



*Grade Level: Grade 2*

*Title:*

## **How To Make Sound & Human Voice is an Instrument**

*Denomination: Catholic*

*Lesson ID: PS-G2-02-CA*

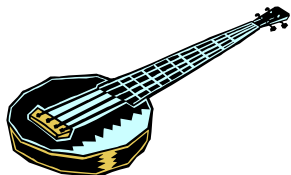
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***Note: Web sites referenced in this lesson were valid at time of publication.***

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## PHYSICAL SCIENCE MODULE– GRADE TWO - CATHOLIC LESSON 2: How to Make Sound & Voice is Instrument of Praise

**GENERAL CONCEPT:** How to make sound

**NOTE: YOU MAY WISH TO ENLIST YOUR MUSIC  
TEACHER TO CO-TEACH PARTS OF THIS LESSON.**

### SCIENCE LESSON CONCEPT

Student will learn how to make high and low sounds.

### GOAL OF SCIENCE LESSON

Student will learn the terms: vibrate, pitch, and volume.

Note: Key Words Handout includes this words.

Student will be able to identify the source of sound.

### OUTCOME EXPECTED

Student will learn that sound is made when objects vibrate.

### MATERIALS NEEDED

- Rubber bands of different lengths and widths
- Shoe boxes or plastic boxes

### RELIGION LESSON CONCEPT

The human voice is a musical instrument of praise.

### GOAL OF RELIGION LESSON

Student will learn that the human voice is an instrument of  
praise of God.

### OUTCOME EXPECTED

Student will more fully participate in worship and prayer using  
the voice to sing and to respond.

### MATERIALS NEEDED

- First Communion songs on CD
- CD player

- Oatmeal boxes – one per drummer.
- Leather or shelf liner heavy paper circles to fit over Oatmeal box opening
- Book: Ty's One Man Band by Mildred Walter or Mole Music by David McPhail. See links.
- Science Journal Page: HOW TO MAKE SOUND
- CD with music that student can strum a banjo and beat a drum with.
- CD player

#### SCIENCE METHODOLOGY

It is critical that each student makes and plays their own home-made instrument.

- **HAVE** the student draw a banjo/guitar and a drum on the Science Journal Page.
- **SAY:** Today we are going to make a banjo type instrument and a drum. They are going to help us discover how to make sound.
- **USE** the shoe box and rubber bands to make the banjo. Stretch the rubber bands across the shoe box. Strum with the fingers to make high and low sounds. Adjust the rubber bands tighter and more loosely.
- **ASK:** What happens when the rubber bands are
- Music books or hymnals

- Scissors
- Paper to make a “Book of Favorite Songs”
- Crayons/markers

#### RELIGION METHODOLOGY

- **IF YOU KNOW THE SONGS TO BE USED FOR FIRST COMMUNION, PLAY** one of the songs they will sing at First Communion. Have them listen carefully. **IF NOT KNOWN, PICK SONGS** pick songs the students know and like.
- **ASK:** What sounds do you hear? (piano, violin, organ, voice?)
- **ASK:** Who gave you a voice? (God)
- **SAY:** We heard different musical instruments, but your voice is a God-made instrument. I am going to play the song again and this time; please use your voice instrument to praise God.
- **PLAY** the song again with student singing.

- **SAY:** When you strum the bands, they move or vibrate and that makes sound. A bigger, loose band makes a loose? (low) What happens when the rubber bands are tight? (High).

lower sound. If you tighten the band by stretching it and tying a knot in it and then re-stretch it over the box, you will get a higher sound. The highness and lowness of sound is called pitch.

- **HAVE** the student **RECORD** how to make high and low pitch on Science Journal Page. (either written or drawn).
- **MAKE** the oatmeal box drums by stretching the rubber circle across the top of the box. Fasten strong tight rubber bands around the edge of the rubber circle.
- **HAVE** the student experiment with making high and low pitch sounds.
- **RECORD** their results on the Science Journal Page.
- **PLAY** a music CD. Have the students strum the banjos and beat the drums to the music.
- **IF POSSIBLE**, read the book “Ty’s One Man Band” or “Mole Music”. See Links for short synopsis.
- **POSIT:** We can make sounds that have pitch and volume.

- **DIRECT** them to sing softly and then loudly. They have volume control. You may use hand gestures to indicate when to sing in various volumes. A practice song could be “Happy Birthday”.
- **ASK** them to sing a part of the song that has a high pitch.
- **ASK** them to sing a part of the song that has a lower pitch.
- **REMIND** them that their vocal chords vibrate like banjo strings to make sound. They have pitch control.
- **INVITE** a guitar musician to come to the class and play and demonstrate the guitar for the class.
- **MAKE** a book of favorite songs with each child contributing one page (Picture, some words, some music symbols.) Keep the class book in your classroom library.
- **POSIT-** We can praise God with our voices. We have volume and pitch control.

