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Mapping the Beat: A History and Geography through Music Curriculum at the University of California San Diego, ArtsBridge America Program - Ancient Civilizations for 6th Grade

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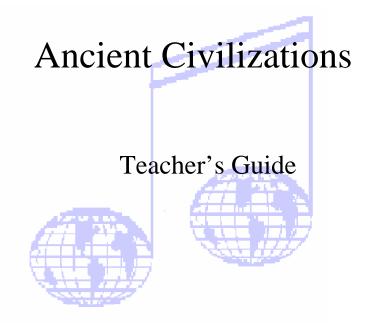
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Supplemental Material

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Mapping the Beat

A history and geography through music curriculum For Sixth Grade



This curriculum was developed by UCSD ArtsBridge America and sponsored by The National Geographic Society Education Foundation.

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Introduction

With the current state of restrictive educational standards and large class sizes, most teachers gladly accept help in developing thorough lesson plans that cover enough material in a compact amount of time, while keeping the students' attention and promoting enthusiasm and curiosity for learning. With that in mind we have developed this series of lesson plans with the intention of integrating music, geography and social studies into one curriculum. As graduate researchers in the music department at the University of California, we have focused in our studies on the various political, cultural and sociological factors that affect musicians and their music. With this experience, and guidance from specialists in the fields of elementary education, arts education, and geography, we have created *Mapping the Beat: A History and Geography through Music Curriculum* with the hope that you, as an elementary teacher, will find it useful for supplementing your social studies curriculum. It is our hope that this program will bring back into the classroom the much needed, and often bypassed, studies of geography and music.

Mapping the Beat, as it has been developed for this project, was built on three main concepts—environment, identity, and movement. These concepts address standards outlined in Geography for Life, designed by the National Geographic Society as a model for education standards. These particular themes were selected for their parallel significance in the study of music. In the classroom, these three concepts are explored through the processes of graphic reproduction of space and demographics, discussions in oral and written form, and participation in musical and performance-based activities.

Investigative discussions provide the opportunity to explore, in depth, the three main concepts connecting music and geography. After an introductory discussion of how the concepts apply to the students' lives, the instructors present several musical examples, employing audio and photographic tools to provide a clearer understanding. For each musical example, the instructors encourage and lead the students in the investigative process outlined in *Geography for Life*. Questions are raised as to the geographic context of the musical performance and the connection between musicians and their surroundings. Under the supervision and guidance of the instructors, students gather data from graphs, maps and other sources and deduce answers to their questions from this information. The issues that are covered in each investigative discussion are then applied to the musical performances and participatory activities that occur in the following weeks.

Sixth Grade Level

In the first year of this project, a curriculum was developed for the fifth grade that was tied to American History from the Revolutionary War to the Civil War. In the second year, the project was expanded to develop lesson plans for the sixth grade that were tied to Ancient Civilizations. As the music from ancient times is not well preserved in many cases, we decided to focus on the role of the musician in ancient Egypt. The unit on ancient India focuses on the music and musical instruments as they relate to the geography of that region. Finally, there is a strong emphasis on geography content in the lesson on Greece as theirs was a civilization with interesting innovations in regional planning. In addition to the lessons reflected here, students took part in a number of assembly performances. Musicians and dancers from Greece and India brought the music and culture of those regions to life. In addition, students took field trips to participate in GIS based activities. A website was established for this project to allow the students to have an interactive GIS experience within the unit on Greece. It is our hope that in addition to utilizing the lesson plans in this manual, you will have the opportunity to flesh out the curriculum with similar assemblies, field trips and a visit to the web site.

Enjoy the curriculum!
UCSD ArtsBridge America
2004

Lesson #1 Overview

Lesson Overview

Mapping the Beat will look at musical production as it occurred in three ancient civilizations: Egypt, Greece, and India. In addition, students will be introduced to basic geographical concepts: climate, landscape, settlement, and migration. Students will also learn the basics of orientation and mapping and the role of cartographic methods in past history and today.

This is an introductory lesson to introduce students to Mapping the Beat and the three geographical regions to be covered throughout the program. Students will discuss timelines and think about spatial relationships. Although each region will be taught separately, there should be an emphasis on the idea that while time is chronological, it is not a necessarily linear concept and that different events take place in different parts of the world at the same time. A helpful analogy for the students is the practice of flipping through television channels: there are different shows happening at the same time.

Look at some of the websites listed in this lesson plan under *preparation/references*. When engaging the students with maps, be sure to discuss the importance of climate (e.g., why do you think the Egyptians had a Sun God, Ra?), and landforms (e.g., why do you think people lived in areas in Upper Egypt in the Nile Delta?).

This lesson will also assess students' awareness of geography by connecting images, events, and symbolic artifacts with each of the specific regions. Students will investigate what exactly is an "ancient civilization" and why it might be important to study in relation to current society.

Objectives

- 1) To demonstrate knowledge of world geography as it relates to Egypt, Greece and India.
- 2) To investigate the concepts of comparative timelines and regional events in Egypt, Greece and India.
- 3) Developing an understanding of the role of music and its importance in society.

Note: the lessons to follow will address specific grade six standards in world history, ancient civilizations and music.

Materials

The following videos are suggested:

<u>The Greeks: Crucible of Civilization</u> produced by Atlantic Productions in association with PBS and Devillier Donegan Enterprises Published Alexandria, VA: PBS Home Video, c2000, 1999

Egypt: The Habit of Civilization directed by Spry-Leverton, Peter

Published [S.l.: s.n.], 1991

The Seven Wonders of the Ancient World produced by Atlantic Productions; Chicago, IL: Questar, c2000

Early Civilizations Color. 20 minutes. BFA Educational Media. An examination of the conditions that allowed civilizations to develop about 10,000 years ago, this well-organized production studies some of the earliest known cultures, including Mesopotamia, Egypt, Phoenicia, Greece, and Rome. The program explains that farming and the domestication of animals during the Agricultural Revolution freed time from hunting and gathering for people to remain in one place, build cities, and grow surplus food, allowing former hunter/gatherers to specialize as artisans, soldiers, philosophers, and priests. Other topics include the invention of written language, why civilizations die, and how subsequent cultures absorb them.

String and drawing material to construct timelines.

Maps can be downloaded from: http://www.nationalgeographic.com/xpeditions/atlas/index.html

The University of Texas Perry-Castaneda Library Map Collection also has maps for downloading: http://www.lib.utexas.edu/maps/index.html

If maps from the UT Library are used, then you must attach the following acknowledgement: "Courtesy of The General Libraries, The University of Texas at Austin."

Preparation/References

The following websites will provide you with background material for regions covered by Mapping the Beat:

http://www.rom.on.ca/egypt/case/about/

(The Royal Ontario Museum's reference site on ancient Egypt)

http://www.ancientegypt.co.uk/geography/home.html

(The British Museum geography of ancient Egypt site)

http://www.carnegiemuseums.org/cmnh/exhibits/egypt/

(Carnegie Museum of Natural History)

http://www.lsa.umich.edu/kelsey/galleries/Exhibits/MIRE/Introduction/AncientEgypt/AncientEgypt.html

(Egyptian music site from the University of Michigan)

http://www.getty.edu/research/conducting_research/vocabularies/tgn/

(Online thesaurus and search engine of geographical names)

http://www.lib.utexas.edu/maps/index.html

(University of Texas online map library)

http://carbon.cudenver.edu/stc-link/AE/geography.html

(University of Colorado-Denver's geography of ancient Egypt)

http://www.itihaas.com/ancient/

(Nice timeline of ancient India)

http://www.wsu.edu/~dee/ANCINDIA/CONTENTS.HTM

(Washington State University's site on ancient India)

http://members.aol.com/Donnclass/Indialife.html

(Life in ancient India)

http://www.lib.utexas.edu/maps/middle_east_and_asia/india_rel96.jpg (Map of India)

http://www.ancientgreece.com/geography/geography.htm (Site for maps and geography of ancient Greece)

http://www.wsu.edu:8080/~dee/GREECE/GREECE.HTM

(Site on ancient Greece from Washington State University)

Procedure/Sequence

Students will discuss what they think they already know about Egypt, Greece, and India. They will use the world map and locate each region and talk about the geography of the areas. Students will watch videos to help identify certain signifiers of the regions. Students will discuss concepts of time and space and construct timelines.

