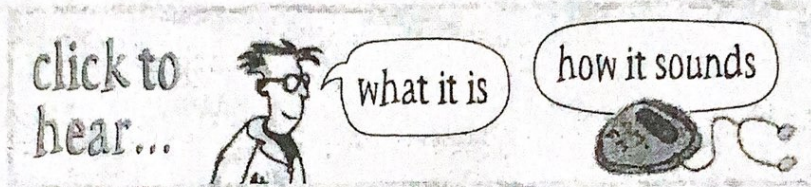


Make Your Own One Man Band!

by John Bertles



The idea of a single person making a band's worth of music is as old as music itself. While many modern devices, such as computers and electronics, make it easy to be a one-person band, it is more fun to build your own! Here are two simple contraptions to start your band.

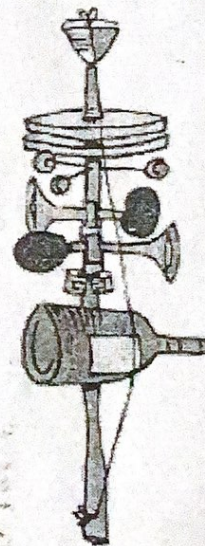
The Devil's Fiddle (or bumbass, pogo cello, stump fiddle, etc.) The Devil's Fiddle is a European musical instrument that has been around for hundreds of years. The earliest mention of it is in an Icelandic document around the 1600s, and it appears to have been used in festivals and street fairs all over Europe.

During the 20th century, versions of the Devil's Fiddle called the pogo cello, or stump fiddle, were sold through mail-order catalogs across the United States. Basically, it is a single-string instrument with various rattles and noisemakers attached to it. The string is bowed with a notched stick as the whole instrument is stamped on the ground to activate the rattles.

Here is how to make your own:

You will need:

- A wooden broomstick
- A length of string (nylon twine or 60+ lb. test fishing line is best)
- A large plastic bottle (something sturdier than the average soda bottle, like a big apple juice bottle, or sport drink bottle)
- Various rattles, bike horns, drums, and other noisemakers
- A paint stirrer or ruler
- Duct tape



Instructions

1. First, tie the string to the pole. (If your stick has an end for screwing into a mop or broom head, the threaded area is a good place to tie the string.) You may need to ask an adult to cut a notch in the pole so that the string stays tight. On the other side of the pole, attach the string again. Notch and tie is good, or consider using a thumb tack to hold the string in place.

2. Take the plastic bottle and slide it between the string and the pole (you may need to adjust the string until it is tight). Slide the bottle down toward one end of the pole until the tension of the string holds the bottle in place.

3. Use the paint stirrer or ruler to strike the string. On a real devil's fiddle, the stick has notches cut into it, but that is not really necessary.

4. Using duct tape, or various clamps available at your hardware store, start to attach rattles and other noisemakers to the pole. Some possibilities are: Coffee cans with beans inside, film cans with pennies inside, bicycle horns or bells, metal cans, pie plates, etc. The idea is to attach so many things that when you stamp the pole on the ground, it makes a rattling, crashing, shaking sound.

Neck Holder for Blown Thingies



This device is used by folk musicians who blow harmonica while playing guitar. It is basically a wire hanger re-bent to hold blown instruments (like kazoos, whistles, bird calls, etc.) up near your mouth. You Will Need:

- A wire coat hanger
- Various blown thingies (kazoos, whistles, bird calls)
- Tape*

Bend a coat hanger so it can be put around the neck with a straight part in front of the mouth (see picture).

* Attach the blown thingies to the straight part with tape.

71 Play a pipe

You can make music from a set of pipes. All you have to do is blow across the open ends. This makes the air inside each pipe vibrate, producing a musical note. Different lengths of pipes give different notes.

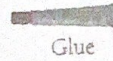
You will need.

