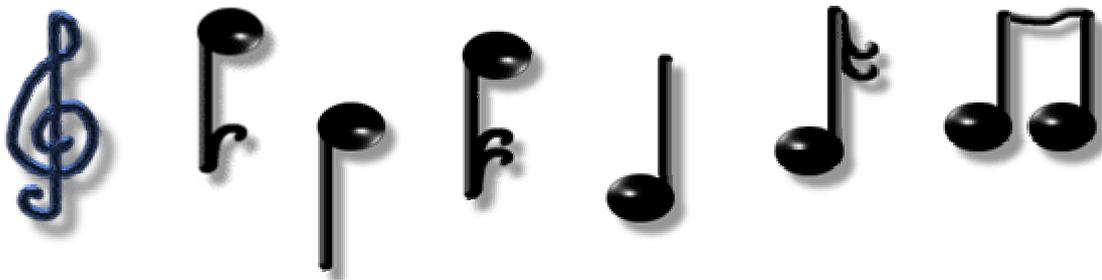


MAKE AND PLAY YOUR OWN

Musical Instruments



***Easy to make
Musical instruments
using
recycled materials***





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1. Decorative items

For any of these activities, you can leave the items plain or decorate them. If you need ideas for decorating these projects, try any of the following items. We are sure this list will help you think of even more items you can use. Combine different things such as buttons and glitter or sequins and yarn. Let the children's creativity surprise you!

Keeping items such as these in a large plastic storage container makes for easy access and quick clean up.

Sequins, buttons, yarn, ribbon, masking tape, beads, glitter, sand, cellophane, construction paper, magazines, photos, crayons, markers, colored pencils, paint, nail polish

Have fun and let creativity and imagination run wild!
Record the band's first song and play back for some
great giggle time.

Enjoy!

2. Drumsticks And Mallets

These sticks and mallets may be used on many percussion instruments. It is important that the mallet be matched to the instrument so that it will feel "right" in the hand and give the desired sound.

Materials:

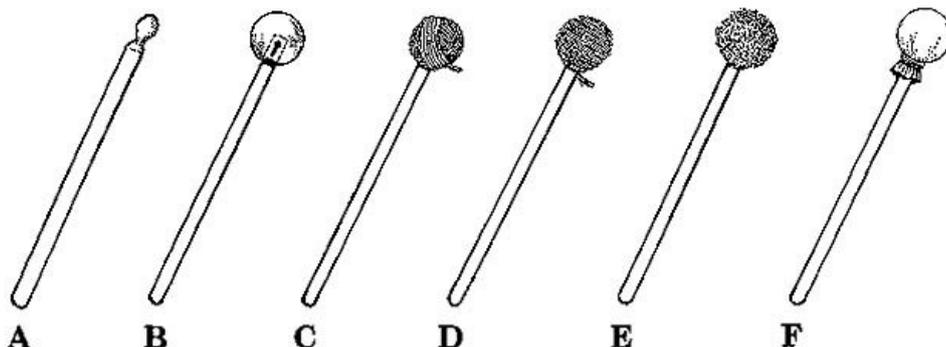
Sticks, 1/4" to 1/2" doweling from 8" to 12" long, Chopsticks, Tree stems

2.1. *Hard Ends*

- Take about a foot of 1/2" doweling and carve a broad groove about 5/8" from the end. Sand the ends round, wax (A).
- Wooden beads drilled out to fit a 1/4" dowel or stick and glued together make good hard mallets (B).
- Cork that is carved in a round shape or old cork fishing floats fitted to a dowel or stick are also fine beaters.
- Plastic balls or spools may be glued to a stick.

2.2. *Soft Ends*

- On about one foot of doweling wrap and wind yarn or jute twine as tight as possible until it reaches a diameter of approximately 1". Dab the yarn end completely with white glue. Hold for a few minutes and let dry thoroughly before using (C) (D).
- Wind a strip of felt around the end of a dowel dabbing a bit of white glue as you wrap.
- Small rubber balls or erasers carved a round shape and drilled out to fit on the end of a thin dowel make good beaters.
- Cork, plastic, or wooden balls glued on a dowel and covered with felt, fur, leather, yarn, or other cloth material (such as wool) are excellent (E). The covering may be either glued into the core or wrapped around tightly and tied just under the knob with string or lacing (F).



3. Percussion Instruments

3.1. *Cymbals*

Materials:

two matching pot covers
yarn or ribbon

To make:

Tie the ribbon or yarn around the handles of the pot covers.

To play:

Strike together to play.

3.2. *Cardboard Box Drums*

Materials:

Empty oatmeal box with cover,
yarn,
pen,
2 pencils,
2 spools,
construction paper ,
crayons

To make:

1. Before beginning, you can decorate the oatmeal box with construction paper and/or crayons for a colorful effect.
2. Place the cover on the box.
3. Use a pen to make a hole in the center of the cover and in the center of the bottom of the box.
4. Through these holes, pull a piece of yarn long enough to hang around child's neck and down to their waist.
5. For the drumsticks, place the spools at the ends of the pencils, secure with glue if necessary.

To play:

Beat to play.

3.3. Box Drum

First came the hollow log. Then the large slit drum, which evolved into this portable version. Fine hardwood makes a much better sound than plywood.

Materials:

4 pieces of wood, each 6" x 8". Hardwoods have a very nice sound. Any size will work nicely.

saw. A coping saw is best, for the blade can be removed for cutting the inside shapes.

pencil

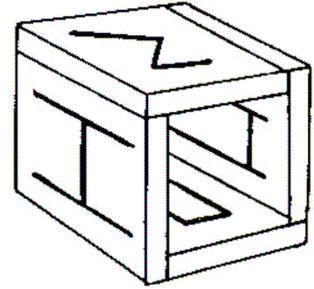
drill

twelve 1 1/2" finishing nails

hammer

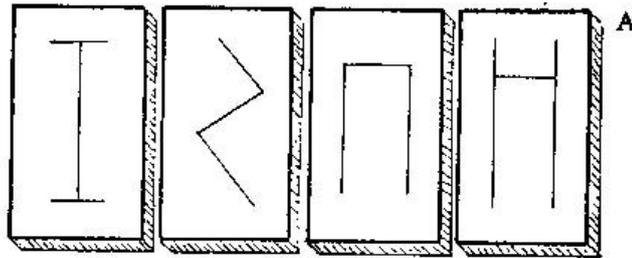
white glue

mallet or drumstick(s)

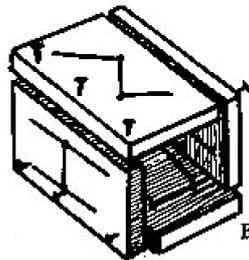


To make:

1. Draw patterns on wood (see diagram A).



2. Drill holes at each angle of each pattern; this is for inserting saw blade.
3. With the saw, cut on the lines drawn.
4. Glue and nail both together (B).



