Object Doors to Learning:  
The Mudfish

Kola box in the shape of a mudfish, Benin Kingdom, Nigeria
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Introduction: The term “mudfish” incorporates a number of species and sub-species of fish that are common in the Benin Kingdom; some can be found throughout West Africa and varieties are known in the U.S., particularly in Louisiana and Mississippi. They can crawl over short distances, or stay alive in mud alone, reviving when water covers them. These unusual features make them powerful symbols, but they are also popular foodstuffs. Numerous objects in the IYARE! exhibition include representations of mudfish; they can provide interesting starting points for discussions in a variety of disciplines at varying grade levels. Use the “inspiractions” (inspiration for a lesson plan plus activities) below and resources on the IYARE! website (http://www.iyare.net) to lead students into new areas of learning connected to Africa.

Art: Stylization, symbolism

English and language arts: Discussion of vocabulary

Music: Discussion of idiophones and rhythmic exercises

Science: Discussions of animal kingdom classifications; adaptation and evolution; particular species; environment

Social Studies: Discussion of divine kings in West African empires; commerce & trade routes; climate zones
Mudfish: Several species of freshwater fish are called mudfish. Some of their traits provide symbolic associations. They are important in Benin art due to their liminal qualities (see vocabulary lesson for mudfish) and because of their association with the sea god Olokun and the monarch (see social studies lesson for mudfish). In Benin art, their depictions are not photographic. Instead, some of their physical aspects have been reduced, others exaggerated, to create several shorthand versions of the fish.

“Inspiractions”: Discuss the meaning of the terms “naturalistic/realistic” and “abstract.” Have students create a visual spectrum with images, going from one extreme to the other.

Have students look at a photo, a scientific diagram, and a Benin image of a mudfish. What traits are exaggerated in the Benin version? What becomes the most important? What traits vanish?

Look through the IYARE! website “Exhibitions” section; how do images that refer to the mudfish in the “Provinces” and “Revivals” section differ from those made by the Ẹdo?

Have students go to the “Primary Sources” section of the IYARE! website’s “Palace School” and open the Pitt-Rivers book. Have them find as many references to mudfish as possibly and discuss how much variation their shapes have. What patterns are used to represent their surface?

Discuss with students some human categories they find liminal. What animals would be the best choices for symbolically representing their limbs?

http://www.iyare.net/
Liminal (adj.): Able to cross boundaries; straddling two states of being; betwixt and between

Applications of word: This word is frequently used to describe African adolescents going through initiations, since they are crossing the threshold of childhood into adulthood. The Ẹdo of Nigeria’s Benin Kingdom do not have initiation of this sort, but that idea could be explored through other African cultures, such as the Mende or Temne of Sierra Leone, the Toma/Loma of Guinea and Liberia, the Yaka, Suku or Nkanu of Congo, the Chokwe of Angola and Zambia.

A second common application of this word in African Studies is to types of animals and, by extension, types of persons. A liminal animal crosses boundaries of earth to water or earth to air. These animals often symbolize persons who can cross the borders of this, the human world and the invisible, or supernatural world. In many regions, such as Benin, such persons include the ruler, priests or priestesses and ritual experts, and witches.

Inspiractions for lesson plans: With this definition in mind, one can adapt activities to appropriate grade levels.

1. Use of dictionary: Phonetic symbols and guides; etymology. Ambiguity according to field—exploring physiological and psychological readings. Age of words: use the online Oxford English Dictionary to explore the age and origin of this word.

2. Identification of liminal animals: For Benin art, hunt through the actual or online exhibition to find crocodiles, mudfish, birds, pythons. Why are pythons liminal animals, but not most snakes? Why are most birds liminal animals, but not chickens? What other common liminal animals exist in Africa and in other parts of the world?
3. **Symbolism**: Discuss similes and metaphors. Explore the concept of visual metaphors; in Benin art, liminal animals are often used in visual imagery concerning individuals with extraordinary powers.

4. **Popular Culture**: Stimulate discussion of how many superheroes are associated with liminality.

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Music

Reconstruction of a 16th century ivory idiophone showing mudfish-legged ruler

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**Classifying Musical Instruments:** Systems of classifying musical instruments have differed geographically and over time; one popular Western system consists of percussive, string, and wind instruments, but this is not the only way to organize instruments. Idiophones make up one of five categories in the Sachs-Hornbostel ([http://en.wikipedia.org/wiki/Sachs-Hornbostel](http://en.wikipedia.org/wiki/Sachs-Hornbostel)) system, which consists of:

2. **Membranophones** ([http://en.wikipedia.org/wiki/Membranophone](http://en.wikipedia.org/wiki/Membranophone)): instruments that have a membrane that produces sound by vibrating
4. **Aerophones** ([http://en.wikipedia.org/wiki/Aerophone](http://en.wikipedia.org/wiki/Aerophone)): instruments that create sound through vibrating columns of air

The drawing above represents the reconstruction of an ivory idiophone made in the 16th century and struck by the Qba with an ivory wand during the Emobo ceremony. Though technically a gong, its sound does not carry far; it is more of a tapper. Its decorations include an image of the mudfish-legged figure.