Play some of the videos and afterwards ask the students what they think is an Ancient Civilization? What do they know already about Egypt? Greece? India? What are words or terms that they connect right away with these places?

Write "Egypt" "Greece" "India" on the whiteboard and ask the students for some keywords from the discussion to place under each geographical region. When they respond with a word (such as "pyramids") ask them under which region should the word be placed. If the students come up empty, then prompt them with a few keywords and ask where it should be placed.

Video examples

You will add to their previous knowledge about Ancient civilizations by reviewing some video material.

Play minutes 2:40-7:00 on "Egypt: Habit of Civilization"

Before the video on Egypt ask them to pay attention to the following:

- a) What are the instruments you see? (wood flutes and drums)
- b) What is the name of the river we see? (The Nile)
- c) How long and wide is the river (600 miles long and at places is 6 miles wide)

Play minutes 8:30-15:30 on "The Greeks: Crucible of Civilization"

Before the video on Greece ask them to pay particular attention to:

- a) Where is Athens? (on a peninsula by the Mediterranean Sea)
- b) What was the peninsula called? (Hellas)
- c) What was the men's job? (working in the field and crafting)
- d) What was the women's job? (spinning, weaving and cooking)
- e) Were all people equal? (no)
- f) What is a serf? (a slave)
- g) Why don't we expect Greece to become an empire? (Have them look at the map: mountainous; no physical unity like the other ancient civilizations)

Write the keywords of the answers on the whiteboard (e.g., "serf")

<u>Time</u>

- a) Talk about time (B.C. vs. A.D. or BCE vs. CE) What does time mean?
- b) What is a time line? Make a quick time line for the school year on the whiteboard.

Group exercise

Make a timeline of a TV night with different channels together on the white board.

Ask the students to suggest 3 channels they normally watch. Then have them describe a sample of a TV night. What is on what channel? What's happening on one channel while you watch another one?

Option to the above:

Ask for volunteer to tell the class the first thing that s/he did when s/he woke up today. Then ask the student what s/he did after that, and so on, up to the present moment in time. Every time the student gives an event, write it down on the timeline. The students will then take five minutes to write down what they did this morning, in chronological order. They will then make comparisons of their lists with the student next to them. Wrap-up by describing what does chronological order mean.

Give each table text that describes events in Egypt, Greece and India. Each student chooses one of the events from the narrative and makes a drawing of the event with its year and geographical location as a heading. The text handout is attached at the end of this lesson plan. There are some excellent images in the student textbook, Ancient World: Adventures in Time and Place. Images can be also found on the internet sites.

Create 3 parallel timelines with string. Mark out the time frame from 6000 BCE (Ancient India) to 307 BCE (Ancient Greece). Attach the students' "event-drawings" at the correct place under the appropriate timeline.

Assessment:

Engage the students and ask them questions about time and space. Prompt them with questions like these:

- a) What might music have been used for in ancient Egypt? Greece? India?
- b) What did they notice on the map that makes the regions look different?
- c) Is the weather different in each place? Why?
- d) What might it have been like to live in Egypt? What about today? In Greece? In India?

Suggestion of events for the timeline exercise:

Egypt:

5000 BCE: Early farming settlements are centered around the Nile river and villages grew and thrived. Farmers were producing crops to trade while craftspeople were making tools, pottery, and jewelry. The Nile River became a major transportation route for trade.

3100 BCE: Egypt was divided into two kingdoms. Towns in Upper Egypt were ruled by a king who wore a white crown. In lower Egypt, people were ruled by a king who wore a red crown. Soon, the king with the white crown (Menes) attacked the kingdom of Upper Egypt (the Nile River Delta region) and overthrew the King with the red crown. Egypt was now unified into one. The new king wore a double crown of red and white. The new king, Menes, became the first pharaoh.

3100 to 2000 BCE: The period of the Old Kingdom.

2600 BCE: Construction of the Great Pyramid of the Old Kingdom begins. The Pyramid was to be the tomb of the Pharaoh Khufu. The construction lasted for nearly 22 years.

2000 BCE: The government leaders in Upper Egypt revolted against the pharaoh and put their own pharaoh in power. This divided up the Old Kingdom and it came to an end. The new pharaoh made Thebes the capital.

2100 to 1700 BCE: After the Old Kingdom collapsed, Egypt's new Middle Kingdom flourishes. Trade increases and The Egyptian armies conquer kingdoms such as Nubia, for gold.

1550 BCE: Egypt's new pharaoh, Ahmose, formed the New Kingdom with a strong military force. Egypt became a huge world power and trade expanded with gold jewelry, linen, and papyrus (paper).

India:

6000 BCE: The Indus River Valley becomes settled as people grow rice.

2200 BCE: The great Harappan civilization begins. Mohenjo-Daro becomes a powerful city and the people grow rice, barley and wheat. North, in the city of Harappa, craftspeople make pottery for use and trade. Bricks are also made and the streets are paved with bricks and brick houses are built.

1550 BCE: Ayrans take over the Indus River Valley and settle in Northern India.

1500 BCE: The beginning of Buddhism in northern India.

Greece:

1500 BCE: Mycenaeans become the power on the Greek mainland.

1150 BCE: The Mycenaeans are taken over by the Phoenicians.

733 BCE: The beginning of Greek colonization of the Mediterranean.

700 BCE: The rise of the city-states in Greece.

586 BCE: The beginning of the great Greek philosophy.

505 BCE: The establishment of democracy in Athens.

480- BCE: The period of Classical Greek culture.

307 BCE: Greece falls under Macedonian control.

Lesson #2 Egypt I

Lesson Overview

With this lesson, students will be introduced to the music of Ancient Egypt and will discuss the social roles of musical production. The students will discuss the role of artifacts and talk about how one might construct a history of music from those artifacts. Students will be exposed to images of musicians and ancient musical instruments. They will also listen to contemporary Egyptian music that has been influenced from constructed histories of ancient Egypt. In addition, the students will discuss the political and religious order of ancient Egypt and music's relationship to those particular structures.

In addition, students will analyze the relationship between physical geography and settlement patterns. They will be introduced to the role of the Nile River and its delta in relation to the development of urban centers and agricultural production. Students will examine why certain environments influence settlement patterns. They will also address the role of climate and the importance of precipitation and flooding in the human development of the region.

The geography of Egypt is important in understanding why the Egyptians centered their culture around the Nile. The Nile Valley can be separated into two parts, the River Basin and the Red Desert land. The river basin of the Nile was rich with wildlife, depending on the flooding cycles of the Nile. The Red Desert was flat and dry area and empty of most life and water.

The Nile in its natural state goes through cycles of flooding. The flooding was the time of greatest fertility for Egypt. As the banks rose, the water would fill man-made canals and would water the crops. However, if the flooding was above or below normal, it could have huge consequences upon Egyptian lives and the economy.

The students will investigate images of ancient musicians and instruments of the time, and talk about what it might have been like to be a musician in Egypt. What might have been their role as musicians? For whom might that have played their music? For what purpose might have they been asked to play their music?

