVG file

Comparison of audio standard file formats

	WAV	MP3
Compression	Lossless	Lossy
Quality	Excellent, identical to the original sound	Very good, designed so that the user doesn't notice the data that has been removed (removes the quieter of any two similar sounds, removes frequencies out with human hearing range).
File size	High for sound	Reasonably low

Sampling rate: this is how many samples per second are saved for a sound wave.
Higher sampling rate = higher file size = better sound quality