


Musical instrument classification 2

Hornbostel-Sachs system

We have just learnt about orchestral classification, BUT it **does not cover** all the instruments. In 1914 *Moritz von Hornbostel* and *Curt Sachs*



set a system to classify all musical instruments. This system is based on **how** an instrument creates vibrations.

If an instrument (an object) creates
vibrations, 

it produces sound.

Hornbostel-Sachs system identifies five categories of instruments:

1. *Aerophones*
2. *Chordophones*
3. *Idiophones*
4. *Membranophones*
5. *Electrophones*

Aerophones

Simple **reed**

Double **reed**

Oboe

Saxophone

bee-**buzzing**-around-the-myer-lemon-tree

***Buzzing** lips*

Trumpet

Flute **Embouchure**

Flute

Horn

- An aerophone produces its sound by the vibration of air.
- Most Woodwinds use the air and **reeds** to vibrate.
- Brass use air and the player's **lips** to vibrate.
- This category belongs to the **Brass** and **Woodwind** family.

Cordophones

Viola

Banjo

Piano

Harp

- Chordophones produce sound by the **vibrating** of strings.
- This category belongs to the Strings family.
- A string can be **plucked**, **bowed** or **striked**.

Idiophones

Xilophone

Triangle

Claves

Cymbals

- Idiophones produce a sound by the vibration of the **instrument itself**.
- This category belongs to the **percussion** family.
- These instruments can be **rubbed**, **struck**, or **shaken**

Membranophones

Bass drum

Timpani

Djembe

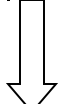
Snare drum

- Membranophones produce sound when a stretched skin (**membrane**) vibrates.
- Different materials can be used to make membranophones, including ceramics, wood or metal.
- This category belongs to the **percussion** family.
- These instruments may have

definite pitch or



indefinite pitch.



Electrophones

Digital Piano

Electronic keyboard

- They have only been around since the 20th century.
- Electrophones produce an electronic sound.
- The sound is produced by an

electronic circuit

