

Answer #326

The answers:

Recorder: Wave shape c, Spectrum b

Krummhorn: Wave shape a, Spectrum c

Clarinet: Wave shape b, Spectrum a

Each wave shape and spectrum can be heard and seen in an mpeg video by clicking your mouse on the photographs below.



The logic to the above choices are clear, especially after completing [Question 325](#).

Note that the recorder is a very plain sound, so it would have the smoothest wave shape and the simplest spectrum - fewer harmonics with large amplitude.

The krummhorn has a very rich, reedy tone, so would have the more complicated wave shape and the greatest collection of harmonics with large amplitude.

The clarinet sounds sort of like a square wave, with its typical "woody" tone. Therefore it would have emphasis on low-frequency odd harmonics. The wave shape even looks a bit like a square wave - that is, its symmetry is similar that of a square wave, or at least more so than tha of the other instruments.

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