Although music existed in prehistoric Egypt, the evidence for it comes after 3100 BCE (Have the students locate the date on the timeline). Music formed an important part of Egyptian life, and musicians occupied a variety of positions in Egyptian society. Music

found its way into many contexts in Egypt: temples, palaces, workshops, farms, battlefields and the tomb. Music was a part of religious worship in Egypt.

Professional musicians existed in various social levels in ancient Egypt. The highest status belonged to temple musicians. The title of "musician" (shemayet) to a particular god or goddess was a position of high status and usually held by women. Musicians who played with the royal household were held in high respect. Gifted singers and harp players were also highly respected. Low on the social scale were the musicians who were entertainers for parties and festivals. Quite often they were accompanied by dancers.

Percussion instruments included drums, rattles, and bells. The sistrum was a rattle used in religious worship. Hand clapping was used as a rhythmic accompaniment. Wind instruments included flutes and trumpets. Stringed instruments included harps, lyres, and lutes. Male and female voices were used in Egyptian music.

The key to this lesson is to allow the students the opportunity to begin to investigate the importance of history and its artifacts, the influences of the past on contemporary culture, and the societal role of musical production. They also need to become aware of the details of the geography of a specific region and the affect it has on settlement.

Objectives

- a) Students will discuss the political, economic, and religious structures of ancient Egypt and explore the role of music and musicians in Egyptian society.
- b) Students will analyze the geography of Egypt and investigate relationships between the physical environment and human settlement.
- c) Students will identify different functions of music in other cultures.
- d) Students will communicate ideas about the importance of music in everyday life.

Standards

- a) Ancient Civilizations Standard 6.2: Students analyze the geographic, political, economic, religious, and social structures of the early civilization of Egypt.
- b) National Geography Standard 4: The Physical and Human Characteristics of Places.
- c) National Geography Standard 12: The Processes, Patterns, and Functions of Human Settlement.
- d) National Geography Standard 15: How Physical Systems Affect Human Systems.
- e) National Geography Standard 17: How to Apply Geography to Interpret the Past.
- f) Visual and Performing Arts: Music Standard 3.2: Listen to and describe the role of music in ancient civilizations.
- g) Visual and Performing Arts: Music Standard 4.3: Identify aesthetic qualities in a specific musical work.

Materials

- 1) CDs with music examples: Ancient Egypt [sound recording] / composed and performed by Ali Jihad Racy. Flûtes du monde [sound recording] = Flutes of the world. Published Boulogne, France : Playa Sound ; [France] : Distribution, Auvidis, 1996
- 2) Overhead transparencies of images of instruments and musicians with copies for students.
- 3) Egypt: The Habit of Civilization directed by Spry-Leverton, Peter. Published [S.l.: s.n.], 1991
- 4) Maps of the physical geography of Egypt.

Maps can be downloaded from: http://www.nationalgeographic.com/xpeditions/atlas/index.html

The University of Texas Perry-Castaneda Library Map Collection also has maps for downloading: http://www.lib.utexas.edu/maps/index.html

If maps from the UT Library are used, then you must attach the following acknowledgement: "Courtesy of The General Libraries, The University of Texas at Austin."

Preparation/References

General history:

http://www.historyguide.org/ancient/lecture3b.html

Teacher's Guide:

http://www.internet-at-work.com/hos_mcgrane/egypt/egyptintro.html

Downloadable Maps:

http://www.nationalgeographic.com/xpeditions/atlas/index.html

General geography:

http://www.mnsu.edu/emuseum/prehistory/egypt/dailylife/geography.html

http://www.rom.on.ca/egypt/case/about/environ.html

The importance of the Nile:

http://carbon.cudenver.edu/stc-link/AE/culture.html

Nile flooding and agriculture:

http://www.mnsu.edu/emuseum/prehistory/egypt/dailylife/geographyandagriculture.html

http://www.civilization.ca/civil/egypt/egcgeo1e.html

http://www.civilization.ca/civil/egypt/egcgeo2e.html

http://www.civilization.ca/civil/egypt/egcgeo3e.html

Music in ancient Egypt:

http://nefertiti.iwebland.com/timelines/topics/music.htm

http://www.lsa.umich.edu/kelsey/galleries/Exhibits/MIRE/Introduction/AncientEgypt/AncientEgypt.html

Life in ancient Egypt:

http://www.kent.k12.wa.us/staff/dbishop/egypt/life.html

Growing up in ancient Egypt:

http://www.mnsu.edu/emuseum/prehistory/egypt/dailylife/genders.htm

Egyptian jokes, tall tales, and life in ancient Egypt:

http://members.aol.com/Donnclass/Egyptlife.html#KATHRYN

Procedure/Sequence

Students will view a video of the region, at which point a discussion concerning geography and settlement should be implemented. Have the students refer to the map of Egypt. They will discuss how histories might be constructed from artifacts. Discuss with them how a contemporary musician might be facilitated by archaeological discoveries when composing their own "music of ancient Egypt." For example, if a musician wanted to play some music that might be authentic to the time, would it be helpful if he or she saw some of the old instruments that have been recovered? Could they perhaps make music that sounded like the music of ancient Egypt on a replication of those old instruments? By seeing the old instruments, could the musician get a better idea of the sounds that they might have made? There is no recording of the music of Ancient Egypt, and all the musician has to work with are the artifacts.

1) Introduction

Tell the students that they will look at a map of Egypt and talk about the physical geography and settlement of the region. In addition, they will view a video, listen to some music and talk about what it might have been like to be a musician living in ancient Egypt.

2) Using the map

Using the classroom map, have the students describe the map of Egypt:

- 1) What shape is Egypt?
- 2) What kind of boundaries does it have?
- 3) What are the *political* boundaries?
- 4) What are the *natural* boundaries?

Have them look closely at the settlement patterns of Egypt and discuss the role of the Nile River:

- 1) Why are most of the cities along the river?
- 2) What is so important about the river?
 - a) Transportation
 - b) Renewal of fertile soil
 - c) Water for irrigation
- 3) Why are there very few cities away from the river?
- 4) What kind of environment do you think is away from the river, in the interior?
- 5) How and why does the Nile River flow north, up the map?

3) Video

Show short video, *Egypt: Habit of Civilization*.

Ask the students to pay close attention certain points of the video. For example:

- 1) How large is the river?
- 2) What type of musical instruments do you see?
- 3) How did people make a livelihood using the Nile River?

Have the students talk about what they saw. Ask them what they think it might be like to live in Egypt.

4) Discussing images of musicians and musical instruments

Hand out copies of images of musicians in ancient Egypt. Help interpret what it is the students are looking at. What can we tell from looking at pictures? (At this point it will help to talk about artifacts and how we collect history and record what we think we know about ancient civilizations.)

Can we tell anything about their lives?

What their social status might be?

A helpful source is: http://nefertiti.iwebland.com/timelines/topics/music.htm.

Hand out copies of images of musical instruments from ancient Egypt. Again, it is important to stress that all our information comes from artifacts and that the Egyptians recorded their history using a written language of hieroglyphs instead of the alphabet of symbols that we have today. Have the students discuss what sounds the instruments might produce, and pay special attention to whether it would have been a pitched or un-pitched sound and whether it would have been a melodic or percussive instrument.

- 1) Are the instruments similar to any of those we have today?
- 2) What can we tell about the instruments?
- 3) Out of what material do you think they are made?
- 4) Where do you think the material most likely came from?
- 5) How do you think the instruments sounded and why?

Look specifically at some of the instruments and discuss the following:

- 1) What type of sounds do you think this instrument can make?
- 2) Can this instrument play a melody or not? (*melody*)
- 3) Is it a melodic instrument? Why, or why not? (melodic)
- 4) What type of timbre do you think these instruments have? (*timbre*)
- 5) Is this a pitched instrument or not? (pitch)
- 6) Do you think this instrument is very resonant or not? (resonance)

Ask the students which instrument they would have liked to play if they had lived in ancient Egypt.