To play:

Lay box on any side. Using one or two drumsticks or a mallet, tap the different areas of the box for different tonal patterns.

3.4. Balloon Tom-Tom Drum

Materials:

Juice can, oatmeal box, potato chip can, or other such container
2 large balloons.
2 heavy rubber bands,
2 pencils with erasers

To make:

1. Open both ends of the container for the drum body
2. Cut small end off the balloons, this is the drum skin
3. Stretch the closed end of the balloon over the drum body
4. Hold balloon in place with the rubber band, smoothing out the wrinkles
5. Repeat 1-4 for the other end

To play:

Use the pencil as the drum stick

3.5. Xylo-Drum

Materials:

tin can, potato chip can, juice can or other such container to use as the drum body.
Styrofoam cup with a base that will fit snugly into the open end of the drum body,
balloon,
rubber band,
3-6 nails of different sizes, long enough to reach from one side of the cup to the other,
duct tape,
stick

To make:

1. Open both ends of the container for the drum body cut small end off the balloons, this is the drum skin stretch the closed end of the balloon over the drum body hold balloon in place with the rubber band, smoothing out the wrinkles.
2. Lay out the nails, shortest to the longest then push them through the rim of the Styrofoam cup.
3. Don't let them touch each other.
4. Fit the base of the cup into the open end of the drum body and tape in place.
5. Make a striker by taping a nail to a stick.

3.6. Coffee Can Bongos

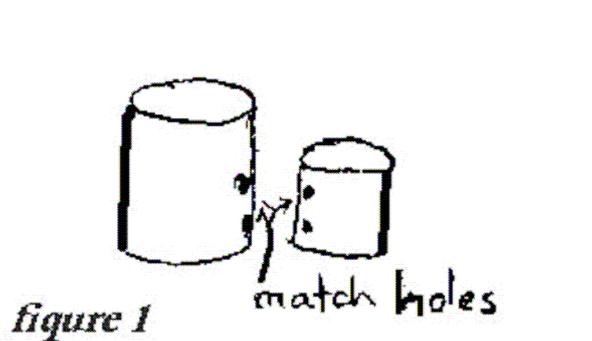
(See Figure 1)

Materials:

two coffee cans of different sizes with lids,
2 wing nuts,
2 bolts

To make:

1. Open both ends of the cans.
2. With a nail punch 2 holes in each can. Put the holes in a straight line one on top of each other.
3. Line them up so that the bolts will go from one can into the other.
4. Put the bolts through the holes and add the wing nuts securing them.
5. Decorate the drum bodies if you want to.
6. Add the plastic lids for the drum heads. Could use inner tubing, brown grocery sack or other material for the drum head. If you use any of these cut the material one inch larger than the drum body.



3.7. Pan Drum

Materials:

several cardboard tubes of a different lengths but the same diameter,
stiff transparent paper ,
glue,
model airplane lacquer

To make:

1. Decorate the tubes if desired.
2. Cut drum heads out of the paper and glue it to each tube.
3. Treat each drum head with lacquer as soon as the glue is dry. This will create tension.
4. Fasten drums together using rubber bands, glue, staples or whatever.

3.8. Mouth Drum

Materials:

mouth and hands

To play:

Open mouth slightly. Lightly hit your cheeks with your open hands. It works best when your hands are straight and your fingers are together. Try changing the position of the mouth for different sound: opening and closing, tightening lips.

3.9. Cake Tin Hand Drum

(See Figure 2)

Materials:

round cake or candy tin without the lid,
inner tube,
rawhide or heavy twine lacing

To make:

1. Cut the bottom out of the tin and smooth any rough edges.
2. Cut open the inner tube so you can have a large, long flat piece that will cover both ends of the tin
3. Lay the tin on the inner tube and draw a circle around it. Turn the tin over and draw another circle connecting the two circles.
4. Cut the two circles out like a figure eight, so they are connected.
5. With the paper punch make holes all the way around the edges about one and a half inches apart.
6. Pull this "drum head" over the tin so that the open end meets, tie this down until you lace it up.
7. Start lacing at one end near the connection and continue around tying a good strong knot. Leave a tail of an inch or so.
8. A handle can be added if desired.
9. Make a drum stick using a hard ball or use a wooden drum stick.

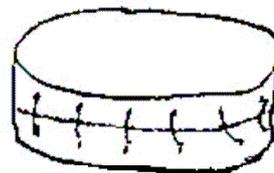
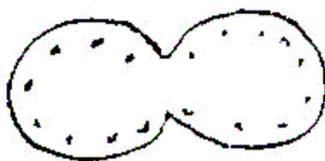


figure 2

3.10. Log Drum

Materials:

3 or more large fruit juice cans,
duct tape or other strong tape,
large brown grocery sack,
green paper,
clear tape

To make:

1. Open both ends of the cans.
2. Tape the cans together to form a log.
3. Open the brown paper sacks up.
4. Cut out enough to wrap around the log.
5. Roll the paper around the log and tape it in place.
6. Draw a wood grain design on the paper with markers or crayons.
7. Cut out some leaves from the green paper and tape them underneath the drum.

To play:

Use sticks to strike the log.

3.11. Skin Drum

Materials:

large juice can,
colored paper,
tape or paste,
wax paper or soft vinyl,
2 strong rubber bands,
2 corks,
2 pencils,
brown paper sack treated with lacquer could also be used for the drum head

To make:

1. Cut both ends out of the cans.
2. Cut the colored paper so that it is as tall as the can and long enough to wrap around it.
3. Decorate one side of the paper.
4. Tape or paste the paper to the can.
5. Cut 2 circles from the wax paper or vinyl at least 1 inch bigger than the can.
6. Place the circle over the can.
7. Fold over the excess paper. Attach the circle to the can with the rubber band. Make this tight.
8. Cover the other end the same way.
9. To make drum sticks twist the sharp end of the pencil into the cork.

3.12. Two-Sided Square Drum

Materials:

Wooden packing crate approximately 12" x 15" x 2" or saw your own sides (white cedar was used by Indians).