 Card



Colored tapes

5 ft (1.5 m)
plastic pipe



Glue



Scissors

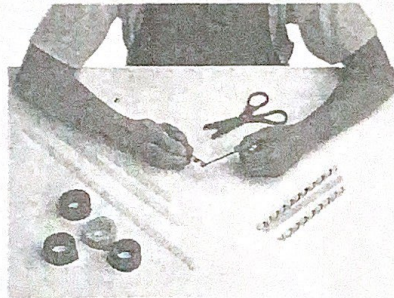


Colored
ribbon

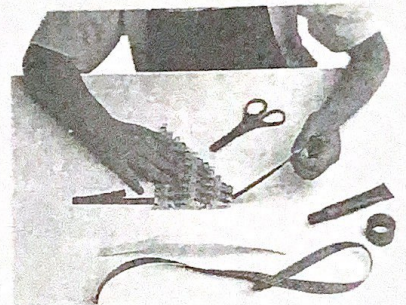


Modeling clay

1 Cut the pipe into pieces, each 0.5 in (1 cm) longer than the last. Decorate them with tape.

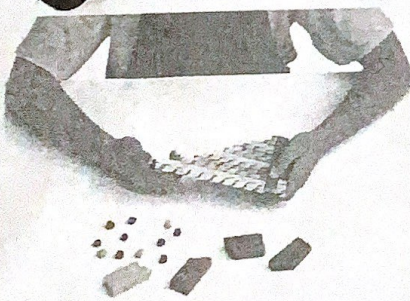


2 Tape the pipes together to make a set. Glue the ribbon to a strip of card, and glue it over the tape.

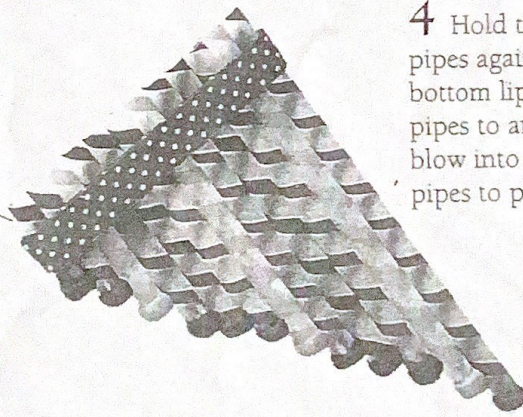


82

3 Roll the clay into small balls. Push one ball of clay into the end of each pipe.



Shorter pipes
give higher
notes.



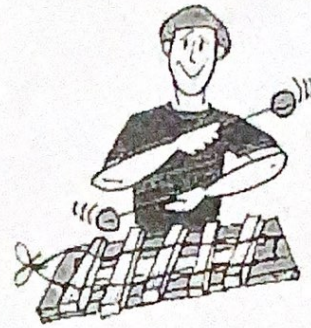
Longer
pipes make
deeper
sounds.

4 Hold the set of pipes against your bottom lip. Move the pipes to and fro, and blow into different pipes to play a tune.

make your own instrument!

Xylophones

by John Bertles



click to
hear...

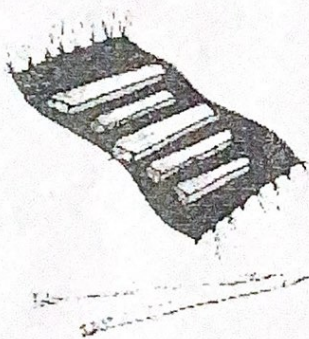


what it is

how it sounds



Xylophones are used in many forms around the world. But the basic instrument is the same everywhere - even in the orchestra onstage in front of you today! Here's how to make your own!



- 4 or 5 pieces of wood each around an inch thick and varying in length from maybe 8 inches to 12 or 18 inches long.
- A fuzzy towel, a piece of carpet, or any other thick soft cloth
- Sticks of some kind (two unsharpened pencils or some chopsticks will do fine)

Lay the wood pieces across the cloth in order of size, so they are not touching each other (the whole idea is to make them vibrate - that's why you can't just put them on the floor). Hit them with the sticks. Try using different sticks, like rubber balls on the end of the sticks, or even foam rubber wrapped around the stick ends with rubber bands.

