# Roots of Rhythm: World Drumming for 5\textsuperscript{th} and 6\textsuperscript{th} Grade Classrooms

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*Please note: Each lesson supports students’ learning with recorded examples of the country’s traditional music for listening purposes and with recorded exercises for play-along musical activities, with instruments, other objects that can create sound, and/or body percussion.*

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Roots of Rhythm:  
World Drumming for 5th and 6th Grade Classrooms 

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Welcome!

Roots of Rhythm: World Drumming for 5th and 6th Grade Classrooms takes teachers and students on a journey to explore different cultures, music, and instruments from around the world and enjoy both listening to and playing rhythms using ethnically diverse percussive instruments, found or student-made instruments, or body percussion. Roots of Rhythm is the result of collaboration between the Percussion Marketing Council and the International House of Blues Foundation (IHOBF) and was created for use in IHOBF and other arts and educational programs. The curriculum, which combines music with history, social studies, geography, and language arts, has been designed to support classroom teachers in integrating music, music-making activities, and related cultural content into classroom curriculums. Content and activities in Roots of Rhythm: World Drumming for 5th and 6th Grade Classrooms align with state and national education standards. Although the curriculum has been designed for fifth and sixth grade, teachers can adapt the content for use with other grade levels.

Roots of Rhythm offers teachers and students an enjoyable and educational experience and can serve as a point of departure for exploring other rhythms and cultures, past and present, from around the world. By supporting music experiences outside of the music room and bringing them into the regular classroom, Roots of Rhythm creates opportunities for many more students to learn about music and participate in music-making activities.

The IHOBF is dedicated to bringing the arts to schools and communities through programs that promote cultural understanding and encourage creative expression. IHOBF was established in 1993 and has expanded to nine locations nationwide, including Anaheim, Atlantic City, Chicago, Cleveland, Las Vegas, Los Angeles, New Orleans, Orlando, and San Diego. IHOBF programs teach about American culture and history through blues music and folk art, encourage exploration and appreciation of diverse cultures, emphasize the importance of creative expression, and support youth participation in the arts. Core programs include the Blues SchoolHouse, Make An Impression, Visiting Artist programs, and Blues Ambassador Scholarships. Each IHOBF location also hosts an annual Dr. Martin Luther King, Jr. program and participates in local community cultural activities. Programs are offered at House of Blues venues as well as in school and community settings. To learn more about IHOBF mission and programs visit http://www.ihobf.org.

Formed in 1995, the Percussion Marketing Council is a trade organization made up of drum and percussion manufacturers, suppliers and dealers. It is governed by a board made up of a representative group of its members. The
PMC's goals are two-fold: 1) to expand the drum and percussion market by increasing the public visibility of all forms of drumming and by promoting drums and drumming as a positive, healthy activity for all members of the public through a variety of activities; 2) to unify the percussion industry by providing a forum for intra-industry communication. In order to achieve the above goals, the PMC relies on funding in the form of annual membership dues as well as financial contributions from music-related companies and organizations.

How Teachers and Students Benefit from *Roots of Rhythm*

*Teachers:*

- Learn about rhythms, drums and percussive instruments from around the world within their respective cultural and historical contexts.
- Gain ideas and resource materials for use in introducing *Roots of Rhythm* content into classroom curriculums.

*Students:*

- Learn about different countries and cultures (basic geography, social history, cultural and musical traditions).
- Gain awareness of how music reflects life conditions and experiences.
- Increase their understanding of different cultural traditions and belief systems and of how diverse cultures influence one another.
- Learn names of and sounds made by different drums and other percussive instruments.
- Learn about rhythms and musical styles from different cultures.
- Learn to play and create rhythms.
- Develop listening skills and music appreciation.
- Have fun listening to and making music.
Introduction to Ten *Roots of Rhythm* Lessons

*Roots of Rhythm: World Drumming for 5th and 6th Grade Classrooms* is a curriculum that introduces ten percussion rhythms from around the world to 5th and 6th grade general classroom teachers through lessons that place a specific instrument and its rhythm in the context of a particular country and culture. Each lesson begins with information about the country’s flag, size, population, geography and climate. This is followed by a description of the country’s background, history, and culture. The last sections present the “focus” instrument and related rhythms, how they are used in an ensemble, and their significance as a *Root of Rhythm*, all using a notation that can be understood by the non-music teacher. The curriculum comes with a CD that contains play-along music and examples of notated rhythms. Most foreign words are in italics and the text includes their phonetic pronunciations.

