



Guitar Virtual Learning

Anatomy of a Guitar (Part II)

May 12, 2020



Guitar

Lesson: May 12, 2020

Objective/Learning Target:

How does the structure of a steel-string guitar compare to the structure of a classical guitar and electric guitar?

Warm-Up Activity

The following three music videos each feature solo musicians playing guitar. The first uses a steel-string acoustic guitar, the second uses a classical (nylon-string) acoustic guitar, and the third uses an electric guitar.

Compare and contrast:

How do they look the same and different?

What is similar and different about how each is played?

How do they sound the same and different?



Steel-String Acoustic



Classical (Nylon-String) Acoustic

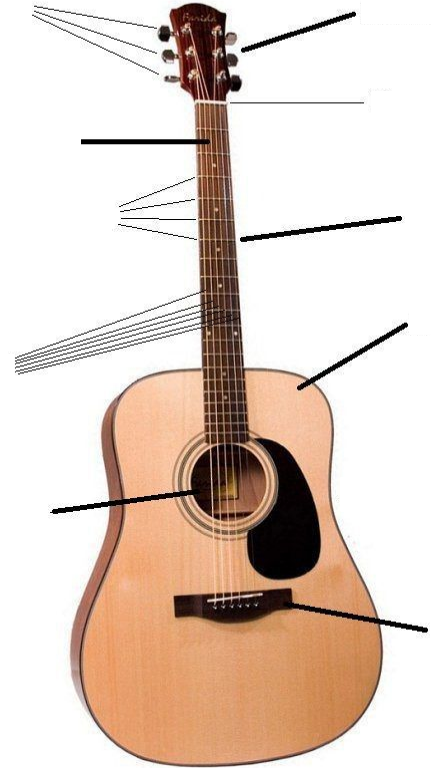


Electric Guitar



2nd Warm-Up Activity

Identify all of the parts of an acoustic guitar that we discussed in the last lesson:



Parts of a Guitar

Last lesson, we learned about the parts that make up a **steel-string acoustic guitar**. Today, we are going to learn how a **classical** or **nylon-string guitar** and an **electric steel-string guitar** are both similar and different than a steel-string guitar.

By the end of today, we should have a pretty good grasp of what components can go into any guitar you might find.

Steel-String vs. Nylon-String

Take a moment and simply study the two acoustic guitars on this page.

Make as many observations about them as you can. How are they similar and how are they different?



Clarification: Nylon-String Guitars

Before we compare these body styles further, we should make a quick clarification of what exactly “nylon-string” guitars mean. We will mostly use “nylon-string” and “classical” interchangeably, but they do not technically mean exactly the same thing.

Nylon-string guitars include **classical** guitars, **flamenco** guitars, and **hybrid** nylon guitars. All are very similar to each other, but they are not exactly the same, so I thought it best to point that out now.



The Classical Guitar

The classical guitar is, in many respects, the first guitar ever. Evolved from earlier stringed instruments, the first true classical guitars as we know them were built in the 1800s, nearly 200 years ago.

This guitar was built by Antonio de Torres in 1856 and can still be played today!

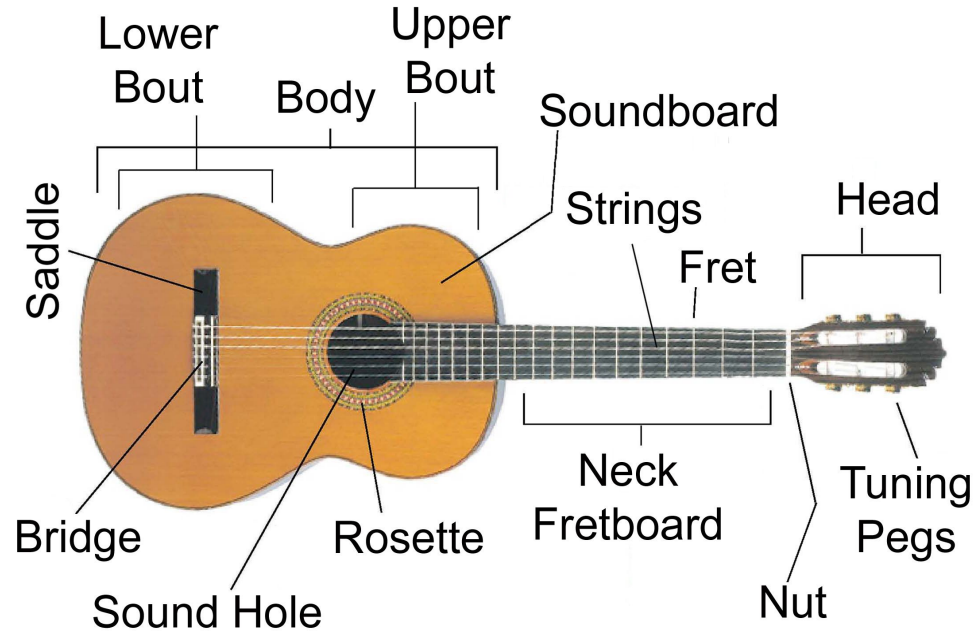


The Classical Guitar

Classical guitars are very similar to their newer cousins, steel-string guitars.

Most of the same components are still present.

