AFRICA: Small Sounds From A Big Country

Grade Level: Music (8th Grade)
Written by: Tommy Reddicks, The Pinnacle Charter School, Federal Heights, CO
Length of Unit: Seven 45-minute lessons

I. ABSTRACT
Whisper songs from Burundi, Mbira melodies from Zimbabwe, and Pygmy music from the central rainforest are three exciting and unique musical examples from indigenous Africa. By unlocking the theory behind each of these distinct examples, it becomes easier to explore, re-create, and appreciate these rich indigenous traditions. While using combinations of singing, improvisation, and composition, classes will experiment with these styles of music and performance in a way that is both demanding and inspiring.

II. OVERVIEW
A. Concept Objectives
   1. Develop an understanding of musical elements in non-western music.
   2. Learn to recognize indigenous instruments used in non-western music.
   3. Develop a sense of appreciation for non-western music.
   4. Recognize that literature and art reflect the inner life of a people.
A. Content from the Core Knowledge Sequence (CKS)
   1. Elements of Music: Recognize theme and variations (page 194)
   2. Sound Waves: Speed and Frequency (page 200-201)
   3. Non-Western Music: Become familiar with scales, instruments, and works from various lands (page 195)
A. Content not from the Core Knowledge Sequence
   1. Whisper Singing/Inanga Chuchotee
   2. Introduction to Inanga Chuchotee Instrumentation
   3. Composing and Performing the Inanga Chuchotee
   4. The research of Louis Sarno
   5. The music of the Ba-Benjelle Pygmies
   6. The Pygmy Culture
   7. The Mbira in Zimbabwe
   8. The rhythm of the mbira
B. Skill Objectives
   1. Listen to selected music with varied instrumentation and voicing, and discuss textures and timbres. Derived from the Colorado Standards and Grade Level Expectation for Music (CSGLE for 8th grade Music, 8.7)
   2. Listen to a musical selection and explain how the composer used specific musical elements. (CSGLE for 8th grade Music, 8.8)
   3. Read notes in the appropriate clef for the instrument being played. (CSGLE for 8th grade Music, 8.6)
   4. Read, notate, and perform rhythmic and melodic patterns. (CSGLE for 8th grade Music, 8.3)
   5. Perform a rhythmic selection of music with syncopation. (adapted from CSGLE for 8th grade Music, 8.5)

III. BACKGROUND KNOWLEDGE
A. For Teachers

B. For Students
1. Find Africa on a map. (3rd and 4th grade World Geography: CSGLE)
2. Compose, read, and perform music in quarter, eighth, and sixteenth notes on a staff. (5th through 8th Grade Music: CKS)
3. Recognize verse and refrain (ABA form). (2nd Grade Music: CKS)
4. Understand Sound Waves. (8th Grade Science: CKS)

IV. RESOURCES

V. LESSONS
Lesson One: Whisper Singing
A. Daily Objectives
1. Concept Objective(s)
   a. Develop an understanding of musical elements in non-western music.
   b. Learn to recognize indigenous instruments used in non-western music.
   c. Develop a sense of appreciation for non-western music.
   d. Recognize that literature and art reflect the inner life of a people.
2. Lesson Content
   a. “Whisper Singing/Inanga Chuchotee”
   b. Introduction of Inanga Chuchotee instrumentation
   c. Sound Waves: Speed and Frequency (page 200-201)
   d. Non-Western Music: Become familiar with scales, instruments, and works from various lands (page 195)
3. Skill Objective(s)
   a. Listen to selected music with varied instrumentation and voicing, and discuss textures and timbres.
   b. Listen to a musical selection and explain how the composer used specific musical elements.
   c. Read notes in the appropriate clef for the instrument being played.
   d. Read, notate, and perform rhythmic and melodic patterns.

B. Materials
2. CD track #3 “Inanga” from *Garland Encyclopedia of World Music/Africa* –or any other Whisper Song recording
3. Writing utensils
4. White board, chalkboard, or large easel
5. Copies of Appendix A for the whole class
6. Writing paper for the whole class
7. A map of Africa (bigger is better)
8. One copy of Appendix B

C. Key Vocabulary
1. Whisper Song/Inanga Chuchotee - a style of music unique to Burundi that involves a vocalist who whispers along with a tree zither.
2. Zither - a flat wooden soundboard over which strings are stretched; the instrument is commonly plucked, but may be strummed or bowed as well
3. Inanga - the name of the concave tree zither in Burundi
4. Ikivumu - the tree used for making the inanga
5. Amenyo and Amano - the “teeth and toes” on the inanga used to tighten and hold the strings

A. Procedures/Activities
1. Prepare a poem (three to five stanzas) and write it on the board prior to the class arriving.
2. Once the class is seated, inform them that you will need LOTS of bottle caps. Tell them you can’t yet say why, but that you will need at least two for every student in the class.
3. Pass out the listening worksheet (Appendix A) and ensure that all students have a writing utensil. Explain the listening worksheet to the class by discussing expectations for answering each section. Let the class know that they are to fill out their worksheet as they listen to the song. There should be no talking!
4. Play (track #3) on the Garland CD for the class.
5. Allow plenty of time (about 10 minutes) for students to share their answers and comments from their listening worksheets following the recording. Be sure to glean the student opinions of the music (this will come from the answers in the last section on the listening worksheet). Make sure that every opinion is justified with a valid reason. For example, if a student replies with, “it was stupid!” or “it was cool!” follow up their response with the comment, “great start, now tell me why”. Continue to probe until the direct reason for their opinion surfaces. (Follow this procedure every time the listening worksheet is used.)
6. Explain to the class that what they just experienced is a style of music that is only found in Burundi. Ask the class if they know where in the world Burundi is. Following the correct answer (Africa) pull out a map of Africa (those who are daring can draw a map on the board) and have a student volunteer locate Burundi on the map. Be sure to reference what other countries border Burundi so the students can create a solid mental picture of the continental region.
7. Tell the class that there are many types of instruments in Burundi, but the one they heard accompanying the singer was a zither carved from a tree trunk. Ask the class if they have ever heard of a zither. Ask for a student volunteer to draw what they think a “Tree-trunk Zither” might look like on the board. Allow multiple volunteers at once if there is room. Take no more than two or three minutes and have the artist volunteers return to their chairs.
8. Explain to the class that a zither is basically an instrument that is cousin to a guitar and piano. It is any device that can hold multiple wires/cords stretched horizontally with tuning pegs or tension blocks. Zithers are commonly plucked, but can also be bowed and strummed (multiple strings plucked at once).
9. Ask the class if they thought the zither in the recording was plucked, bowed, or strummed (answer is “plucked”).
10. Explain that the zither used in the recording is called an “Inanga”. It is a trough-like zither carved from a special tree called the “Ikivumu”. It is shallow and
concave. This concave shape creates a resonator (a semi-hollow area for the sound to vibrate, echo, and/or amplify). At the ends of the resonator (or concave section) are the “teeth and toes”, or pegs for fastening and tightening strings. In Burundi, these teeth and toes are called, “Amenyo” and “Amano”. There are usually eight to twelve strings stretched from the amenyo and amano. These strings are commonly made from cow tendon.

