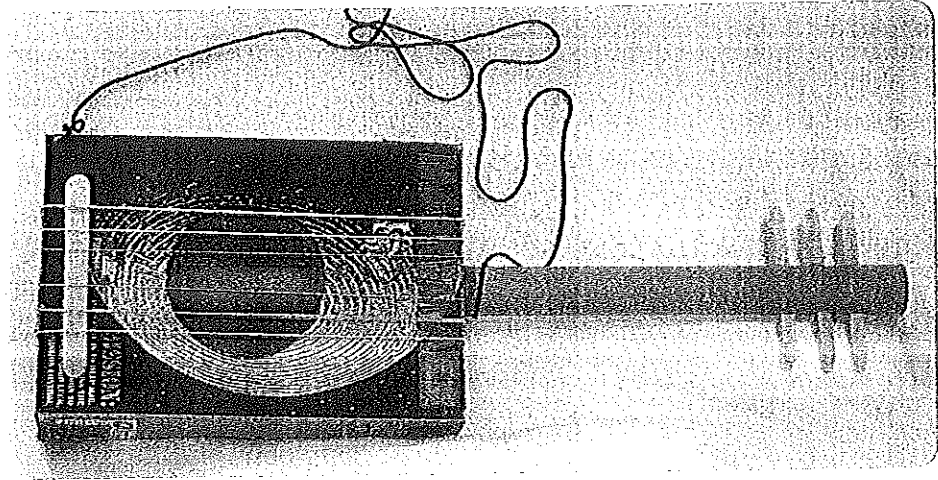


ROCKIN' CEREAL BOX GUITAR



Making the Rockin' Cereal Box Guitar incorporates and utilizes: concentration, dexterity, fine-motor skills, following directions, hand-eye coordination, listening, measurement, patience, sequencing, spatial relations, sustained attention

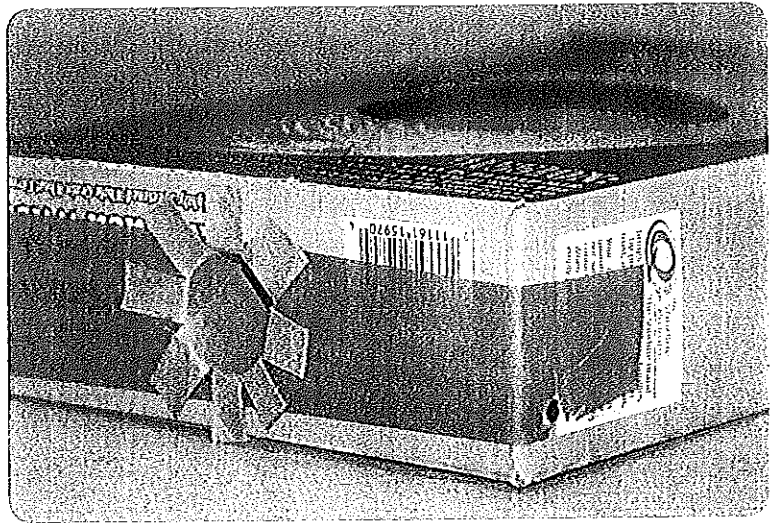
Playing the Rockin' Cereal Box Guitar utilizes: concentration, expression of sense of self, fine motor skills, imagination, listening, music fundamentals (pitch, rhythm, timbre), problem solving, science of sound

Supplies:

- Cereal box with top and bottom tabs undone
- Long paper tube (wrapping paper tube), approximately 30 inches (76.2 cm) in length
- 3 wooden craft sticks, 0.4 in (1 cm) wide
- Large wooden craft stick, 0.75 in (1.9 cm) wide
- 6 rubber bands, 5–9 in (12.7–22.9 cm) in length, different widths
- Yarn or ribbon, 3–4 ft (91.4 to 121.9 cm)
- Pencil
- Scissors
- Hole punch
- Tape
- Toothpick
- Ruler
- Compass (optional)
- Glue (optional)

