

Properties of audio files

Audio files store sound

Sound waves need to be turned into numbers to be stored on a computer

This requires a process called **sampling**: taking a reading (a **sample**) of the sound many times a second – thousands of times

Properties of audio files

Audio files have two properties you need to know:

- 1. Sample rate** – the number of samples per second. The more samples, the better quality the sound is, but the larger the file size
- 2. Bit depth** – the amount of data used to store each sample. The more data used, the bigger the file size, but the higher quality the sound is

Properties of audio files

There are different formats of audio file that you need to know about:

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| MP3 | Small file size. Uses a lower bit depth and sampling rate, but quality of audio is lower. Good for using online and on phones and can be used on websites easily |
| AAC | Compressed, but better quality than MP3. Larger file size |
| FLAC | Higher quality sound, but still has some compression. Larger file size and an open source format |
| OGG | An audio format used by Spotify. Has some compression and is an open source format |
| WAV | Uncompressed so large file size and very high quality. Can be used easily |