11. Now, following the verbal description of the zither, ask for a volunteer to correct or re-draw the inanga on the board.

12. Say, “Now let’s talk about the voice on the recording!” Ask the class to describe the characteristics of the singer.

13. Ask, “Was the singer singing?” Ask, “Was the singer singing different notes?” Allow for discussion, and then play the recording again.

14. At this point, tell the students that this form of music is called “Whisper Singing”. In Burundi it is called Inanga Chuchotee. (Chuchotee is French for whisper.) Let the class know that in this musical form, the singer has to follow a very strict set of rules, the first of which is that everything must be whispered.

15. Explain that the basis for this style of music is provocation. This means that it requires a reaction from the listener. Ask the class why they think performing music at a whisper would help to provoke a reaction from the listener. Allow for quick discussion on the question, and then refer the class to the poem on the board.

16. Explain to the class that you will first read the poem to them in a normal voice, then a VERY LOUD voice, and then in a whisper. Recite the poem three times in the aforementioned style.

17. Ask the class how they felt about each style, saving the whispered example for last. Did they feel compelled to listen? Did they try and block it out? Did they have to listen hard to comprehend it? Did it make them feel any emotion? Etc. Following the classroom answers about the whispered example, explain (in a whisper) to the class the inherent effect of a whisper (quiet sounds force us to focus) on the listener. Explain that whispering can be very intense. For example, if the president of the United States was delivering a message about terrorism on the television, and he suddenly got serious and started talking in a meaningful whisper, every listener would lean forward to try and hear.

18. Have the class take out a notebook and team up in groups of two to begin writing their own three to five stanza poem for whispering. Explain to the class that this poem will eventually become their own Inanga Chuchotee. Because of this, have them choose a topic that will demand attention from the listener. Allow the remainder of time for work on the poems (save the last two minutes of class for the Verbal Q&A: Appendix B).

19. Remind the class to bring in bottle caps, and then play the CD recording (Track #3) again as the class exits. Leave the poem on the board for the next day.

B. Assessment/Evaluation

1. Completion and discussion of the Listening Worksheet (Appendix A)
2. Burundi Verbal Q&A (Appendix B)

Lesson Two: Whisper Singing (Day Two)

A. Daily Objectives

1. Concept Objective(s)
   a. Learn to recognize indigenous instruments used in non-western music.
   b. Develop a sense of appreciation for non-western music.
2. Lesson Content
   a. Introduction to Inanga Chuchotee
   b. Introduction to Inanga Chuchotee Instrumentation
   c. General Rules of Inanga Chuchotee Performance
   d. Sound Waves: Speed and Frequency (page 200-201)
   e. Non-Western Music: Become familiar with scales, instruments, and works from various lands (page 195)

3. Skill Objective(s)
   a. Listen to selected music with varied instrumentation and voicing, and discuss textures and timbres.
   b. Listen to a musical selection and explain how the composer used specific musical elements.
   c. Read, notate, and perform rhythmic and melodic patterns

A. Materials

   1. *Garland Encyclopedia of World Music/Africa* and/or *World Music/The Rough Guide Volume 1*
   2. CD track #3 “Inanga” from *Garland Encyclopedia of World Music/Africa* –or any other Whisper Song recording
   3. Writing utensils
   4. White board, chalkboard, or large easel
   5. One copy of Appendix B (Burundi Verbal Q&A)
   6. One copy of Appendix C (Overtones and the Human Voice)
   7. Copies of Appendix D (Inanga Chuchotee Rules) for the class
   8. A map of Africa (bigger is better)

A. Key Vocabulary

   1. Whisper Song/Inanga Chuchotee - a style of music unique to Burundi that involves a vocalist who whispers along with a tree zither
   2. Zither - a flat wooden soundboard over which strings are stretched; the instrument is commonly plucked, but may be strummed or bowed as well
   3. Inanga - the name of the concave tree zither in Burundi
   4. Ikivumu - the tree used for making the inanga
   5. Amenyo and Amano - the “teeth and toes” on the inanga used to tighten and hold the strings
   6. Pitch - the location of a sound in a tonal scale dependant upon the speed of vibrations from the source of the sound
   7. Overtone - a pitch that is relative or perceived by the human ear to be higher than the actual source tone; overtones are related to the original pitch usually by fractions of their original frequency
   8. Frequency - the speed of the vibrations of a sound source

A. Procedures/Activities

   1. Play (track #3) on the Garland CD for the class as they enter.
   2. Collect bottle caps and remind students to bring in more if needed.
   3. Inform the students that they need to be seated next to their poem-writing partner.
   4. Review the Q&A (Appendix B) with the class and discuss answers as needed.
   5. Have the class resume the poem writing and circulate around the room the classroom to monitor progress and help as needed (this should take no longer than 15 minutes!).
   6. Now explain the following to the class: Inanga Chuchotee is whispered, but there are many different rules to performing it correctly. First of all, a true whisper has no “pitch”. So, in order to make the performance truly musical, the part of the inanga is very important. When done correctly, the overtones from the inanga
will make the human whispering sound like it actually has pitch, and the listener will assume there is singing, not whispering, taking place. This is the true secret to Inanga Chuchotee – allowing the overtones from the plucked instrument to merge with the whispering voice, creating connections that sound like vocal changes in pitch.

7. Hand out Appendix C (Chuchotee Overtones and the Human Voice). Help to explain to the class what they are looking at. Define frequency, and overtone for them. Discuss the difference between the frequency, and overtones of the spoken or singing voice compared to a whispered voice. Compare the inanga example on the sheet to the whispered voice.

8. Now, carefully explain to the class that the whispered voice covers a larger spectrum of the frequency at all times, thus allowing it to align with many of the overtones of the inanga. For example, when the inanga is played, the note played vibrates at a fixed frequency (let’s say 7,000 KHz) creating a certain pitch. The whispered voice (see Appendix C) can simultaneously vibrate at a much wider frequency, ranging from around 1,000 KHz to 10,000 KHz (and higher). When the inanga plays at 7,000 KHz it aligns with the whisper at 7,000 KHz making the whisper seem more pronounced at that frequency. This creates the aural illusion of the whisper and the inanga producing the same pitch. So, when these overtones align, it is possible for the whisper to relate, resemble, or sound like the pitch played on the inanga. In this way, from a technical standpoint, the whispering is an extension of the pitched instrument – as if it was a part of the inanga. Whew!

9. Allow for questions on the handout, and then collect them. Explain that the class will be performing their poems with their own “inanga”. Tell them that they will be replacing the inanga with classroom instruments (xylophones or harps).

