

# Sound Science for Kids: Make a Craft Stick Harmonica

<https://frugalfun4boys.com/2016/11/30/sound-science-kids-make-craft-stick-harmonica/>

**This craft stick harmonica is fun to play, and you can adjust the pitch by moving the straws!** It's a neat project, and a good one to make with a group because the materials are very inexpensive. You can fit in a little science learning too – see the bottom of the post for ways to turn this into a true science experiment.

I saw this project idea on [Filtz Wizardry](#), and I knew the boys would love it. They did – it has been a huge hit! Gresham made more of them today so that everyone has their own.

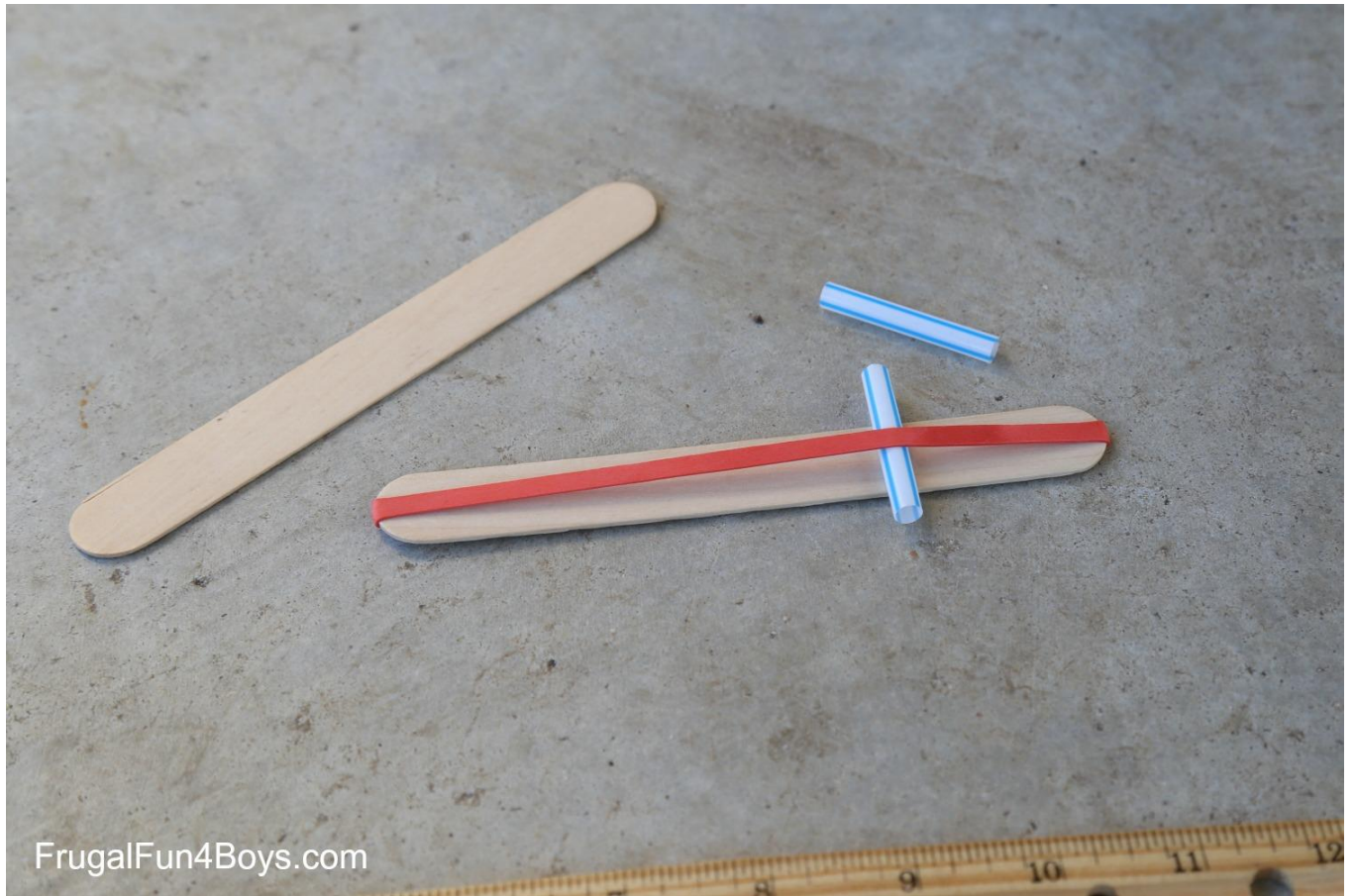
## **To make one, you will need:**

- Jumbo craft sticks (2)
- A wide rubber band
- Two smaller rubber bands
- A straw
- Scissors



Cut two pieces of straw that are 1 – 1 .5 inches long.

Stretch the thick rubber band around one of the craft sticks. Place one of the straws under the rubber band.



Put the other craft stick on top and attach them with one of the small rubber band on the same end as the straw.

Stick the other piece of straw at the other end of the harmonica, but this time place it on top of the wide rubber band. Secure the end with the second small rubber band.



To play the harmonica, all you have to do is blow. Our younger kids were wanting to hum into it at first, but then they got the hang of it.

It makes a really cool noise! When you blow, the wide rubber band vibrates and makes a sound.





To change the pitch, slide the straws closer together or farther apart. When you slide them closer together, the section of rubber band that is vibrating is shorter, so it makes a higher sound. Slide the straws all the way to the edges to get the lowest possible sound (which is still pretty high, but lower).

The kids have been playing with these constantly! Since they're noise makers, I've had to put them away during school and other times for my own sanity, but they're not really *all* that loud and definitely a lot of fun.

You can print an [instruction and information sheet](#) from The Exploratorium. Very useful, especially if you are making these with a group!

Owen built a LEGO case for his harmonica, which kind of cracked me up! The lid opens and closes with hinges.

**Make it an experiment!**

- Does the thickness or the tension of the wide rubber band affect the pitch? Try different ones.
- Can you change the pitch by blowing harder or softer? Does the shape of your mouth affect the pitch? (Yes, it does! One of my boys figured out how to play a song by blowing different ways.)