



LESSON PLAN: Survival

<p>MD Social Studies VSC Standards - 4th grade</p>	<p>Standard: Peoples of the Nations and World Topic: Elements of Culture Indicator: Describe the various cultures of early societies in Maryland.</p> <p>Standard: History Topic: Settlement and Beginnings of New Societies Indicator: Describe Native American societies indigenous to Maryland</p> <p>Standard: Geography Topic: Using Geographic Tools Indicator: Locate places and describe the human and characteristics of those places using geographic tools.</p>
<p>Objective:</p>	<p>Students will:</p> <ul style="list-style-type: none"> • Compare and describe the elements of culture including shelter, recreation, education, oral traditions, art, music and language of Native American societies. • Through interaction with reproduction Woodland Indian items and discussions concerning everyday lives to gain understanding of indigenous people survived in the past without modern technologies. • Identify regions of Maryland: Appalachian, Piedmont Plateau, Atlantic Coastal Plain by their geographic characteristics
<p>Grade Level:</p>	<p>3rd – 5th</p>
<p>Length of Lesson:</p>	<p>60 to 90 minutes (could be divided into two 45 minute lessons)</p>
<p>Overview:</p>	<p>This lesson will use class discussions, observation, inference, and hands-on interpretation to illustrate how Woodland Indians lived in Maryland 500 years ago. Hands-on investigations of replica tools and objects will help illustrate how groups survived in their environment.</p>
<p>Teacher Background:</p>	<p>Five hundred years ago the East Coast of North American was generally covered with mixed hardwood forests that contained many giant trees. Areas of smaller growth, shrubs and grasslands existed where fire, either natural or set by Native people, had burned. In general, Woodland Indian culture and societies were based on an adaptation to this forested environment. The map of Woodland Indians in Maryland reflects the information known about what groups occupied Maryland at that time. For additional information refer to the Overview of Woodland Indian Lifeways.</p> <p>Each Tool Kit listed on the Materials list is explained below. For more specific definitions please refer to the Objects and Tools Definitions.</p> <p>Flintknapping Tools (stone tool making) Two basic methods of flaking (chipping) are used to make stone tools such as spear points, drills, knives, or arrowheads. Percussion flaking is when a stone or antler hammerstone is used to strike flakes off. Pressure flaking is when a bone, wood or antler tine tool is used to push flakes off from the edges of a stone tool as</p>



it is being shaped and sharpened.

- A Hammerstone is a rounded rock used to strike pieces (flakes) from another stone during to process of making a stone tool.
- An Elk antler billet (hammer) offers a bit more control when striking flakes from a partially made tool. Flakes are removed by hitting the developing tool's edge so that the edge is gradually sharpened and the tool itself is made thinner.
- An Antler pressure flaker, made from the antlers of a White-tailed deer, is used to press small flakes from the edge of the developing tool as it's shaped and sharpened.
- A Manufacturing Sequence is a stone series showing the process of gradual change of a stone into a tool. The largest rock fragment in the sequence is the first stage of the process. At this stage, one would use a hammerstone to begin removing unwanted portions of stone from the larger piece of material. The next piece of stone shows a roughed out shape. The third piece in the sequence is closer to becoming a stone tool. Notice how the shape is more developed and it is thinner. The fourth stone is the finished product, a stone blade that can be used as a knife or a spear point.

Woodworking Tools

- Wooden bowl is the product in this group.
- The groundstone celt would have been hafted as an axe to be used for cutting down trees and shaping wood.
- When making handles from wood, one may need to drill holes. The stone drill bit is hafted onto a wooden handle. Using two hands, the handle is twirled so that the stone drill bit cuts into the board. Each student should have a chance to use this drill to see how it works. (Carefully supervised use is recommended because the stone drill can snap and break.)
- Drilling can also be accomplished by twirling a reed or stick in sand to slowly grind a hole in bone or shell.
- The celt is made from stone by a method referred to as 'groundstone.' Sandstone, sand and water are used to grind and polish stones into tools.
- Refer to the John White painting of fishermen to show a large object that can be made from wood – the dugout canoe was hollowed out of a log.

Hunting Tools

- Arrow and hafted knife are used for hunting game and skinning animals. The bow and arrow was introduced into the Maryland area about 1200 years ago. Bow size ranged from 3 – 6 feet in length and varied between different tribes. The taller bows were reportedly used by the Atlantic coastal groups.
- The furs of a raccoon, muskrat, rabbit and beaver are included within the traveling trunk. These furs would have many uses, ranging been sewn together to make warm robes and other clothing or they may have been sew together for bedding. Some furs were worn as head-dresses to show clan or tribe affiliation.
- While talking about the Fishhook & line, observe the varied methods of

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fishing in the John White's painting. Nets on poles, nets held between people, fish weirs made of sticks, and spears are all being used to catch seafood. Early colonial records indicate that the Eastern Shore groups were known for using spears to fish.

Animal Hide Preparation & Use

Tanned animal skins were quite useful and desirable to the Woodland Indians. Pelts with the fur left on made warm robes and bedding. Bear hides were prized due to their large size and warmth. Colonial accounts record that bear were plentiful on the Eastern Shore and that local groups often traded the skins. Furs from smaller mammals were sewn together to make winter cloaks and bedding. Rabbit, raccoon, beaver and muskrat were all trapped for food and their furs.

