

SØRAV MUSIC ACADEMY

LEVEL 1 · FOUNDATIONS

20-question multiple-choice assessment

Instructions: Choose one answer (A, B, C or D) for each question. Complete all 20 questions before turning to the answer key. The final page contains the correct answers and explanations.

1. *What is sound in air?*

- A. A changing pressure disturbance travelling through a medium
- B. A picture displayed by a DAW
- C. A type of MIDI message
- D. A measurement of song loudness

2. *In a DAW, what does a waveform primarily show?*

- A. The musical key of a song
- B. Signal amplitude changing over time
- C. The exact emotional quality of a performance
- D. The number of plugins on a track

3. *Frequency is measured in which unit?*

- A. Decibels (dB)
- B. Beats per minute (BPM)
- C. Hertz (Hz)
- D. Samples per bar

4. *For a simple periodic tone, increasing its frequency is generally heard as...*

- A. A higher pitch
- B. A wider stereo image
- C. A longer reverb tail
- D. A lower track fader

5. *Amplitude most directly describes...*

- A. The tempo of the music
- B. The size of a signal variation
- C. The musical scale
- D. The length of an audio region

6. *What does phase describe?*

- A. The track's position in the mixer
- B. The song's section name
- C. A waveform's position within its cycle relative to a reference
- D. The number of audio files in a project

7. *What is the main reason to use gain staging?*

- A. To keep signal levels sensible through the signal path and avoid unwanted clipping
- B. To make every track as loud as possible
- C. To guarantee a finished master
- D. To change MIDI notes into audio automatically

8. A digital audio sample represents...

- A. A complete song section by itself
- B. A single measured value of the audio signal at a point in time
- C. A plugin preset name
- D. A stereo panning position

9. What does sample rate describe?

- A. How many audio samples are captured per second
- B. How many tracks are in the session
- C. How loud the monitor speakers are
- D. How many notes a chord contains

10. What does bit depth primarily affect in linear PCM audio?

- A. The song's key signature
- B. The number of stereo speakers
- C. The available quantisation precision and theoretical dynamic range
- D. The tempo of MIDI playback

11. In Logic Pro, an audio track normally plays...

- A. Recorded audio regions
- B. Only chord names
- C. Only MIDI control messages without an instrument
- D. Only automation curves

12. What is MIDI?

- A. A lossless audio file format
- B. Performance/control data such as notes, timing, velocity and controller messages
- C. A type of equalizer
- D. A loudness measurement

13. What turns MIDI notes into audible sound on a software-instrument track?

- A. The track colour
- B. The region name
- C. A software instrument responding to the MIDI events
- D. The project folder

14. In a basic audio signal path, what usually happens after a microphone captures a performance?

- A. The microphone instantly creates a mastered release
- B. The signal can pass through a preamp and audio interface conversion before being recorded by the DAW
- C. The audio becomes MIDI automatically
- D. The waveform is deleted

15. Why should you listen instead of judging a sound only by its waveform size?

- A. Waveform size alone does not establish musical quality or tonal balance
- B. A larger waveform always means a better performance
- C. Waveforms only work with MIDI
- D. Listening changes the sample rate

16. What is clipping in a digital audio path?

- A. A type of chord inversion
- B. A track being moved to another screen
- C. A signal exceeding the available digital level limit and being truncated or distorted
- D. A low-pass filter setting

17. Why is it useful to leave headroom while working on a mix?

- A. It ensures every track has the same pan position
- B. It leaves margin for peaks and processing before reaching the digital ceiling
- C. It automatically fixes phase problems
- D. It makes MIDI files smaller

18. What does panning primarily control in a conventional stereo mix?

- A. The left-right placement of a sound
- B. The sample rate
- C. The bit depth
- D. The pitch of every note

19. Why should you compare processed and bypassed audio at similar loudness?

- A. To make the session use fewer tracks
- B. To ensure both signals have identical frequency response
- C. To reduce the chance that a louder signal is preferred simply because it is louder
- D. To remove the need for critical listening

20. What is a good critical-listening practice?

- A. Change many processing settings at once
- B. Ask a specific question, listen in context, and test one change at a time
- C. Always choose the loudest version
- D. Ignore references and playback conditions

ANSWER KEY & EXPLANATIONS

Use this final page only after completing all questions.

1. A — A changing pressure disturbance travelling through a medium

A vibrating source creates pressure variations that travel through a medium such as air.

2. B — Signal amplitude changing over time

A waveform represents signal amplitude over time. It does not directly tell you whether the sound is good or correctly mixed.

3. C — Hertz (Hz)

Hertz means cycles per second and is the standard unit for frequency.

4. A — A higher pitch

For a simple periodic tone, higher frequency generally corresponds to higher perceived pitch.

5. B — The size of a signal variation

Amplitude describes the magnitude of signal variation. Perceived loudness also depends on other factors.

6. C — A waveform's position within its cycle relative to a reference

Phase describes position within a cycle relative to a reference and matters when signals combine.

7. A — To keep signal levels sensible through the signal path and avoid unwanted clipping

Gain staging manages levels at different points in the signal path, helping maintain headroom and avoid unintended clipping.

8. B — A single measured value of the audio signal at a point in time

Digital audio represents a continuous signal with a sequence of discrete amplitude measurements called samples.

9. A — How many audio samples are captured per second

Sample rate is the number of samples per second, expressed in Hz or kHz.

10. C — The available quantisation precision and theoretical dynamic range

Bit depth determines the number of possible amplitude values and affects quantisation precision and theoretical dynamic range.

11. A — Recorded audio regions

An audio track is designed to play audio regions; instrument tracks host software instruments driven by MIDI.

12. B — Performance/control data such as notes, timing, velocity and controller messages

MIDI describes performance and control events. It is not itself a recording of the sound wave.

13. C — A software instrument responding to the MIDI events

A software instrument interprets MIDI events and generates audio.

14. B — The signal can pass through a preamp and audio interface conversion before being recorded by the DAW

A mic signal is typically amplified as needed and converted to digital audio by an audio interface before the DAW records it.

15. A — Waveform size alone does not establish musical quality or tonal balance

Waveform size indicates amplitude, not artistic quality, tonal balance, or whether a sound works in context.

16. C — A signal exceeding the available digital level limit and being truncated or distorted

Digital clipping occurs when signal values exceed the representable maximum, producing distortion.

17. B — It leaves margin for peaks and processing before reaching the digital ceiling

Headroom is margin below the maximum level, allowing peaks and processing without unintended clipping.

18. A — The left-right placement of a sound

Panning controls the apparent left-right placement of a signal in the stereo field.

19. C — To reduce the chance that a louder signal is preferred simply because it is louder

Louder often seems better. Level matching helps you judge the actual tonal or dynamic change more fairly.

20. B — Ask a specific question, listen in context, and test one change at a time

Specific listening questions and one-change-at-a-time comparisons make observations more reliable and decisions easier to evaluate.