



# Artists on Tour

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Percussion Group Cincinnati

## *Music from Scratch*



### STUDY GUIDE

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# MUSIC FROM SCRATCH

*Music from Scratch* explores different percussion instruments and music compositions from around the world. Percussion instruments were some of the first instruments to be created and most cultures have a style of percussion instrument. Early instruments were made of wood and animal hides or dry vegetation. As the different metals were discovered and humans learned how to smelt and shape metal ore, new instruments were created. Musicians have also used items made for a different purpose as instruments.

Some of the music and places of the world that *Music from Scratch* will cover are Africa, American pop and folk music, Central America/Mexico, China, and South America/Chili.

Presentations may also include all or excerpts from:

- “The Glory and the Grandeur” and “Mozart Escapes the Museum” by Rossell Peck
- “Concerto for Percussion and Orchestra” by Qu Xiao-song
- Arrangements by the Percussion Group Cincinnati

**HARMONY**—notes played (or sung) simultaneously that sound good together

**MELODY**—a succession of notes that flow together, focus on clarity of pitch

**PITCH**—the sound of a musical note (or anything)

**RHYTHM**—a series of long and short sounds, arranged in a pattern, focus on duration and stress of the musical note; “The pattern of movement in time”

(*The New Harvard Dictionary of Music*)



# INSTRUMENTS FAMILIES

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## THE WIND FAMILY (AEROPHONES)

Instruments in which the air, provided by the musician, causes the instrument to resonate a sound.

Ex: A musician uses his/her breath to make the hollow tube of a flute resonate sound.

What kind of wind instruments can you make? Have you ever tried blowing across the top of a soda bottle when it was full? Half full? Empty? By using your breath to generate sound, you are playing an instrument from the wind family.

## THE TWO FAMILIES OF PERCUSSION

### THE DRUM FAMILY (MEMBRANOPHONES)

Instruments that produce sound by striking a membrane-like head stretched over a hollow opening.

Ex: Drums

How can you make a drum? Try cutting the bottom out of a Pringles can, place the plastic lid over the top of the container, then drum on it with the eraser end of an old pencil or pen. What happens if you cut the bottom of the can off at different points?

### THE CONCUSSION FAMILY (IDIOPHONES)

Instruments that are played by colliding two objects into one another. Ex: wood blocks or a pair of cymbals

Concussion instruments are probably the easiest to find around your house. The banging of two pots, the rattle of a salt shaker (the salt colliding with the can), and the hammering of a nail are all concussion instruments. Even stamping your feet and clapping your hands are instruments in this family! How many different concussion instruments can you think of?

## THE STRING FAMILY (CHORDOPHONES)

Instruments of the string family are played when a string is struck, plucked, or bowed. The strings vibration is what causes the instrument to sound. Ex: guitar, violin

One homemade example of a string instrument is a vibrating rubber band. If you take a rubber band and stretch it between your finger and your thumb, then with your opposite hand pluck the rubber band, what happens? You should hear a vibrating sound, or buzzing. What happens to the sound as you loosen and tighten the tautness of the rubber band around your fingers?

## ELECTRONIC FAMILY

The final family cannot really be reproduced out of household items. It has only recently been created with the coming of computers. This family is called the Electronic Family, or electrophones.

Ex: Synthesizer or electronic keyboard

# SOME PERCUSSION INSTRUMENTS

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**CASTANETS**—two shell-shaped pieces of wood that are clapped together by the hand; performers usually have a set in each hand

**COWBELL**—a rectangle-shape metal bell (like the bell worn by cows), may have a clapper inside or is hit with a mallet

**CYMBALS**—a circular metal plate that has a convex shape, two cymbals are usually banged together or they may be hit with a mallet or drum stick

**DRUM**—the most recognizable percussion instrument, comes in various shapes and sizes; the basic structure is a frame (wood or metal) where one end is covered with a membrane (traditionally animal hides but modern drums use a synthetic material); sound is made by striking the membrane with the hand or mallet

**FOUND OBJECTS**—any object that was not originally designed to be an instrument but that is used during a performance; example, brake drums from cars can be hit with a mallet to produce a sound, or plastic bags and newspapers can be crumpled or rubbed together

**GONG**—similar to a cymbal, but the edges are turned down to create a lip and it is hang then struck with a mallet

**MARIMBA**—similar to a xylophone with the addition of pipes (resonators) under the wood strips

**MOKTAK**—an oval shaped hollow wood instrument with a curved handle that is hit to produce a sound, often used during Buddhist chants

