

Amerindian Tools

Students will make observations about pre-historic tools used by the Amerindians to gain an understanding of how they lived.

Before You Visit

Background

Tools and other artifacts recovered from archaeological sites are sometimes the only line of evidence we have to understand how certain groups or cultures lived. This is certainly the case in our study of Amerindians who lived in the Caribbean before written history (pre-1492 AD). Tools from these groups were made from stone, ceramic, and shell, including stone or shell axes; chisels/celts; hoes and other digging implements; grinders and mortars; griddles and flat plates for cooking; etc. Ceramics are fired clay artifacts (pottery), often found as tiny, broken “sherds.” Because of the Caribbean tropical climate, the remains of wood, clothing, baskets, and other organic items decay rapidly. Thus, the items that survive are all the more important to archaeologists.

Early hunter-gatherers were believed to have possessed limited knowledge of pottery and crop domestication, though some practical, low-fired pottery has been discovered. These cultures were primarily stone and shell workers who fashioned the majority of their tools from flint, marine shell and coral, as later cultures also did.

Beginning around 500 BCE, the Saladoids developed advances in agriculture, formation of societal structure, and advancement of technological sophistication which, especially in the Greater Antilles, continued to develop. Artifacts recovered from these societies reveal an evolving and complex Caribbean culture. Tools include stone grinders and mortars, griddles, woven baskets, graters, hunting tools and traps, weapons, and a variety of ceramic objects (household pots and jars, ceremonial vessels, figurines, etc.). Though it is believed that basket weaving and textiles were advanced and widely



Amerindian Heritage

Grenada National Museum: Teacher Kit

Grade Levels

- 4th +
- Extension Activities for Secondary Forms 1+

Duration

- Pre-Visit: 30 minutes
- Visit: 25 minutes
- Post-Visit: 20 minutes

Topics

- Artifacts for providing clues about a culture
- Tools used for agriculture, hunting, and other tasks
- The reliance (and advancement) of tools for human survival
- The Cabot & Amerindian lifestyle

Extensions/Linkages: Ceramic cultures, hunting and fishing techniques, trade with European sailors, archaeological dating of artifacts

Entry Skills/Knowledge: *Migrations* and *Foods* lessons; basic understanding of hunter-gatherer vs. sedentary/agricultural societies

Materials

- *Ancient vs. Modern Tools* comparison Handout
- Clipboards or notebooks for students to press on
- Pencils for each student
- Copies of activity worksheet handout (optional) at museum

Exhibit Tie-Ins

- Amerindian Exhibit Displays: *How Did They Live?*; *The Cabot*; *Old World Meets New (Section on Trade)*

Objects of Interest

- Maritime objects (canoes, fishing nets, etc.)
- Hunter-gatherer tools
- Ceramic objects

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used, few artifacts have been preserved due to natural deterioration in a tropical environment.

Tools for Agriculture.

Digging and chopping implements included stone axes, chisels/celts, hoes (stone heads fastened to wooden sticks carved from tree branches); and shells for shoveling or scraping soil.

For Hunting, Gathering, and Fishing

Woven baskets, spears, arrowheads, bows and arrows, rope, nets, fishing lines, harpoons, dams to trap fish, clubs (boutou), natural poisons, and slings.

For Combat

Bow and arrows, slings, clubs (boutou), hot peppers (as a form of “biological weapon”), canoe/pirogue (used in raids; capable of holding 40-50 warriors).

For Cooking/Home Life

Woven baskets, rope, sifters, stone graters/mortars, stone griddles, presses, ceramic pots, jars, plates and bowls, looms for textiles, adorned objects for ceremonies and rituals, and various natural materials for paints and dyes (e.g., red dye from the annatto plant, which may have also served as an insect repellent; a blue-black dye from fruit of the genep tree for tattoos/body painting; etc.).

Before You Visit

Lesson objectives

SWBAT make observations about pre-historic tools used by the Amerindians to gain an understanding of how they lived.

- Students will describe some of the tools used by Amerindians in their everyday life.
- Students will make a comparison between modern and pre-historic tools used by the Amerindians to gain an appreciation of how labor-intensive basic tasks were.

Procedure

1. Begin with an introductory (or refresher discussion, if you completed *Foods* and/or *Migrations* lessons) discussion about how migrating groups slowly evolved from hunter-gatherers to sedentary societies focused primarily on farming and agriculture. With this transition came a long history of experiments and discoveries in crop domestication, leading to more organized, planned farming of food crops to sustain communities of people. An important aspect supporting this development was in the advancement of technology, or tools and objects used to help humans accomplish certain tasks.

