

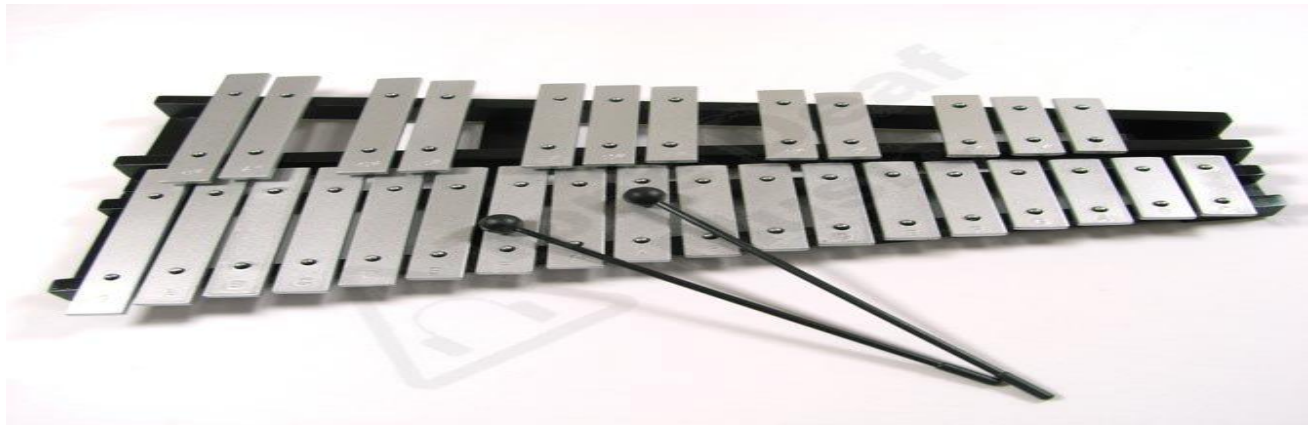


Percussion

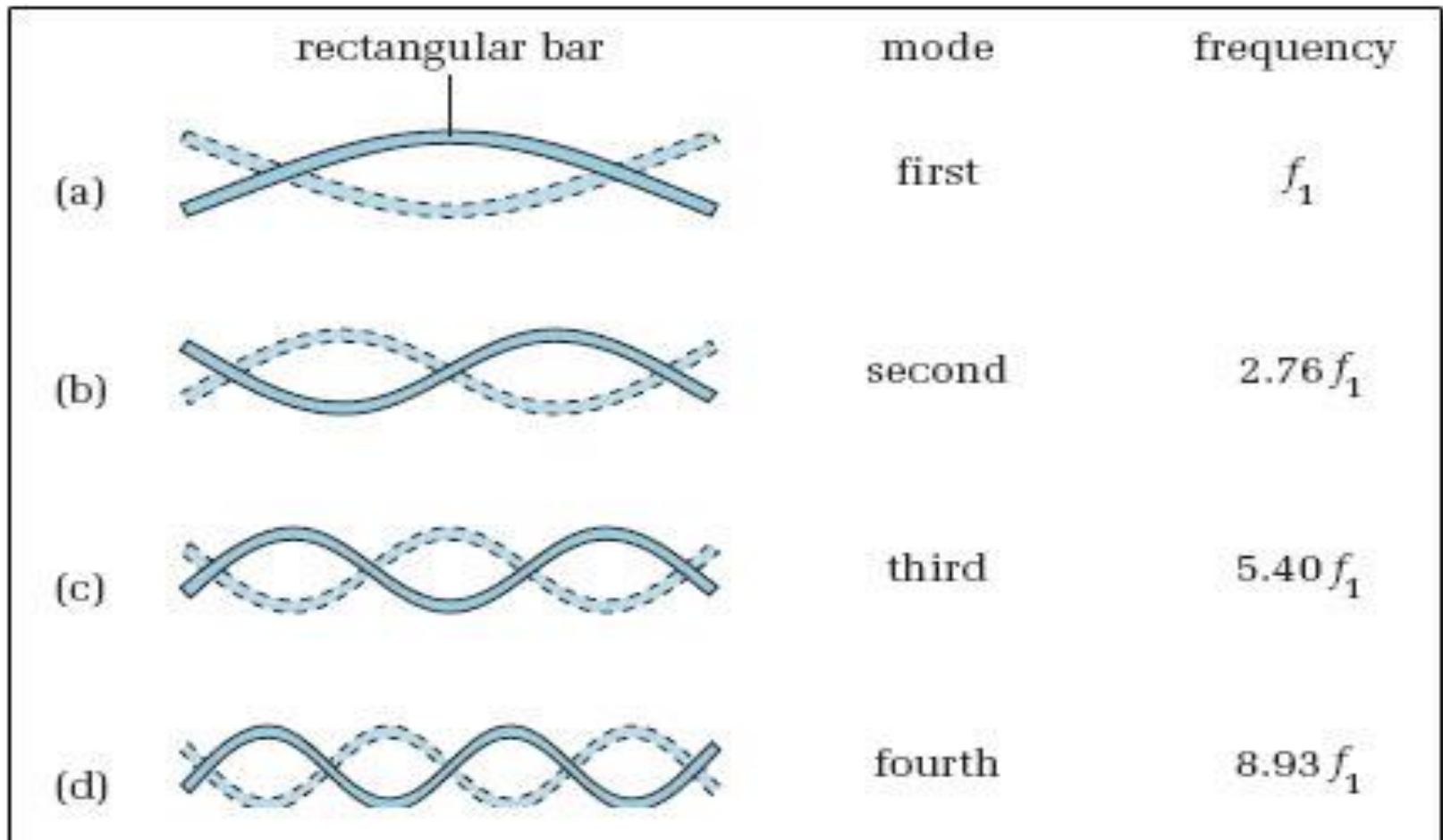


Glockenspiel

- Similar to a xylophone, but the difference is that it is made of metal plates instead of wood and is an octave higher than the xylophone. Unlike marimba bars, each of the glockenspiel plates are flat and does not have a groove.
- The range of frequencies that is produced by the glockenspiel is generally between 784 Hz to 4,186 Hz.



- The fundamental modes create pure bell-like sounds.
- The bars are supported at the locations of the two nodes of the fundamental standing wave.



Djembe:

- 3 primary methods of playing include a bass tone, mid tone and slap tone.

The bass has a frequency of 65–80 Hz. Depending on the size of the drum and the amount of tension on the skin, tone frequency varies from 300 Hz to 420 Hz and slap frequency from 700 Hz to 1000 Hz, with audible overtones reaching beyond 4 kHz.



Why the Djembe is unique:

- It's acoustically a Helmholtz resonator
- The drum head made from skin made of goat, cow, horse. There are also synthetic drumheads but that produces sounds different from the traditional sounds of an animal skin drum head.
- The body is made of carved hard wood. The interior of the body is often rough, scalloped or carved with some sort of design.