1-1/2" finishing nails and hammer

Long tacks such as furniture tacks with decorative heads

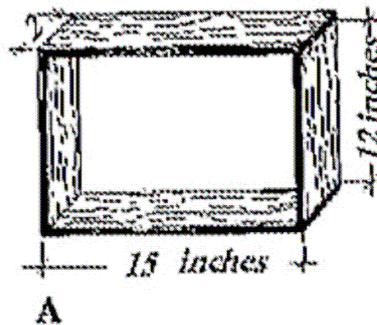
rawhide

glue

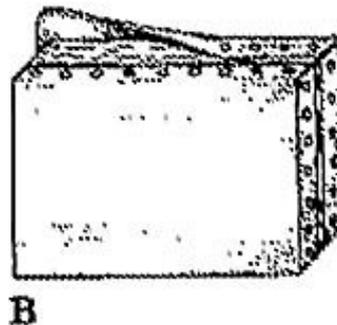
scissors

To make:

1. Saw two 12" lengths and two 15" lengths of wood that are about 1/2" to 1" thick. Make the frame smaller if your piece of rawhide is not large enough to accommodate the suggested size.
2. Glue and nail drum frame together (A). Let dry.



3. Soak rawhide in cool water overnight or in lukewarm water for an hour or two.
4. Trim rawhide to shape so that both sides will be covered with enough to wrap around and tack.
5. Tack rawhide to one side of frame, then pull skin around the box so that skin overlaps the sides and is reasonably taut, not tight. Place a tack about every inch (B).



6. Repeat on the other side. Tack skin along edges. Cut out corners so skin will lay flat.
7. Let dry slowly overnight.
8. Decorate

3.13. *Xylophone*

Materials:

tall glasses or jars,
water,
mixing spoon

To make:

1. Fill the glasses or jars with different amounts of water. The more water in the glass, the lower the pitch will be. Having less water in the glass or jar will raise the pitch.

To play:

To play, gently strike the glasses with a mixing spoon.

Note: This instrument should probably be played by older children in "the band" because of the use of glass.

3.14. *Gong*

(See Figure 2)

Materials:

Disposable pie tin,
large cereal box,
tape,
string,
pencil,
cork,
paper clip

To make:

1. Tape ends of box closed.
2. Draw a window on one side of the box and cut it out.
3. Poke a hole in the side of the pie tin and in the top of the box.
4. Tie a piece of string to the pie tin, thread the other end through the hole in the box. Tie the string to the paper clip to hold in place.
5. Make beater out of cork and pencil.

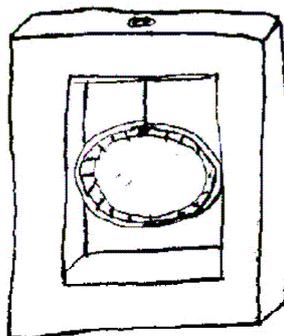


figure 2

3.15. *Carpet-Tube Bongos*

Materials:

two lengths of carpet tubing (one 1 foot long, the other 8 inches or so). The longer tube will produce a lower pitch.

1/8-inch paneling or plywood

coping saw

glue

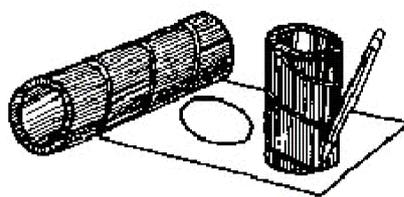
masking tape

string or colored yarn

paint / markers

To make:

1. Use the end of the tube for a pattern and draw two circles on a piece of 1/8-inch paneling or plywood.
2. Then saw out the circles for the drumheads with a coping saw.



3. Glue the Disks on the tubes. To hold the heads on the tubes tape them with masking tape.



4. Run a line of glue down one side of your short drum and stand it on its head. Press the longer drum (also standing on its head) against the glue line.
5. Tape the two drums together and let the glue dry. To make the drums look nice and to hold them securely together wrap them with string or colored yarn.



To play:

To play your bongos hold them between your knees and slap the heads with your fingers and thumbs.

3.16. *Tabular Glockenspiel*

The tubular glockenspiel has a brilliant ringing tone.

Materials:

It is made from electrical conduit (pipe). The one we'll make uses 1/2-inch diameter conduit.

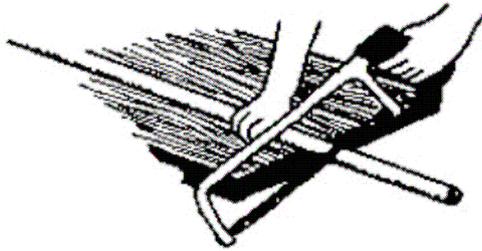
You can make glockenspiels from other sizes of conduit or metal pipe, too. But you will have to tune them by ear.

Hacksaw

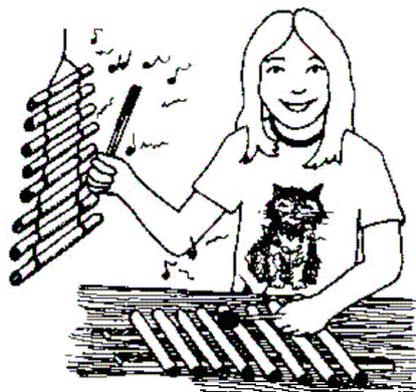
two strips of foam rubber or felt

To make:

1. With a hacksaw cut your tube to these exact lengths: 11", 10 1/4", 9 3/4", 9 1/2", 8 7/8", 8 1/2", 7 7/8", and 7 5/8".



2. Now you have a set of tubes already tuned to a major scale. Set the tubes on two strips of foam rubber or felt.
3. Place the strips under the nodes to allow the tubes to vibrate freely.
4. You can make a good beater by wrapping the end of a scrap of your conduit with three or four layers of tape.
5. Make additional tubes if you like. Remember the shorter the tube the higher the pitch will be.



4. Shakers, Rattlers and Scrapers

4.1. *Jingling Johnnie, Lager Phone, Dolley Stick*

Materials:

broom handle,
stick or piece of wood 2x2's work great,
bottle caps,
nails,
#8 wire 1 1/4" long

To make:

1. Take out the cork or plastic from the bottle caps.
2. Using a large nail punch a hole in each cap from the outside to the inside.
3. Place two caps together back to back and nail them on to the stick. Do not nail them tightly, you want them to be loose. Use as many as you want placing them at least 1/4" apart
4. You may want to decorate the rest of the stick.

To play:

To play, tap it gently on the floor.

4.2. *Maracas*

Materials:

20 oz soda bottle
sand or small pebbles

To make:

Fill a 20 oz soda bottle a third full of sand or small pebbles.

To play:

Shake em!

4.3. *Tambourine*

Materials:

2 paper plates,
stapler or glue
hole punch,
string,
jingle bells,
crayons

To make:

1. Staple or glue two paper plates together, facing each other.
2. Using a hole punch, make holes around the plates and tie jingle bells to the holes with string.

3. Decorate the tambourine with crayons.

To play:

Shake to play.

