3.3 Fundamentals of data representation

3.3.7 Representing sound

Content	Additional information	Chk
Understand that sound is **analogue** and that it must be converted to a **digital form** for storage and processing in a computer.		
Understand that **analogue signals** are **sampled** to create the digital version of sound.	Understand that a sample is a measure of amplitude at a point in time.	
Describe the **digital representation** of sound in terms of: • **sampling rate** • **sample resolution**.	Sampling rate is the number of samples taken in a second and is usually measured in hertz (1 Hertz = 1 sample per second). Sample resolution is the number of bits per sample.	
Calculate sound file sizes based on the sampling rate and the sample resolution.	File size (bits) = rate x res x secs rate = sampling rate res = sample resolution secs = number of seconds	