5) Listening to Music examples on an audio CD

Have the students listen to some musical sample from an audio CD.

Example 1: Flute

"Lélital" (from Flutes of the World.)

This is an example of the Ancient Egyptian flute, the *ney*.

The word *ney* is derived from the old Persian word for 'reed', and can be interpreted as an abbreviation of 'reed flute'. The *nay* is also used as a generic term in Arabic for several types of folk flutes. The Egyptian use of the *ney* is dated back to the 3rd millennium BC and is still played today. The *ney* is also used in traditional music in Turkey, Central Asia, and in all Arab countries.

- 1) What type of timbre do you think these instruments have?
- 2) Is this a pitched instrument?

Example 2: Strings

"The Land of the Blessed" from Ancient Egypt performed and composed by Ali Jihad Racy.

The long solo is played by the *buzuq*, a long-necked lute with frets.

- 1) Discuss different string techniques (plucking, bowing etc.)
- 2) How many instruments can you hear playing in this piece?
- 6) Have the students write a short, one-paged autobiography as a musician in ancient Egypt

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Assessment

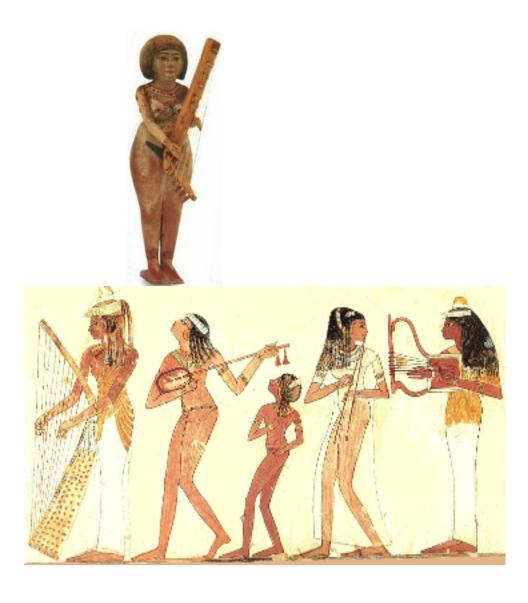
- 1) What is the importance of rivers in human settlement?
- 2) How does the natural environment affect social structures such as religion and economics? How does it affect daily life?
- 3) What can we learn from the artifacts that are left behind by ancient civilizations? Why are they important to preserve?
- 4) How does geography have an affect on trade and what affect does trade have on the development of civilizations?
- 5) What is a melody? What is timbre? Pitch?
- 6) What are some of the roles music plays in ancient society? How are they similar to today? How are they different?
- 7) How might some instruments be more resonant than others? Why?



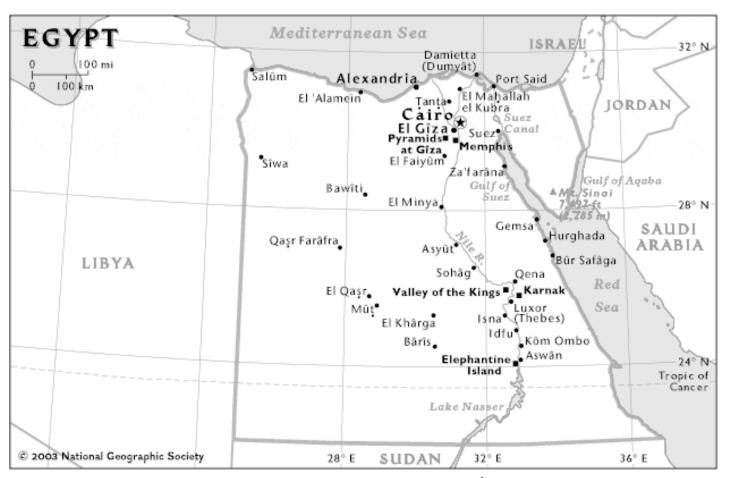
Reed Pan Flute







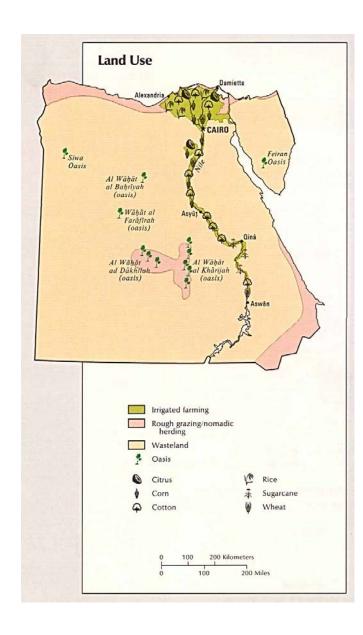








Courtesy of The General Libraries, The University of Texas at Austin.



Lesson #3 Egypt II

Lesson Overview

With this lesson, students will review some of what they have already learned about the music of Ancient Egypt and the social roles of musical production. However, the majority of this lesson plan will be an activity in making a musical instrument, a pan flute. Students will become familiar with the background of the pan flute and how it might have been used. Students will also learn the relationship between materials used in constructing the flutes and the materials available in a specific physical environment.

In addition, students should review what they learned from the last lesson in respects to the geography and settlement of Ancient Egypt. The students should know why the Nile was so important in the development of Egypt.

The key to this lesson is to allow the students the opportunity to construct a musical instrument of their own. They will also learn how to make sounds and learn to discern between different sounds. They will listen to a recording of pan flutes and learn to discern the different notes.

Objectives

- Students will explore the role of a specific instrument in ancient society.
- Students will construct and decorate their own pan flute.
- Students will learn about uses of materials and their relationship to a given environment.

Standards

- a) Ancient Civilizations Standard 6.2: Students analyze the geographic, political, economic, religious, and social structures of the early civilization of Egypt.
- b) National Geography Standard 15: How Physical Systems Affect Human Systems.
- c) National Geography Standard 17: How to Apply Geography to Interpret the Past.

- d) Visual and Performing Arts: Music Standard 1.0: Artistic Perception.
- e) Visual and Performing Arts: Music Standard 2.0: Creative Expression.
- f) Visual and Performing Arts: Music Standard 3.0: Historical and Cultural Context.

Materials

Audio CDs of pan flute music:

The Art of the Arabian Flute [sound recording] : the nay / Bashir Abdel Al (performer)

Published East Grinstead, West Sussex, Great Britain: ARC Music, 1998

<u>Flûtes du Monde</u> [sound recording] = Flutes of the world

Published Boulogne, France: Playa Sound; [France]: Distribution, Auvidis, 1996

PVC pipes (3 to each student)

Molding clay

Masking tape

Markers

Images of hieroglyphs; download images here: http://members.aol.com/egyptart/symlst.html#bc

Maps can be downloaded from: http://www.nationalgeographic.com/xpeditions/atlas/index.html

The University of Texas Perry-Castaneda Library Map Collection also has maps for downloading: http://www.lib.utexas.edu/maps/index.html

If maps from the UT Library are used, then you must attach the following acknowledgement: "Courtesy of The General Libraries, The University of Texas at Austin."

Preparation/References

General Pan flute information:

http://pan-flute.com/home.html

http://panflute.net/history/

Hieroglyphs:

http://members.aol.com/egyptart/symlst.html#bc

Procedure/Sequence

Using the classroom map, students should locate Egypt and the Nile Valley with little prompting. Discuss once again about what it might have been like to be a musician in Egypt and what might have been their role as musicians? Ask the students if they can recall any of the types of instruments they looked at in the previous lesson. Ask them about the music they listened to and what they thought about it.

Let the students know that they will now make an instrument of their own. Tell them a little bit about the pan flute, one of the oldest and most common of all instruments throughout the world.