Note: Heavy-duty paper plates may be more durable for this craft.

Safety note: If using a stapler, an adult should do this. When finished be sure to cover the staples with scotch tape.

4.4. Clatter Stick

Materials:

cork,
sharpened pencil,
unsharpened pencil,
metal washers,
jingle bells,
string,
heavy tape,
glue

To make:

1. Twist sharpened pencil into the cork and fill the hole with glue.
2. Put the unsharpened pencil into that hole. Let the glue dry.
3. Slip the washers and bells alternately onto the pencil.
4. Wrap enough tape on the end so that the washers and bells don't fall off.

4.5. Rattler

(See Figure 1)

Materials:

2 paper plates,
dried beans or rice,
white glue

To make:

1. Decorate the bottom side of both plates.
2. Put rice or beans on the plate.
3. Squeeze glue around the edge of the plate.
4. Place the other plate on top rim to rim and let them dry.

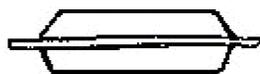


figure 1

4.6. *Gourd Scraper (For When You Do Not Have Gourds)*

Materials:

long balloon,
news paper,
paste,
heavy cord,
white glue,
paints

To make:

1. Blow up the balloon and knot..
2. Tear up newspaper into strips for paper mache stuff.
3. Paste the strips onto the balloon covering it completely three times.
4. Tie a long cord to the knot on the balloon.
5. Wrap the cord around the balloon evenly spaced. Tuck the end in and cut off any extra.
6. Paint the balloon covered with newspaper and cord with white glue. Make it good and thick.
7. Let it dry completely.
8. Cut the neck of the balloon, decorate.

To play:

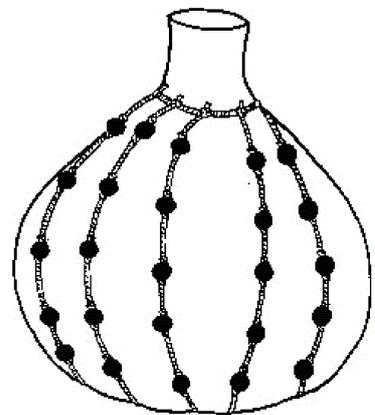
Scrape with a stick or old wooden spoon.

4.7. *Calabash*

Originally from Africa, but now common in Latin America, this large calabash has it's rattle outside. The most effective sound comes when there are many small glass beads on a loose network of strings.

Materials:

Gourd, preferably about 6" in diameter with a neck as pictured above
String or cord, thin enough to slip through beads
Beads, wooden or glass
Candle wax
Masking or cellophane tape
Scissors



To make:

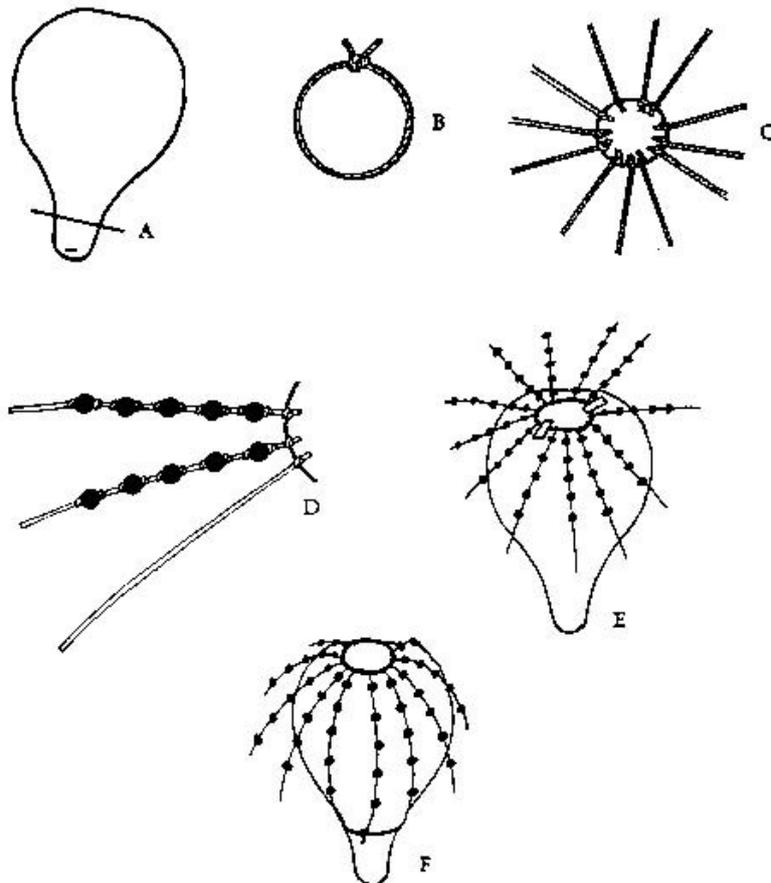
1. With a knife, cut off narrow end of the gourd, leaving enough of the end to grasp comfortably (A).
2. Scoop out seeds and extra membrane in the gourd.
3. Dry thoroughly in the hot sun or in the oven at a low, even temperature.
4. Cut a piece of string about 4" long and tie it in a circle (B). Lay on a flat surface.
5. Cut 12 pieces of string (more for a larger gourd), each about twice the height of the gourd, or at least long enough to tie knots on each side of each bead

and to knot at base of gourd. Tie these strings at equal intervals around the circle of string (C).

6. Dip free end of each string in melted candle wax, to make threading beads easier. When burning a candle, enough wax forms around the candle wick to dip strings. Let wax on string harden. Make a knot in string, slip on a bead and knot again. This will hold the bead in place.
7. Repeat this procedure at equal intervals until you have four or five beads on each string (D). The size of the gourd determines how many beads to use.
8. Tape circle with beads onto the rounded top of gourd; use masking tape or cellophane tape (E).
9. Loosely tie a circle of string around the handle base (F). This will hold the beaded strings in place.

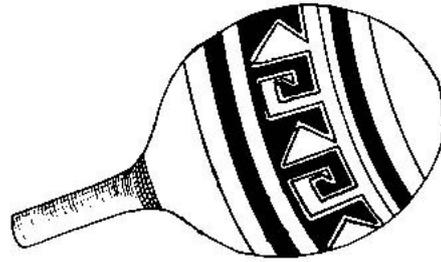
To play:

This is especially fun to play because, besides just being shaken, it can be tossed and caught-in rhythm, of course.



4.8. Gourd Rattle

Gourds are easy to grow. They can often be found in the market. Especially in a local farmers' market. The type and amount of rattles used inside change the sound dramatically.



