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Mbira

description

Create an African mbira, commonly known as a thumb piano.

materials

Wood Piece or Box	Metal Bobby Pins (about 5-7)	*Duct Tape
Needle Nose Pliers	Pencil	Additional small piece of wood
Nails or Screws	*Acrylic Paint	

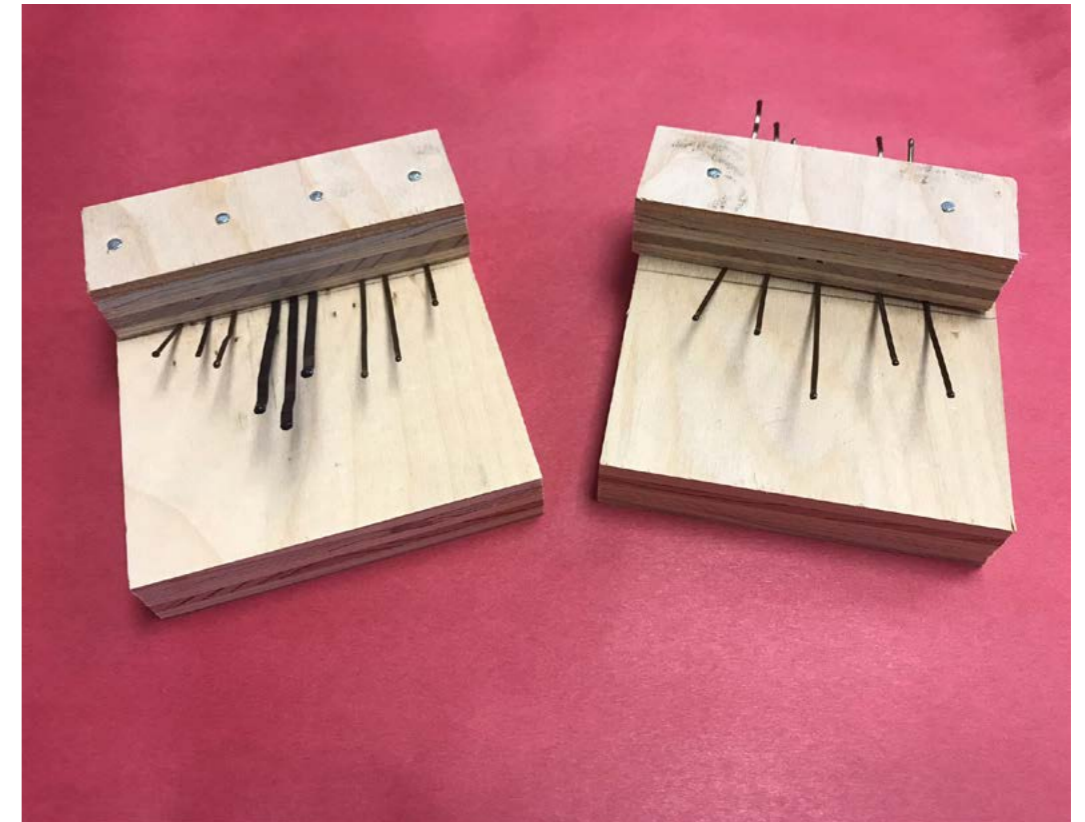
**material is optional*

Background Information

The mbira instrument comes from the Shona people of Zimbabwe, located in Sub-Saharan Africa. These instruments are used for meditation and for dance, and are usually made of wood or bamboo, with keys made from anything metal: bicycle spokes, seat springs, and spoons. The mbira is usually placed inside a cut gourd to amplify the sound.