**POD RATTLES**—a seed pod that has been dried; the seeds inside the pod become loose and when shaken produce a sound

**STEEL DRUM**—one of the newest created instruments, it was created on the island of Trinidad in the mid-20<sup>th</sup> century and is made out of oil barrels

**THUMB PIANO**—a small hand-held instrument, the base is like a ball cut in half, on the flat surface are metal tabs that are played by the thumbs

**XYLOPHONE**—several wood strips of various lengths are mounted on a frame, the wood is struck with a mallet, the length of the strip determines the pitch

## EDUCATIONAL RESOURCES

Ardoey, Neil, ed. *Music*. Eyewitness Books, Knopf, 1989.

Randal, Don Michael, ed. *The New Harvard Dictionary of Music*. Cambridge, MA: Belknap Press of Harvard University Press, 1986.

*Sound Designs—Handbook of Instrument Building*. Banek & Scoville, 10 Speed Press, 1980.

Tatchell, Judy, ed. *Usborne Introduction Series: Understanding Music*. Tulsa: EDC Publishing, 1992.

Performance in World Music Series:

White Cliff Media  
PO Box 561  
Crown Point, IN 46307

Cross-cultural Materials:

Dove Music  
PO Box 08286  
Milwaukee, WI 53208,  
(414) 444-4447

Lark in the Morning  
PO Box 1176  
Mendocino, CA 95460

# ACTIVITIES

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These activities are designed to enhance your students' enjoyment and understanding of the *Music from Scratch* program. All activities can be used before the lecture-demonstration to prepare students for what they are about to see and do, and/or after, to process the new information, and to continue its inclusion in future studies.

## "ORDINARY" SOUNDS

**Curriculum Areas:** Music, Science

- 1) Take a wooden spoon and hit/tap it against different objects, e.g., a pillow, a table, a metal desk, a wall, etc. Have students compare the different sounds: Is it clear or muffled (quality/ timbre)? Does it echo? Is the pitch high or low? How long does the sound last? Does it sound like more than one sound (overtones)?
- 2) Water in glasses: fill several glasses of the same shape with different levels of water, tap the glass near the rim with a knife or other piece of silverware. Students should compare the different pitches. Is the pitch higher or lower when there is more or less water in the glass?

## ANIMALS AND SOUNDS

**Curriculum Areas:** Science

The human ear can only hear a particular range of sounds. It is more sensitive to middle high frequencies. Animals also have a particular range of sounds they can hear. Two examples: dogs can hear higher pitches than humans and elephants can hear pitches lower than humans can. Have the class compose a list of several different types of animals. Then have each student research one or two animals to find out what range of sounds (pitch and frequency) animals can hear. Have students place their animals on a chart (one for the entire class) so they may compare which animals can hear what range.

## SOUND PATTERNS AND COMPOSITION

**Curriculum Areas:** Art, Music, and Mathematics

- ♦ Patterns: Have students work in groups to create patterns with clapping and snapping. The teacher may want to do a few patterns with the class to get the students started. Examples: "clap-clap-snap clap-clap-snap" or "clap-snap-clap-clap-snap clap-clap-snap-clap." You may also want to throw in a slap on the thigh.
- ♦ After the groups have had time to experiment, have the students translate their clapping patterns into visual patterns using different colors, shapes or sizes. Example: if clap = red and snap = blue, then the "clap-clap-snap clap-clap-snap" would be "red-red-blue red-red-blue." Or shapes "square-square-circle square-square-circle" or combine the two. Then have students repeat the process experimenting with making the sounds faster and slower and translating that into a visual pattern. Then trying longer and shorter sounds, or higher and lower.
- ♦ Have students take the patterns they have created and put them together to create a composition. Students may also want to incorporate different sounds, such as, vocal sounds, a shaker can or drum.



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# RHYTHM AWARENESS

## ***Curriculum Areas: Art, Music, Mathematics, and Physical Education***

From a heartbeat to a drumbeat, from a handclap to the overlaying of hands, feet, and voices in classroom symphony, rhythm awareness creates a whole new language for students. Rhythm-focused activities can help develop concentration, reinforce thinking and counting skills, and create harmonic group interaction.