Materials:

1 dried gourd, any shape or size, but hard and firm

Rattles-seeds from gourd, pebbles, beans

Knife or hand saw, to cut neck of gourd

Narrow spoon or knife

Dowel or stick, 6" long and the width of neck of gourd in diameter, if necessary

Twine or heavy string

White glue

Poster paints and shellac

To make:

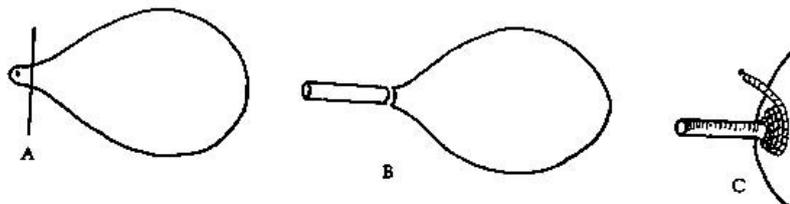
1. With knife, cut off the narrow end of the gourd; if neck is long enough, leave most on for handle (A).
2. With narrow spoon or knife, scoop out seeds and membrane inside the gourd. Save seeds for rattle.
3. Dry gourd in the hot sun or oven at a low even temperature.
4. When dry, fill gourd with seeds, beans or pebbles.
5. If it's long enough for a handle, reattach gourd end with white glue.
6. If dowel is needed for handle, place glue on one end of dowel and insert in the neck of gourd (B). Dry. Dip twine in white glue and wrap firmly around the dowel and up the gourd about 1/2" (C).
7. If desired, paint a bright colorful design on gourd with poster paint; when dry, shellac to protect finish. Or you may leave it natural.

To play:

Shake rhythmically.

Hints:

A long season of drying in the warm sun and wind is the best for gourds. In colder climates the process can be speeded up by a warm oven. Be sure the gourd is completely dry before cutting otherwise it will shrink and wrinkle.



4.9. Hawaiian Uli-Uli

This is the Hawaiian version of the gourd rattle. The hula dancer carries it with the gourd downward to emphasize the movement of the bright feathers and the movement of her grass skirt.

Materials:

2 dried gourds, each about 3" in diameter
Spoon or knife, for cutting and scooping out gourd

2 dowels, each about 5" long and wide enough in diameter to fit neck of gourd

Beans, for rattles

White glue

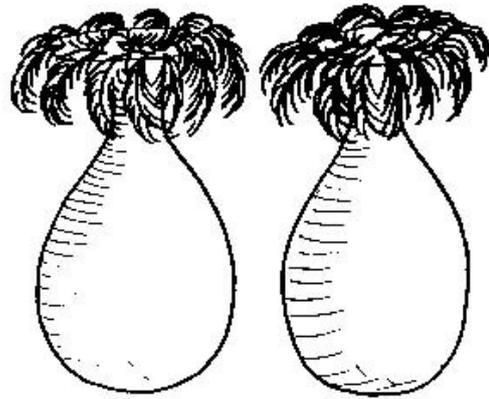
1/4" plywood, 5"x10", to make two 5" circles

Saw, hand or electric

2 nails

Hammer

Feathers or crepe paper-enough to decorate the plywood discs

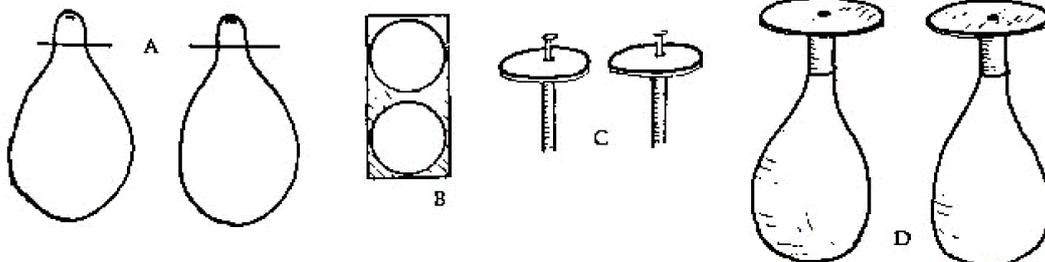


To make:

1. With a knife, cut off the neck end of each of the gourds, leaving enough of the neck to insert a dowel for a handle (A).
2. Scoop out seeds and membrane with a spoon or knife.
3. Dry gourd in the hot sun or oven at a low even temperature.
4. Cut two 5" circles from the plywood (B). Center a nail in each circle and nail through to dowels (C).
5. Insert about 10 beans for rattles in gourds. Place glue on dowel, insert in neck of gourd and dry (D).
6. Attach feathers or crepe paper to plywood circles with glue or staples.

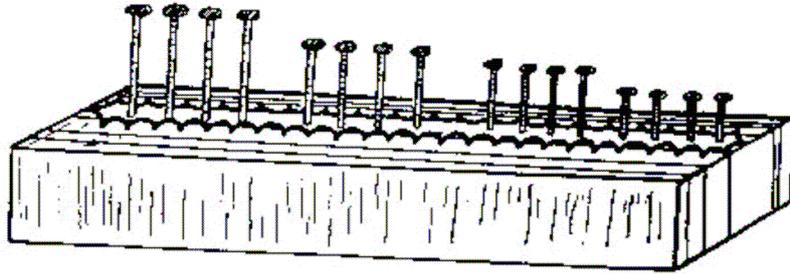
To play:

The dancers hold a shaker in each hand, with the gourd down and the feathers up to accent the traditional hand movements of the hula. At intervals, they tap the gourd half of one instrument on the feathered wood circle of the other.



4.10. Nail Rasp

This makes a soft, bell-like sound.

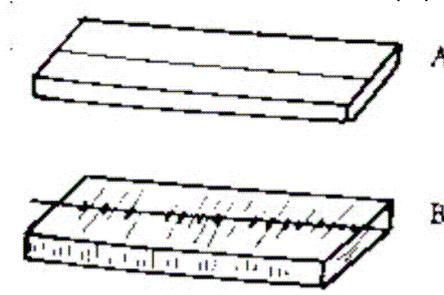


Materials:

1 block of wood 10" x 2" x 2". Try to have the grain of the wood going across rather than lengthwise (this keeps the wood from splitting when hammering nails).
nails of different sizes (16 were used in the diagram)
1 large nail for strumming
hammer
paint or marking pens (optional)

To make:

1. Draw a line the length of the wood in the center (A).



2. Mark where to place nails (B). The nails are grouped according to sizes (C).



3. Hammer the nails in the marked spots.

4. If desired, the block of wood may be decorated with paint or marking pens.

To play:

Use the large nail to run down the line of nails in a rhythmic fashion. The different lengths of the nails make different bell-like sounds.