10. Explain to them that in order for them to reproduce the true sound of the Inanga Chuchotee, they will need to carefully abide by an established set of rules used in Burundi. Pass out Appendix D (Inanga Chuchotee Rules). Explain the importance of each rule in detail.

11. Now, tell the teams to practice speaking their poems to each other. Tell them to speak it with intensity and to note what happens to the pitch of the voice as it is spoken. Teams then need to diagram the direction of each phrase as seen at the bottom of Appendix D. Diagrams/drawings should be written into the poem directly to the right of the poetry. Tell the class that these diagrams will become the basis of tomorrow’s compositions. Explain this concept further by diagramming the pitch direction of your own poem on the board. Speak it through loudly, and diagram each line after it is read for the class. Allow the rest of the day’s time for all groups to complete this process. Circulate around the room the room and help out as needed.

12. Have the teams hand in their work at the end of class.

13. Pass in Appendix D.

14. Play the Garland CD (Track #3) as the class exits.

15. Make sure to leave the poem on the board for the next day.

A. Assessment/Evaluation

1. Review of Appendix B (Q&A)

2. Assessment of the team poem diagrams
Lesson Three: Whisper Song (Day Three)

A. Daily Objectives
   1. Concept Objective(s)
      a. Develop an understanding of musical elements in non-western music.
      b. Learn to recognize indigenous instruments used in non-western music.
      c. Develop a sense of appreciation for non-western music.

   1. Lesson Content
      a. The Inanga Chuchotee
      b. Composing and Performing the Inanga Chuchotee
      c. Sound Waves: Speed and Frequency (page 200-201)
      d. Non-Western Music: Become familiar with scales, instruments, and works from various lands (page 195)

   1. Skill Objective(s)
      i. Listen to selected music with varied instrumentation and voicing, and discuss textures and timbres.
      j. Listen to a musical selection and explain how the composer used specific musical elements.
      k. Perform a rhythmic selection of music with syncopation.

A. Materials
   1. Garland Encyclopedia of World Music/Africa and/or World Music/The Rough Guide Volume 1
   2. CD track #3 “Inanga” from Garland Encyclopedia of World Music/Africa –or any other Whisper Song recording.
   3. Two or more xylophones, or autoharps, or harps
   4. Writing utensil
   5. White board, chalkboard, or large easel
   6. Copies of Appendix D (Inanga Chuchotee Rules) for the class
   7. Music manuscript paper for the whole class

A. Key Vocabulary
   1. Whisper Song/Inanga Chuchotee - a style of music unique to Burundi that involves a vocalist who whispers along with a tree zither
   2. Zither - a flat wooden soundboard over which strings are stretched; the instrument is commonly plucked, but may be strummed or bowed as well
   3. Inanga - the name of the concave tree zither in Burundi
   4. Ikivumu - the tree used for making the inanga
   5. Amenyo and Amano - the “teeth and toes” on the inanga used to tighten and hold the strings
   6. Pitch - the location of a sound in a tonal scale dependant upon the speed of vibrations from the source of the sound

A. Procedures/Activities
   1. Have the Garland CD (Track #3) playing as the class enters the room.
   2. Collect any bottle caps and ask for more if needed.
   3. Pass out Appendix D (Inanga Chuchotee Rules) and hand out the diagrammed poems (from the previous day) to each team.
   4. Allow a few minutes for questions and for teams to finish diagrams, and then pass out music manuscript paper to each group.
   5. Explain to the class that they now need to write music that follows the exact direction of the diagram for each line of their poem. The composition should also mimic the EXACT rhythm of the speech in the poem. Have the students limit their compositions to one octave (four or five notes is usually plenty!) in the key of the classroom instruments being used. Urge the students to write simple,
slow music that can be easily playable by any 8th grade performer. Demonstrate this with the first line of the poem on the board. Allow 15 to 20 minutes for this composition. Circulate around the room and help as needed. Refer to Appendix D (Inanga Chuchotee Rules) for a complete explanation of the composition.

6. As teams begin to finish their compositions, assign a pass/fail grade to the work done. This grade should be solely based on the requirements mentioned in step #5 above. For teams receiving a “fail” grade, encourage and supervise revision until the work is acceptable. Once groups finish, allow them to begin practicing the poem as a whisper song with a classroom instrument. Have the teams take turns whispering and playing the instrument. Brave students may try to do both at once.

7. As the class, as a whole, finishes the composition, allow teams to volunteer playing their whisper song composition for the class. Remind teams that these performances should be quiet and haunting, demanding the full attention of the listener. Insist on proper audience etiquette, and provide positive feedback for every performance. (This portion of the lesson can be extended an extra day to allow for extra composition time and additional performances.)

8. As time winds down, review Appendix B (Burundi Verbal Q&A) and collect Appendix D.

9. Play the Garland CD (track #3) as the class exits.

A. Assessment/Evaluation
1. Appendix B (Verbal Q&A) review
2. Evaluation of team compositions

Lesson Four: Music in the Pygmy Culture

A. Daily Objectives
2. Concept Objective(s)
   a. Develop an understanding of musical elements in non-western music.
   b. Learn to recognize indigenous instruments used in non-western music.
   c. Develop a sense of appreciation for non-western music.
3. Lesson Content
   a. The Pygmy Culture
   b. The music of the Ba-Benjelle Pygmies
   c. The research of Louis Sarno
   d. Non-Western Music: Become familiar with scales, instruments, and works from various lands (page 195)
4. Skill Objective(s)
   a. Listen to selected music with varied instrumentation and voicing, and discuss textures and timbres.
   b. Listen to a musical selection and explain how the composer used specific musical elements.
   c. Read, notate, and perform rhythmic patterns.

B. Materials
1. Garland Encyclopedia of World Music/Africa and/or World Music/The Rough Guide Volume 1
2. Garland CD (Track 19) BaAka Eboka
3. Voices of The Forgotten Worlds CD (Track 3 Disc 2) Ejenji
5. Copies of Appendix A
6. Appendix E (Sarno’s Journey To The Center Of The Earth)

C. Key Vocabulary
1. Pygmy - small or dwarflike
2. Ba-Benjelle Pygmies - aka Pygmies from Africa belonging to the Bayaka tribe
3. Polyphony - many sounds at once as melody
4. Ethnomusicologist - a person who studies indigenous music
5. Elobaye - “hello, how are you”
6. Ejenji - a forest mystic who is believed to have telepathic power
7. Esime - percussion break with intense dance and sparse improvised singing
8. Mokoondi - the forest spirit called out in Elanda and Lokoondo; this spirit is typically painted in phosphorescent paint and clothed in raffia fibers; although this spirit is a member of the tribe, the cover of darkness always conceals his or her identity; the Ba-Benjelle consider the Mokoondi an integral mystical component to their existence
9. Eboka - intense polyphonic song usually accompanied by drums or clapping that calls out the Mokoondi; this form rises and falls with intensity as it blends in and out of Esime
10. Elanda - simple party music
11. Lokoondo - intense polyphonic women’s song, usually involving their own Mokoondi
12. Elelo - funeral singing
13. Geedal - harp
14. Mondume - harp zither
15. Mobio - open ended four hole flute
16. Earth Bow - a living sapling tied down to the ground with rope and held there with a wooden peg; the rope is plucked generating a deep resonating sound