You should be able to hear different notes from each piece of wood. The problem is that the wood has a tendency to bounce around. You can fix that by making an even better xylophone (you'll need to get an adult to help you with this one).



ll

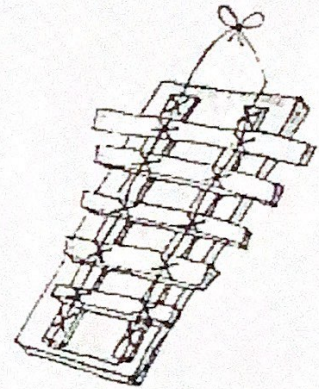
- A wooden base around 12" x 8" x 1"
- Two strips of foam rubber about 12" x 1", or strips of felt or other soft cloth
- 4 or 5 pieces of wood
- A heavy-duty staple gun (3/8-inch staples) OR hot glue or Elmer's-type glue
- 2 feet of twine or other thin rope

Staple or glue the foam rubber or soft cloth to the wood base (use a lot of glue) as shown:

Place the wood pieces across the base, in order of size.

Staple the end of the twine to one side of the base.

Lay the twine across the bars and staple the twine to each bar, then staple the twine to the opposite side of the base, and back again, once again stapling each bar (to provide stability), and then, finally back onto the base near where you had started. If this sounds a bit complicated, just look at the drawing and staple wherever you see an X. You may need to hammer the staples a bit to make them tight. The whole idea of the twine is to make this a bounce-less, more portable instrument. instrument.

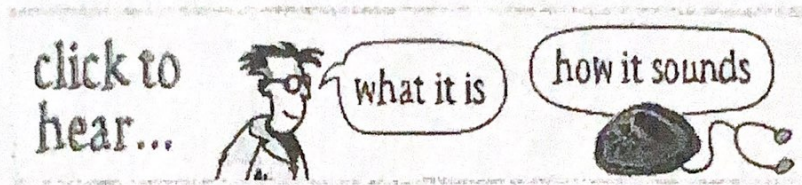


(If you don't have a staple gun, you can use glue; just glob it on - use a lot - at the same points you would staple and press the twine into the globs using a pencil to push if you have hot glue. Make sure your glue is FULLY dry before playing your instrument - about 24 hours for Elmer's-type glue!



Make Your Own Finger Piano!

by John Bertles



In Africa, finger pianos are also known by the names *sensei*, *m'bira*, and *kalimba* among others. Here is how to make your own. You will need:

<http://www.asza.com/ikalim.shtml>

Bobby pins (large ones work best but you can use both large and small)

Pliers (to break the bobby pins)

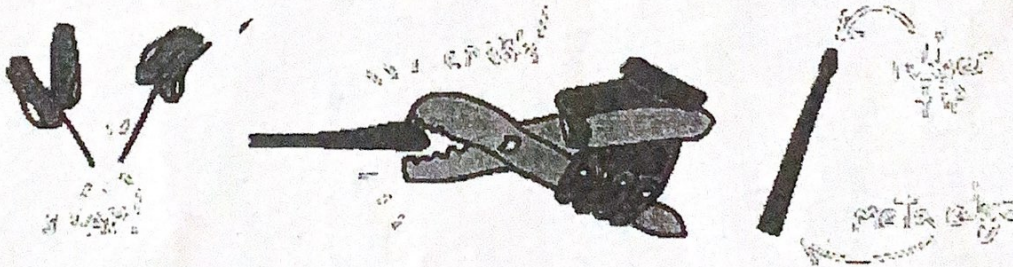
Heavy duty staple gun and 3/8 inch heavy duty staples

Plywood (about 6 inches by 6 inches and at least 1/2 inch thick)