To Make:

- Lay the flattened cereal box on the table with the front of the box facing up, the top of the box away, and a side panel on the right hand side. In the lower right-hand corner (not including the tabs), approximately 0.5 in (1.3 cm) above the fold, punch a hole through both layers. (This is where the guitar strap will be attached later on.) Return the box to the original 3-dimensional shape and tape or glue both ends. (Note: If using glue, allow time for it to dry.)
- To create the sound hole, cut a large circle/square [no more than 4 in (10.2 cm) in diameter] in the front face of the box. The opening should not come within 2 in (5.1 cm) of the sides of the box.
- Find the midpoint on the bottom and top sides of the box. Starting at the midpoint, draw a circle with the same radius as that of the paper tube. Cut out the circles; these are the openings for the neck of the guitar.
- Insert the tube through the box so that both ends of the tube are sticking out. Starting with the tube at the bottom of the box, cut eight evenly spaced 0.75-inch- (1.9-cm-) long slits into the tube. Fan out, or spread, the “fingers” of the cut tube; adhere each one to the box. (If using glue, allow for it to dry.) On the other end of the cereal box, apply strips of tape to secure the neck (tube) in place.
- Stretch the rubber bands lengthwise around the cereal box. Arrange them so that they are over the opening and not touching one another. At 1–2 in (2.5–5.1 cm) below the sound hole, slide the large wooden craft stick under the rubber bands to form the bridge.
 - ▲ Pluck the rubber bands to hear their pitch. Arrange the rubber bands from lowest to highest pitch.
- Tuning pegs on a real guitar are located on the sides of the neck. They hold one end of the guitar’s strings. Turning the pegs tightens and loosens the strings, which changes their pitch. To simulate tuning pegs, craft sticks are inserted toward the end of the paper tube. On both the left side and the right side of the neck (tube), measure 3 in (7.6 cm) from the end. At the 3-in (7.6-cm), 2-in (5.1-cm), and 1-in (2.5-cm) marks, make a 0.5-in (1.3-cm) slit lengthwise. You will have made six slits total: three on one side and three directly opposite. Slide a smaller craft stick through each of the pairs of slits.



- ▲ Hint: To determine the sides of the neck, set the box flat on the table with the neck pointing away. From this position, the left side of the box and tube are on the left; the right side of the box and tube are on the right.
- To attach the strap, tape one end of the yarn (or ribbon) to one end of a toothpick using a piece of tape. Thread the toothpick through the holes punched at the start of this process. Remove the yarn from the toothpick, and tie a knot. Take the other end of the yarn and tie it around the neck where it attaches to the body of the guitar. Tape into place.

To Play:

Holding the guitar

- Sit on a chair and put the guitar on your lap with the sound hole to the outside.
 - ▲ If your right hand is your dominant hand, the neck goes on the left.
 - ▲ If your left hand is your dominant hand, the neck goes on the right.
- Put the guitar strap over your neck.
 - ▲ If your right hand is your dominant hand, put the guitar strap behind your right shoulder and arm.
 - ▲ If your left hand is your dominant hand, put the guitar strap behind your left shoulder and arm.

Playing the guitar

- Pluck the rubber bands with the index finger of your dominant hand.
- Strum the rubber bands with the thumb on your dominant hand.
- Strum from the top down and from the bottom up.

Suggestions:

- Note: Changing the craft sticks from a flat to perpendicular position increases the tension on the rubber bands, which changes the pitch and timbre.
 - ▲ Is there a relationship between tautness and pitch?
- Is the sound different strumming from top down than strumming from bottom up?
- Experiment with different widths and lengths of rubber bands and their tautness to achieve sounds of different pitch and timbre.
 - ▲ Do wider rubber bands produce the same sound as thinner ones of the same length?
- Figure out how to play a familiar tune such as “Twinkle, Twinkle, Little Star.”
- Create a musical composition.