D. Procedures/Activities
1. Greet the class by saying, “Elobaye” (pronounced Eh-loh-buy–ay; this means, roughly, “Hello, how are you” to the Ba-Benjelle). Gesture for the class to return the phrase. Repeat this as a call and response until they all get it (insist on loud enthusiasm) and then explain what it means, and that it is a common greeting used by the people they are about to listen to.
2. Collect any bottle caps. Ask for more if needed.
3. Pass out the listening worksheet (Appendix A) and play the “Voices Of Forgotten Worlds” CD (track #3 – disc two) or the Garland CD (track #19). Proceed with a discussion of the worksheet answers.
4. Introduce the word Pygmy without explanation to the class and ask for what the students think the word might mean. Following all tries, define it as listed above and explain that the Pygmy people in Africa, which is who we just heard from, are one of the last remaining isolated “hunter-gatherer” cultures in the world. Explain that this means they still live off of the land in their own way, only interacting with the outside world when they choose to. For the most part, because of their isolation, they do not have to adhere to all of the laws and rules of the “civilized” world as other cultures are forced to do.
5. On the map of Africa, have a student volunteer try and guess what areas in Africa might allow a culture to exist in isolation from the outside world. The answer lies along the Congo River in west central Africa. This is because of the dense rainforest that still populates much of this region.
6. Now have a student find Greece on the map (if the map contains Greece – if not, have them point to where Greece would be). Explain that the ancient Greeks (and even the Egyptians) wrote about the Pygmy people and are supposedly responsible for naming them, primarily for their small size (average height between four-and-a-half and five feet tall). The Pygmies were thought to have disappeared after the times of Aristotle, but they were rediscovered in the 19th
century. This means that the Pygmy people are an ancient people. In fact, they are thought to have inhabited most of central Africa many years ago.

7. Ask the class why the Pygmy people no longer occupy most of central Africa. The answer is the diminishing forests. Explain that the Pygmy people are forest people and have been largely affected by the harvesting of the rain forests in Africa. Population has also been a reason for their decline. As more people move into these areas, they are less able to live off the resources of the land. They are also less able to live by their own rules. For the Pygmy people to survive as they have for thousands of years, they need to have isolation of the forests.

8. Now explain that the reason Pygmy music is so intriguing, is that it is far more advanced and complex than people expect for such an “uneducated” forest-dwelling people. Their harmonies are very intense, and their polyphony is mind-boggling (stop to explain polyphony if needed).

Specialists in the music field, wanting to study the Pygmy music, have attempted to record the songs of the Pygmy people and have come away with mixed results. Many ethnomusicologists have attempted to record music from the many tribes of Pygmy people, but most have come away with music that was uninspiring and predictably chaotic. This was largely due to two factors. First of all, the Pygmy people lived either on the edge or within the rainforest, making them very inaccessible. Because of this, many researchers did not attempt to find “truly” isolated cultures and wound up recording tribes that had begun to “civilize” their ways. In these “civilized” recordings, the musical style is mixed with other local influences and usually lacks any genuine quality. The second factor was that the Pygmy people are a proud people and are not usually willing to share their wealth of music with strangers, so what was typically recorded was party, adolescent, or drinking songs. Only the truly experienced researcher would even know the difference, and often times a simple party song satisfied the researcher and he or she would then leave.

9. One researcher however was different. His name was Louis Sarno. The Pygmy people called him “Patron” or “Mondele” (white man). While living in New Jersey, he was flipping through radio channels and heard a recording of the Ba-Benjelle Pygmies. He was an ethnomusicologist, and he was shocked at the depth and complexity of the music he heard. It was both advanced, and raw, and he wanted to hear more. Amazed at their unique sound and incredible talent, he began to quickly study and find anything and everything he could about the Pygmy people.

10. Ask the students how the Pygmy people could have developed a type of music that sounded so advanced to trained listeners. The answer lies in their close relationship to nature, and their amazing ability to be in-tune to the sounds of nature.

11. To make the point, read the following to the students:

It is well known that wives will know if the men have been successful on a hunting trip just from the change in the bird calls in the forest. They will begin preparation for a celebration and meal before the hunting party returns home. When walking through the dense rainforest, one can sometimes not see ten feet in any direction. But, by tuning into the sounds of the water, the wind, and the birds, the Pygmy can easily find his way. Basically, the Pygmy people have a highly developed sense of hearing. This sense allows them to not only hear a sound, but also
connect it with all parts of their daily life. Pygmy music is an extension of this idea. Nearly every occasion has a sound in Pygmy culture. These sounds become an extension of the music of the rainforest. From a distance, the yodeling nature of Pygmy singing can quickly blend with the calls of the birds in the rainforest.

1. Continue the story of Louis Sarno. Explain to the class that he dropped everything but a tape recorder and flew to Africa to record the Ba-Benjelle. Read Appendix E (Sarno’s Journey To The Center Of The Earth) to the class. Follow this up with question and discussion on the story.

2. Explain to the class that the Pygmy people, as Sarno found out, incorporated music into nearly every event in their lives. It was part of who they were. Music was as necessary as the air and the water to them. Like a bird’s song, it was their way of being a part of nature. Tell the class that tomorrow they will arrive to class as the Ba-Benjelle people would. They will have a simple existence and do as they pleased, but they must generate music for the entire class period. They will have to follow just three simple rules:
   a. From the moment they arrive to the moment they leave, music cannot stop (music is defined here as organized sound).
   b. They cannot upset the balance of their environment (no destroying, breaking, or permanently altering the room)
   c. Nobody is obligated to do anything specific, but it is important that all contribute to the music in some way. Any contribution must be accepted.

3. Explain to the class that, while this sounds like a fun “free-for–all”, it will be difficult to maintain. It will take lots of energy, and plenty of creativity. Ask the class to survey the room and decide how they might be able to use parts of their environment, or “their rain forest” for making music. Have them break into groups of three to four and begin planning for the coming day.