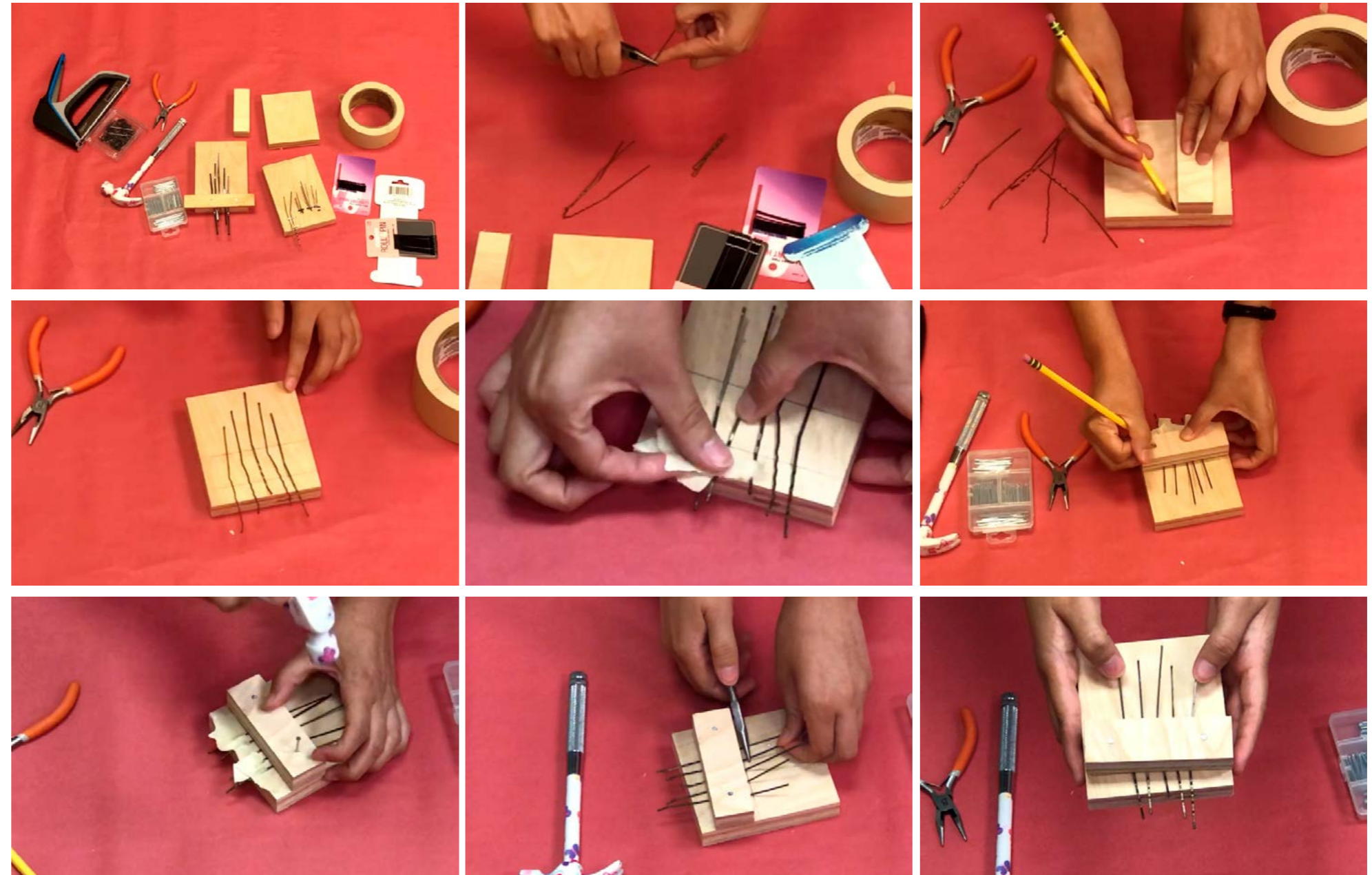
Tips

- Adults should complete the steps involving tools and be extra cautious if using power tools.
- If the pins are difficult to handle, use duct tape to keep them in place



Procedure

1. *Optional: paint the larger wood block and set it to dry while you work on the hair pins.
2. Use the pliers to straighten out all the hair pins.
3. Place the smaller wooden piece on top of the large piece, about $\frac{1}{4}$ from the top. Use a pencil to mark where its located, then set it aside.
4. Place all the keys along the bottom pencil mark, at different lengths. Your longest key should not be longer than $2\frac{1}{2}$ inches and the shortest should be about 1 inch. Space them out how you wish.
 - a. Tape them down at the edge to hold in place.
5. Place the small wooden piece on top of the keys and use the pencil to mark where the nails are going to be, avoiding overlap with the keys.
 - a. Two nails will be at each end, and an extra nail can be added in the middle.
6. Begin to hammer the nails (or drill the screws) completely into the wood.
 - a. The keys should be firmly in place to produce sounds.
 - b. Remove the tape.
7. Use the pliers to slightly lift each key at an angle.
8. To play the mbira, hold it with both hands and stroke down on the keys with your thumbs.