The percussion instruments are based on the “Classification of Musical Instruments” set forth by Germans Curt Sachs and Eric M. Von Hornbostel in 1914 and translated into English in 1961. This system has become the standard for classifying musical instruments from around the world. The lessons include seven membranophones (where the drumhead vibrates), two idiophones (where the instrument’s body vibrates), and one that combines these two types. The sound of an instrument depends on two factors, shape and playing technique, as follows:

**Shapes:**
- Hourglass - usually with two drumheads and of variable pitch
- Goblet - one drumhead with a deep tone of fixed pitch
- Barrel - one or two drumheads
- Cylinder/cone - one or two drumheads
- Frame - a shallow hoop with one drumhead and a handle
- Kettle sets - one drumhead on a rounded kettle in a set of two, small and large

**Techniques:**
- Percussion - idiophones, in this case a xylophone struck with a beater
- Friction - membranophones rubbed to get a sound
- Shaken - in this case a drum that is hit and/or shaken to get a sound
- Concussion - idiophones, cymbals, two similar un-pitched parts struck together

The choice of rhythms and instruments included in *Roots of Rhythm* was based on a criteria established by the author, Dr. Craig Woodson, in conjunction with the Percussion Marketing Council. Choosing from the myriad types of rhythms and percussion instruments from around the world that included membranophones and idiophones was a daunting task. To narrow the selection, it was determined that the final choices had to fulfill six requirements. Each final rhythm and instrument had to represent:

1. One of the ten major types of rhythms found throughout the world (listed below).
2. Either one of the major sub-sections of membranophones: hourglass, goblet, barrel, cylinder, cone, one and two drumheads, variable tension, friction, modified with snare or rattle; or one of the major sub-sections of idiophones: concussion, metal, percussion, wood, pitched and non-pitched, and shaken.
3. A significant historical connection to the roots of rhythm from around the world.
4. Importance to people from the ethnic area represented.
5. Either an ancient rhythm dating between 500-3000 years ago or a modern rhythm dating between 100-500 years ago.
6. One of the diverse cultures from around the world, but limited to two countries each from the broad cultural areas of Africa, Asia, Europe, the Middle East and the Americas.

In the process of choosing the ten instruments, a short list was plotted on a chart (see below) that compared various aspects of the instruments including their families, shapes or techniques, names, cultures, countries, and relative ages. The goal was to establish a baseline for choosing the final ten. A review of the chart shows that not all families of instruments are common in all cultural areas. For example, a shaken drum is not common in Africa and a xylophone is not common in the Middle East. It is apparent that a wider variety of percussion instruments are slightly more common in Africa and Asia than in the Middle East.

The chart shows the ten focus instruments in bold font. An “M” refers to membranophones, and an “I” refers to idiophones. The seven categories marked “NC” mean that examples are not commonly found in that area. The “RC” stands for recently common within the last 100 years. Foreign terms are in italics and some diacritical marks like a macron (ā) are used when available.