4. As time expires, play the CD (track 3, disc two) or the Garland CD (track #19). once more as the class exits.

A. Assessment/Evaluation
   1. Completion and discussion of the Listening Worksheet (Appendix A)
   2. Discussion of “Sarno’s Journey To The Center Of The Earth” (Appendix G)

Lesson Five: Music In Pygmy Culture (Day Two)

A. Daily Objectives
   1. Concept Objective(s)
      a. Develop an understanding of musical elements in non-western music.
      b. Learn to recognize indigenous instruments used in non-western music.
      c. Develop a sense of appreciation for non-western music.
   1. Lesson Content
      a. The Pygmy Culture
      b. The music of the Ba-Benjelle Pygmies
      c. Non-Western Music: Become familiar with scales, instruments, and works from various lands (page 195)
   2. Skill Objective(s)
      a. Listen to selected music with varied instrumentation and voicing, and discuss textures and timbres.
      b. Listen to a musical selection and explain how the composer used specific musical elements.
         a. Perform a rhythmic selection of music with syncopation.
A. **Materials**
   1. *Garland Encyclopedia of World Music/Africa* and/or *World Music/The Rough Guide Volume 1*
   2. *Garland CD (Track 19) BaAka Eboka*
   3. *Voices of the Forgotten Worlds CD (Track 3, Disc 2) Ejenji*
   4. Copies of Appendix A
   5. Hand drum of any kind

B. **Key Vocabulary**
   1. Pygmy - small or dwarflike
   2. Ba-Benjelle Pygmies - aka Pygmies from Africa belonging to the Bayaka tribe
   3. Polyphony - many sounds at once as melody
   4. *Elobaye* - “hello, how are you”

C. **Procedures/Activities**
   1. As the class enters, holler, “Elobaye” (pronounced Eh-loh-buy–ay) a few times with great energy to the oncoming students. Begin drumming on the hand drum. Provide no other instruction unless ABSOLUTELY necessary. Allow the class to mingle and join in. They can sit anywhere they desire, and act out in any way that is not destructive. As soon as others have begun making music, break from the drumming and circulate around the room – quietly encouraging all to participate. Try to stay out of the center of attention. Only intervene if the music begins to stop. Try not to talk, unless in song. When there are only a few minutes left in class, bring the session to a close with a holler of “Voila”, and ask the class to sit in a large circle to discuss the event.
   2. Ask the class if they found it hard to keep the music going.
   3. Ask them if they found some points during the class that sounded cool, or sounded weird. Discuss what factors made those moments feel the way they did.
   4. Ask the students what their favorite part was. What was their least favorite part? Why?
   5. Ask the students if they would ever consider giving up what they had to live like a Pygmy in Africa (like Sarno). What would be the advantages and disadvantages?
   6. What advantages in Pygmy life could be incorporated into the way we live today? What lessons can the Ba-Benjelle teach us today?

C. **Assessment/Evaluation**
   1. End of class discussion listed above in steps 2 through 6.

---

**Lesson Six: The Mbira in Zimbabwe**

A. **Daily Objectives**
   1. **Concept Objective(s)**
      a. Develop an understanding of musical elements in non-western music.
      b. Learn to recognize indigenous instruments used in non-western music.
      d. Develop a sense of appreciation for non-western music.
   2. **Lesson Content**
      a. The Mbira in Zimbabwe
      b. The rhythm of the mbira
      c. Elements of Music: Recognize theme and variations (page 194)
      d. Non-Western Music: Become familiar with scales, instruments, and works from various lands (page 195)
   3. **Skill Objective(s)**
      a. Listen to selected music with varied instrumentation and voicing, and discuss textures and timbres.
b. Listen to a musical selection and explain how the composer used specific musical elements.
c. Perform a rhythmic selection of music with syncopation.
d. Read, notate, and perform rhythmic patterns.

A. Materials
1. *Garland Encyclopedia of World Music/Africa* and/or *World Music/The Rough Guide Volume 1*
2. Garland CD (Track 20) or any mbira recording.
3. Garland CD (Track 21) or any mbira recording.
4. Copies of Appendix A
5. Copies of Appendix F (Mbira Training Sheet)

B. Key Vocabulary
1. Shona - the Bantu speaking people who occupy most of Zimbabwe and parts of Mozambique
2. Mbira - the mbira is a plucked instrument of the Shona that is played singly or in ensembles; the mbira is typically made with spokes or nails hammered flat and attached to a board at various pitched lengths
3. Kalimba - a novice, or training instrument smaller in size and keys than the mbira
4. Mbira Dzavadzimu - Mbira of the ancestral spirits; an mbira with twenty-two or more wide keys
5. Polyrhythm - several different rhythms performed simultaneously

A. Procedures/Activities
1. Greet the class with the now customary, “Elobaye” and collect any bottle caps. Ask for more if needed. Pass out the listening worksheet (Appendix A) and play the Garland CD (track 21).
2. Review the worksheet answers and discuss the student musical opinions.
3. Let the students guess at the country of origin, and, if they don’t guess, tell them it is Zimbabwe.
4. Take a brief moment to allow a student volunteer to locate Zimbabwe on the map of Africa. Once again, note the countries that surround it to generate a sense of geographic orientation.
5. Introduce the word “Mbira”, and explain what it is. Explain that the mbira is usually played facing the body, with the thumb of the left hand and the thumb and forefinger of the right hand. Some players will also play with the forefinger of the left hand.
6. Let the students know that some experts believe the mbira may have been invented as a portable xylophone, but this cannot be proven. Furthermore, while mbiras and kalimbas (a small novice instrument) exist all over Africa, the Shona people have developed the largest instruments and use them most frequently in rituals/ceremonies. Thus, the importance of the mbira in Zimbabwe outweighs its use in other African countries. This allows the Shona people a sense of ownership and emotional connection to the mbira.
7. Explain that, in addition to the mbira, the Shona people have developed their own drums, pan pipes, shakers and rattles, and have even developed their own singing style.
8. Note to the students the distance from the Ba-Benjelle Pygmies in west central Africa to Zimbabwe. Explain to the students that there is a similarity in the yodeling singing style of the Shona and the Pygmies, suggesting that the Pygmies probably inhabited this area before the Bantu-speaking peoples arrived.
9. Ask the class to quiet down and listen. Play a minute or two of the Garland CD (track 20) for the class. When done, explain that the reason that this music
sounds so bizarre and complex is the use of polyrhythms. Ask the class if anyone can define polyrhythms. If not, breakdown the word into “poly” and “rhythm” for the class and explain the word with the definition listed above (in vocabulary).

10. Pass out the Mbira Training Sheet (Appendix F) to class. Let them know that in order to become an mbira player, you begin as a novice with simple songs. These songs, to our ears, are quite hard. What a Shona beginner in Zimbabwe would start out with would challenge most music teachers in the United States. The reason for this is the polyrhythm. To best explain this, the first exercise on the Mbira Training Sheet is set up to teach a simple polyrhythm: 3 against 2. Use the training sheet to practice the first exercise with the class. Have the students pat the example on their legs. Circulate around the room and help out as needed. (This exercise may take a bit of teacher practice as well. More detailed instruction is included in the appendix)

11. Once students begin to grasp the concept, allow for some class volunteers to demonstrate. When possible, ask them to try performing the 3-against-2 polyrhythm with their feet while both sitting and standing. This can be a great deal of fun, so take some time here for experimentation.