Animals were skinned using tools like the hafted knife. Then the flesh and fat were scraped off using various tools such as stone scrapers and bone fleshers. When deer hides were going to be used for making clothes and other leather objects, the fur was removed. The skins were often soaked for a couple of days in a stream (held down with heavy rocks). When the fur had started to rot, it could be scraped off with the beamer. This tool was held with two hands so that the cutting surface was down against the hide. Then the beamer was pulled towards the user to remove the fur or hair.

Then the hide could be smoked to increase its water resistance. A paste was made of brain tissue and water. This was kneaded into the hide to soften it. Once the hide had been tanned into leather, bone awls and needles were used to make clothes and bags. The awl was used to punch holes and the needle was threaded with sinew or rawhide strips to sew the garments and bags together.

Containers

Through time various methods of carrying and storing things have been developed. Some of the earliest containers that Woodland Indians used were made from bark or woven from cordage (string). Bark was stripped off trees, such as tulip poplar, basswood and slippery elm, in the spring and early summer to make baskets. Plant fibers and animal sinew was processed and twisted together to make cord. Bags made from tanned hides or animal stomachs and bladders would also have been used.

Approximately 3,000 – 4,000 years ago, people in Maryland began to carve large bowls with lug handles out of steatite (soapstone). These stone bowls were replaced when pottery was introduced into the region. The earliest pottery in Maryland (around 2,500 years ago) was flat bottomed, slab construction shaped to look like these stone bowls. Crushed-up steatite was used to temper the clay of these first pottery vessels. Coil-constructed conical vessels replaced the flat-bottomed type. By the Late Woodland, different groups were using sand, crushed quartz and shell fragments to temper the clay. The clay vessel resembles a pot that could have been made and used by Maryland's Woodland Indians.



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Lesson Procedure:

1. Ask students to imagine themselves living exactly where they do today, but 500 years in the past, before European colonization. What would they see in their environment? Write this list upon the blackboard.
 - [*Land covered in forests, huge trees, rivers, animals (what kinds? Rabbit, squirrel, raccoon, beaver, muskrat, otter, deer, bob cat, panther, elk, bear, fox, ground hogs, opossum. Birds – turkey, geese, ducks. Fish, freshwater mussels, eels, tidewater region – clams, oysters)*]
2. Ask the class what the three basic needs of every human are [*Food, Water and Shelter (including clothing)*] and write them beside the first list written on the blackboard.
3. After the lists are compiled, ask the students to write a brief constructed response on the following questions.
4. How might you obtain the three basic human needs from the woodland environment found 500 years ago? What kind of tools might you need to survive in these surroundings (*To hunt, to cook, to make clothes and shelter*) and how would you make them?
5. Divide the class into small groups and give each group one of the Tool Kits provided in the trunk. Ask each group to analyze of the objects in their tool kit as a group of items that are used together for an activity or task. All of the items are related to each other through the task or function that they perform. Each group should take about 10 – 15 minutes to observe the tool kits and to fill out the Tool Kit worksheet. During this time, the teacher should spend a few minutes with each group helping them to identify the objects, the materials they are made from, and their functions.
6. Bring the class back together and ask each group to present their findings.
 - What kinds of materials do the tools or objects have in common?
 - Can you identify tools in one kit that were made by another kit? Or could have been used in another kit?
 - How effectively were the Woodland Indians using their environment?

Materials:

Objects - Tool Kits

Flintknapping (stone tool making) Tools

- Hammerstone
- Elk antler billet (hammer)
- Antler pressure flaker
- Manufacturing Sequence – from rock to finished stone tool



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	<p>Woodworking Tools</p> <ul style="list-style-type: none">• Hand drill and board• Groundstone Celt• Wooden bowl <p>Hunting Tools</p> <ul style="list-style-type: none">• Arrow• Fishhook & line• Hafted knife• Furs• Image - John White's painting of fishermen in a dugout <p>Animal Hide Preparation & Use Kit</p> <ul style="list-style-type: none">• Hafted stone knife• Bone flesher• Bone beamer• Tanned deer hide piece• Awl• Needle <p>Containers</p> <ul style="list-style-type: none">• Clay pot• Gourd bowl• Bark basket• Woven basket <p>Images Map of Woodland Indian Groups in Maryland John White's painting of fishermen in dugout canoe</p>
Related Resources:	<p>Hulton, Paul. <i>America 1585: the Complete Drawings of John White</i>. The University of North Carolina Press and British Museum Publications. 1984.</p> <p>Idaho Museum of Natural History Cordage Discovery Box http://imnh.isu.edu/Public/JustForKids/CordageDiscoveryBox/Home_page/mm_temp.htm</p> <p>www.nativetech.org Very extensive and informative website on Native American technology and art emphasizing the Eastern Woodlands region.</p>
Extension Activities	<p>Additional activities that can be used to extend this lesson include making clay pinch pots and cordage (string). Supplies for these activities are not included in the Trunk, but can be easily purchased for minimal costs from a craft supply shop or the craft section of a department store. Instructions for both activities are included with this lesson plan.</p>