## RESOURCES, LINKS AND COMPUTER LESSONS.

### Science Links

(Teacher) A Writing for Science lesson on sound  
[http://www.sfscience.com/english/grade\\_2/unit\\_B/chap\\_1/wfs/wfs.htm](http://www.sfscience.com/english/grade_2/unit_B/chap_1/wfs/wfs.htm)

(Teacher) Simple directions for making 9 different instruments from ordinary materials. See last page  
<http://www.kinderart.com/teachers/9instruments.shtml>

(Teacher or Parent and Student) Using the PBS series Arthur, make musical instruments and download story and directions. Something for Grade 2 students to take to younger students to share.  
<http://www.pbskids.org/arthur/parentsteachers/lesson/jamboree/>

(Teacher) Synopsis of Mole Music Book  
by David McPhail - 1999 - Juvenile Fiction - 32 pages  
Mole creates a magical gift that unbeknownst to him has the power to erase hatred from the hearts of all who hear his music

((Teacher and Student) "Ty's One Man Band" by Mildred Walter  
Synopsis of Ty's One Man Band Book  
Description: *TY'S ONE-MAN BAND* is the story of a mysterious stranger who creates a *one-man band* out of odds and ends.

### Religious Links

(Teacher) Music Correlation to Chapters and topics. Good source for appropriate songs.  
<http://www.faithfirst.com/html/catechist/musicCor/images/>

## 9 Easy to Make Musical Instruments for Kids



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Children love music as much as they enjoy making things. Why not join these two creative forces and make one or all of these fun and easy musical instruments to encourage play and creativity.

### 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

When you are finished constructing your instruments, have a camera ready to take a picture of the band. Record this activity in your child's scrapbook so you can look back in years to come.

### TAMBOURINE

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

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

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.

### DRUM

- empty oatmeal box with cover
- yarn
- pen
- 2 pencils
- 2 spools
- construction paper
- crayons

Before beginning, you can decorate the oatmeal box with construction paper and/or crayons for a colorful effect.

Place the cover on the box. Use a pen to make a hole in the center of the cover and in the center of the bottom of the box. Through these holes, pull

a piece of yarn long enough to hang around child's neck and down to their waist.

For the drumsticks, place the spools at the ends of the pencils, secure with glue if necessary.

Beat to play.

## CHIMES

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

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

## HORN

- paper towel roll
- waxed paper
- rubber band
- pen

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

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

## CYMBALS

PS-G2-O2-CA

- two matching pot covers
- yarn or ribbon

Tie the ribbon or yarn around the handles of the pot covers. To play, strike together.

## XYLOPHONE

- tall glasses or jars
- water
- mixing spoon

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, 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.

## COMB BUZZER

- pocket comb
- tissue paper

Fold a piece of tissue paper over the tooth edge of a comb. To play, hum through the tissue paper.

## GUITAR

- empty shoe box
- rubber bands
- ruler or stick

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

To play, strum or pluck the rubber bands.

### **HAND BELLS**

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

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

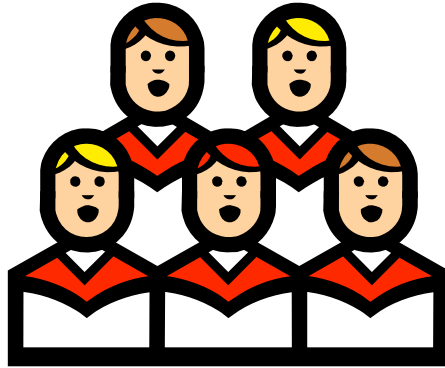
Shake to play.

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

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**KEY WORDS**  
**PHYSICAL SCIENCE – GRADE TWO – LESSON 2 - CA**



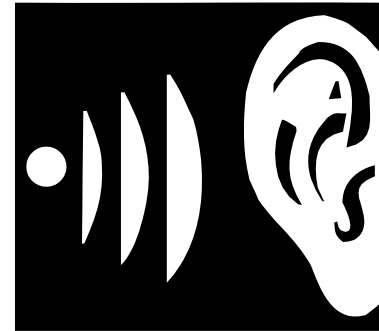
**SOUND**

**AIR WAVES**

**VIBRATION**

**PITCH**

**VOLUME**



**VOICE**

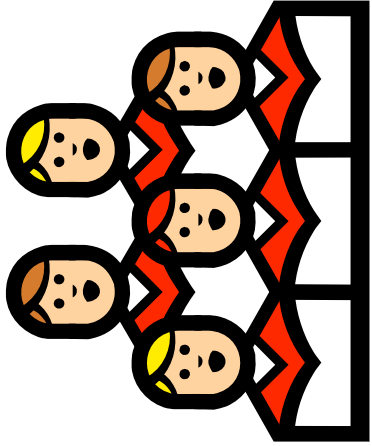
**INSTRUMENT**

**PRAISE**

**WORSHIP**

**RESPOND**

**KEY WORDS**  
**PHYSICAL SCIENCE – GRADE TWO – LESSON 2 - CA**



**SOUND**

**VOICE**

**AIR WAVES**

**INSTRUMENT**

**VIBRATION**

**PRAISE**

**PITCH**

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**RESPOND**