Students should be informed that pan flutes were, and are, still used all over the globe. Talk a bit about what materials might have been used in different parts of the world. For example, would a reed flute be made in an environment where there was no river that might facilitate the growth of reeds? What about bamboo? If a musician was living in the foothills in China and there was a lot of bamboo, would that be a likely material? Or what about bones? If there was no natural material in a stark environment, might the best choice be animal bones? Discuss how the natural environment (i.e., the physical geography) might have determined what materials were used.

The students will also listen to CDs of pan flute music. Ask them if they think they could play the flute and ask them if they could compose their own compositions. Ask them if they think it would be easy. Why? Why Not?

Distribute to each table:

- a) ½" PVC pipes (3 lengths to each student)
- a) 1 1/2" to 2" square of molding clay for each student
- b) Masking tape
- c) Markers
- d) Images of hieroglyphs
- e) Acrylic paints

Each student receives three pre-cut pieces (three different lengths: suggested lengths are 4 inches, 6 inches, and 7 inches) of PVC. The students will occlude one end of each pipe with modeling clay and try to blow into them on the other end.

Ask the students which pipes have a deeper pitched sound and which pipes have a higher pitched sound. (The longer ones are deeper and the shorter ones are higher in pitch). Ask if anyone knows which string on the guitar is deeper: the thicker one or the thinner one (answer: the thicker one).

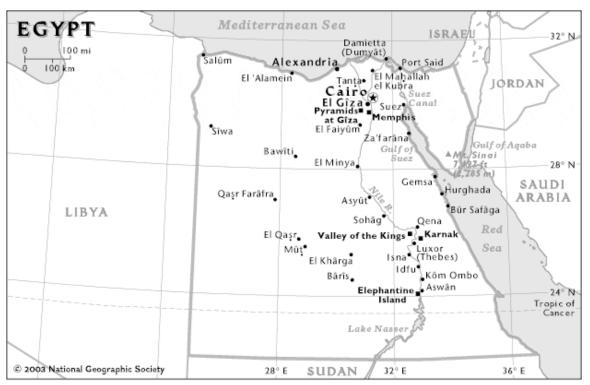
After the students have experimented with playing on the pipes, they should piece the pipes together with masking tape in the order of the pipes' lengths.

As the students piece the pipes together, distribute the acrylic paint together with the teacher. Have the students paint on their pipes using images from Egyptian hieroglyphs. Ask them to choose the hieroglyphs and signs that they feel relate to them. They can try spelling out their names in hieroglyphics. The class can listen to the CD of pan flutes while they decorate.

When they are done, ask students to share their flutes with the class.

Assessment

Discuss the relationship between available materials and physical environments (In this case, the pan flute. What grew along the Nile and was readily available? Answer: reeds. What material might be used in China? What about San Diego?)

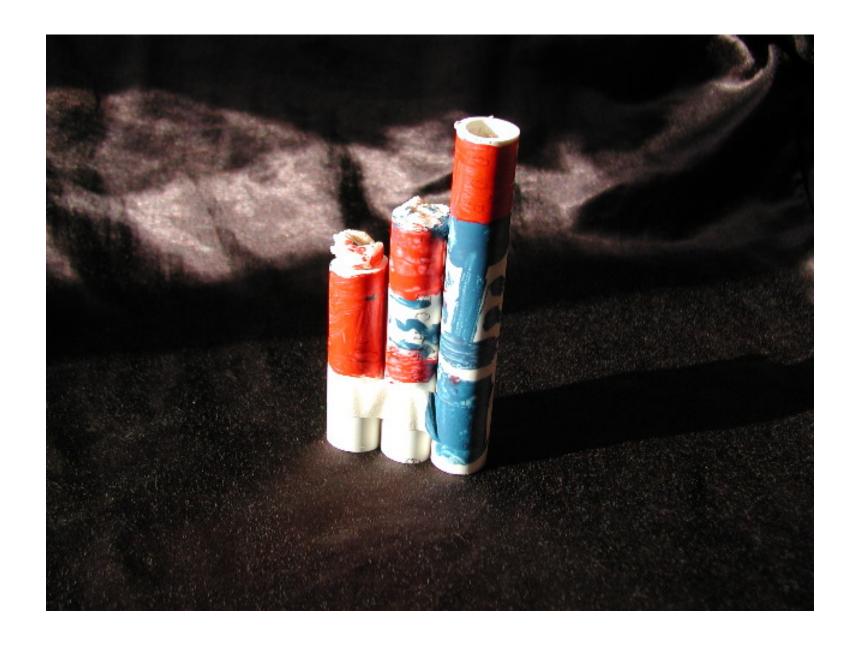




- sign tr. approximate sound
- A
- *3* ah
- P
- *t* ee, y (often ah at beginning of word)
- or ₩ y ee, y
- r ah
- \$\int \text{or } \mathcal{Q} \text{ \$\mu\$} \text{ oo, w}
- **b** b
- □ *p* p
- - *m* m (or <u></u> or ↑)
- $n \quad n \quad (\text{or } \checkmark)$
- r r (or <u>♣</u>x)
- **ķ** h
- **₿** kh
- $\stackrel{h}{\Longrightarrow}$ kh (ch in German ich)
- $\int or - s \quad s \quad (older - z)$
- □ š sh
- **½ k** k (q)



Reed Pan Flute





Lesson #4 Egypt III

Lesson Overview

With this lesson, students will review the geography of the Nile River Valley of Ancient Egypt. They will also investigate how the Egyptians viewed death and afterlife and learn about Ancient Egyptian burial rites. The majority of this lesson plan will be an activity comprised of composing an original musical score using the pan flutes they constructed in the previous lesson. Students will compose a burial rites tune, complete with their own lyrics. The students will act as a group of musicians from Thebes who must travel a long distance downriver to Memphis where the burial of a pharaoh is underway. Students will gain an understanding of basic music composition techniques. In addition, students will understand the importance of the physical geography of the region, and the role of religion in Ancient Egypt.

Discuss once again what it might have been like to be a musician in Egypt. Using the maps, explain to them that they are going to be musicians from Thebes who have been handpicked to write a special burial song for a pharaoh who just passed away. However, the pharaoh lived in Memphis, which means that they will have to spend some time getting there. How might they get there? Discuss with them what it would have been like to sail down the Nile. How long might it have taken? As they travel down the river towards Memphis, they will spend the time writing the burial song that they will perform when they arrive.

Boats played a large role in trade and travel in Ancient Egypt. The Nile River provided a perfect transportation route. The very earliest boats were made of reeds. The reeds were tied together with papyrus rope (made from the fine fibers of the reeds). Later, around 3200BCE, wood was imported to build wooden ships (have the students locate 3200BCE on the timeline).

Those who did not have boats themselves could use ferries that carried people and goods along the river. The Pharaoh and the royal family rode in special boats that were covered to keep out the sun and the eyes of the commoners.

Egyptian farmers had specially built boats that could transport their products. Some of the boats had very large decks that could accommodate cattle. Cattle in Egyptian society were highly prized and most of the farmer's income came from raising cows.

Egyptians did not travel that much because of their fear of other places. If an Egyptian were to die away from home, they feared that they might not get a proper burial. Without a proper burial, an Egyptian could not be prepared for the Afterlife. Yet, travel was still extremely important for trading, and those Egyptians engaged in commerce did travel often.

The students will watch a video about Ancient Egyptian religious beliefs of life after death and the practice of mummification.

After watching the video, students will then learn how to compose a song of their own using the pan flutes they made in last week's lesson. The students will also listen to a CD of Egyptian music to help motivate them and give them some ideas. The students will learn some basic compositional techniques.

The key to this lesson is to allow the students the opportunity to compose an original piece of music using their own lyrics and the musical instrument of their own making (the pan flute.) They will investigate the Ancient Egyptian belief of the after world and the practice of mummification. They will also gain an understanding of the effort it took to undertake a long journey and the importance of river systems in travel and exploration.

