Woodland Indians:
Life near the Great Lakes
School Resource Kit
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Each School Resource Kit is comprised of authentic artifacts and modern reproductions.

Handling these particular objects is encouraged. Touching the objects and passing them around is allowed, but please remember that some items are delicate and should be treated with care.

Objects in plastic should remain in plastic though they may still be passed around for closer inspection.

Why do we ask you not to touch certain objects? The oils, dirt and moisture from your fingertips can stain textiles and etch metals, permanently changing them. One touch may not seem like much, but hundreds of touches in a year can wear a hole in a cotton dress or a notch in a wooden axe handle.

There are some items in certain kits that may be considered weapons in your school; be aware of your school’s policy regarding weapons and take appropriate action (i.e. inform the principal).

These items have been specially chosen for “hands on” learning and educational programs. In any museum, items on display and in the collection should never be touched unless a museum staff member has invited you to do so.

If an item is damaged, please gather all the pieces into a plastic bag and return it with the kit. When you return the kit, please let a staff member know that there is a damaged object.

If you find an item is missing or already damaged, please inform the museum’s student staff when you return the kit.

There are numerous benefits to the school resource kits. The “hands-on” aspect is one. Look closely at the materials used to make these historic objects. Look at their colors and decorations. Feel how light or heavy they are. Look at how they were manufactured. Consider who would have used these objects. Then, compare these historical artifacts to objects we use today. How are these items made today? Do we even use these objects today? What is different? What has remained the same?
Michigan Grade Level Content Expectations

SOCIAL STUDIES

Living and Working Together
Use historical thinking to understand the past.
K – H2.0.4 Describe ways people learn about the past (e.g., photos, artifacts, diaries, stories, videos).

History of Michigan (Through Statehood)
Use historical thinking to understand the past.
3 – H3.0.1 Identify questions historians ask in examining the past in Michigan (e.g., What happened? When did it happen? Who was involved? How and why did it happen?)
3 – H3.0.5 Use informational text and visual data to compare how American Indians and settlers in the early history of Michigan adapted to, used, and modified their environment.

U1.1 American Indian Life in the Americas
Describe the life of peoples living in North America before European exploration.
5 – U1.1.3 Describe Eastern Woodland American Indian life with respect to governmental and family structures, trade, and views on property ownership and land use.
(National Geography Standard 11, p. 164, C, E)

U1.4 Three World Interactions
Describe the environmental, political, and cultural consequences of the interactions among European, African, and American Indian peoples in the late 15th through the 17th century.
5 – U1.4.3 Explain the impact of European contact on American Indian cultures by comparing the different approaches used by the British and French in their interactions with American Indians.
(National Geography Standard 10, p. 162, C, E)
5 – U1.4.4 Describe the Columbian Exchange and its impact on Europeans, American Indians, and Africans.
(National Geography Standard 11, p. 164, E)

GEOGRAPHY

Environment and Society
Understand the effects of human-environment interactions.
1 – G5.0.1 Describe ways in which people modify (e.g., cutting down trees, building roads) and adapt to the environment (e.g., clothing, housing, transportation).

ECONOMICS

Market Economy
Use fundamental principles and concepts of economics to understand economic activity in a market economy.
K – E1.0.3 Recognize situations in which people trade.
1 – E1.0.4 Describe reasons why people voluntarily trade.
2 – E1.0.5 Use examples to show that people cannot produce everything they want (specialization) and depend on trade with others to meet their wants.
3 – E1.0.3 Analyze how Michigan’s location and natural resources influenced its economic development (e.g., how waterways and other natural resources have influenced economic activities such as mining, lumbering, automobile manufacturing, and furniture making).
Introduction

Around 10,000 years ago, the first people began to arrive and settle in the Great Lakes Basin. These people are now called Paleoindians. The Paleoindians accomplished many great feats. The most important and difficult accomplishment during this time was the rapid colonization and occupation of this area of land on a permanent basis. This region was home to an extremely harsh climate, yet the Paleoindians continued to thrive and develop into more complex societies.