<table>
<thead>
<tr>
<th>M</th>
<th>I Type Name</th>
<th>Age</th>
<th>Africa</th>
<th>Asia</th>
<th>Europe</th>
<th>Americas</th>
<th>Middle East</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Hourglass Modern</td>
<td>Ghana Dondo</td>
<td>Modern</td>
<td>Ghana</td>
<td>Korea Changgo</td>
<td>NC</td>
<td>United States Talking drum RC</td>
</tr>
<tr>
<td>M</td>
<td>Goblet Modern</td>
<td>Guinea Djembé</td>
<td>Modern</td>
<td>Guinea</td>
<td>Cambodia Sgar āraks</td>
<td>NC</td>
<td>United States Djembé RC</td>
</tr>
<tr>
<td>I</td>
<td>Percussion Ancient</td>
<td>Mali Balaphon</td>
<td>Ancient</td>
<td>Mali</td>
<td>Thailand Ranāt ēk</td>
<td>NC</td>
<td>France Xylophone</td>
</tr>
<tr>
<td>M</td>
<td>Barrel Ancient</td>
<td>Ghana Atsimewu</td>
<td>Ancient</td>
<td>Ghana</td>
<td>Japan Kakko</td>
<td>RC</td>
<td>United States Conga</td>
</tr>
<tr>
<td>M</td>
<td>Friction Ancient</td>
<td>Zaïre Kwita</td>
<td>Ancient</td>
<td>Zaïre</td>
<td>Romania Buhai</td>
<td>NC</td>
<td>Brazil Cuica</td>
</tr>
<tr>
<td>I</td>
<td>Shaken Ancient</td>
<td>NC</td>
<td>Ancient</td>
<td>NC</td>
<td>Pakistan Damaru</td>
<td>NC</td>
<td>Portugal Adufe</td>
</tr>
<tr>
<td>M</td>
<td>Cylinder/Cone Modern</td>
<td>S. Africa Isigubu</td>
<td>Modern</td>
<td>S. Africa</td>
<td>Japan Daibyoshi</td>
<td>NC</td>
<td>Portugal Adufe</td>
</tr>
<tr>
<td>M</td>
<td>Frame Modern</td>
<td>Nigeria Sakara</td>
<td>Modern</td>
<td>Nigeria</td>
<td>India Kanjira</td>
<td>NC</td>
<td>Ireland Bodhrán</td>
</tr>
<tr>
<td>I</td>
<td>Concussion Ancient</td>
<td>Morocco Qargab</td>
<td>Ancient</td>
<td>Morocco</td>
<td>Bali Ceng-ceng</td>
<td>NC</td>
<td>Estonia Cymbals</td>
</tr>
<tr>
<td>M</td>
<td>Kettle sets Ancient</td>
<td>Chad Naas</td>
<td>Ancient</td>
<td>Chad</td>
<td>India Tabla</td>
<td>NC</td>
<td>Germany Timpani</td>
</tr>
</tbody>
</table>

Chart for Roots of Rhythm Instruments & Cultures
Each lesson is presented in eight sections—shown with a box border below—and designed to help classroom teachers understand the country’s background and history, a specific culture, as preparation for a discussion of a specific instrument and its rhythm. What follows is a brief introduction to these sections.

**Instrument, Country, and Flag:**
Some countries are well known throughout the world, like the United States and Japan. Others are not as well known, like Romania and Thailand, but all are important to the roots of rhythm. The name of each instrument is followed by a short description. In most cases, there is a short story about the flag that helps set the stage for a discussion about the culture.

**Size and Population:**
Most countries are relatively small compared to the United States, around the size of various states in the U.S. Populations vary widely, from very dense like Japan with 873 people per square mile to sparse like the Lakota people at 8 per square mile in South Dakota.

**Geography and Climate:**
Geographies range from flat deserts in Egypt to mountains and forests in Romania. Island countries like Cuba and Japan contrast to the land locked Lakota. Climates vary among the countries from wide variations in Japan to mostly hot and humid in Ghana.

**Background and History:**
Some countries in these lessons like Egypt date back to the dawn of civilization, while others like the United States are only a few hundred years old. Countries like Portugal, Turkey and Japan amassed enormous empires but were later reduced to their original size, often by overextending their resources and through wars. The Lakota people started as part of a larger Oglalala nation, which covered a wide area, but have been restricted by treaties to living on reservations with a fraction of the land that they once occupied. Countries like Cuba and the United States were in great part built under colonial rule and with immigrant and slave labor, while the people who built Romania, Ghana and Thailand emigrated from adjacent areas in ancient times.

**Cultures:**
Some cultures like those of Portugal and Turkey had almost global impact through conquest. On the other hand, Cuba and Japan were heavily impacted by other cultures. In fact, rhythms and instruments from Ghana, Thailand, Japan, Portugal, and Cuba came into their respective cultures from a source outside that culture. Some rhythms and instruments are played mainly by women, like those on the *adufe* and *sājāt*, but most others are traditionally played by men. All rhythms and instruments represent part of the core of each musical culture.

**Music: Instruments & Rhythms**

**Instruments:** Most of the ten instruments are drums, since often idiophones perform a supporting role. A notable exception is the *ranāt ēk*, a xylophone used to conduct the ensemble. The *djembé* and *kakko* are drums that lead an ensemble, while others like the *dondo* and *sājāt* play supporting rhythms in the group. Some instruments are familiar like the *djembé* and bongos, but others are not like the *buhai* and *naqqāra*. 
**Rhythms:** The rhythms represent signal communication (*djembé*) and language (*dondo*), strict layered rhythm (*ranāt ēk*) and free rhythm (*kakko*), sacred singing (*adufe*), secular dance (bongos), military marching (*naqqāra*), heartbeats (Lakota Drum), polyrhythms (*sājāt*), and animal sounds (*buhai*). Six are ancient rhythms and four are more recent examples. The following is an outline of the rhythms and examples by culture and country.