4.11. Chimes

Materials:

ruler or stick,
washers,
nail polish,
string,
mixing spoon

To make:

Hang the washers from the ruler or stick with pieces of string by wrapping the string around the ruler or stick and securing.

To play:

Strike the washers with the mixing spoon to play.

Note: You can make this craft colorful by painting the washers first with different color nail polishes, such as red, gold, glittery, etc. Parents should supervise this part of the activity closely.

4.12. Sandpaper Blocks

This is another type of scraper that is used in children's rhythm bands.

Materials:

Two small blocks of pine or plywood, approximately 1" x 4" x 5" (although size is really not important

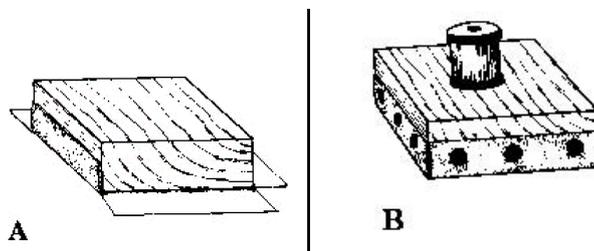
Sandpaper (experiment with different grades of sandpaper to make different effects).

Thumbtacks

Thread spools and glue or cabinet knobs and screws

To make:

1. Cover one side of each block with sandpaper.
2. Fold the sandpaper over the edges and fasten it with thumbtacks. Cut the corners out so sandpaper will fold neatly around the block (A).



3. Trim off excess.

4. Glue or screw handles to the other side of each block (B).

To play:

Rub the blocks together in a continuous motion for a swishing, whispering sound or bring the blocks together in a more percussive manner for a more rhythmic effect.

4.13. Hand Bells

Materials:

2 paper towel rolls,
hole punch,
4 jingle bells,
string or yarn

To make:

1. Punch a hole in each end of the paper towel rolls.
2. Tie two jingle bells to each side of the paper towel rolls by running string or yarn through the holes and carefully tying off.

To play:

Shake to play.

4.14. Flower Pot Bells

Materials:

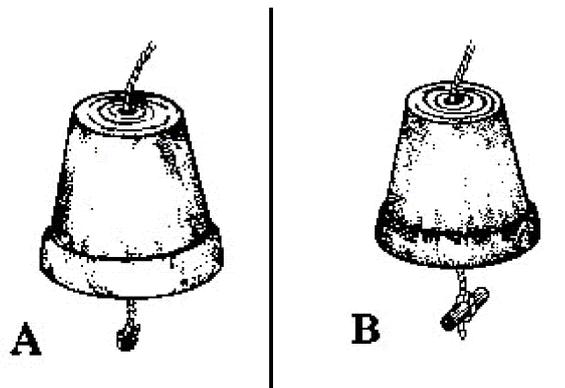
Clean, unglazed, earthenware flowerpots
Heavy cord or twine
Mallet or striker
Pole or broomstick

To make:

1. If you want a set of bells to play a scale or tonal pattern, you will have to hand-pick several sizes of pots and compare their relative pitches. Flowerpots of the same size can differ by one or two scale degrees. Size and *thickness* determine the pitch.
2. Suspend the pots upside down from a cord attached to a broomstick or other framework. Don't strike them too hard.

Options:

You may either tie a large knot in the cord and insert through the hole in each pot before tying to the pole (A), or if the cord is too thin for a good-sized knot, tie it to a small (2") section of dowel before threading through the pot hole (B).



5. Wind Instruments

5.1. *Comb Buzzer*

Materials:

pocket comb
tissue paper

To make:

Fold a piece of tissue paper over the tooth edge of a comb.

To play:

To play, hum through the tissue paper.

5.2. *Flute (Plumber's Pipe Cross)*

Materials:

15 inches of PVC plumber's pipe,
large cork cut down to about 7/16" in width to fit into the pipe

To make:

1. Clamp PVC down with cardboard under the clamps to protect the pipe.
2. Carefully mark with pencil: 3 1/2" from the left, 4" from first mark, 1" from second mark, 1" from third mark, 1" from fourth mark, 5/8" from the fifth mark, 1 1/4" from the sixth mark, 2 1/4" to the end.
3. Drill each hole carefully and directly in the center of each pencil mark.
4. Push the cork down into the left end.
5. Not necessary but decorative, are threads for wrapping. Choose any color and start wrapping. Put a dot of glue at each end of thread to hold it.

5.3. *Horn*

Materials:

paper towel roll,
waxed paper,
rubber band,
pen

To make:

1. Cover one end of the paper towel roll with waxed paper, secure it with a rubber band.
2. Punch a row of holes along one side of the roll with the tip of a pen.

To play:

To play, sing a tune into the open end of the horn.

5.4. Kazoo (Tube)

Materials:

Toilet tissue or paper towel tube,
wax paper or tin foil,
rubber band

To make:

1. Cut a circle larger than the end of the tube from the wax paper or foil.
2. Put this circle over the end of the tube smoothing it out. Hold it in place with the rubber band. It must be smooth and tight.
3. With a pencil or pen twist a hole into the tube just below the rubber band.

To play:

To play, hold the open end of the tube to your mouth and hum or sing into it. You might have to pucker your lips a little.

5.5. Oboe (Straw) (See Figure 2)

Materials:

plastic drinking straw

To make:

1. Pinch one end of the straw flat.
2. To form a double reed, cut that end of the straw into a point.
3. You can make other sounds by varying the length of the straw.

To play:

To play put reed end in the mouth just past the lips and blow hard.

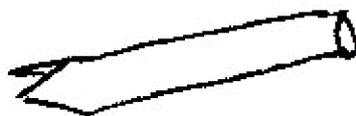


figure 2



5.6. *Trumpet (Garden Hose)*

Materials:

Garden hose,
funnel or plastic bottle,
duct tape

To make:

1. Cut hose, about 3 3 feet is good length, longer and fatter makes it harder to blow.
2. Cut piece of duct tape 4 to 5 inches long.
3. Insert small end of funnel into the cut end of hose. Or cut off soda bottle top and insert in neck of hose. Tape into place. The larger the funnel, the louder the sound.
4. Coil the hose into a circle and hold in place with tape.

