## From Wikipedia:

Sampling rate	Use
8,000 Hz	Telephone and encrypted <u>walkie-talkie</u> , <u>wireless intercom</u> and <u>wireless microphone</u> transmission; adequate for human speech but without <u>sibilance</u> (ess sounds like eff (/s/, /f/)).
11,025 Hz	One quarter the sampling rate of audio CDs; used for lower-quality PCM, MPEG audio and for audio analysis of subwoofer bandpasses.
16,000 Hz	Wideband frequency extension over standard telephone narrowband 8,000 Hz. Used in most modern VoIP and VVoIP communication products.
22,050 Hz	One half the sampling rate of audio CDs; used for lower-quality PCM and MPEG audio and for audio analysis of low frequency energy. Suitable for digitizing early 20th century audio formats such as 78s.[11]
32,000 Hz	miniDV digital video camcorder, video tapes with extra channels of audio (e.g. DVCAM with four channels of audio), DAT (LP mode), Germany's Digitales Satellitenradio, NICAM digital audio, used alongside analogue television sound in some countries. High-quality digital wireless microphones. Suitable for digitizing FM radio. Catallogue research
37,800 Hz	CD-XA audio
44,056 Hz	Used by digital audio locked to <u>NTSC</u> color video signals (3 samples per line, 245 lines per field, 59.94 fields per second = 29.97 <u>frames per second</u> ).
44,100 Hz	Audio CD, also most commonly used with MPEG-1 audio (VCD, SVCD, MP3). Originally chosen by Sony because it could be recorded on modified video equipment running at either 25 frames per second (PAL) or 30 frame/s (using an NTSC monochrome video recorder) and cover the 20 kHz bandwidth thought necessary to match professional analog recording equipment of the time. A PCM adaptor would fit digital audio samples into the analog video channel of, for example, PAL video tapes using 3 samples per line, 588 lines per frame, 25 frames per second.
47,250 Hz	world's first commercial PCM sound recorder by Nippon Columbia (Denon)
48,000 Hz	The standard audio sampling rate used by professional digital video equipment such as tape recorders, video servers, vision mixers and so on. This rate was chosen because it could reconstruct frequencies up to 22 kHz and work with 29.97 frames per second NTSC video - as well as 25 frame/s, 30 frame/s and 24 frame/s systems. With 29.97 frame/s systems it is necessary to handle 1601.6 audio samples per frame delivering an integer number of audio samples only every fifth video frame. Also used for sound with consumer video formats like DV, digital TV, DVD, and films. The professional Serial Digital Interface (SDI) and High-definition Serial Digital Interface (HD-SDI) used to connect broadcast television equipment together uses this audio sampling frequency. Most professional audio gear uses 48 kHz sampling, including mixing consoles, and digital recording devices.
50,000 Hz	First commercial digital audio recorders from the late 70s from <u>3M</u> and <u>Soundstream</u> .
50,400 Hz	Sampling rate used by the Mitsubishi X-80 digital audio recorder.
88,200 Hz	Sampling rate used by some professional recording equipment when the destination is CD (multiples of 44,100 Hz). Some pro audio gear uses (or is able to select) 88.2 kHz sampling, including mixers, EQs, compressors, reverb, crossovers and recording devices.

96,000 Hz	<u>DVD-Audio</u> , some <u>LPCM</u> DVD tracks, <u>BD-ROM</u> (Blu-ray Disc) audio tracks, <u>HD DVD</u> (High-Definition DVD) audio tracks. Some professional recording and production equipment is able to select 96 kHz sampling. This sampling frequency is twice the 48 kHz standard commonly used with audio on professional equipment.
176,400 Hz	Sampling rate used by <u>HDCD</u> recorders and other professional applications for CD production. Four times the frequency of 44.1 kHz.
192,000 Hz	<u>DVD-Audio</u> , some <u>LPCM</u> DVD tracks, <u>BD-ROM</u> (Blu-ray Disc) audio tracks, and <u>HD DVD</u> (High-Definition DVD) audio tracks, High-Definition audio recording devices and audio editing software. This sampling frequency is four times the 48 kHz standard commonly used with audio on professional video equipment.
352,800 Hz	<u>Digital eXtreme Definition</u> , used for recording and editing <u>Super Audio CDs</u> , as 1-bit DSD is not suited for editing. Eight times the frequency of 44.1 kHz.
2,822,400 Hz	SACD, 1-bit <u>delta-sigma modulation</u> process known as <u>Direct Stream Digital</u> , co-developed by <u>Sony</u> and <u>Philips</u> .
5,644,800 Hz	Double-Rate DSD, 1-bit <u>Direct Stream Digital</u> at 2× the rate of the SACD. Used in some professional DSD recorders.
11,289,600 Hz	Quad-Rate DSD, 1-bit <u>Direct Stream Digital</u> at 4× the rate of the SACD. Used in some uncommon professional DSD recorders.
22,579,200 Hz	Octuple-Rate DSD, 1-bit <u>Direct Stream Digital</u> at 8× the rate of the SACD. Used in rare experimental DSD recorders. Also known as DSD512.