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Membranophone Instrument

description

Create a plastic bottle membranophone instrument to experiment how sound is made.

materials

Empty Water Bottle	Latex, Vinyl, or Rubber Glove
Rubber Band	Construction Paper
Tape	Hole Puncher
Scissors	Straw
*Box Cutter	

**material is optional*

Background Information

A membranophone is any type of musical instrument with a stretched membrane that vibrates to produce sound. Examples of these instruments are drums and the kazoo. As you blow air into the bottle, pressure accumulates between the paper tube and the bottle. The stretched membrane is lifted and air flows down the rolled paper tube. The vibration, resulting from the continuous lifting and falling of the membrane, creates the sound you hear. You can change the pitch of the sound by making the paper tube shorter or by cutting out finger holes along the side of the paper tube.

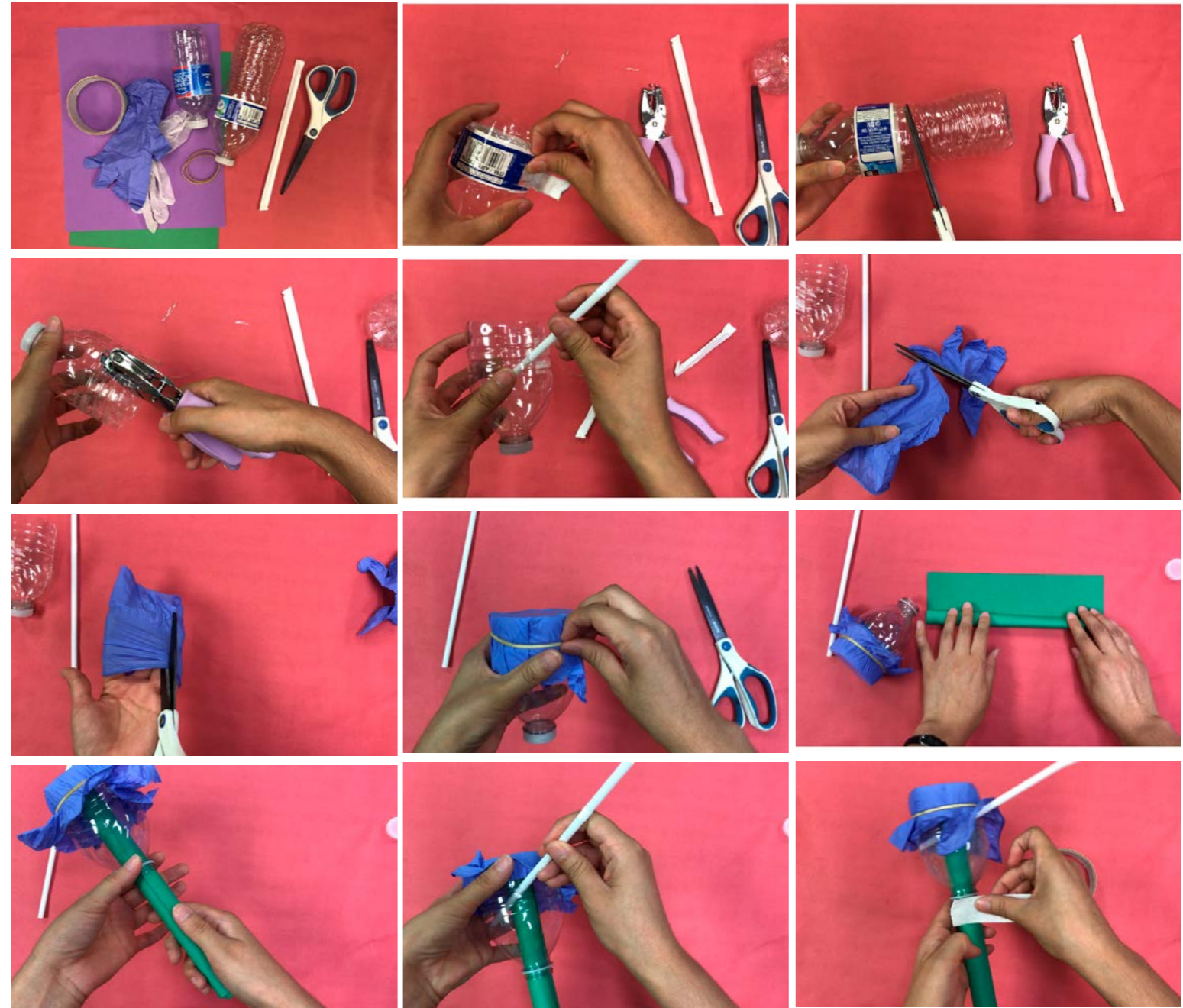
Tips

- Adults should complete the steps using box cutters.
- Take care of sharp edges after cutting the water bottle.
- Adjust the construction paper until sound is produced, then tape in place.



Procedure

1. Start by cutting the water bottle in half using scissors or a box cutter.
2. Keep the top end with the cap and reuse or recycle the other half of the bottle.
 - a. Trim the top half to avoid sharp edges.
3. Use a hole punch to punch a hole as far down as you can, away from the cut edge.
 - a. Push the straw through the hole to make sure of the fit. Use the hole puncher to make the hole bigger if necessary. Take out the straw and set it all aside.
4. Grab the glove and cut off the thumb and fingers. You should have a fingerless glove cylinder, open at both ends.
5. Cut along one side of the glove to make it a rectangular shape.
6. Cover the open end of the bottle with the cut glove and secure with a rubber band.
 - a. Stretch it tight by pulling along the ends of the glove.
7. Take the construction paper and roll it up into a cylinder that is small enough to fit through the bottle's opening.
8. Feed the construction paper through the opening until it touches the glove. Let go of the paper and it will expand to fit the opening.
9. Take the straw and run it through the punched hole until it touches the opposite side.