**“Inspiractions”:** Go through the “Exhibition” section of the IYARE! website and locate the original photo of the ivory idiophone. Can you identify any effects of years of tapping on the ivory?
Go through the “Exhibition” section of the IYARE! website and locate another type of idiophone (this time in brass), as well as a membranophone and a chordophone. Which of the three instruments do you think produces the sound that is loudest?

Discuss the physics of tuning an instrument, examining the drum and akpata “lute” in the Exhibition section.

Go to the “Videos” section and have students isolate and imitate the percussive rhythms. Discuss their charting.

http://www.iyare.net/
Science:
Biology and Environment

Mudfish: The term “mudfish” covers numerous types of freshwater fish, including many catfish varieties. In the Benin Kingdom, various types of *Clarias* are available, as is *Malapterus electricus*.

General traits: Mudfish can crawl for short distances on land, and can stay alive in mud, till rain creates an environment for them to swim again. They are marked by barbells, whiskerlike appendages used to forage for food.

“Inspiractions”: With this in mind, one can adapt activities to appropriate grade levels.

5. **Taxonomical classification**: Discussion of Linneus and the biological classification of organisms; defining animals in terms of Kingdom, Phylum, Class, Order, Family, Genus, and Species. Have students hunt for different types of mudfish and see where and why they are differentiated on the taxonomical chart.

6. **Adaptation and Evolution**: How and why have mudfish developed the ability to move on land? How does the idea of the “lungfish” relate to the development of amphibians and reptiles? What are the specifics of mudfish survival? How does the electric mudfish (*Malapterus electricus*) stun its prey? What other aquatic animals have developed similar traits? How does water’s conductivity play a part in their activities?

7. **Health**: What nutrients do fish supply? How do they compare to other protein sources in terms of calories and other factors?

8. **Environment**: Much of Benin’s fish supply comes from the nearby Niger Delta. This is also the region that supplies Nigeria with the offshore oil that provides much of its current wealth. How does the oil industry affect the water environment of the region and
the fish? There are many online sources that would allow students to research this issue; useful keywords and key phrases include Niger Delta, Ogoni, Ijo or Ijaw, Itsekiri, Urhobo, Shell Oil, Chevron, British Petroleum, Agip, Exxon.

Besides pollution resulting from the oil industry, other forms of contamination can affect fish and then humans. Are mudfish “bottom feeders”? What does that phrase mean? Mudfish, crayfish and shrimp are staples of Benin cooking; how might various kinds of human behavior affect their safety as a food source?

http://www.iyare.net/
Social Studies

Detail of a 16th century ivory bracelet showing mudfish-legged ruler

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**Mudfish**: Actual mudfish are a part of the coastal climate zone and their fishing and trade an aspect of the regional economy. Benin’s oral history includes a mudfish-legged king, while its traditional religion features the deity of the sea, who also has mudfish legs. A discussion of divine kings in West African empires involves both sacred and secular aspects.

**Geography**: Climate zones tie economy to the land, and provide useful clues to the parameters of historical possibility. Understanding the variety of zones and geographical features near Benin provides insights to the kingdom’s interactions with its neighbors in the past; modern geographical boundaries show more recent developments. Smoked mudfish are traded from riverine areas inland.

**“Inspiractions”**: Map exercises teach valuable skills. Have students go to Google Earth (download free program on [http://earth.google.com/](http://earth.google.com/)) and find their school, then use their own understanding to map how they reach school from their house. Introduce key concepts of scale and landmarks.

Have students use the Internet to download the historic/regional map of Benin on the IYARE! website, then find maps that show Nigeria’s climate zones and current 36 states. Have them investigate Nigeria on Google Earth as well (download free program on [http://earth.google.com/](http://earth.google.com/)). Teach them how to use map keys to determine distance on a printed map, then how to do the same on Google Earth. Using Google Earth, have them trace the waterways into the Niger Delta, and look at the coastal creek system within Nigeria. Using Google Earth, have them compare the foliage and earth color with the climate zones listed on a print map. Discuss the terms rainforest, savanna, sahel, and desert, and investigate where these are found within Nigeria. Which category does the Benin Kingdom fall into? At its height, did it the kingdom’s borders include other types of geographic zones?
Discuss the main food crops (yam, cassava, pineapple, citrus fruits, water leaf, oil palm) and domestic animals (chickens, rams, goats, cows) found in the Benin area and in the Niger Delta (also see recipe section under IYARE!’s “fun” section). Look at the relationship between cattle and tsetse flies and consider protein sources. Before refrigeration (and now, when electricity is not always constant), how could fish be transported from riverine areas to Benin without spoiling?