2. Ask students what tools they might need to start a garden. Solicit suggestions from students, to include objects like shovels for digging (digging implements), hoes for tending to top soil, buckets or watering cans, seeds, pots, sticks and twine for attaching/supporting plants as they get taller, and so on. Write down objects on the blackboard as they are named in a matrix (table). The top row will be these tools (*Modern tools*). In the first column (far left), you will add *ancient tools* used for agriculture by Amerindians, listed above. As you

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write in each ancient tool, ask students to match that tool to a modern one they named. If they have not named a modern tool that matches, solicit suggestions from the class until an appropriate tool is named.

Sample matrix to draw on blackboard: **Tools we use for gardening and cooking.**

		Modern Tools:								
		Metal Grater	Shovel	Metal Axe/saw	Bowl (plastic or ceramic)	Frying pan	Cooking pot	Metal Hoe/Plow	Knife	Hammer
Prehistoric Tools:	Ceramic Pot				X		X			
	Stone axe			X						
	Stone/Shell Scoop		X							
	Shell grater	X								
	Ceramic griddle					X				
	Hammer-stone									X
	Stone/Shell Celt							X		
	Stone blade								X	

As students call out modern tools that match the ancient tools you write on the board, place a check mark in the corresponding cell where they intersect by row and column. Then, explain how the Amerindians used each tool, and what materials these were typically made of. Ask students what materials modern tools are usually made of: iron, steel, or alloy metals for shovels, hoes, axes, frying pans, and pots; plastics or lightweight metals for watering cans; plastic, ceramic, or porcelain for bowls; and so on. Note the distinctions in how food is heated and cooked—stoves vs. fire pits; stone griddles vs. metal cookware/pans/cast-iron griddles; etc.

Lead students to guess a major difference between these materials. What did the Amerindians not have? Metal, including iron or modern-day alloys like steel, were not available to early Amerindians. Instead, they had to rely on natural materials available to them, such as specific types of stones, shells, coral, wood, clay, and plant fiber (stalks, leaves, vines, etc.) to make materials and tools.

When Europeans came, they traded with Amerindians. In exchange for crops such as corn, manioc, and other vegetables and fruits, Europeans provided iron griddles and other cookware and metal tools.

Review other objects and tools and their uses, as outlined in the Background, before turning to Ceramics.

Ceramics. Stress the importance of ceramics in understanding Amerindian cultures. Ceramics are a huge innovation during the transition to agriculture, and, along with stone tools, are the primary line of evidence we use to learn about these people.

We know that ceramics were extremely important tools for Amerindians, as they enabled them to carry and store water, food, seeds, ground plants/nuts/pods, beads, and other materials or small objects that needed to be collected or stored.

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Ceramics were shaped and molded by skilled workers, then heated in open fire-pits to harden their shape. Clay requires a very high temperature to truly harden, however. When open fires were used, the objects were often not exposed to high enough temperature—we call these artifacts low-fired pottery. Low-fired pottery is usually very practical and simplistic, suggesting their owners may have been earlier groups, such as the Casimoroid (which is later confirmed through testing and analysis). **Note:** The museum has exhibit displays detailing how ceramics were made, as well as ceramic artifacts for students to explore.

As ceramic cultures evolved over time, so did their methods. To achieve higher temperatures, pottery would be fired or heated in underground pits that were efficient in trapping heat. Advanced ceramic cultures often decorated their pottery with intricate patterns and imprints using dyes and paints. For example, some pottery pieces have been imprinted with intricate woven basket patterns, suggesting these groups were expert basket-weavers, as well. The Salodoids were known for their painted pottery and intricate patterns, using white dyes to paint on dark red-colored clay pottery.

Debriefing

As you can see, there are many parallels between modern-day tools and their ancient predecessors. Objects that we may take for granted were of significant importance to Amerindian cultures that needed them to grow their own food, cook, store items in domicile environments, and make their daily tasks and chores easier. Ask students to imagine what it would be like to tend a garden without a real shovel or hoe—how would they dig and plant seeds? How would they water plants during times of drought if they did not have a proper irrigation system, or pots and basins to use for collecting water?

It is easy to see how our materials used in manufacturing tools has changed—we now have access to heavy-duty and/or lightweight metals, plastics, man-made fibers and textiles, strongly-fastened handles and grips for things like axes, machine-sharpened blades for cutting, power-tools for making laborious jobs like construction easier, and so on.

However, the materials available to Amerindians could be quite sophisticated, given the time period and context—dyes and poisons extracted from plants, strong woven baskets and rope for nets, sharp shell and stone points for arrows and spears—all were essential to helping these cultures thrive in harsh environments. The ability to make shelters out of stronger, better materials was a very important development between Archaic Indians and their successors, especially because of hurricanes and tropical storms.