10. Blow into the straw to produce the sound.
 - a. If no sound is produced, move the construction paper upward and blow into the straw until the sound is produced.
11. Tape the construction paper to the bottle to keep it secure.





Peach Cobbler

Ingredients

2 pkgs Pillsbury pie crust (leave in refrigerator until ready to use)		
4 bags (4 lbs) frozen peaches	½ cup brown sugar	2 tbs cinnamon
2 tbs butter	2 tbs vanilla	Tbsp lemon juice (optional)
1 cup granulated sugar	2 tbs corn starch	1 egg yolk

Process

Preheat oven to 350 degrees

1. In a large skillet, melt butter until bubbly (Photo 1)
2. Add peaches to skillet and stir occasionally as they defrost (Photo 2)
3. When peaches are defrosted, stir in both sugars, vanilla, cinnamon, and optional lemon juice.

Stir occasionally while mixture is cooking at a slow simmer. At this point, taste the mixture and decide if it needs more sugar for your taste. Some recipes call for double the amount of sugar. If you like the tartness of the fresh peaches to come through, do not add more sugar.

4. In a small bowl, dissolve the corn starch with a small amount of water and add to the peaches. This will thicken the liquid so that it is not too runny.
5. As the peaches continue to slowly simmer, spray your pan with Pam.
6. Open-up one pie crust package (containing two pieces) and stretch out each piece. You will need to use both pieces, overlapping slightly, to cover the entire interior of the pan entirely with pie crust.) (Photo 3)
7. After simmering for approximately 30 minutes the peaches are ready to be poured into the pan. (Photo 4)
8. Open the second package of pie crust and cut into strips. Lay them across the peaches horizontally first then vertically, in order to make a lattice design. Take the strips all the way across and press into original crust. (Photo 5)
9. In a small bowl, beat the egg yolk then brush it onto the crust. This will give it a beautiful golden color. (Photo 6)
10. Place the pan in the oven and after 30 minutes check it every five minutes, removing it when the crust is that golden brown color. Ovens differ so it can be ready between 30 and 40 minutes.

Traditionally, Peach cobbler is served with vanilla ice cream. Enjoy! (Photo 7)



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7

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