After the Paleoindian Period came the Archaic period. The Archaic period lasted from approximately 8,000 B.C.E. to 1,000 B.C.E. It was during this time period that the inhabitants of this region developed new tool making and hunting techniques. Also during this period the people began to widen the food resources that they used and they were more efficient in using the resources they had. The advances that the Archaic peoples accomplished made the development of the next period, the Woodland period, possible.

The term “Woodland” has been coined to label the late archaeological cultures developed by Native North American peoples throughout the eastern and midwestern parts of the continent. This period dates from approximately 1,000 B.C.E. to 1,000 C.E. It is named after the Eastern Woodland Environmental zone in which it first developed.

Some major features in this period include the manufacturing of pottery, construction of elaborate burial mounds, the use of the bow and arrow, and midway through this period farming became widespread, including the cultivation of maize, seeds, squash, sunflowers, and many other crops.

This loan kit focuses on tools and other artifacts that Native Americans from the Woodland Period would have used on a daily basis. This includes a bow and arrow, a fire bow and drill, stone knife, stone axe (celt), an illustration of a hafted celt, a bone awl, bone fish hook, a harpoon blade, clay pot, two different sizes of cordage, a necklace, a small portion of buck skin, a pair of moccasins, and a porcupine quill work sample.

Woodland people used a great variety of natural resources to make the tools and materials they needed to live. Items in this collection are meant to replicate some of these tools and materials. All items are REPRODUCTIONS; however, they should still be handled with care.
Artifacts

Bow (E97.12): Bows were made from hardwoods such as oak, ash, or hickory. The strings were usually made from fibers that were stripped from various plants and sometimes fibers from deer tendons (called sinew). The illustration at the bottom of the page depicts a Woodland Period bow and an arrow.

Arrow (E97.71): Arrows were made from straight saplings. Projectile points were chipped from flint or chert. Flint and chert were obtained through trading or by gathering it locally. Feathers from large birds, such as owls, hawks, and turkeys, provided the fletching that stabilized the arrow in flight. The sinew obtained from deer tendons was also used to attach the feathers and projectile points to the shaft.

The arrow in this collection was handmade using stone tools and natural materials. All materials came from the central part of the state. The shaft was made from redosier dogwood and was cut, scraped, and sanded with stone tools. The projectile point was chipped from a nodule of Bayport chert (from the Saginaw Bay area). The feathers came from a wild turkey. The fletching was split and trimmed with a flake of chert. The fletching was split and trimmed with a flake of chert and secured with hide glue (glue made from hide scrapings and hooves) and lashed firmly with sinew. The paint used to crest the arrow was made from crushed rock.

The use of the bow and arrow revolutionized hunting techniques. The bow and arrow was even used for fishing.
Artifacts

Fire Bow and Drill (E89.78a-d): The ability to make fire was a skill necessary for survival. Many techniques were developed to help aid in the fire starting process. The fire bow and drill was created as a method of creating friction, which started the fire. The cord on the small bow was wrapped around a wooden spindle. One end of the spindle was placed in a hole carved into the fire board (large board). The smaller block of wood was used to support the top of the spindle and it also protected the hand from its twisting motion. While applying pressure on the spindle, it was rotated quickly by pushing and pulling the bow. When done correctly, sufficient heat was generated to ignite previously prepared tinder.
Artifacts

Stone Knife (E97.13): The knife has a blade made of chert and a wooden handle. It has been glued into the handle with pine pitch mixed with charcoal and secured with a wrap of deer rawhide. Knives like this typically could handle most needs of the user, including deer processing and cutting of arrow shafts.

Celt (E97.14): A celt is a refined stone axe. Celts were made of pecked, ground, and polished hardstone. They were wedged into a hole in a hardwood handle. Hafted this way, each time a blow was struck with the axe, the celt was wedged even tighter into its handle.