<table>
<thead>
<tr>
<th>Rhythm</th>
<th>Example</th>
<th>Culture/ Country</th>
<th>Instrument, Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking</td>
<td>Speech on drums</td>
<td>Africa/ Ghana</td>
<td><em>Dondo</em>, an hourglass talking drum</td>
</tr>
<tr>
<td>Signal</td>
<td>Signal to play drums</td>
<td>Africa/ Guinea</td>
<td><em>Djembe</em>, a goblet-shaped signal drum</td>
</tr>
<tr>
<td>Layered</td>
<td>1, 2, 4, 8 counts</td>
<td>Asia/ Thailand</td>
<td><em>Ranāt ēk</em>, a xylophone conductor</td>
</tr>
<tr>
<td>Free</td>
<td>Bouncing ball</td>
<td>Asia/ Japan</td>
<td><em>Kakko</em>, a rhythmic conductor</td>
</tr>
<tr>
<td>Religious</td>
<td>For spiritual songs</td>
<td>Europe/ Portugal</td>
<td><em>Adufe</em>, a religious frame drum</td>
</tr>
<tr>
<td>Animal</td>
<td>Animal sounds</td>
<td>Europe/ Romania</td>
<td><em>Buhai</em>, an animal friction drum</td>
</tr>
<tr>
<td>Human</td>
<td>Heartbeat</td>
<td>Americas/ S. Dakota</td>
<td>Lakota Drum, rhythm of the heart</td>
</tr>
<tr>
<td>Dance</td>
<td>3/2 clave beat</td>
<td>Americas/ Cuba</td>
<td>Bongos, a drum set for dancing</td>
</tr>
<tr>
<td>Polyrhythm</td>
<td>2 against 3 counts</td>
<td>M. East/ Egypt</td>
<td><em>Sājāt</em>, ancient cymbals</td>
</tr>
<tr>
<td>Military</td>
<td>8 and 9 counts</td>
<td>M. East/ Turkey</td>
<td><em>Naqqāra</em>, military kettledrums</td>
</tr>
</tbody>
</table>

**Listen & Play Along:**
This section is supported by the *Roots of Rhythm* Companion CD and CD Notes. The CD provides musical examples for the focus lesson to support teachers and students in listening to and playing along with authentic music and also to provide a sound source for the notated rhythms in the Resources section. The CD Notes identify all sound tracks and provide valuable information about the recorded music. Use of the CD Notes is strongly recommended.

The notation of rhythms is intended for both the non-music and music teacher. It is based on a box system designed by Philip Harland in the early 1960s called Time Unit Box System or TUBS. It makes use of the boxes on graph paper to indicate the fastest counts of a slower rhythm, like millimeters are smaller units of centimeters. For example, if you have six boxes in a row, there are two slower even counts possible on one and four (see below). A notation in a box means that there is a hit on that count, and an empty box means rest for that count. Numbers and/or spoken phrases above each box are there to aid in counting the rhythm. When you read the TUBS rhythm through a few times, the sound should become clear, in a way similar to repeating phonetic spellings in a dictionary. TUBS notations, including percussion strokes for the right (R) or left (L) hand, are as follows:

- **TUBS counting**: 1 2 3 4 5 6
  
  ![](image)

- **R** or **L** = hit a high sound, on edge
- **R** or **L** = hit a low sound, in center
- **R** or **L** = hit rim of drum or wooden drum body to get click sound
- **R** or **L** = an extra loud hit or count
- **X** = clap your hands or hit cymbals together
- **II**, **rr**, **rl**, **lr** = fast double hits
- **Graphic shapes** [ ] = free or unmeasured rhythm (*buhai*, *kakko*, and Lakota Drum)
- **c, d, e, f**, etc. = a piano’s white notes

In most cases the authentic instruments will not be commonly available, but substitutes can be used. Students can use everyday items, like a phonebook or spoons, as percussion instruments.
If there is a music teacher or program in your school, check to see if substitute musical instruments are available as follows:

1. guiro and maracas
2. bongos
3. congas or *djembé*
4. bass drum
5. tambourines and frame drums
6. tom-toms and *cuica*
7. xylophone
8. cymbals and cowbell

**Making Your Own Instruments:** In many cases you can make your own homemade version of the instrument. As a model, children in Ghana, West Africa make drums by stretching strips of pure gum rubber from a tree around a can, then wrapping it around a small stick for a beater. Instead of rubber, you can stretch PVC packaging tape around a solid frame like a can or flowerpot, but it has to be wrapped in a certain way. To keep an even thickness, wrap the tape in a crisscross pattern pulling it medium tight in a vertical direction and then very tightly perpendicular to the first direction. The only exception is the *kakko*, which has an additional tension system: in this case the tape should be pulled loosely in both directions and then tensioned with the strapping tape.

