



99 INSTRUMENTS

Classification by the
Hornbostel-Sachs system

Family	How sound is made
Idiophones	Vibrating body of the instrument itself
Membranophones	Vibrating stretched membrane
Chordophones	Vibrating string
Aerophones	Vibrating column of air
Electrophones	Electronics generate or shape the sound



Idiophones ~ *Sound from the vibrating body of the instrument itself*

Struck – pitched

Celesta
Glockenspiel
Hand bell
Handpan
Marimba
Singing bowl
Steel pan
Tubular bells
Vibraphone
Xylophone

Struck – unpitched

Bonang
Castanets
Claves
Cowbell
Cymbals
Gong
Timbales (shell)
Triangle
Woodblock
Drum Kit (Cymbals)

Plucked

Jaw harp
Mbira

Box percussion

Cajon

Scraped / shaken

Cabasa
Guiro
Maracas
Shekere
Tambourine

Membranophones ~ *Sound from a vibrating stretched membrane*

Hand drums

Bongos
Conga
Djembe
Tabla
Talking drum
Tambourine

Stick/mallet drums

Drum kit
Snare drum
Surdo
Timbales
Timpani

Chordophones ~ *Sound from a vibrating string*

Bowed strings

Cello
Double bass
Erhu
Hurdy-gurdy
Viola
Violin

Plucked lutes

Balalaika
Banjo
Bouzouki
Koto
Lute
Mandolin
Oud
Pipa
Shamisen
Sitar
Steel string guitar
Ukulele

Harps and zithers

Hammered dulcimer
Harp
Kora
Lap dulcimer

Keyboard strings

Harpsichord
Piano

Electro-chordophones

Electric bass
Electric guitar
Pedal steel guitar

Aerophones ~ *Sound from vibrating air*

Double reed woodwinds

Bassoon
Contrabassoon
Duduk
English horn
Oboe

Single reed woodwinds

Bass clarinet
Clarinet
Saxophone

Flutes and edge-blown

Flute
Panpipes
Piccolo
Recorder
Tin whistle

Brass (lip-vibrated)

Bugle
Cornet
Euphonium
French horn
Sousaphone
Trombone
Trumpet
Tuba

Free reed

Accordion
Concertina
Harmonica
Melodica

Vessel flutes

Ocarina

Natural Horns (lip-vibrated)

Conch
Didgeridoo

Combinations

Pipe Organs (pipes can be edge-blown, single and double reed)
Bagpipes (single reed drones and double reed chanter.)

Electrophones ~ *Sound generated or shaped by electronics*

Pure Electrophones

Drum machine
Electric organ
Synthesizer
Theremin
Turntable

Electro-chordophones

Electric bass
Electric guitar
Pedal steel guitar

Notes on classification

- * This classification follows the Hornbostel-Sachs system, the international standard for organology.
- * Some instruments appear in more than one category, e.g. The tambourine can have both a membrane (membranophone) and metal jingles (idiophone). The cajon is primarily struck wood (idiophone) but behaves acoustically like a membranophone.
- * Timbales appear under both idiophones (for the patterns played on the shell) and membranophones (for the drum heads).
- * Electric guitar, electric bass, and pedal steel guitar are classified here under chordophones as the sound originates in a vibrating string and under electrophones as the signal is captured and amplified electronically.
- * The accordion, concertina, harmonica, and melodica are free-reed aerophones - air causes metal reeds to vibrate, but the reeds themselves are the sound source rather than a column of air in a tube.