Hammer

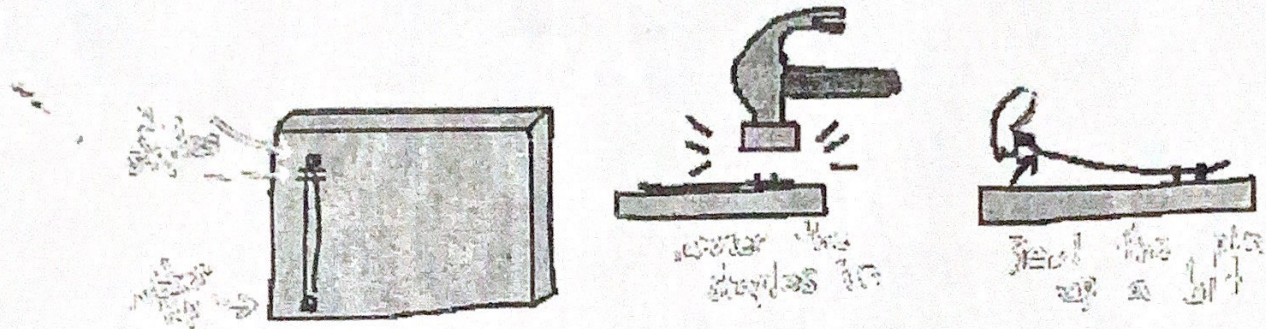
Step 1:

Break three Bobby pins by putting the bent part in the jaws of the pliers and crushing them down. As you open them up again the metal will snap (Note: if you don't have pliers you can also break the pins by hammering the bent part flat with a hammer). If you broke three pins you should now have six pieces, each with a rubber tipped end and a rather sharper metal end.



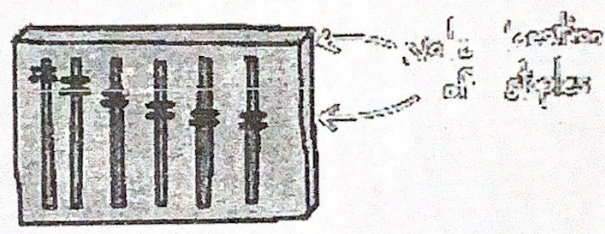
Step 2:

THE LOW PIN. Staple a pin to the left side of your plywood. Use two staples positioned right at the sharp metal edge of the pin to leave the rubber tipped end free for playing. If the staples did not go all the way in, then hammer down the staples to hold the pin tightly. The rubber tipped side should be up in the air (to be able to vibrate). If it is not, then bend it up just a bit.



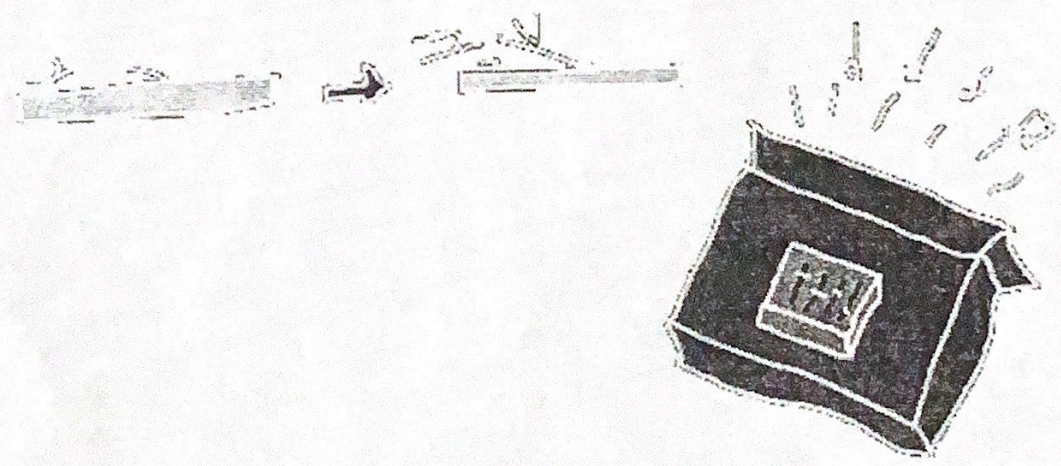
Step 3.