Objectives

- Students will experience composing their own original piece of music and learn basic compositional techniques.
- Students will undertake an activity that requires problem solving and independent thinking.
- Students will gain a better understanding of the social and religious beliefs of an ancient civilization.
- Students will investigate the importance of the physical geography of a specific place.

Standards

- a) Ancient Civilizations Standard 6.2: Students analyze the geographic, political, economic, religious, and social structures of the early civilization of Egypt.
- b) National Geography Standard 15: How Physical Systems Affect Human Systems.
- c) National Geography Standard 17: How to Apply Geography to Interpret the Past.
- d) Visual and Performing Arts: Music Standard 1.3: Transcribe simple aural examples into rhythmic notation.

- e) Visual and Performing Arts: Music Standard 2.0: Creative Expression; 2.3 Perform on an instrument.
- f) Visual and Performing Arts: Music Standard 4.1: Develop criteria for evaluating the quality and effectiveness of musical performances and compositions, including arrangements and improvisations, and apply the criteria in personal listening and performing.

Materials

Audio CDs of pan flute music:

The Art of the Arabian Flute [sound recording]: the nay / Bashir Abdel Al (performer) Published East Grinstead, West Sussex, Great Britain: ARC Music, 1998

Flûtes du Monde [sound recording] = Flutes of the world Published Boulogne, France : Playa Sound ; [France] : Distribution, Auvidis,1996

Ancient Egypt [sound recording] / composed and performed by Ali Jihad Racy

Video of Egyptian Burial Rights:

Mummies And The Wonders of Ancient Egypt (2001)

A & E Entertainment ASIN: B00005MKOC

Maps can be downloaded from: http://www.nationalgeographic.com/xpeditions/atlas/index.html

The University of Texas Perry-Castaneda Library Map Collection also has maps for downloading: http://www.lib.utexas.edu/maps/index.html

If maps from the UT Library are used, then you must attach the following acknowledgement: "Courtesy of The General Libraries, The University of Texas at Austin."

Preparation/References

It is suggested to spend some time to understand Egyptian burial beliefs and social structures by looking at the web sites.

Teacher's resource site on ancient Egypt:

http://falcon.jmu.edu/~ramseyil/egypt.htm#A1

Overview of life on the Nile:

http://carbon.cudenver.edu/stc-link/AE/culture.html

Sites with many links:

http://library.thinkquest.org/J002046F/ancient_egyptian_life.htm
http://www.civilisations.ca/civil/egypt/egtut09e.html http://www.neferchichi.com/mummies.html

The following site is an excellent resource to help develop questions to ask students:

http://www.egypt-tehuti.org/faq-ancient-egypt.html

Source for printable maps:

http://www.mnsu.edu/emuseum/prehistory/egypt/maps/mainmap.html

Encyclopedia on Egyptian mythology:

http://www.probertencyclopaedia.com/D2.HTM

Procedure/Sequence

1.) Students should look at the map(s) and discuss how they might get themselves from Thebes to Memphis. Locate the two places on a map. Prompt them to try to determine how far it is. How will they get there? On foot, and by land? Why? Why not? On the river? By boat? What kind of boat? How long will it take? How did people travel in Ancient Egypt?

2.) Once they have determined how to get to Memphis, they will spend their traveling time writing a song for the burial of the pharaoh who just died.

3.) At this point they will begin an investigation into the beliefs of the Egyptians. Prompt them with some questions (ask them what they might already know from previous lessons.) Discuss with them who might have been allowed such expensive and fancy burials (especially one with music all the way from Thebes!)

4.) After the discussion, show them a video that explains burial rituals, beliefs, and mummification.

(Follow through from last week when you had asked them if they think they could play the flute and ask them if they could compose their own compositions and if they thought it would be easy.)

Learning to make music:

Compositional techniques exercises:

Demonstrate an example of each of these exercises before you ask the students to repeat them. Make sure the students understand the connection with the term and the compositional technique.

a) Dynamics

Ask the students to sing a long note. Direct them to start very quiet, grow louder and then back again to quiet, all in one breath. Repeat the exercise until they are able to do it without a conductor.

Reverse the previous exercise: loud-soft-loud on one breath

b) Tempo On a single syllable, like "ma", sing Fast Slow Fast-slow-fast (gradually from fast to slow etc.) Slow-fast-slow

c) Call and response

"Call" to the students and have them respond with one of the above "patterns".

Now listen to some of the music examples on the CDs and ask the students to discuss in pairs among themselves, what they heard. Did they hear any of the patterns/compositional techniques above? Before they go into their own discussion, please explain to them one example you just heard (for example: "In the piece we just heard, the singer was singing very fast, then very slow")

Then ask them to share their examples with the class.

Now, using the techniques they have just learned, ask the students to compose a piece consisting of both music and lyrics for voice and flute. Have the students think up a set of lyrics for their song. The lyrics should be about their journey down the Nile River as they travel from Thebes to Memphis. Tell them that as they traveled, they began to forget about the pharaoh and instead became interested in the landscape around them and in the river itself.

1) Write the lyrics on the board. Let the students come up with their own lyrics, but do prompt them to keep them on the right track. What does it feel like to be sailing down the river? Is the sun bright and warm on their faces? What do they see as the float past the landscape? Fields of grain? What do they see in the distance? Desert? Mountains? Do they see fish as they move down the river? Do they think of home? Are they excited about seeing Memphis? Do they just want to travel on and on and not even go to the burial?

Note: Limit the lyrics to no more than 5-6 lines (or less) otherwise they won't be enough time. If it seems to be going along smoothly, you can extend them. Break the students up into smaller groups and have each group work on one of the above suggested thoughts. For example, one group might compose lyrics about being homesick, while another group can describe the feeling of the floating down the river, etc..

- 2) Once the lyrics have been sorted out, begin setting them to music. Discuss with the students the tempo they think is appropriate for each line of lyrics. Discuss with them certain decisions they will be making (tempo, textures, etc.)
- 3) See if the students can repeat playing some of the notes and guide them in putting together the piece. You may find that it will work easier to break them into sections, having some of them sing the lyrics and others play notes --and then switching them.
- 4) If all goes well, they will sing and play their new musical composition.

Assessment

Discuss the issues of geography and travel in Ancient Egypt. What was the mode of transportation? How did people move from one place to another? Why were settlements along the Nile?

Were the Ancient Egyptian's religious beliefs different than religions today? Were they at all similar? How?

Have the students use musical vocabulary to evaluate their composition (tempo, dynamics etc.).

Lesson #5 India I

Lesson Overview

With this lesson, students will be introduced to the music of India and will explore the different styles of musical production between North and South. Students will be introduced to Indian music, musical instruments, and to Indian dance. They will also receive a brief geographical introduction to the region and some important physical features.

Students will analyze a map of India and determine the geographical distinction between North and South India. Students should pay specific attention to the physical geographical features of the two regions and be able to determine what those features are and how they might form a geographical division between North and South.

India is one of the most diverse regions of the world. It has a large variety of cultures, languages, and ethnic groups. There are four major population groups who are represented by the languages they speak system. Most Indian religion and almost all of its literature is Indo-European. The major languages, most of which are Indo-European, are: Hindi; Urdu (which is very closely related to Hindi but uses Arabic script); Bengali; Marathi; Assamese; Sindhi; Oriya; Punjabi; Kashmiri; Nepali; Telugu; Tamil.