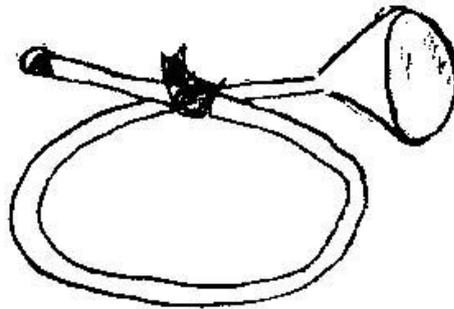


figure 3

5.7. *Whistle (Clay)*

Materials:

salt, water,
flour,
small whistle,
lentils or beads

To make:

1. Mix: 1 cup water, 1/2 cup flour, 1 cup salt, into a saucepan.
2. Heat mixture over low heat stirring continually until it is thick and rubbery.
3. Put mixture on a floured surface.
4. Roll half the clay into a ball around whistle. Be careful not to cover the mouthpiece or the opening.
5. Work the clay to create heads, legs, wings, etc. Use beads, lentils for eyes or decorations.
6. Allow the clay a day before blowing.

6. Stringed Instruments

6.1. *Guitar*

Materials:

empty shoe box,
rubber bands,
ruler or stick

To make:

1. Remove the cover from the box.
2. Stretch the rubber bands around the box.
3. Attach the ruler or stick to the back of the box on one end to act as the arm of the guitar.

To play:

To play, strum or pluck the rubber bands.

6.2. *Mouth Bow (See Figure 1)*

Materials:

3 feet narrow lattice or a lightweight yardstick,
fish line (50 pound-test)

To make:

1. Cut notches into the lattice or yardstick as shown in diagram (a).
2. Drill a hole into each end (a)
3. Tie fishing line to one end of lattice. Go into the notches and then thread it into the hole. Tie a strong knot (b).
4. Pull the fish line taut so that the lattice curves. Tie tightly to the other end of the lattice.

To play:

To play, place the bow against opened mouth and pluck the string with fingernail or pick. Changing the shape of the mouth helps create the melodies.



figure 1 a & b

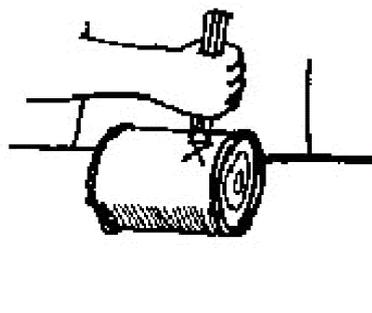
6.3. Spike Fiddle

Materials:

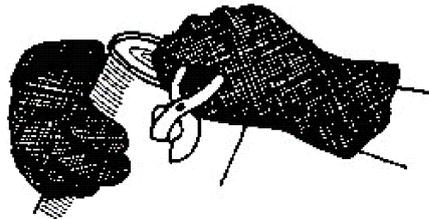
a tin can,
a straight stick (about 2 feet long),
some string. Wire or monofilament line works best.

To make:

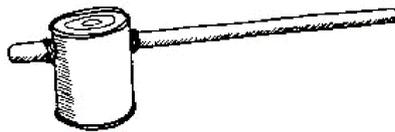
1. With a cold chisel and a hammer make holes large enough for the stick to go through the can.



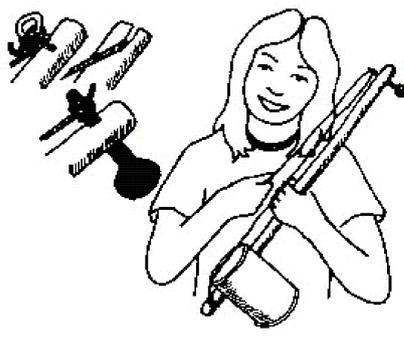
2. Bend the flaps with pliers. Jagged tin edges can cut. Wear gloves for safety.



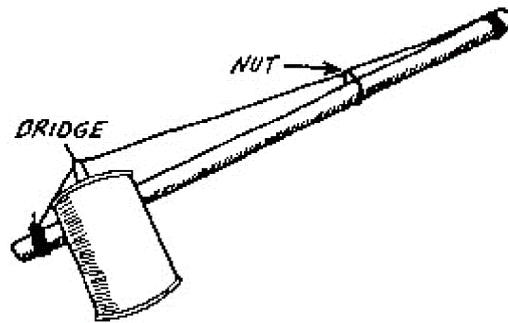
3. Push the stick through the holes so an inch sticks out one side and the other end is 1 or 2 feet long. Wrap the stick with string so the can won't slide.



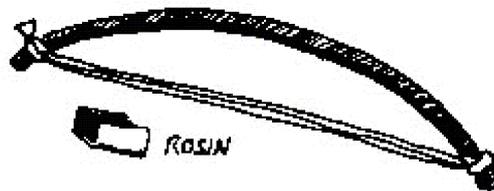
4. Most spike fiddles have three or fewer strings. Tie one end of the strings to the short end of the stick, then stretch them over the soundboard end of the can.
5. Pull the strings tight and tie them either through a notch in the end of the stick, to a peg, or to an eye screw.
6. Spike fiddles often have a moveable nut. You can use it to help tune the string(s). When you slide the nut up or down the neck, the pitch changes.



7. Insert the bridge (a wedge of wood, short stick, seashell, or stone) between the soundboard and string.

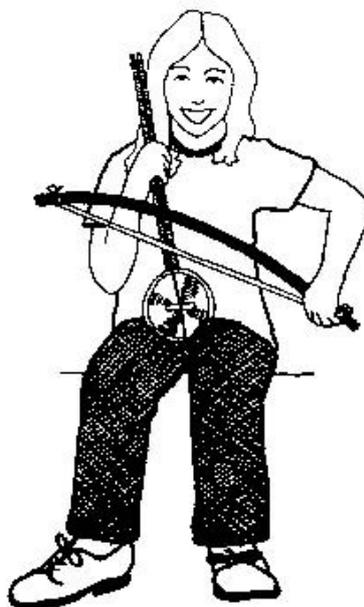


8. To play a fiddle you need a bow. Make a musical bow, but use a strip of cloth about an inch wide folded over twice, a heavy cotton string, or a small bunch of lighter strings for the "hair" on your bow. Rub the rosin on the cloth strip string of the bow to increase its friction.

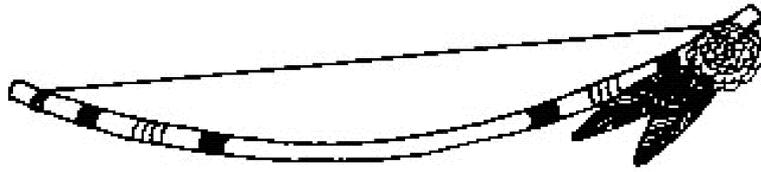


To play:

Hold your fiddle upright with the sound box resting on your lap. With one hand slide the "hair" of the bow across the fiddle string(s) just a few inches up from the bridge. With the other hand you can change the pitch of the string(s) as you play. Move your fingers up and down the string(s) like a spider on a walk. Notice how the pitch changes. With practice you can produce the exact tones you want to play. Think the tone you want and match the sound you are making to it.