The rest of the pins. Start stapling in the rest of the pins. As you work your way from left to right, staple the pins further and further toward the rubber tips, so that the length of the vibrating pin is getting shorter and shorter. You probably shouldn't staple the pins any further than halfway down the length of the pin.



To play:

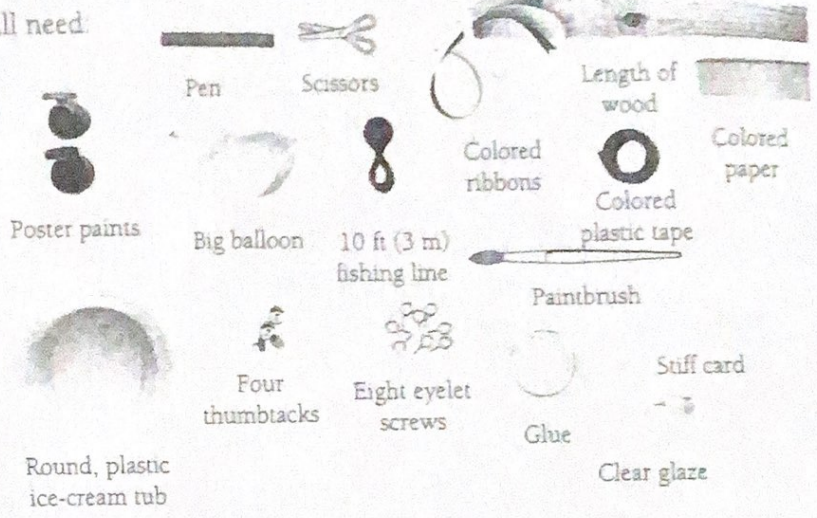
push down on the rubber tip then slide your finger back off the tip. As the pin bounces back to its original position it will vibrate and make a sound. Try putting the plywood on different things to make it louder (something called a resonator). The best things are big cardboard and styrofoam boxes, but try any thin rigid flat surface to see what works best!



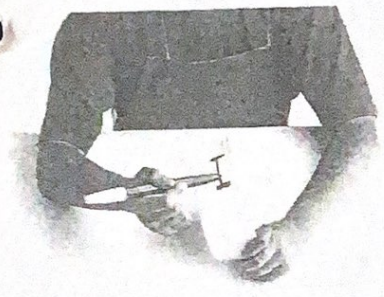
Build a banjo

A banjo has four strings, stretched tightly. You play the banjo by plucking the strings with your fingers. The strings vibrate very fast, producing musical notes. You can strum a rhythm by plucking all the strings together. Or you can play one note after another, to pick out a tune. You can make each string play several notes.

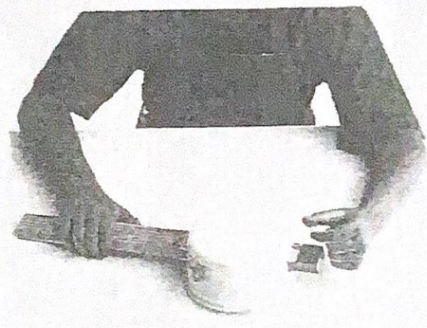
You will need:



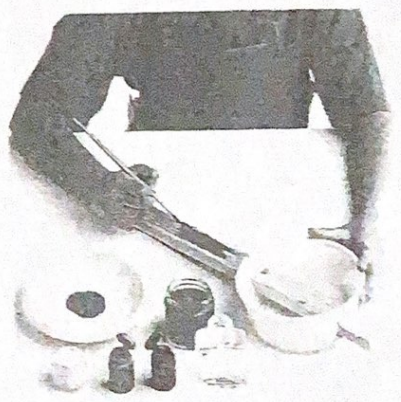
1 Cut two 'T' shapes under the rim of the tub, opposite each other. Make them as wide as the end of the wood.