The geography of India is most noted for the barrier of mountains in the north called the Himalayas. These mountains have isolated India from neighboring countries. The flood plains of the Indus River in the west and the Ganges in the east, allow for some of the richest agricultural regions on the planet. It was on the floodplains of the Indus River that the first civilizations of Ancient India came to be established. Southern India is a large peninsula with a desolate mountain range along the western coast. In the center is the flat region called the Deccan Plateau. The western coast of India is isolated because of the mountain range but the eastern seaboard allowed for several natural harbors and became the region of contact with other people and intensive trade.

Students will view a video, *Music of India*, with which they will study in-depth the various instruments. The students will investigate the societal role of music and the importance of dance as an accompaniment to the music. The following instruments will be discussed:

1) South-Indian musical instruments: flute (made of bamboo with 8 holes); violin (similar to the Western violin, but tuned differently); mridangam (two headed drum); tamboura (four strings). 2) North-Indian music instruments: sitar; tabla; tamboura.

The key to this lesson is to allow the students the opportunity to begin to investigate the importance of music in India, and the wide variety of instruments used. In addition, they will learn about differences in music between regions (in this case, North and South) within a single entity, India. They also need to become aware of the details of the geography of "regions within a region" and the affect this might have on settlement and cultural production.

Objectives

- Students will discuss and explore the role of music in Indian society.
- Students will analyze the geography of India and investigate relationships between the physical environment and human settlement.
- Students will communicate ideas about the importance of music in Indian life.

Standards

- a) Ancient Civilizations Standard 6.2: Students analyze the geographic, political, economic, religious, and social structures of the early civilization of India.
- b) National Geography Standard 15: How Physical Systems Affect Human Systems.
- c) National Geography Standard 17: How to Apply Geography to Interpret the Past.
- d) Visual and Performing Arts: Music Standard 1.0: Artistic Perception.
- e) Visual and Performing Arts: Music Standard 3.0: Historical and Cultural Context.

Materials

- 1) Maps of the physical geography of India.
- 2) "Discovering the Music of India" [videorecording] / directed by Wilets, Bernard. Published 1976.

3) Drawing materials.

Maps can be downloaded from: http://www.nationalgeographic.com/xpeditions/atlas/index.html

The University of Texas Perry-Castaneda Library Map Collection also has maps for downloading: http://www.lib.utexas.edu/maps/index.html

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Preparation/References

http://www.musicalnirvana.com/introduction/ancient_history.html

http://www.musicindiaonline.com/carnatic/

Procedure/Sequence

1) Geography:

Look at the map of India (also use the globe, if possible.) Have the students try to identify the main physical boundaries. They should pay specific attention to the mountainous region in the north (Himalayas, the world's largest mountains) and should discuss how that terrain might affect settlement patterns and migration. Have them note that the South is bounded by water. Have them identify the Seas and Oceans (The Arabian Sea, the Bay of Bengal, The Indian Ocean.) Ask them if they think that life in China (to the North over the Himalayas) might have been culturally similar to southern India. What affect might the rugged mountain boundary have in this respect?

It is important that they understand that the mountains of the north are the source of the great rivers that allow for settlement and agriculture in the floodplains of Calcutta and the region of today's Bangladesh. They should know where both the Indus

River (western side in today's Pakistan) and the Ganges River are located (eastern side.) Ask them if they think that living in Ludhiana might seem more isolated from the rest of the world in comparison to living in Madras. Why? (The Eastern side is lowlands with good harbors and easy contact with outsiders.) Would it be hard to travel by land from Bombay (in the South on the Western side) to Madras? (Yes, the Western Ghats are a high and rugged mountain range on the Western side of Southern India, and in between the West and East is the high windswept and dry Deccan Plateau.)

Have them look at the areas that hold the South and those of the North. Have them name some of the larger urban areas (e.g., Delhi in the North and Bangalore in the South.) Tell them that they will be exploring the music of both the North and the South.

2) Music of India:

To view the video and stop to review the material and make drawings will take around 20 minutes for each section (ie. South Indian music, North Indian music, dance).

Review the South-Indian music part first, then talk about all the instruments and ask the students to draw one or more of them.

Instruments:

Flute (made of bamboo with 8 holes) Violin (as our Western violin, but tuned differently) Mridangam (two headed drum) Tamboura (four strings)

(Stop the video at suitable places to review a concept or an instrument. Ask them about the material that was just shown, and give them a chance to ask questions.)

Review the North-Indian music part and talk about the instruments and ask the students to draw one of them.

Instruments:

Sitar

Tabla Tamboura

Review the dance section and discuss the material. Discuss some of the gestures and the meaning of the gestures.

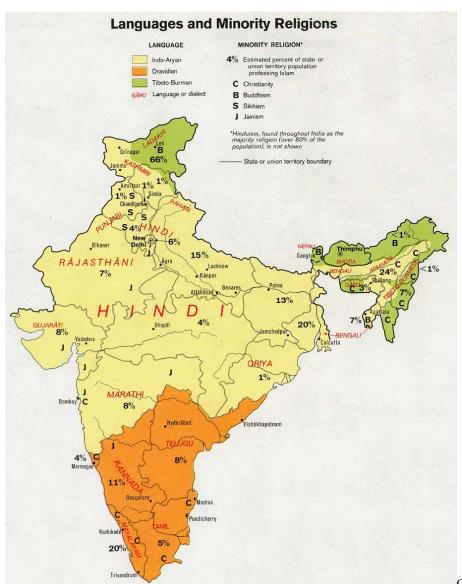
Text for the dance:
"Oh Lord with Lotus shaped eyes
she is waiting for you at the threshold of the house"

Here is some background information on the violin, which was not part of the ancient Indian ensemble:

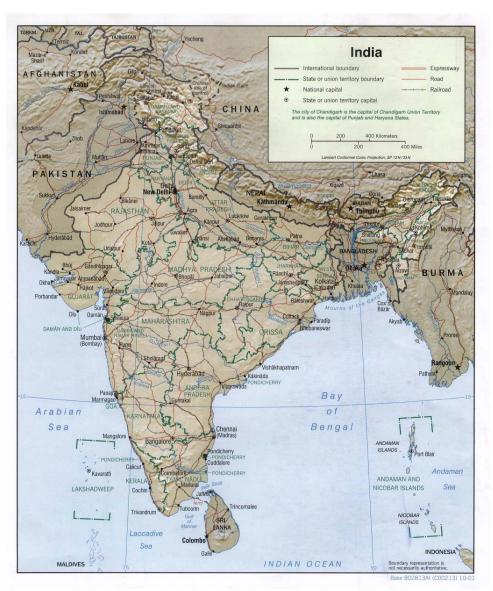
The European violin was introduced into south Indian music in about 1800) and the Thanjavur musician Vadivelu who settled in Trivandrum were its first exponents. By the end of the 19th century it had become the standard accompanying instrument for concerts of Karnatak music, and it is now also widely used as a solo instrument. It is tuned in 4ths and 5ths (or 5ths and 4ths) sounding sa and pa. The original fingering was a two-finger technique, sliding up with the middle finger and down with the index finger.

Assessment

- What is the importance of rivers in human settlement?
- How does the natural environment affect settlement?
- How might the geography of India have an affect on trade and communication?
- How are the instruments of the North different from those of the South? How might some of the techniques be different?
- How might dance be important as an accompaniment to music?
- What is scale? What is raga?
- What is the music of the South called? (Karnatik)
- What is the music of the North called? (Hindustani)



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Lesson #6 Greece I

Lesson Overview

With this lesson, students will be introduced to the geography of Ancient Greece. They will investigate the connection between the physical geography of Greece and the fact that the Greeks were great seafarers and explorers, merchants and traders. The majority of this lesson plan will be an introduction to the use of maps. Students will gain an appreciation of the uses of maps and will understand their importance both in past histories and today.

Greece is one of the most mountainous countries in Europe. Because of the rugged terrain, settlement occurred near the seacoast where port cities were established. The mountains also meant poor soils and Greece had very limited agricultural land. Greece is in a very active volcanic area, and earthquakes are also very common. Greece has very few rivers, and none of them are navigable.

