

Simple Machines/Systems of Caddo Tools/Weapons

Grade 4-5

Created for public use and for [Preserve America](#) and [TIDES](#) project partner Caddo Mounds State Historic Site by Joy Moore, Brooks Quinn Jones Elementary, Nacogdoches ISD, 5th Grade Science/GT Coordinator, *Preserve America*, and *TIDES* Curriculum Development team member, August 2009.

Updated by Rachel Galan, Caddo Mounds State Historic Site, Educator/ Interpreter, February 2014. TEKS updated to the August 2010 revision.

Lesson Overview: In this lesson, the student will recognize that the Caddo Indians were a people that contributed to our national identity. The student will communicate in various ways an understanding of the systems that the Caddo used. They will know that tools and weapons of the Caddo are considered a system and/or structure. They will create models of these systems.

Standards/Objectives:

TEKS §112.6. Science, Grade 5. (b)(1) Scientific investigation and reasoning. The student conducts classroom and outdoor investigations following home and school safety procedures and environmentally appropriate and ethical practices. The student is expected to:

(A) demonstrate safe practices and use the safety equipment as described in the Texas Safety Standards during classroom and outdoor investigations.

TEKS §113.15. Social Studies, Grade 4. (b)(22) Social studies skills. The student communicates in written, oral, and visual forms. The student is expected to:

(B) incorporate main and supporting ideas in verbal and written communication;

(C) express ideas orally based on research and experiences; and

(E) use standard grammar, spelling, sentence structure, and punctuation.

TEKS §113.16. Social Studies, Grade 5. (b)(22) Culture. The student understands the contributions of people of various racial, ethnic, and religious groups to the United States. The student is expected to:

(C) summarize the contributions of people of selected racial, ethnic, and religious groups to our national identity.

Vocabulary:

Caddo Indians	contribute (contributions)
remove	simple machine
structure	system
tool	

Phase 1- Engage: The students will begin by drawing an example of a Native American and their surroundings in their journal or on paper. They may draw more than one, a family, a child...do not give specific instructions. You are trying to see what they know-no wrong answers. You may share a few as a group and discuss each response and the differences in each idea. An Elmo is a great resource for sharing projects if you have one accessible. Most students will draw the typical teepee, bows and arrows, and headbands. There is much more to the Caddo tools and weapons (and homes) than this. These ideas are good, but will be expanded upon in this lesson.

Phase 2- Explore: The students will complete the following lab station on tools and weapons. If children finish at different times, you may have them read a book of your choice on the Caddo Indians. This could be considered research on the topic. They could write facts and discuss them as a group. This is an important step if the student has no previous knowledge on the Caddo Indians. You may give particular jobs to each student or use the procedures your children are used to in lab. Please see the lab instructions below:

Station 1- Caddo Indian's Tools & Weapons The students will choose one item from each basket or container from which to make a system/structure. Now, they will create a tool or weapon (system/structure) and decorate it (using the art supplies mentioned in Materials section). They will make a plan of how to use it in a journal in the form of writing instructions and a labeled drawing. The student will clean up the station.

Phase 3- Explain: This section will help students analyze the projects created in the lab above. The teacher will share some of the student's projects from lab station 1 as a whole group. This will be most beneficial with an Elmo and projector so each child may see the tools and weapons close up. If not available, you may want to pass around the different samples as you discuss. The teacher will remove a part of the tool or weapon and ask the students how it will work now. You may even want to demonstrate "before and after" affects. Repeat this a few times until the children recognize that a system/structure is made of several parts working together. All parts are needed to work properly.

Phase 4- Elaborate/Extension: The student will look at some picture examples of Caddo Indian tools & weapons. You may do this as a group or let individuals work alone. The children will answer the following questions to determine their knowledge of a system and Native American use of such systems.

1. What is similar about your tool/weapon to the picture?
2. Why did you need each part to create your tool/weapon?
3. What happens when you remove a part of your structure?
4. Is your tool/structure a system?
5. What did Native Americans (Caddo) contribute to our nation?
6. Why are the Caddo important to you?
7. What are you thinking or wondering right now?

Phase 5- Evaluate: An appropriate evaluation would be to compare and contrast the provided pictures with the student's project, They may write a short compare and contrast paper including similarities, differences, improvements, uses of structure, etc.

Materials:

Paper/Journal Picture examples of Native American tools and weapons Crayons/markers, art paper, pencil 3 baskets or containers to hold materials Sticks, paint sticks, other types of stick-like objects Rope, rubber bands, string, twist ties Sharp/dull-large/small rocks Other scrap items that could be used to make tools & weapons Paint, paint brushes, container to rinse brushes.

References/URLs:

Inquiry Approach: The 5-E Learning Cycle Model located at - <http://faculty.mwsu.edu/west/maryann.coe/coe/inquire/inquiry.htm>

Texas Beyond History: World of the Caddo located at - <http://www.texasbeyondhistory.net/kids/caddo/>

Learn About Texas Indians Activity Book (Texas Parks and Wildlife) located at - http://www.tpwd.texas.gov/publications/pwdpubs/media/pwd_bk_p4000_0016.pdf

Hatzigeorgiou, Karen J. *U.S. History Images* located at: <http://ushistoryimages.com>

Digital Archives and Collection at Stephen F. Austin State University located at - <http://digital.sfasu.edu/>

Within the Digital Archives, there are several potentially useful collections:

- Stone Fort Museum
- Center for Regional Heritage Research
- East Texas Research Center