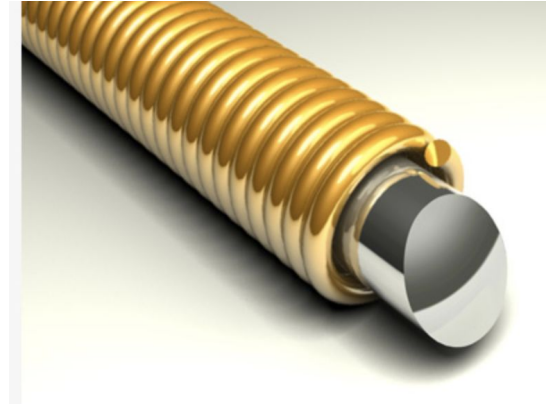
Let's highlight a few differences!



Nylon Strings

The most important difference between “steel-string” guitars and “nylon-string” guitars is, you guessed it, the strings used!

While steel-string guitars use strings made with a steel core, nylon strings have a nylon core. With both steel and nylon strings, usually the lower three strings are plated or wrapped in another material (typically brass, bronze or silver) to help produce the lower tones.



The Headstock

The headstock on a nylon-string guitar is shaped differently than the typical headstock on a steel-string guitar. This shape is referred to as a “slotted headstock” for the two slots that hold the tuning mechanisms the strings are fed into.

While there are still six tuning pegs just like with the steel-string, the pegs on a classical guitar point backwards instead of outward.



The Fretboard

The neck and fretboard is the probably the largest noticeable difference to someone used to playing a steel-string guitar.

- The fretboard of a nylon-string guitar is wider than most all steel-string guitars.
- It is also usually a bit shorter overall, with the neck joining the body at the 12th fret instead of the 14th fret, which is typical for steel-string guitars.
- The fretboard of a classical guitar is flat, while a steel-string guitar's fretboard is slightly curved.



The Electric Guitar

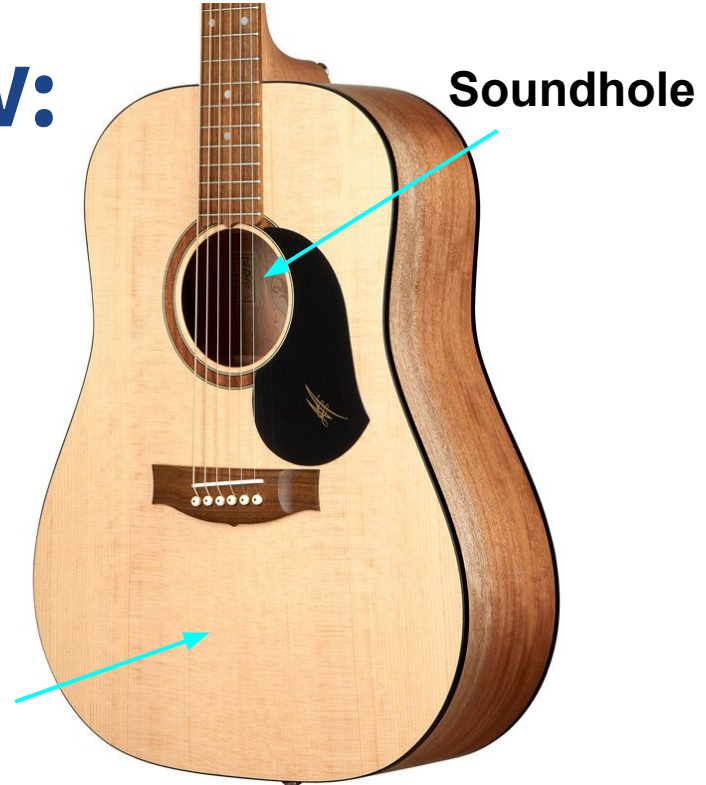
Electric guitars, like steel-string acoustic guitars, use steel strings. How electric guitars differ from any type of acoustic guitar, however, is in how those strings are amplified when they are played.



Acoustic Guitar review:

Do you remember how the sounds of the vibrations of the strings on an acoustic guitar are amplified? The sound bounces around inside the body of the guitar, and as it resonates, it naturally **amplifies** (makes louder) the sound from the strings.

Soundboard



Electric Guitar Pickups

On an electric guitar, there is no hollow space in the body for the sound to resonate. To make the sound of the strings louder, the vibrations are amplified electronically.

Each string has a series of tiny **pickups** (like mini microphones) that collect the sound of the strings.



Electric Guitar: I need an AMP!

The catch with electric guitars is those tiny pickups only collect the sound; they are not designed to amplify the sound in any way on their own.

If the guitar is set up correctly, the sound then travels through wiring inside the guitar to a cord that connects the guitar to an electronic **amplifier**. The amplifier or **amp** then translates that into sound and sends that sound out like a speaker.



Electric Guitar

Once you get passed the fundamental difference in how these instruments make sound, you can see that, despite quite a difference in shape and look, electric and acoustic guitars have many of the same components:





Some other types of guitars

While we've covered the basics on different types of guitars, there are a few important types we haven't really looked at.

While we will not explore these types more at this time, we'll go ahead and check them out so you know what they are called and what they look like.

Resonator guitars and arch-top guitars are a kind of acoustic guitar.
Hollow body and semi-hollow body guitars are a kind of electric guitar.



Resonator Guitars



Arch-top Guitars



Hollow body guitars



Follow-Up Activity

Read the following two articles by instructor Aaron Matthies and summarize what each had to say about types of guitars and important components of guitars.

[Ultimate Guide to Types of Guitars](#)

[Parts of a Guitar](#)



2nd Follow-Up Activity

Watch this video montage of a guitar being made and write down every time you can identify a part of the guitar being made or being put onto the guitar as it is being built.

2nd Follow-Up Activity