Extension Questions (Secondary)

Compare and contrast how people are able to do the following tasks today compared to how Amerindians did them thousands of years ago: a) build a house, b) dig land, c) fish or hunt, d) cook or prepare food. Choose one task and create a chart to compare ancient vs. modern methods for this task.

Adaptations for Struggling Students

- If learners struggle with understanding tools and their uses, some photos or illustrations may be useful—use our provided handout or search online for more photo examples to show students.
- Have learners create a three column table in their notes: Col. A for the ancient tool, Col. B for its use, and Col. C for its modern-day counterpart. This will help them link each tool to their purpose.

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At the Museum

Examining and Comparing Tools

Overview

Students will explore the museum to observe and collect information about ancient tools used by Amerindians in order to make inferences about how they lived. They'll relate their observations to modern-day tools in order to connect Amerindian life with that of our own.

Background Information

Amerindian tools and objects on display at the museum are meant to showcase how these cultures lived and utilized natural resources available to them in order to survive. The tools help students gain an appreciation of the type of work they did (agricultural farming, shelter-building/camping, hunting-gathering, traveling, exploring, combating/defending, etc.) and of the struggles they faced using these tools compared to the technology available to us in modern times.

Lesson objectives

SWBAT make observations about pre-historic tools used by the Amerindians to gain an understanding of how they lived.

- Students will make connections between modern and pre-historic tools by examining artifacts at the museum, comparing their characteristics to help them understand how Amerindians lived and worked.
- Students will appreciate the importance of tools as *artifacts* to help us understand how societies lived.

Procedure

1. Invite students to explore the tools and artifacts on display in the exhibit. We suggest they approach each object with a structured, inquiry-based approach: students should be encouraged to make observations about the object's shape, size, color, materials, sturdiness, estimated weight, and any other observations that will help them understand the object's purpose and importance to Amerindians.

The **museum activity handout** provides structured questions to lead students through this learning activity. Students should be given approximately 20 minutes to explore, either as individuals or in pairs/small groups.

2. Next, gather the class together and review major sections of the Amerindian Heritage Room and displays: *How Did They Live?* and *The Cabot*. Review some of the tools, ceramics, and other artifacts on display there.

Ask students,

- How were these objects used in everyday life?
- How did some of the tools shown help Amerindians survive? What if they did not have them?
- How do you think these tools were made?

[Point out individual objects on display to encourage specific answers to these questions]

Ask students to select an object on display and share how it has changed in modern times. Is it still used?

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After Your Visit

Debriefing

As you can see, the tools discovered at archaeological sites around Grenada and other parts of the Caribbean have helped us understand how Amerindians and other cultures lived. Since there are few other historical records or accounts of their lifestyle before the arrival of European sailors (whose accounts are useful, but also biased and silent on Amerindian history), the artifacts are the primary evidence we have to tell a story, or narrative, about our past.

Review some reasons why tools are important to archeologists when studying a culture:

- Tools help us determine **where** a group may have come from and **when** they lived. By determining the type of tool, the materials used, and the age of the tools, we can tell a lot about the people who used them. For example, if the same kind of tool is found in the Caribbean as in South America, we might conclude the group(s) using them had already begun to rely on trade with neighboring groups for tools and supplies. But if the tool in South America is much older and rudimentary, we might conclude that the people who made it later migrated to the Caribbean, making new, improved tools as they learned new ways to improve their craftsmanship.
- Sometimes we can **date** the materials found and study **how they were made**, as well as analyze what kinds of wood, vine or rope, stone, clay, or paints/dyes were used to determine their **origins**;
- Even the **methods** used to make tools (carving patterns, sharpening techniques, chopping patterns or other tool-making characteristics) can tell us about the groups who made and used them.
- We can learn about a cultures' level of sophistication as a society by how advanced their tools were, especially tools used for farming, building shelter, or doing other labor-intensive tasks.
- We can gain insight into how people in that culture lived. Tools made jobs easier, saving people time. If less time was needed to hunt and grow food or build and repair shelters, then people could focus on other aspects of life such as culture, ceremonies, games, and other activities.

Extensions

- What are some historical factors or developments that caused tools to change and evolve over time?

Post-Visit Reflection

- How did the availability of tools discussed in this lesson affect manual labor of Amerindians? How do you think new inventions found their way into Amerindian life? Who do you think "invented" new tools? Do you think villages/bands of Amerindians shared their inventions or discoveries with others?