



MOUND HOUSE LESSON PLANS

ENCLOSED ARE SEVEN LESSON PLANS THAT YOU MAY INCORPORATE INTO YOUR CURRICULUM PRIOR TO VISITING MOUND HOUSE. OUTLINED WITHIN ARE GENERAL GUIDES TO THE LESSONS, THE FOCUS OF THE LESSON AND LESSON GOALS IN ADDITION TO COLORFUL IMAGES OF ACTUAL ACTIVITIES STUDENTS MAY ENJOY ONSITE.

IF YOU ARE INTERESTED IN PARTICIPATING IN ANY OF THESE LESSONS DURING YOUR VISIT TO MOUND HOUSE, PLEASE SEND AN EMAIL TO MOUNDHOUSE@FORTMYERSBEACHFL.GOV AND REFERENCE THE LESSON NUMBERS AND NUMBER OF STUDENTS PER GROUP.

PLEASE REMEMBER TO ALSO BRING A COMPLETED WAIVER FORM, FOUND [HERE](#), FOR EACH STUDENT ON THE DAY OF YOUR VISIT.

(239) 765-0865

MOUNDHOUSE@FORTMYERSBEACHFL.GOV

PHYSICAL ADDRESS:

451 CONNECTICUT STREET
FORT MYERS BEACH, FL 33931

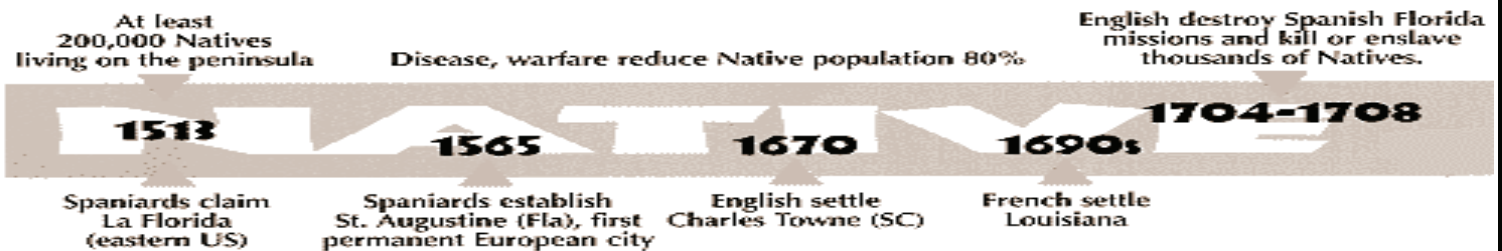
MAILING ADDRESS:

2523 ESTERO BOULEVARD
FORT MYERS BEACH, FL 33931

Lesson #1

TIMELINE

This lesson plan is designed to teach students about Florida's history. This initial activity takes approximately 15 minutes and provides a visual aid that helps students to understand the numerous time periods that have taken place in Florida's past and how each distinct culture interacted with the environment. In addition, this lesson plan allows students to obtain an understanding of different environmental processes that helped shape the Florida landscape and also illustrates the concept of environmental change over time by providing an in-depth survey of paleo- and modern climates. Students will grasp the idea of the temporal difference between initial Native American settlement and the European population of Florida.



Focus of Discussion:

- The students will be asked to define a timeline. Using a tape measure, students will learn that a timeline is a visual scale of time punctuated with historical events. Using 1 inch to equal 100 years, students will place historical events on the timeline.
- Starting with recent events, such as the last holiday and extending further back in time from the American Revolution, to Christopher Columbus' discovery of America, to the first people arriving in Florida 12,000 years ago, students will discuss each event as it relates to the timeline of Florida history.
- The timeline will be used to relay that Native American populations have been here much longer than Europeans or Americans.
- Students will learn about the extensive changes to Florida's environment in the last

12,000 years, including the ice age and the fact that the shoreline would have been 80 miles further west than it is today. They will also learn how a much cooler climate meant a very different landscape and types of animals than those that inhabit Florida today.

- Students will learn and discuss how Native Americans lived, worked and protected the surrounding environment, practicing a sustainable lifestyle.

Lesson Goals:

1. Students gain an appreciation of the time depth of Native American settlement in relation to European contact with the Americas and realize the importance of sustainable settlement practices.
2. Students recognize the concept of climate change over time and identify the driving forces behind it.
3. Students have a working knowledge of Florida's paleo-inhabitants and climate and understand how both have adapted and changed through time.