There are five steps to making a drumhead on a can or frame. This begins with an “anchor,” or a piece wrapped around the can so that the drumhead has a good surface on which to stick.

1. Wrap the anchor around the drum body just below the opening or “mouth” of the drum.
2. Attach the first piece for making the drumhead across the middle of the drum’s mouth. 
   **NOTE:** Pull each piece in four positions: stick the tape to the anchor (A), stretch it above the opening (B), pull it over to the other side (C), and stick it on the side’s anchor (D).
3. Finish taping the vertical direction with PVC tape following Step 2 for each piece.
4. Stretch the tape in the horizontal direction, but this time after first attaching the tape to the anchor, pull it very tightly over the opening (B) with each piece following Step 2.
5. For the beater, wrap a wad of tape around both ends of a chopstick, twig, or a ¼” by 9” long dowel then cover it with tape, like a wrapper on a small lollipop.

![Diagram of drumhead making process](image)

**NOTE.** For instrument-making projects, some uncommon items including the square *Adufé* frames, the shallow Lakota Drum frames, and PVC tape in various colors are available for purchase. Contact Ethnomusic, Inc. at 440-543-5181 or email: ethnomusic@adelphia.net for more information.
Resources:
The last page of each lesson gives the reader a graphic reference for understanding the instrument, usually in the context of the percussion section with which it is associated. This page, which can be used as a student handout, shows the various rhythms in a TUBS, a graphic, or a dot notation, and includes descriptive notes on how to play the rhythm and instrument.

Roots of Rhythm is an innovative cross-curricular program that offers teachers and students an enjoyable educational experience. It provides an exploration of fundamental rhythms, both ancient and modern, from around the world. This approach expands on the experience of playing music, taking it outside of the music room into the general classroom with simple hands-on activities. Roots of Rhythm brings several developmental benefits including higher academic achievement, improved physical coordination, deeper concentration skills and greater self-discipline. The curriculum intends to enhance social skills, improve a student’s self-image and boost self-confidence. In the end, participants learn that people from diverse cultures are linked together through percussion music. Students and teachers experience the therapeutic, recreational, and even spiritual effect of playing rhythms on percussion instruments from around the world.

Author of the Ten Lessons

Dr. Craig Woodson earned his doctorate in music from the University of California at Los Angeles, with specializations in music education, ethnomusicology, and ethnic musical instrument technology. He has been a percussion teacher, a performing and recording musician, college lecturer, a teaching artist in schools, and a music consultant for over 30 years. He has written articles and performed in videos on musical instruments, drumming, and the making of simple musical instruments from around the world.

After starting a small business making ethnic musical instruments in the 1970s he received twelve U.S. patents on musical instruments technology. In 1979 he started a three-year project as an invited researcher in Ghana, West Africa, assisting in the mass production of African instruments for Ghanaian schools. He has been a music consultant to Walt E. Disney Enterprises, the U.S. State Department, Remo, Inc., Mick Fleetwood, Inc., the Percussion Marketing Council, and A Cultural Exchange. He has presented educational concerts with organizations such as the National Symphony Orchestra, the Los Angeles Philharmonic, The Cleveland Orchestra, The Orange County Performing Arts Center, and Kronos Quartet. In 2000, he was featured in a NASA video on music and science, and he received funding from the National Endowment for the Arts to develop a school music program about Mars.

Dr. Woodson has played drums in movies with Elvis Presley and Connie Francis, performed on TV with Linda Ronstadt, and recorded with Ray Manzarek, the Brothers Four, David Ackles, and as a Columbia recording artist with the 1968 electronic rock band, the United States of America. He was Senior Director of Education at the Rock and Roll Hall of Fame and Museum for two years. He is married with two children and lives in Chagrin Falls, Ohio.