Discuss the concept of ethnic group as opposed to nationality. Why is the term “tribe” a loaded one for Americans? What associations do we have regarding historic period, size, social organization, settlement, and activities connected to this term? Send students to http://www.ethnologue.com/ to compare the population size of Nigeria’s Edo with that of the Dutch, the Irish, the Apache, the Tamil, and the Aztec, as well as with Nigeria’s Yoruba, Igbo, and Hausa.

Follow the Niger River northward on the IYARE! map. Which ethnic groups lived along its borders within Nigeria? Given the shifting climate zones, what foodstuffs might be traded from one zone to another?

**Mythological Background:** Benin’s monarch is often discussed as the god Olokun’s reflection, or as his “little brother.” The monarch’s coral regalia is said to have been stolen from the deity, and the large central bead on many of his images is called *orhirhi*, the name of the electric mudfish; wearing it is said to induce quivering and awe in his subjects. Olokun is shown with the legs of an electric mudfish; if the Oba’s bare feet were to touch the ground, they are said to shock the earth so much that crops wouldn’t grow.

**Oral History:** One of Benin’s 15th century rulers, Oba Ohen, had enemies among his chiefs. He was in the habit of secretly leaving the palace at night, which they didn’t like. They wanted to be aware of his whereabouts and behavior at all times. Chief Iyasẹ, one of the most powerful war chiefs, grew so annoyed that he visited a ritual specialist and bought a medicine that would cause paralysis. He hid it under a bridge that he suspected the Oba crossed at night. Its actions were directed only at the king; if anyone else walked over it, they would remain unharmed. Indeed, the Oba crossed the bridge and activated the medicine, which caused slow paralysis. He returned to his palace, and over the course of the next few weeks, lost the use of his legs. He wanted to keep this information from his chiefs, but had to tell his young attendants something, since they carried him from place to place. He told them that he was becoming more and more like Olokun, the Edo god of the sea and wealth, who is often seen as the mirror image of the monarch. Olokun is said to have legs that are electric mudfish. The palace pages carried him into the reception room early, so the chiefs would meet him already seated. At the end of a meeting, he would wait until they all left before having the boys carry him to his private rooms. Suspecting the medicine had done its work, Chief Iyasẹ hid, and saw the Oba could no longer walk. The king caught him spying, and killed him. Other chiefs began asking of his whereabouts, especially since he had last been seen in the palace. Their investigation revealed Oba Ohen had murdered the Iyasẹ, so they in turn killed the king. Images of the fish-legged ruler can concurrently represent Olokun, any ruler in his divine aspect, and Oba Ohen. When the latter, they remind the monarch that even his powers must be reigned in, or consequences may occur.

Like the Oba of Benin, numerous African monarchs were considered semi-divine. This often meant their health was tied to the health of the kingdom, and meant their lives were surrounded
with rituals of protection and enhancement of their powers. Subjects were instructed they neither drank nor ate, nor did they sicken or die; these conventions were accepted by speech avoidance.

“Inspiractions”: Many divine kings are associated with a particular god or are said to have divine origins. Have students use the Internet to research another African divine king, such as the Asantehene of Ghana’s Ashanti kingdom, the various Òbas of Nigeria’s Yoruba kingdoms, the Ahosu of the Benin Republic’s Fon kingdom of Dahomey or the rulers of the Kuba or Kongo people. What supernatural powers were kings supposed to have? What divine aspects are referred to in their images or dress? What religious duties does the king have as the priest of his people and royal ancestors?

Look at primary documents in IYARE!’s “Palace School” to extract comments over time regarding Èdo respect and veneration for their king. What attitude is expressed by these remarks? Are they objective or scornful?

What is the European concept of “the divine right of kings”? Did this have a counterpart in the Benin kingdom?

Discuss how oral and written history differ, and how one has come to have greater authority than the other. Discuss how historical events can be mythologized. Have students divide into four groups and rewrite the history above in four different ways: a) as myth, b) from the personal point of view of the Iyase, c) from the collective indignation of the chiefs, d) from the point of view of the next ruler, Qba Qhen’s son.

[Link to IYARE! website: http://www.iyare.net/]