Lesson #2

STORIES BENEATH OUR FEET

UNDERGROUND EXHIBIT

This lesson will give students the unique opportunity to walk inside a Calusa Indian shell mound where a 1958 swimming pool was once located. Approximately 20 minute long, this program is hosted by Mound House volunteers who lead students into an underground room to showcase the layers within a shell mound. These layers, which stretch over 30 feet, are akin to an earthen history book, each layer representing a chapter of human behavior or period of time in the past. Because many archaeological sites have been altered or destroyed by development, including some here on Estero Island, this exhibit provides a unique opportunity to visualize 2,000 years of history. A six minute video and LED display along the wall of the exhibit provide students with an understanding of how archaeologists conduct excavations and interpret their findings. A forty four foot mural along the opposite wall depicts daily life for the Calusa on this mound.



Students explore the *Stories Beneath our Feet Exhibit*

Focus of Discussion:

- The underground exhibit provides a view into layers upon layers of human history. Archaeologists utilize specific techniques that enable them to reveal, record, and interpret their findings.
- The underground exhibit provides evidence of the lives and culture of the Calusa in the form of shells, bones, and artifacts such as pottery and tools. Mound building techniques are also revealed in the archaeological record.
- The Calusa lived on the mound. Status was conveyed by the location of one's residence on the mound. The most important people lived on top of the mound, such as political, religious and military leaders, with people of lesser importance living further down the mound near the water. The concept of height denoting importance remains in modern culture.

Lesson Goals:

1. Students gain an understanding of how a Calusa mound was made and how this mound was built and re-configured over the centuries.
2. Students learn some of the techniques that archaeologists use to conduct an excavation and how they record and interpret findings.
3. Students learn what a Calusa mound is made from and the significance between a secular shell mound and a sacred mound built of sand.
4. Students will be able to identify various types of shells, tools and pottery within the mound and be able to discuss their uses and significance to the Calusa.



Lesson #3

MIDDEN TRAY

This lesson plan is designed to be the only lesson plan in this module that links the technique of archaeology with the cultural component of Florida's Native Americans. This activity will serve as a visual reference that aids in the understanding of Calusa architecture, and incorporates a progressive, hands on approach to the subject matter. Students will learn that the mound is not a "garbage pile" and that the archaeological record shows that they were intentionally built. The students are divided into groups of four or five, seated under shaded picnic tables and provided with a midden tray. The midden trays consist of the material that shell mounds are made of. This is what archaeologists find when they dig into a mound. Students will separate items into groups based on similar attributes including different species of shell, shell tools, fish and animal bones and pottery sherds. Students will count the number of each type of shell, bone and pottery and will discuss the differences between them. Students will utilize the data they have collected to learn what species the Calusa utilized as food, tools and building material. The instructor will use this opportunity to reinforce the concept of what an estuary is and why it is important.

Focus of Discussion:

- The midden is not a garbage pile, and the mound is an intentionally built structure.
- Students will discuss how archaeologists separate and classify archaeological evidence into different categories.
- A discussion of how the estuary was like a modern day supermarket to the Calusa, with a review of the shells and bones collected from the midden trays to identify the various species encountered.



Lesson Goals:

1. Students apply the concept of classification based on shared similar attributes.
2. Students identify the key components that comprise a shell mound.
3. Students learn that shell mound construction was largely intentional and not simply haphazard accumulation.
4. Students acquire an introduction into the subfield of zooarchaeology.
5. Students understand the importance of the estuary to pre-Columbian peoples and us today.



Students search through Mound House Midden Trays



Lesson #4

MARINE LIFE EXHIBIT- TOUCH TANK

Presented by the Mound House Environmental Educator, this program consists of a 20-30 minute introduction to some of the living creatures that can be found in the Estero Bay estuary and the Estero Island beach environments. Utilizing a shaded outdoor picnic table with a holding tank, live specimens of marine mollusks including conchs, whelks and clams in addition to sea sponges, tunicates, starfish, sea urchins, hermit crabs, shrimp and fish are presented to the students with a brief interactive discussion of each species. Students are given an opportunity to observe, touch and hold some of the marine species under the supervision of the Environmental Educator.



Students experience the Mound House Marine Life Touch Tank

Focus of Discussion:

- How aquatic creatures interact with one another and within their environment.
- Aquatic food webs, the role of predator /prey relationships and species interdependency, including humans.



- Adaptations for survival within an estuary or beach ecosystem.
- Discussion of how changes in an ecological system can affect the entire system.
- How these marine creatures were utilized by the Calusa.
- How these marine creatures are utilized today.