12. Now divide the class into groups of two. Have the students begin working on exercise #2 on Appendix F. This will take the rest of the class time (10 to 15 minutes). Circulate around the class and help out as needed.

13. At the end of class, have the students pass in Appendix F and ask one last time for bottle caps (if needed). Explain to the class that the mbira is designed to have a “dirty” sound. This means that, in order to project better, the Shona people attach land snail shells, or bottle caps to the mbira to create a buzzing sound while it is played. This gives the mbira a very distinct sound. Tell the class that tomorrow, they will begin building their own mbiras in the Shona style. Tell them to practice their polyrhythms overnight, because they will be playing them on a real instrument soon!

14. Play the Garland CD (track 21) as the class exits.

A. Assessment/Evaluation
1. Completion of the Listening Worksheet
2. Assessment of the polyrhythm performance in class

Lesson Seven: The Mbira in Zimbabwe (Day Two)
A. Daily Objectives
1. Concept Objective(s)
   a. Develop an understanding of musical elements in non-western music.
   b. Learn to recognize indigenous instruments used in non-western music.
2. Lesson Content
   a. The Mbira in Zimbabwe
   b. The rhythm of the mbira
   c. Elements of Music: Recognize theme and variations (page 194)
   d. Non-Western Music: Become familiar with scales, instruments, and works from various lands (page 195)
3. Skill Objective(s)
   a. Listen to selected music with varied instrumentation and voicing, and discuss textures and timbres.
   b. Listen to a musical selection and explain how the composer used specific musical elements.
c. Perform a rhythmic selection of music with syncopation.
d. Read, notate, and perform rhythmic patterns.

A. Materials
1. *Garland Encyclopedia of World Music/Africa* and/or *World Music/The Rough Guide Volume 1*
2. Garland CD (Track 20) or any mbira recording.
3. Garland CD (Track 21) or any mbira recording.
1. Copies of Appendix A
2. Copies of Appendix F (Mbira Training Sheet)
3. Supply box: 8” squares of plywood, hanger wire, woodscrews, corner molding, wire cutters, screwdrivers, screws, wood staples, hammer, nails, tape and bottlecaps
4. Copies of Appendix G (Easy Mbira Construction)

A. Key Vocabulary
1. Shona - the Bantu speaking people who occupy most of Zimbabwe and parts of Mozambique
2. Mbirab - the mbira is a plucked instrument of the Shona that is played singly or in ensembles; the mbira is typically made with spokes or nails hammered flat and attached to a board at various pitched lengths
3. Kalimba - a novice, or training instrument smaller in size and keys than the mbira
4. Mbira Dzavadzimu - mbira of the ancestral spirits; an mbira with twenty-two or more wide keys
5. Polyrhythm - several different rhythms performed simultaneously

A. Procedures/Activities
1. Greet the class with the now customary, “Elobaye” and with the Garland CD (track 20) while collecting any bottle caps.
2. Pass out the Mbira Training Sheet (Appendix F) and work through exercises #1 and #2 in groups of two for about 15 minutes. Circulate around the room and help as needed.
3. Pass in Appendix G and grab the box of supplies. Have some students help carry the wood to a suitable construction zone (outside, or a woodshop). Proceed with the mbira construction as outlined in Appendix G (Easy Mbira Construction). This will take 30 to 120 minutes depending on class size and volunteer help.
4. When finished, collect all supplies and get them back to the supply box and head back to class. If any time remains, pass out Appendix F and begin exercise #1 using fingers on the mbira.
5. When time runs out, collect Appendix F and play the Garland CD (track 21) as the class leaves. Let the class know that they will need to leave the mbiras in class for the time being. (This lesson can be extended one to three days depending on the time it takes to construct an mbira for every student. Adding an extra day for practice time following construction is also an option.)

B. Assessment/Evaluation
1. Assessment of the practice on Appendix F
2. Assessment of the mbira construction

VI. CULMINATING ACTIVITY
B. Students will take a paper and pencil final exam covering the content in the seven lessons (Appendix H).
C. Following the exam, the class will compose and perform a large whisper song using their mbiras as Inanga and performing the song(s) as a whole-class ensemble. This activity
will take approximately three to four days. In order to complete the project, the teacher and students must do the following:

1. Select a group of two to four students to compose the text of the whisper song (this should take 20 to 30 minutes maximum).
2. While the lyrics are composed, the remainder of the class will continue a teacher led “whole class” rehearsal of Appendix F.
3. Once composed, write the lyrics on the board and, with the aid of the class, diagram the pitch motion of the lyrics.
4. Compose the music by allowing the lowest pitch on the mbira to be the lowest point on the pitch diagrams. The highest point should be the highest note on the mbira. Decide on two to three more notes to represent the rising and falling of the pitch between the high and low points.
5. Pass out music manuscript paper to each student. Ensure everyone has a pencil.
6. Begin to compose on the board, through student suggestion, the music for each phrase (and accompanying music diagram).
7. When finished composing, practice playing the music until an elementary degree of mastery is achieved.
8. Now begin trying the piece with the whole class whispering the text to the mbira composition.
9. Practice this until mastered and perform it for a selected audience.
10. When finished, allow the students to take the mbira, the new composition, and Appendix F with them.

VII. HANDOUTS/WORKSHEETS
C. Appendix A: Music Listening Worksheet
D. Appendix B: Burundi Verbal Q&A
E. Appendix C: Overtones and the Human Voice
F. Appendix D: Inanga Chuchottee Rules
G. Appendix E: Sarno’s Journey To The Center Of The Earth
H. Appendix F: Mbira Training Sheet
I. Appendix G: Easy Mbira Construction
J. Appendix H: Unit Exam
K. Appendix I: Unit Exam Key
L. Appendix J: Music Manuscript Paper

VIII. BIBLIOGRAPHY
Appendix A
Listening Worksheet

Name ____________________________________________

Date ____________________________________________

Homeroom Teacher ____________________________________________

Try and name the song and the country of origin: ____________________________________________

1. Circle one of the following words that best describe the “style” of the music being played for you. Briefly explain your choice in the space to the right.
   a. Rock
   b. Country
   c. World
   d. Opera
   e. Jazz
   f. Reggae
   g. R&B
   h. Blues
   i. Classical
   j. New Age
   k. Rap
   l. Other (please list) ____________________

2. Using letters (starting with “A”) try to outline the form of the music being played for you, and write it in the space below. (For example: AABACA etc.)

3. Name as many instruments/sounds as you can from the music being played for you, and list them below.

4. Do you like the music being played? Why? Justify your reasoning in the space below.
Appendix B
Burundi Verbal Q&A

1) Where in the world is Burundi? Have a student find it on the map.

2) What is an Inanga? It is a trough-like zither carved from a special tree called the “Ikivumu”. It is shallow and concave. This concave shape creates a resonator (a semi-hollow area for the sound to vibrate echo, and/or amplify). At the ends of the resonator (or concave section) are the “teeth and toes”, or pegs for fastening and tightening strings. In Burundi, these teeth and toes are called, “Amenyo” and “Amano”. There are usually eight to twelve strings stretched from the amenyo and amino. These strings are commonly made from cow tendon.

