

# Make a Matchbox Guitar

If you are into music then you will definitely love this matchbox guitar project! A guitar is a string musical instrument that you pluck in order to create a sound.

The vibrations of the strings when you pluck or strike them are the sounds that we hear when the instrument is being played.

The matchbox guitar, though it will only serve as a miniature of a real one, is meant to demonstrate to us how string musical instruments work. Now, get the materials ready and start building your very own matchbox guitar!



# **Materials**

You will need the following items for this activity:

- Matchbox
- Rubber bands
- Wood that can be carved (recommended wood is balsa wood because it is light and soft and has a coarse open grain)
- Carving knife

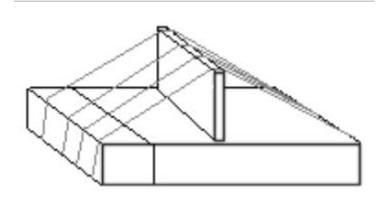
### **Procedures**

Give yourself about 15 to 30 minutes to complete your miniature guitar.

To start off, take your balsa wood and carving knife to make the body of the guitar. Slice the wood into a flat triangle so that the length of its longest side is a few units longer than the width of the matchbox. Empty the matchbox and then place the wooden triangle across the width of the matchbox, allowing the corner to protrude on one side. Trim the side that protrudes from the box. Now, put the remaining wood onto the matchbox and then slide the box open, leaving a guarter of it closed.

Now, fit the rubber bands around the matchbox on the long side. Make sure you arrange the rubber bands evenly, as these will serve as the strings of your miniature guitar. To keep the strings tight and snug, pull the matchbox open just a little bit more.

Try it out by playing your miniature guitar! Your matchbox guitar should in the end look like this:



Source: sciencefairadventure.com [1]

# **Discussion**

The activity is pretty much straight forward and it functions just like a real guitar does! You create a sound by plucking the strings. Furthermore, pinching the strings on one end while plucking them at the same time allows you to change the pitch of the sound. Try it out yourself!

Aside from guitars, other string musical instruments include violin, cello, mandolins, bandurria, ukulele and a lot more!

Source URL: <a href="https://explorable.com/make-a-matchbox-guitar">https://explorable.com/make-a-matchbox-guitar</a>

#### Links:

[1] http://www.sciencefairadventure.com/ProjectDetail.aspx?ProjectID=177, [2] https://explorable.com/, [3] https://explorable.com/make-a-matchbox-guitar