Students are invited to consider the marine creatures within the touch tank “as a Calusa would”. This portion of the education program brings living, breathing examples of the artifacts, shells and bones that students will find within the underground exhibit and in their midden tray discoveries. Students are given an opportunity to discuss how they might find and harvest these specimens, prepare them as food, make shells into tools, weapons and ornaments, or utilize discarded shells as building material for shell mounds. Emphasis is placed on the importance of how shells and bones from millions of these marine creatures and extending back in time for over two thousand years are present at the Mound House site as artifacts and forming the very mound itself.

Lesson Goals:

1. Students develop a “hands on” understanding of species interaction and environmental adaptation.
2. Students gain appreciation of predator /prey relationships and adaptations for survival within a marine environment.
3. Students learn that marine creatures were the foundation of Calusa life and that like humans today, the Calusa were an integral part of the estuary and beach food chain.



Lesson #5
CORDAGE

This activity takes approximately 20 minutes to complete. Students are seated under shaded picnic tables and provided with cordage fibers and allowed to select decorative shells with which to construct a necklace or bracelet. Native Americans used fibers from plants to make thread, cord, and ropes. The Calusa in particular used fibers from the cabbage palm to make cordage that could then be fashioned into ropes to tie together canoes, haft shell tools onto handles and make fishing nets. This lesson plan is designed to teach students how to utilize the surrounding environment to produce the technology that was implemented during Florida's prehistory. This activity will not only provide students an appreciation of the time and technique needed to produce this technology, but will also allow them to make their own traditional shell necklace or bracelet that may act to excite the students and serve as a visual reminder of the task they have completed.

Focus of Discussion:

- Students will learn what cordage is and how once it is made how it might be used for other applications.
- Even though this is termed "primitive technology," that does not mean it is simple technology.
- How all the construction materials being used in this activity are acquired from nature.

The students are supervised and assisted if need be during the process of creating cordage by the instructor or a Mound House volunteer so that all students are able to complete the project in the time allotted.





The finished product of a Cordage Bracelet with Shell Jewelry.

Lesson Goals:

1. Students develop an understanding for the time and skill needed to produce this technology.
2. Students appreciate that the words “primitive technology” does not necessarily equate to simple technology.
3. Students produce their own necklace or bracelet as a visual reminder of the activity.



Lesson #6

POTTERY

It is clear from the archaeological record that Native Americans used fired clay pots for everything from storage to cooking. Many of the pottery remains that are found are highly decorated while others appear to be plain and are thought to be more utilitarian. The students will have the opportunity to view pottery sherds while in the underground exhibit at Mound House. The goal of this lesson plan is to provide students the opportunity to produce their own pottery using the technology that would have been present during Florida's prehistory. Students will be assisted in making the pottery by Mound House staff and volunteers.



Students display their finished pottery pieces.



Points of Discussion:

- Native Americans would have dug their own clay from stream beds and river banks found throughout Florida. The Native Americans in Southwest Florida produced pottery known as sand temper plain. The term plain refers to the lack of decoration on the pots.
- As students are making the pottery, they will be encouraged to discuss how pottery might have been used by the Calusa.
- In the process of making the pots, students will be asked how “primitive technology” differs from simple technology.

Lesson Goals:

1. Students develop an understanding for the time and skill needed to produce this technology.
2. Students appreciate that “primitive technology” does not necessarily equate to simple technology.
3. Students produce their own pot as a visual reminder of the activity.
4. Students learn that all human things come from nature.



Lesson #7

ATLATL

(Spear Thrower)

Native Americans utilized the atlatl, or spear thrower, as a hunting tool and weapon. The atlatl serves as an extension of the thrower's arm, enhancing the power and accuracy of the atlatl dart. This enables the thrower to stand farther from their target, whether prey or an enemy. Students will observe a demonstration of atlatl throwing and then be instructed in its use and offered an opportunity to throw an atlatl dart at a target. This program takes approximately 15 minutes to complete.



A student readies her Atlatl in preparation to strike the unsuspecting Deer.

Focus of Discussion:

- The atlatl is an example of primitive technology. Students discuss how this technology works including the basic physics of why an atlatl enables a spear to be thrown so much farther.
- The atlatl enabled Native American spear throwers to have a much more powerful and accurate weapon. How might that advantage be used?
- All the components of this early technology come from nature.



Lesson Goals:

1. Students have an opportunity to learn about and use an example of primitive technology.
2. Students learn that all components of primitive technology are made from components found in nature. Students discuss how wood, feathers and points might be crafted by Native Americans to make an atlatl and atlatl darts.



Two students face off in an Atlatl competition.