3) What does “Chuchotee” mean? It is French for “whisper”.

4) How many players does it take to perform Inanga Chuchotee? One.

5) In “Inanga Chuchotee”, is their singing? No, just whispering.

6) Should the Inanga Chuchotee be performed alone, with no one around? No, it is intended to be provoking- to create a reaction from the audience.

7) How many instruments are used in an Inanga Chuchotee? Two; the voice and the Inanga.

8) What is an overtone? A pitch that is relative or perceived by the human ear to be higher than the actual source tone. Overtones are related to the original pitch usually by fractions of their original frequency.

9) What is frequency? The speed at which a sound vibrates. The higher the frequency, the faster the vibrations, the higher the pitch.

10) How does Inanga Chuchotee sound like actual pitched singing? The overtones of the notes played on the inanga align with overtones in the whispered voice and make it sound as if the whisper has pitch.
Appendix C
Overtones and the Human Voice

The production of a whisper loosens the vocal cords. Instead of allowing air from the lungs to exhale in controlled surges or regular pulses, the vocal cords are blasted with air creating turbulent noise. The resulting sound is what many regard as “white noise”. White noise is characterized by a presence of ALL frequencies within a given range.

When one speaks, the vocal cords are vibrated, enabling speech to be heard through articulated pitches. When one whispers, one can still be heard, but not through pitch, merely through articulation (or shaped bursts of noise). Because the human voice is able to speak in virtual “white noise”, the abundant frequencies present enable the voice to merge with pre-existing overtones – like those from an instrument.

Look at the narrow band spectrograms below (Figures 1 and 2) and compare the frequency response of the spoken voice to the whispered voice. Notice how the spoken voice (Figure 1) breaks up along the ascending frequency, reappearing in various overtones. Now look at the whispered example (Figure 2). Notice how solid and stable it appears as it ascends through the same range as the spoken voice.

Now look at the last example (Figure 3). This is the frequency and overtone reading from a plucked Inanga. Can you see how the Inanga and the whispered voice produce frequency and overtone images that overlap? This is one way that the illusion of Inanga Chuchotee is visible.

Figure 1: Narrow Band Spectrogram of “To be or not to be,” voiced.

Figure 2: Wide Band Spectrogram of “To be or not to be,” whispered.

Figure 3: Narrow band spectrogram of an Inanga tone.
Appendix D
Inanga Chuchotee Rules

1) **The Rule of Melodic Downdrift:** This rule is one of the most important. It is a characteristic of various types of African music. It basically means that as the speaker/singer runs out of breath, the pitch of the spoke/sung voice falls off or descends. This means that every phrase in Inanga Chuchotee must end in a descent.

2) **The Rule of Melodic Integrity:** This rule is also extremely important. It simply means that the melody should stay fairly consistent with only slight variations to accompany text. It should not circulate around the room from phrase to phrase. There should be a certain welcome repetition to the melody.

3) **The Rule of Melodic A and B Themes:** This rule states that there should be a specific A and B section to each melody. This can be thought of as one theme with one variation.

4) **The Rule of Linguistic Tonality:** This means that the composition on the inanga must follow the precise pitch movement of the text.

5) **The Rule of Moraic Rhythm:** This rule applies to vowel sounds. A single pitch should accompany a vowel. If a vowel is exceptionally long, it can contain two pitches.

6) **The Rule of Semantic Coherance:** Don’t alter the text in any way to fit the music. The music should have been written well enough to match every vowel and syllable of the text.

7) **Grammaticality:** Respect the rules of grammar.

8) **The Whisper Rule:** This is obvious – no pitched voicing. Everything must be whispered.

9) **Audience Etiquette:** As an audience, the performance space must be silent and respectful.

**Below is an example of diagramming the text pitch for an Inanga Chuchotee:**
First the phrase is spoken, and then the pitch direction is diagrammed to the right.

\[
\begin{align*}
\text{(phrase 1)} & \quad \text{I have been roaming the path of life for many years.} \\
\text{(phrase 2)} & \quad \text{I have enjoyed a life of vast adventure.} \\
\text{(phrase 3)} & \quad \text{I have fulfilled a dream of family and love.} \\
\text{(phrase 4)} & \quad \text{I have come full circle}
\end{align*}
\]
Appendix E
Sarno’s Journey To The Center Of The Earth

It began as a short trip to West Central Africa. Louis Sarno was set on finding the remote Ba-Benjelle Pygmies. Despite local governments and officials urging him to seek other, more accessible Pygmy people, Sarno would not be swayed. His travels took him through remote savannahs and dense jungle. But, upon his arrival at the Pygmy home of Amopolo, a people that appeared to be lazy, drunken, and self centered dulled his excitement. He was introduced to many people of this Bayaka tribe as he strolled the village with a cassette recorder strapped around his neck. Knowing a little French and some Yaka (a language close to the language of the Pygmies) Sarno made generous attempts at recording the Pygmy music. But, despite his offering up money and gifts, all he received in return was simple party songs and drunken yodeling. Sarno, after a few weeks began to lose hope, thinking his dream of hearing the sweet polyphonic sounds of the Pygmies was hopeless.

Sarno continued his attempts at communication and conversation, all the while spending a great deal of money on mbaku (the local alcohol) to appease the demands of these Ba-Benjelle. He was given a beehive hut as a house, and an old door to sleep on. His feet had become infested with Chigoes (a bug that lays eggs under the skin and when the eggs hatch thousands of babies bore their way out) and he was being fed a steady diet of tadpoles and flour. His heart began to question his motive, as he had been in the village for nearly a month and he had nothing of the music he was expecting. All he managed to record was simple elanda (the party music). This upset Sarno to such an extent that he even loudly lectured the Pygmies, basically saying, “You are all lazy drunks! Your music is simple. This is hopeless!”

The next evening, while sitting in the mbanjo (gathering place), it seemed the usual elanda was starting up again. But, as the drums picked up their pace, the women began a subtle yodeling Sarno had not heard before. This was it! This was the sound he had heard on the radio. Sarno quickly switched on his recorder and watched in wonder. The women were in a circle, swaying in and out. The polyphony and yodeling was building to a large chorus. The men joined in and then suddenly, a bush appeared from the forest, swaying, rising, and falling to the ground. It was nimble, and danced toward the mbanjo. It was the Mokoondi (the forest spirit). As it grew near, its body was glowing. The women followed it and when it turned on them they ran back yelling, “Wol!”Soon, the music broke into an esime (percussive dance break with some improvisation). Then, the polyphonic singing picked up again. This continued for many hours. This was the eboka!