Bone Awl (E97.16): An awl was a tool meant to stab a hole through various materials. The most common use was poking through leather. Awls were also used in sewing. After a hole was punched, sinew (deer tendons) could be pushed and drawn through the holes to sew garments and various other materials. This same method was used on birch bark to make canoes and containers.

Hafted Axe Illustration (E97.75): The illustration is meant for display purposes. The photo shows how a celt was used as an axe.
Artifacts

**Bone and Fish Hook (E97.16):** Fish were an important staple in the diet of the Great Lakes Indians. The development and use of harpoons during the Woodland Period revolutionized the act of fishing. Before the bone and fish hook and the harpoon were developed something called a gorge hook was used to fish. This hook was a straight piece of bone that was tied to the end of some cordage. Since it was a straight piece of bone it was hard to hook and pull fish in with the gorge hook. The bone and fish hook and the harpoon made fishing much easier. They are made from a rectangular bone which was rubbed and abraded in the center on both sides to remove an oval shaped perforation in the center. The bone was then cut on each side of the perforation so that the fishhooks could be made from the single perforation. They were then ground and shaped into the desired final form by scraping or with the use of an abrader. This same method could be used on shells and flint, however, they were not common in the woodland region.

**Harpoon (E90.02):** A harpoon is a spear with a detachable point. They were usually made from bone or antler. The most common use of a harpoon is for fishing.

The harpoon in the kit is made of deer bone. Notice the hole to which a line could be attached for pulling the catch. The barbs prevented the point from pulling out of the fish. This is an example of a detachable point.
Artifacts

Clay Pot (E89.58): Pottery making by the Native Americans in the Northeast is one of the benchmarks of the Woodland Period. Pottery was made by the women of the community without the use of pottery wheels or a kiln. First, raw clay was obtained and cleaned of impurities, such a twigs and debris. Next, temper was added to strengthen the clay. This could be particles of crushed granite or other materials. The clay was made workable by adding water. It was then kneaded to remove air bubbles and increase the clay’s plasticity. After it was kneaded and formed into a ball, the potter created a depression in the center of the clay with her thumbs. As the clay was rotated, the depression was enlarged until walls were formed. Coils of clay were added to give the pot additional height. Also, decorative carvings could be imprinted on the pot using various textured objects (leaves, sticks, shells, etc.) before it was fired. To set the clay, it was fired in a shallow open pit fueled by wood. Firing altered the pottery chemically and physically, so it would remain in a hardened form.

Cordage: Rope and string for making fish nets, snares and other items were made from a variety of natural plant fibers. Plants such as the stinging nettle, and inner bark from trees, such as the basswood, made excellent cordage. Using a reverse-wrap method, strands of these fibers were twisted into twine.

The larger cord (E97.18): This cord was made from the inner layers of basswood bark.

The smaller cord (E89.80): This cord was made from fibers that were stripped from the stalk of a single nettle plant.
Artifacts: Clothing

**Necklace (E97.19):** The beads worn by people of the woodlands were made of shells, bones, and stones. This necklace is made of small shells. Sometimes shells were obtained in trade from locations as far as the Gulf of Mexico.

Skin from animals met most clothing needs for the people during the Woodland Period. Animals like deer, rabbit, and martin were used. The hides were tanned and bound together, typically using sinew and the sewing methods described earlier.

**Buckskin (E89.82):** Buckskin is the hide of a deer that has had the hair removed and made soft and supple through the process of brain tanning. Brain tanning a hide required many hours of work. Deer brains were rubbed into the hide during the final stages. The hide was then stretched continuously until dry. To keep from shrinking when it got wet, it was smoked. This is an actual piece of smoked brain tanned leather.