2 Bend the flaps of the 'T' shapes out. Push the end of the wood through the holes. Tack the flaps to the wood.



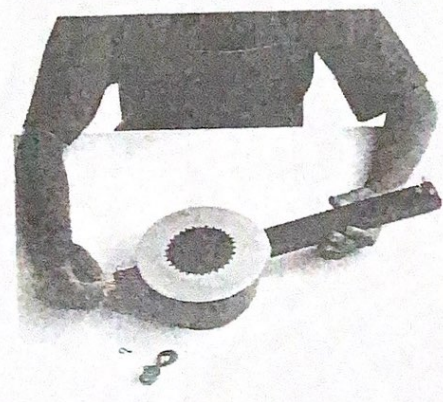
3 Paint and glaze the wood and the tub. Mix glue with the paint you use for the tub. Paint lines across the wood.



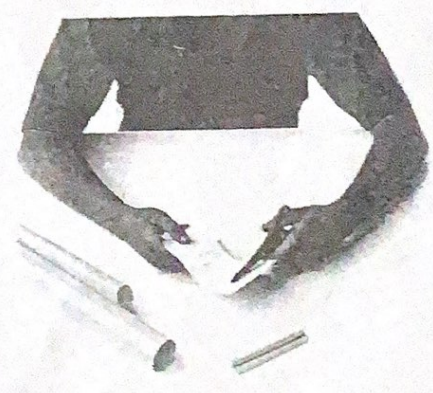
4 Cut off the neck of the balloon. Stretch the balloon over the tub and tape it to the sides. Paint a design on it.



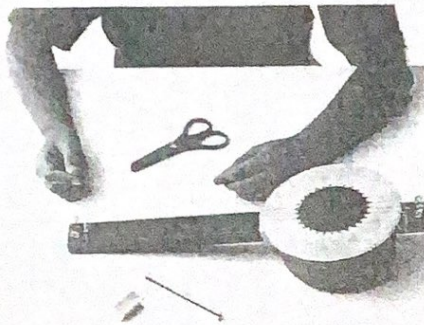
5 Partly screw four eyelet screws into each end of the wood. Make sure you can turn each screw in either direction.



6 Make two triangular bridges of card and paper. Make one the same width as the wood and the other three times as wide.



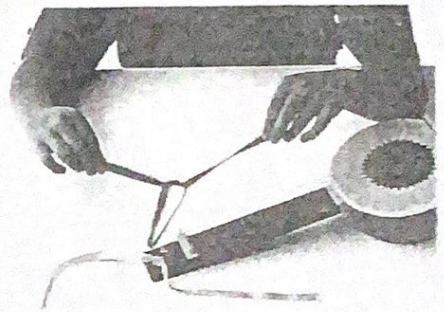
7 Make four strings by cutting the fishing line. Tie these strings securely to the two sets of eyelet screws.



8 Insert the two bridges under the strings, as the picture shows. Turn the eyelet screws to tighten the strings.



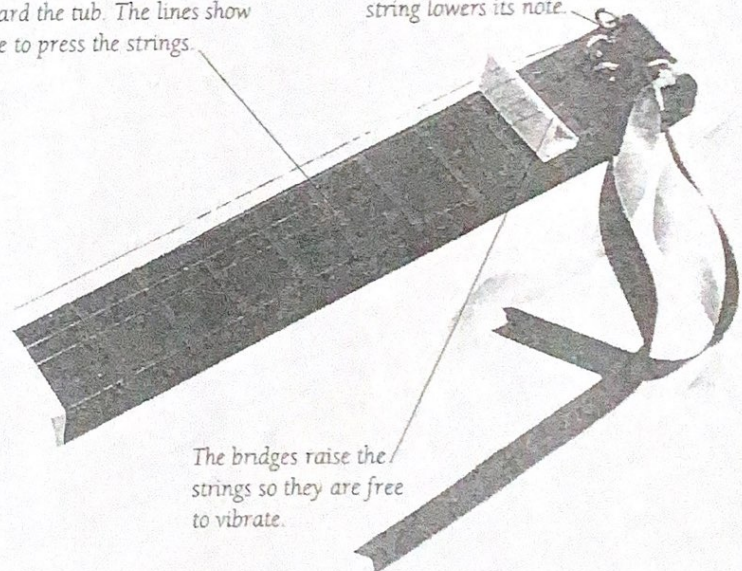
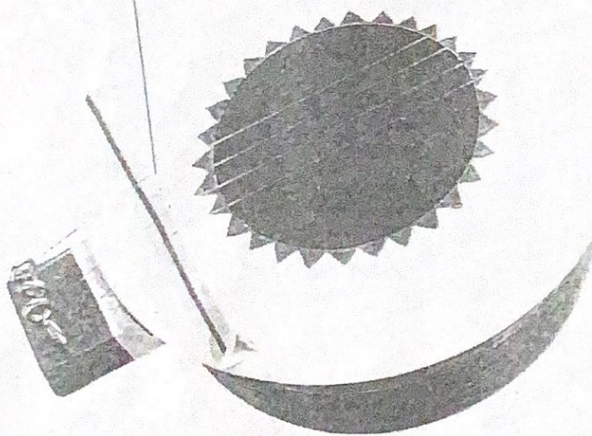
9 Decorate the banjo by tying pieces of ribbon of different colors to the eyelet screws. Your banjo is now ready to play.