- Start with a downbeat. Clap along with any music. Add the upbeat, take away the downbeat. Practice clapping, then walking, in half-time, regular time, and double time. Use skipping steps, running steps.
- Use an eight-count rhythm. Have the students clap or step loudly for eight, then softly for eight. Or dance for eight and freeze. Change it to four of each, then two. Can you alternate loud and soft by ones? Clap or step or sing a note only on the one count and the four. Try the one, three, five, and seven. Try the two and eight only. You get the idea. Try singing out the numbers of the beats you land on.
- Clap any rhythm and have the students imitate it. Use your hands and let them use their feet. Let them use any part of their body to reproduce your rhythm. Now divide the group into two and have them pass rhythms to each other to be imitated.
- Stand in a circle. Choose an eight-count rhythm to do all together, even if it is simply clapping on all eight beats. One by one everybody has eight counts to improvise, clap, step, or sing their own rhythm. Eight counts together then eight counts alone; eight counts together, then eight counts to the next person. You might want to start slowly until the group catches on to the overall rhythm.

### **Related Activity**

Listen to recordings of classical, folk, and jazz music. Discuss the differences and the similarities in the rhythms, sounds, styles, and instruments that were played to produce these recordings. Can you recognize any percussion instruments?

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## CHANGING TRADITION

**Curriculum Areas: Art, Music, Science, History, Social Studies, and Language Arts**

American music developed with the meeting of various cultures in the New World. When two things meet, both are changed, and a third thing may emerge. We often think of “traditional” as meaning “old” and “in the past,” when in fact traditions are ever-changing as the people who practice them encounter new situations. Use these exercises to illustrate how this process works.

- Form two or three groups. Have each group create a series of short rhythm phrases and perform them several times for the other groups. Then, have the groups incorporate what they can remember from the phrases of the others into their own phrase. Create a longer rhythmic sequence. How did the original phrases change when adapted by other groups? Can you still recognize the original?
- This same exercise can be done with words, using the game “Telephone.” Sitting in a circle, one person makes up a sentence and whispers it to the next person. The sentence gets whispered around until the last person says aloud what s/he heard. The result is often funny, but you try to figure out how the last sentence is like the first. What words remained the same? Did the last sentence *sound* like the first, only using different words? Was the rhythm of the sentences the same?
- Try this experiment with physical substances. Observe what happens when two substances are combined: food coloring and water, sugar and water, oil and water, baking soda and water.

Discuss traditions within the students’ families, cultures, and individual lives. Traditions include where people go and what they eat on Thanksgiving, what people name their children, what they do on their birthdays. How have their personal traditions changed, and what influences them?

### Related Activity

Talk about the music to which the students listen. . .sisters/brothers. . .parents. Ask them to bring CDs or MP3s of their favorite music and then listen for specific instruments. Have them write down as many instruments as they hear in a specific song. (If names are not known, descriptions are good, too.)

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## WATCHING A LIVE PERFORMANCE

**Curriculum Areas: Art, Music, History, Social Studies, and Language Arts**

Live performances have some very different qualities from what students may see on television or hear on audio recordings. Have each student attend a live performance of any kind: dance, music, sports, or speech. Discuss those things that make live performances so powerful to watch or participate in.

- Can a live performance ever be repeated exactly? Why or why not? How is it different from a recorded performance?
- What can you see, hear, or feel during a live performance that affects the perception of the experience that you do not get by watching television? How are live performances affected by such things as the weather or the size and mood of the audience?
- What is the relationship of the audience to the performers? Does it change at different events? What types of performances are your favorite and why?
- Do you think it would be difficult or easy to be a live performer? Why?
- Have you ever performed live? What was it like? Was it just one time or did you get to do the same thing in many performances? How does one performance of the same material differ from another?

Have the students write about the live performance they saw. Have them write about or discuss what they would perform if they had the opportunity. Reassure them that if they really wanted to perform, they could and will.

### **Related Activity**

Discuss the importance of working together as a group and the ways in which we cooperate with each other to create something. Why could this be difficult?

Have the class get into groups of 5-7 people. Ask one person to create a rhythm—clapping, rubbing, humming, pencil tapping, anything! Once the first person has a set rhythm, the second person should create a rhythm through another means. Each person should step in with his/her own rhythm through their own individual means. The group should continue this rhythmic phrase for awhile and then drop each rhythm out in the opposite order in which they came until one rhythm is left alone.