**Moccasins (E89.79):** This type of footwear was usually made from buckskin. The one-piece, puckered up-toe type of moccasin was common among the Eastern Woodland tribes.
Artifacts

Porcupine Quill Work: Great Lakes Indians used porcupine quills to decorate birch bark articles as well as tanned skins. A single porcupine can yield as many as thirty to forty thousand quills. The quills were sorted and occasionally dyed before use. They were also soaked in water to help make them more pliable.

Quill Work Sample (E89.75): This is a sample of how porcupine quill work was used to decorate.
Suggested Classroom Activities

**Making Bead Necklaces:** Students can make their own beaded necklaces, bracelets, or strands. Using small shell beads or macaroni noodles, have students create their own necklace design. A good way to incorporate trading into the activity would be to give different students different styles of beads, so they have to interact and trade amongst themselves to get a variety of different beads.

**Woodland Period Coloring Activity:** Have students color illustrations relating to the Woodland Period Indians. Some samples are available on the following pages.

**Making Woodland Pottery:** Follow these directions to create a traditional style of earthenware used by Eastern Woodland Native Americans. While clay from streams and rivers would have been used to fashion pottery used for cooking and eating, we recommend using a self-drying clay available at most craft stores. The pots you will create are for educational and decorative purposes only. **DO NOT** use these pots to hold food or liquids of any kind!

**Materials:**

- self-drying clay (no firing or baking needed)
- a small container of water for each student
- newspaper to cover tables
- damp paper towels for each student
- assorted shells, sticks, stones, etc., for etching designs in the pots.

**Directions:**

1. Take a small handful of clay and shape into a round ball.

2. While holding the ball in the palm of one hand, take the thumb of the other hand and make an indentation in the center of the ball. Keep turning the ball of clay and pressing down with the thumb to within 1/2 inch of the bottom.

3. When the pot is the desired depth, rotate while pinching the sides with the thumb (inside) and fingers (outside).

4. Work from the bottom up until you have achieved the desired shape. As the clay dries it may begin to crack. Keep dipping your fingers in the small container of water and wipe the surface of the pot frequently with damp paper towels.

5. When the pot is finished, use small objects that would normally be found in nature to etch designs in the pot. Make sure each student etches their initials in the bottom.
Buckskin
Credits

Edited by: Kelly Sczomak
Layout: Abbie Diaz

We acknowledge the use of materials from the following sources:

http://mason.gmu.edu/~jjarski/portfolio/fall07/easternwoodland

http://www.hal.state.mi.us/mhc/firstpeople/firstpeople.html

http://www.geo.msu.edu/geogmich/paleo-indian.html

http://www.fcps.edu/KingsParkES/student%20pages/indians/woodland/woodland.htm

Every effort has been made to find and credit the sources of information used in this publication. If a source has been inadvertently omitted or errors made, please contact the Museum of Cultural and Natural History. Any oversights will be remedied.

Museum of Cultural and Natural History
103 Rowe Hall
Bellows Street at East Campus Drive
Central Michigan University
Mount Pleasant, MI 48859

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School Resource Kit Evaluation Form: Woodland Indians

Kit Use:  ___ Mid Tier Lesson  
___ Student Teaching  
___ College Classroom Presentation (Class Number __________)  
___ Elementary Classroom (Grade Level __________)  
___ High School Classroom (Subject Area __________)  
___ Other (___________________________________)

1. Did the kit meet your needs?  Yes ________  No ________

2. Was the kit easy to use and understand?  Yes ________  No ________

3. Is there anything not included in this kit that would be useful?  Yes ________  No ________
   If yes, please include your suggestions: __________________________________________

4. Was the printed guide easy to use and understand?  Yes ________  No ________

5. Was the kit in good condition?  Yes ________  No ________

6. Would you use this kit again?  Yes ________  No ________

7. Would you recommend this kit to a colleague?  Yes ________  No ________

8. Is there a topic that you would suggest we develop a loan kit for?  
   If yes, please include your suggestions: __________________________________________

Additional Comments:  
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you for your feedback!  
-The Museum of Cultural and Natural History