Greece is made up of three geographical regions:

- 1) Macedonia, the rugged mountainous region in the north.
- 2) Peloponnese Peninsula of the south, where Cornith and Sparta are located.
- 3) Attica, the plains of Greece found in its middle and where Athens is located.

In addition, Greece is surrounded by six seas: Ionian, Mediterranean, Aegean, Crete, Marmara, and Black.

Because of the easy access to the seas, the Greek were great seafarers. They developed an extensive trade system and built a strong Navy. The Greeks established colonies throughout the Mediterranean and Black Seas during the first millennium BCE.. Pytheas was the first sailor and navigator who sailed as far as Britain and wrote a book "On the Ocean."

The key to this lesson is to introduce the students to Ancient Greece and the physical geography of the area. There should be an emphasis on the connection of the physical geography (mountains, rugged terrain, lack of any substantial agricultural land, and the proximity of the ocean) and the settlement of the region. In addition students will be introduced to the importance of map use.

Objectives

- Recognize and use appropriate geographic tools and technology (e.g., maps, globes, graphs, diagrams) to answer geographic questions, analyze spatial distributions and patterns, and solve geographic problems.
- Read, interpret, and prepare maps, charts, graphs, and other visual representations to understand geographic relationships.
- Locate places and explain geographic information or relationships by reading, and interpreting maps and other geographic representations.
- Investigating the importance of the physical geography of a specific place.
- Use maps to organize information about places, and environments in a spatial context.

Standards

- a) Ancient Civilizations Standard 6.4: Students analyze the geographic, political, economic, religious, and social structures of the early civilization of Greece.
- b) National Geography Standard 1: How to use maps and other geographic representations, tools, and technologies to acquire, process and report information from a spatial perspective.
- c) National Geography Standard 3: How to analyze the spatial organization of people, places, and environments in a spatial context.

Materials

- 1) Video: "Globes, Maps, and Graphs: Geography Basics." Rainbow Educational Media.
- 2) Classroom map of Greece.
- 3) Handout maps of Greece (attached at the end of this lesson plan).
- 4) Pencils
- 5) Rulers

Maps can be downloaded from: http://www.nationalgeographic.com/xpeditions/atlas/index.html

The University of Texas Perry-Castaneda Library Map Collection also has maps for downloading: http://www.lib.utexas.edu/maps/index.html

If maps from the UT Library are used, then you must attach the following acknowledgement: "Courtesy of The General Libraries, The University of Texas at Austin."

Preparation/References

The following links provide a good background on the geography and physical environment of Greece:

http://www.historyforkids.org/learn/greeks/index.htm

http://www.museum.upenn.edu/Greek_World/Index.html

http://www.ellopos.net/elpenor/greek-texts/ancient-greece/history-of-ancient-greece-1-geography.asp

Procedure/Sequence

- 1) Discuss with the students why maps are important. Talk about the importance of mapping and map reading in both the past and today and give them some examples of daily map use that they already know. Use examples that they can relate to such as a map of a bus route, the map in the mall, a road map or Thomas Guide of San Diego, etc. How would they know how to get somewhere they weren't familiar with without a map?
- 2) Discuss the timeframe of Greece in relation to Egypt and the location of the two civilizations in relation to each other. Have the students look at the timeline and point out how much later Greek civilization was in comparison to Egypt.

- 3) Introduce the geography of Greece and discuss with them how the physical landscape had an affect on the settlement of the area. What affect do mountains have? (They limited settlement because of the rugged terrain). What about the seas? (Port cities were more easily established and it also meant the Greeks were great seafarers). Ask them to think about San Diego as a large port for the Navy and whether they think the Ancient Greeks might have had a Navy? Why might the Greeks have been great travelers and traders? Have them locate the different seas surrounding Greece. Did the Greeks need to make maps of some kind? Why?
- 4) Watch the video on maps. The students will watch a 27-minute video on the types of maps and how to locate places on a map. The video also discusses the use of graphs and dealing with statistical information. Tell the students to pay careful attention to the ways one can locate places on a map. Tell them to pay attention too the use of color and symbols in maps. Also tell them to watch and listen carefully to the explanation of the scale of maps.

After viewing the video, the students will use the classroom maps to attempt to located places. They will then do several exercises using handout copies of maps of Greece.

Map use exercises:

- 1) After the students watch the video hand out copies of the National Geographic Xpeditions map of Greece. Discuss with the students what political boundaries are and have them shade in lightly with pencils the political boundaries of Greece.
 - a) Ask them what are the names of the surrounding countries.
 - b) Ask them how many seas are near and around Greece (answer: 6) What are the names of the seas? (Ionian, Mediterranean, Aegean, Crete, Marmara, Black)
 - c) Ask them what is the name of the capital (and why are there two names –answer: one is in Greek and one in English; capitals are marked with a star and circle)
 - d) Have them identify the location of Athens by using the longitude and latitude (38 degrees N and 24 degrees E)

Using the same map, explain to them that they are going to travel from Kerkira (on the island of Corfu, near Albania) to Hania (on the Island of Crete.) Ask them to locate Kerkira using longitude and latitude (20 E and near 40 N.) Then ask them to locate Hania (24 E and near 36 N.)

Now ask them how far it is from Kerkira to Hania. (Have them use the scale bar: measure the length of the bar and then measure off the distance between the two places.) If they were to travel directly over land and by sea, how many miles is it? (The scale is 3/4 of an inch to 70 miles.)

How far is it from Athens to Thessaloniki?

Note: it is important that the following three maps are printed out at the same size.

- 2) Hand out the relief map (it has physical relief but no place names.)
 - e) Ask them what looks different with this map. What does this map tell us that the other map does not? What does the other map tells us that this map does not? (A relief map shows us the topography of a region) Does Greece have a lot of mountains?
 - f) Where might farming take place in Greece by looking at the map? (Flat areas and valleys)
 - g) Is the scale the same with both maps? (Have them measure the length of Crete in both the Xpeditions map and this map. They are close but not exactly the same. Tell them that their measurements of distance on one map will not be the same on the other because the scale is different.)
- 3) Hand out the map without relief but with place names. Ask the students what this map tells us that the other map does not.
- 4) Hand out the map that is only an outline.
 - a. What does this map show us? (Only natural boundaries and rivers outlines)
 - b. Have them write in Athens, the capital.
 - c. Now have them refer to their first map (the Xpeditions map) and have them write in the oceans.

- 5) Explain to them that they are beginning to make their own map with information from other maps. Explain to them that this is how maps are produced. Explain to them that maps are made up of *layers*.
- 6) Have the students put both the relief map and the outline map with place names together and hold them up to the light. Discuss with them that they now have a map with place names and physical relief. Now have them put the blank outline map (the one that they have marked the capital, Athens, and the seas) on top of the relief map and hold it up to the light. Ask them what do they have now? (A relief map with the seas and the capital.)
- 7) Have them put all three together and up to the light and tell them that they now have a complete map with place names, mountains, and rivers and seas.

Explain to them that *cartographers* (map makers) start with an outline of the natural boundaries (the blank outline map) and then add on the layers to make a complete map. One might call these "sandwiches" of maps --just like putting together a sandwich to eat.

Assessment:

- 1.) How does the physical environment reflect on settlement and what people might do for their livelihood?
- 2.) Why might have maps been important to the Ancient Greeks?
- 3.) How might maps be important to you?
- 4.) Vocabulary:
 - a) Longitude
 - b) Latitude
 - c) Tropic of Cancer
 - d) Tropic of Capricorn
 - e) Cartography
 - f) Equator
 - g) Scale (1:1, etc..)
 - h) Cardinal directions (East/West, etc.)