Hold a string down to change its note. The notes get higher as you move your hand toward the tub. The lines show you where to press the strings.

Tightening the string makes it sound higher. Slightly loosening the string lowers its note.

Make each bridge by folding and gluing pieces of card and paper. Cut four notches in one edge to hold the strings.

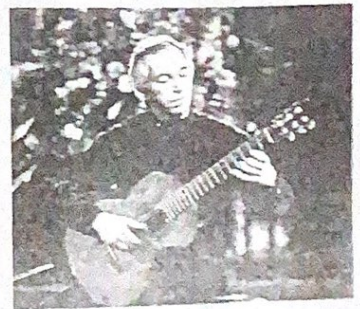


The bridges raise the strings so they are free to vibrate.

10 Tune the banjo by tightening the strings, so each one gives a different note.

Busy fingers

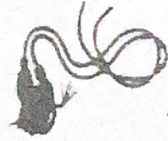
The guitar is like a banjo, except that it has six strings. When you press a guitar or banjo string, you change the length of the part of the string that vibrates. This changes the note made by the string when you pluck it.



72 Blow a horn

You can make a horn from a hose and a funnel! Close your lips firmly together and put them to the end of the horn. Blow air through your lips and the horn will sound. This happens because your lips make the air inside the horn vibrate.

You will need:



Cord with tassels



Funnel

30 in (75 cm) of hose



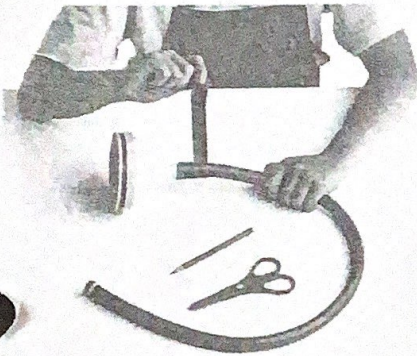
Scissors



Colored tape

Pencil

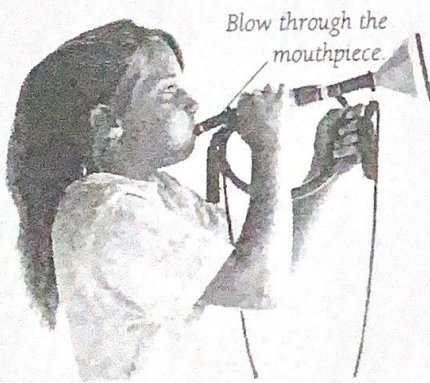
1 Decorate the funnel with tape. Push it into one end of the hose and secure it with tape.



2 Tape around the other end to make the mouthpiece. Loop the hose and attach the pencil to it.



3 Decorate the horn with strips of tape and the cord. Now your horn is ready to blow.



The horn produces only a few notes. You can get these by pressing your lips tighter together as you blow, or letting them relax a little.