6.4. Musical Bow



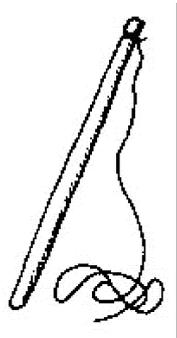
Materials:

The stick should be longer than a foot, shorter than you, and strong. It should bend into a gentle arch without breaking. A thicker stick with a natural arch is also ok.

The string must be strong so you can pull it tight. You can use nylon fishing line, wire, cotton cord, plastic strings, guitar strings, banjo strings, or any strong string.

To make:

1. Cut a length at least a foot longer than your stick. Tie one end of the string to one end of your stick.

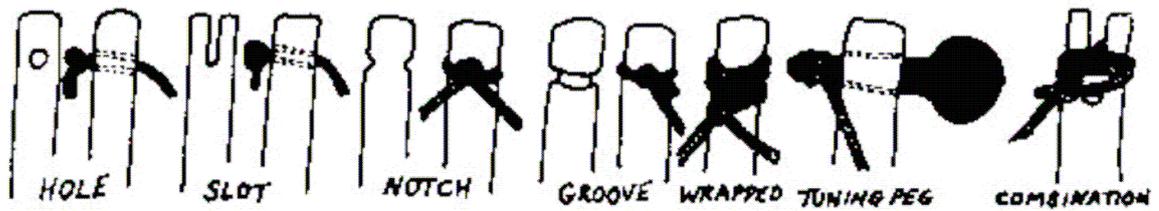


2. Stretch the string to the other end of the stick into an arch. Wrap the string into an arch.



3. Wrap the string around the stick 3 or 4 times so it won't slip, then tie it with a knot.

Some ways to attach the string to a bow



4. You can decorate your bow with paint, whittling, feathers, or yarn.

To play:

Hold your bow as shown.



The string lies across your open mouth, touching it at the upper corner. Pluck the string with your lower thumb or either index finger. Adjust your mouth to make the sound louder. Bend the bow to change the pitch.

6.5. Plastic Bottle Banjo

The banjo sound box is open on the bottom. It has been made in the past from fence posts, cigar boxes and cookie tins, so our plastic jug is not too far out of line. If you wish, it is possible to upend it, get a violin bow and play this creation like a cello.

Materials:

- a 1-gallon plastic jug, with a flat bottom. (thin jugs that hold distilled water are good.)
- 1 piece of wood, 30" x 2" x 3/4", for the fingerboard
- nylon fishing line (at least 25-lb. test- the stronger the better)
- 2 large screw eyes for tuning pegs
- 2 small screw eyes
- 2 tacks or screws for holding jug to fingerboard
- wood for bridge, 1" x 1/2" x 1/2"
- hammer and nail
- sharp, strong scissors
- sandpaper and shellac (optional)
- pliers
- pocketknife

To make:

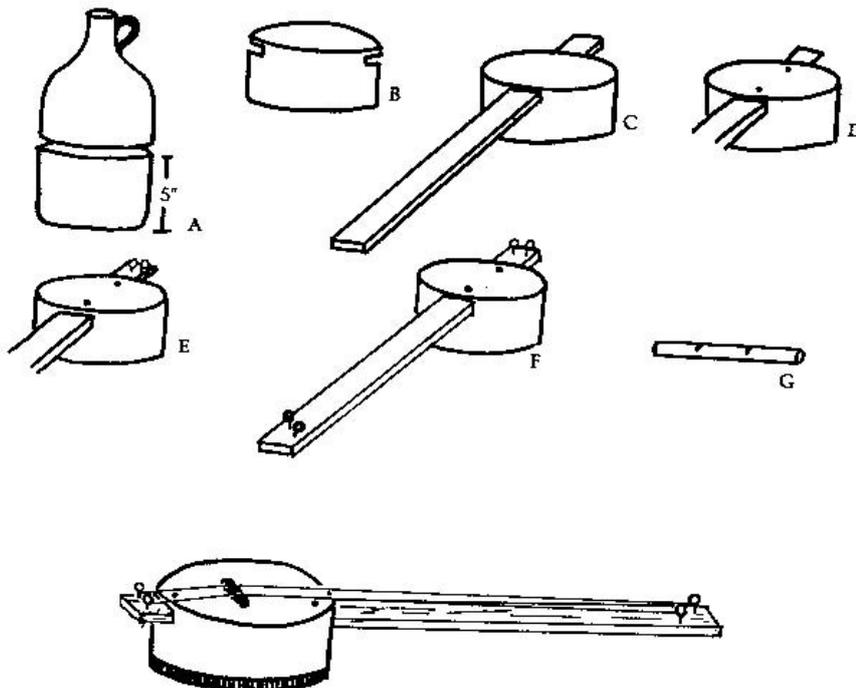
1. With scissors, cut the bottom half out of the plastic jug, about 5" up from the bottom (A).
2. With the scissors, make slots for the fingerboard to slide through, on opposite sides of the jug, as close to the flat bottom surface as possible (B). The fit should be snug and tight.
3. Slip fingerboard in the slots so that a short end (1 1/4") remains on one side (C).
4. Use two tacks or small screws to hold the fingerboard to jug (D).
5. Place the 2 small screw eyes 3/4" apart on the short end of the fingerboard, to hold the strings (E)
6. Put the 2 large screw eyes 5/8" in from each side of the other end of the fingerboard. If one is placed 1" from the end and the other 2", they will be easier to turn for tuning (F).
7. Cut 2 nylon strings at least 4" longer than the fingerboard. Tie on to each small screw eye. Pull the string tightly with pliers, wrap each around the corresponding large screw eye several times, and tie.
8. Strings can now be turned by turning the screw eyes. If they are tight, use a pencil or a nail through the loops in the screw eyes to turn them.
9. On a small piece of wood-1" x 1/2" x 1/2"-make grooves, using a pocketknife, 3/4" apart for a bridge (G). Glue this bridge in place between the center of the jug and the small screw eyes.

To play:

Hold like a regular banjo, with the left hand around fingerboard and the sound box off to the right side. The right hand strums near the sound box.

Hints:

Tune as you like. One way to tune in fifths (five notes apart) like a violin. Another way of tuning is related to the dulcimer and the balalaika-two strings are tuned to the same note. Play the tune on only one string. Leave the other string open, as a drone string.



7. Acknowledgement

SOAPKidz would like to take the opportunity to acknowledge and thank the various websites and people that have contributed ideas and content to this recycling initiative.



This booklet was compiled by SOAPKidz.
www.soapkidz.org (2008)