

Thumb Piano (Mbira or Kalimba)

Version 1: Using bobby pins *This version uses a staple gun – please ask an adult for help!*



Materials: Bobby pins, staple gun and staples, backing board, hammer

Method:

- Hammer the bobby pins at the bend until they break in 2 (you will turn the sharp side into the board)
- Put the lower crosswise bobby pin in position and staple gun it at both ends
- Place the 4 lengthwise bobby pins that you see in the photo on top of the pin you just stapled in place
- Put the upper cross bar (bobby pin) in place over the other bobby pins and staple gun it in position
- Bend the bobby pins up a bit

You can tune the notes by sliding the bobby pins up or down

See a video of this version here <https://www.youtube.com/watch?v=m-jrcSMETtc>

Version 2: Using popsicle sticks and 2 blocks of wood *This version requires either drilling or sawing – please ask an adult for help!*



Materials: popsicle sticks, 2 pieces of wood (4-6 inches long, at least ½ inch thick, and at least 1 inch wide), 2-3 bolts, 2-3 washers, 2-3 wing nuts

Here is a link to the video instructions:

<https://www.youtube.com/watch?v=zScxP4UY5-A>

The video also has some good advice for what to use as a sound box to get more sound out of your thumb piano.

Version 3: Using bobby pins, dowels (or pencils) and elastic



Materials: bobby pins, 2 dowels (pencils would work), elastics, backing board

Method:

- Pry open the bobby pins about ½ an inch
- Place the bobby pins on the backing board and wedge one of the dowels inside the row of pins
- Place the other dowel on the back of the board in-line with the first one
- Hold in place with elastic bands

Having more than 2 hands will likely be important!

Here's the link to the video: <https://www.pinterest.ca/pin/741475526132414227/>

Version 4: This is the summer project version! ***This one involves tools – please get help from an adult!***



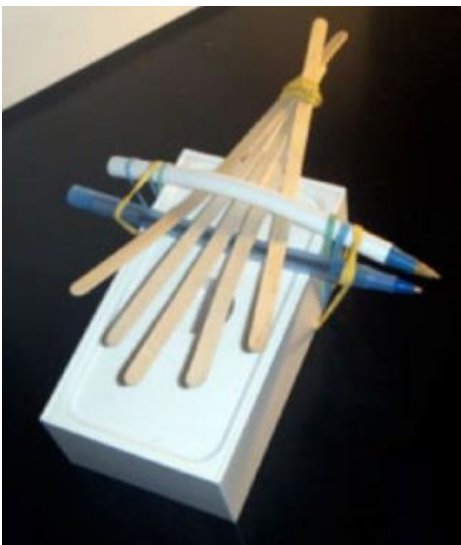
Materials: popsicle sticks, large backing board (or 2), screws, drill, screwdriver, ruler

Method:

- Measure to get the placement of the screw holes exactly right! Mark placement. You want the shafts of the screws to sit just at the side of the popsicle sticks (in between 2 sticks). The head of the screw will hold the sticks in place.
- Drill holes
- Screw in screws, leaving enough space to slide the popsicle sticks under the screw heads
- Slide in your popsicle sticks
- The picture (and video) show making a second row of popsicle sticks that act as the black keys on the piano

Here's a link to the video: <https://laughingsquid.com/how-to-make-humb-piano-out-of-popsicle-sticks/>

Other Versions:



A simple version from Pinterest



A beautiful (serious) version from Make Magazine
Instructions here: <https://makezine.com/projects/thumb-piano/>