The next morning, the entire village was filled with music. Women sang as they mashed flour, men sang on their way into the forest, and meat was offered to Sarno. The children drummed and played flutes. He secretly wondered in amazement at how they had kept this from him for so long. It was as if the village had given in, accepting that he was not going to give up. Sarno would need to stay longer.

Soon the village made its annual move to the forest, where this once lazy people became master hunters. Their swiftness through the jungle was ghostlike. Their connection to nature was beautiful. Sarno was a clumsy novice in the forest, and faced many embarrassments, but his affection for this people was growing. Their affection for him, the “Mondele”, grew as well.

For the next two years, Sarno would hear the music of many instruments, the earth bow, the Mondume, the Mobio, and the Geedal. He would meet and record the music for Ejenji, a telepathic evangelist. He would learn to hunt antelope, grubs, and honey in the forest. And, through the women, he would hear the Lokoondo. This music was hauntingly beautiful, and men did not participate. Still, the women would have a great affect on Sarno. He would fall in love and marry within two years.

Life was not perfect, however, for Sarno. He would catch malaria twice, and suffer the loss of many of his Pygmy friends to disease, famine, and misfortune. Still, the heartbeat of this people was their music, a music that seemed to bring life to every single episode of life, and even death: with the mournful singing of the Elelo. This culture of music and symbiotic life so captivated him that he gave up the notion of a permanent return home. Now, his home is with the Ba-Benjelle. It was mutually accepted that Sarno would give his life to the Ba-Benjelle. He has promised them that he will never leave in exchange for the love of his wife, and the love of a beautiful people. He still lives with the Ba-Benjelle today, writing, recording, and most of all, living to the fullest at the center of the earth.
Appendix F
Mbira Training Sheet

Exercise #1: 3 against 2

Exercise #2: Advanced 3 against 2

When attempting these exercises, the lower set of notes is intended for the left hand, and the higher set is intended for the right.

When practicing exercise #1, think of it this way first: “Both, left, right left, both, left, right, left”
Remember to begin first by patting the thigh, and then progress to mbira once mastered.

Remember to practice these exercises until you can do them at a very quick speed.
Appendix G

Easy Mbira Construction

Assembly:
1. Plywood squares
2. $\frac{1}{2}”$ corner molding
3. 1” wood screws
4. Thick gauge hanger wire
5. Electrical tape
6. Hammer
7. Screwdriver
8. Wood Staples
9. Wire cutter
10. Bottle caps
11. Tack nails

Assembly:
1. Cut plywood into 8” squares.
2. Hammer two wood staples over the horizontal hangar wire.
3. Lay the five hanger wires (4 to 6” long) vertically over the horizontal wire and tighten down with 6” piece of corner molding (pre-drilling holes can help molding from splitting.)
4. Loosely attach bottle caps to the top (amount may vary) with 1 tack nail
5. Wrap electrical tape around plucking end of vertical hanger wire.

Total cost for a class of 30: $45.00
Appendix H
Unit Exam (50 points)

Name_________________________  Date________________________

Homeroom____________________________

True/False (20 Points)
(Fill in the blank on the left with a T for true or an F for false.)

1. ___Whisper Singing was developed in Zimbabwe.
2. ___An Inanga is a zither carved from a tree trunk.
3. ___Inanga Chuchottee is a loud musical form.
4. ___Improvisation is very important when performing the Inanga Chuchottee.
5. ___Melodic downdrift is when the melody follows the voice lower in pitch.
6. ___Whisper singing actually forces the voice to have real pitch.
7. ___Louis Sarno is an ethnomusicologist.
8. ___Polyphony means many different rhythms.
9. ___Yodeling is typical with Pygmy singing.
10. ___The Mookondi is a Pygmy party song.
11. ___Only women sing the Lokoondo.
12. ___The Ba-Benjelle Pygmy people count on the rainforest for survival.
13. ___The mbira is most famous in Kenya.
14. ___The Shona are the first people to ever inhabit Zimbabwe.
15. ___The mbira uses polyrhythms.
16. ___The mbira only uses three fingers for playing.
17. ___A polyrhythm is two or more different rhythms played at the same time.
18. ___The kalimba is only played by experts.
19. ___The mbira can have more than twenty notes.
20. ___Mbira playing only involves thumbs and forefingers for plucking.

Essay
(Answer each question in paragraph form, using complete sentences. Use the back of this page if needed)

1. Describe how frequency and overtones make Inanga Chuchottee sound as if the whispered voice is actually pitched.

2. Describe the “eboka”.

3. Explain why the mbira is considered more important to the Shona than other African people.
Appendix I

Unit Exam Key (50 points)

Name________________________________ Date______________________

Homeroom____________________________

True/False (20 Points)
(Fill in the blank on the left with a T for true or an F for false.)

1. _F_ Whisper Singing was developed in Zimbabwe.
2. _T_ An Inanga is a zither carved from a tree trunk.
3. _F_ Inanga Chuchottee is a loud musical form.
4. _F_ Improvisation is very important when performing the Inanga Chuchottee.
5. _T_ Melodic downdrift is when the melody follows the voice lower in pitch.
6. _F_ Whisper singing actually forces the voice to have real pitch.
7. _T_ Louis Sarno is an ethnomusicologist.
8. _F_ Polyphony means many different rhythms.
9. _T_ Yodeling is typical with Pygmy singing.
10. _F_ The Mookondi is a Pygmy party song.
11. _T_ Only women sing the Lokoondo.
12. _T_ The Ba-Benjelle Pygmy people count on the rainforest for survival.
13. _F_ The mbira is most famous in Kenya.
14. _F_ The Shona are the first people to ever inhabit Zimbabwe.
15. _T_ The mbira uses polyrhythms.
16. _F_ The mbira only uses three fingers for playing.
17. _T_ A polyrhythm is two or more different rhythms played at the same time.
18. _F_ The kalimba is only played by experts.
19. _T_ The mbira can have more than twenty notes.
20. _T_ Mbira playing only involves thumbs and forefingers for plucking.

Essay (10 points each)
(Answer each question in paragraph form, using complete sentences. Use the back of this page if needed)

1. Describe how frequency and overtones make Inanga Chuchottee sound as if the whispered voice is actually pitched.
   
   When the inanga plays, its overtones align with the whisper making the whisper seem more pronounced at that frequency. This creates the aural illusion of the whisper and the inanga producing the same pitch. So, when these overtones align, it is possible for the whisper to relate, resemble, or sound like the pitch played on the inanga.

2. Describe the “eboka”.
   
   Eboka: intense polyphonic song usually accompanied by drums or clapping that calls out the Mokoondi. This form rises and falls with intensity as it blends in and out of Esime.

3. Explain why the mbira is considered more important to the Shona than other African people.
   
   The Shona people have developed the largest instruments and use them most frequently in rituals/ceremonies. Thus, the importance of the mbira in Zimbabwe outweighs its use in other African countries. This allows the Shona people a sense of ownership and emotional connection to the mbira.