SPEAK ARCHAEOLOGY IN ONE EASY LESSON!

A Brief Glossary

ARCHAEOLOGY (also spelled ‘archeology’)

Learning about people of the past by studying the places people lived, the objects they used, and the traces in the soil left by humans. Archaeologists of the more recent past also study written records.

ARROWHEAD - see PROJECTILE POINT

Artifacts people commonly call arrowheads may have been used on spears, darts, or other weapons.

Archaeologists usually use the term ‘projectile point’ or ‘chipped stone tool’.

ARTIFACT

An object such as a tool or an ornament that has been made or modified by a person.

BIFACE

Any chipped stone tool that has been flaked on both sides. Projectile points and knives are examples.

CHERT

The kind of stone most commonly used to make stone tools. Fine quality chert is called FLINT. When a piece of chert is hit with another rock or a tool such as a piece of antler, small sharp flakes break off. A good FLINT-KNAPPER can make very sharp tools such as points for arrows or spears, knives, drills and other tools.

CONTEXT

An artifact found in the spot where the people who originally used it left it is said to be in context, or in situ. An artifact in context is directly associated with many clues that can tell archaeologists more about the past. Such clues might include soil colors and chemistry, relationships to other artifacts, and charcoal that can be used for radiocarbon dating. In contrast, an artifact that has been removed from this original location is out of context. An artifact out of context usually tells us very little about the past. When archaeologists excavate a site, they are just as concerned about recording the context as they are about the artifact. When someone picks up artifacts and takes them away from a site, the context is lost, and we will never be able to recapture it. This is why we urge people to leave sites intact and artifacts undisturbed.

CULTURE

A society’s way of life, including technology, economy, beliefs and social structure. Culture is learned, not biologically inherited.
FAUNAL REMAINS

Remains of animals such as deer and fish. The bones, fish scales, and antlers found on sites tell us something about what animals people were eating, how people caught them, and how animals were valued. Sometimes bone and antler was used to make tools and ornaments.

FEATURE

A collection of one or more contexts representing human activity. These types of material remains cannot be removed from a site, and include roasting pits, hearths, house floors, or post molds.

FLORAL REMAINS

Remains of plants, such as corncobs, nutshells, seeds or charcoal. Studying floral remains can help us learn what season people lived at a site, what they ate and how they domesticated crops.

MIDDEN

Deposit containing shells, animal bone, and other refuse that indicates a site of human activity.

POTSHERD

A broken piece of pottery. A piece of the upper rim of a pot is called a rimsherd. Sherds from other parts of the pot are called body sherds.

PROJECTILE POINT

Any pointed tool used on the end of a thrown weapon, such as a spear, lance, dart, or arrow. Many projectile points were made of chert, but bone, antler, and copper were also used.

RADIOCARBON DATING

A method of determining how old an object is. Only plant and animal remains can be used. Physicists use a tiny amount of charcoal or bone. Their equipment counts the amount of a certain kind of carbon that deteriorates over time at a known rate. The amount of this carbon left in the object tells us roughly how old it is.

SITE

A place where people have lived or worked in the past, and where evidence of their activities survives.

Now you can amaze your friends by saying things like….

I hope the potsherds are still in context at the site!

and

Hey, let’s radiocarbon date those floral remains!
Archaeologists studying the remnants left by past peoples have put together the outline of the story. Over the centuries, ways of life changed as populations shifted, new cultural developments were adopted, and improved methods of using the resources provided by the changing environment were developed.

Archaeologists have divided the past into periods with names like “Paleo-Indian” and “Early Archaic.” Although gradual, transitions between periods were marked by major cultural changes.
MATCH THE ARTIFACTS

Modern

Ax

Drill

Fish hook

Pipe

Knife

Earrings

Prehistoric

1.

2.

3.

4.

5.

6.
MICHIGAN ARCHAEOLOGY CROSSWORD

(Hint: The answers are in the word search on the following page!)

Across
1. The appearance of pottery and large earthworks are characteristics of this archaeological period.
4. Native Americans mined copper on Isle Royale during this archaeological period.
5. Archaeological period marked by fluted spear points and hunting mammoths.
7. Commonly called an arrowhead.
8. The 26th state, established in 1837.
10. An archaeologist’s most important tool.
11. An artifact’s location in the ground
12. Traders during the contact period were interested in this animal’s fur.

Down
2. Someone who learns about humanity’s past by studying physical remains.
3. Objects made from hardened or fired clay.
6. A place known to have archaeological remains.
8. Refuse left behind by humans.
9. A type of material remain that cannot be removed from a site, ex. post mold
ARCHAEOLOGIST
ARCHAIC
BEAVER
CERAMICS
CONTEXT
FEATURE

MICHIGAN
PALEOINDIAN
POINT
SITE
TROWEL
WOODLAND
Paleo-Indian Period
(10,000 B.C.? - 7000 BC)

This period saw the retreat of the massive glaciers that covered all of Michigan during the Ice Age. The climate was cool and wet. Mastodon, mammoths, caribou, and other animals no longer found here roamed the plains and marshes. The Paleo-Indian people lived as wandering hunters. Their distinctive fluted spear points have been found throughout the southern two-thirds of the Lower Peninsula and the western Upper Peninsula.
Mammoths and Mastodons

Mastodon Skull

Mastodons were smaller and lived in bogs and forests. They liked to eat trees and shrubs. Their foreheads were low and flat.

Mammoth Skull

Mammoths were bigger and liked to eat grassy plants. Their foreheads were tall and pointed.

How do we know these animals once lived here?
We know because we find their bones in many places.

How do we know what they looked like?
Mammoths and mastodons have been found frozen in artic ice. They had long brown hair, like yaks or musk oxen. The hair kept them warm in cold climates.

What happened to the mammoths and mastodons?
They died out by about 10,000 years ago. They are now extinct; there are no more mammoths or mastodons anywhere in the world.

How big were mammoths and mastodons?
Mammoths were between 10 and 12 feet high. Mastodons were shorter, only 8 or 9 feet high. A mammoth could easily look into a second-story bedroom window. A mastodon might have to stand on its toes to see in.

Did you know?...

The mastodon is Michigan's state fossil! In 2002, school children from Wayne and Washtenaw counties succeeded in their campaign to have the mastodon declared Michigan's official state fossil.
Because the Great Lakes were much lower during this time, many sites from this period are buried under sediments along the coasts and rivers or may even be underwater. Sites are most common in the southern half of the Lower Peninsula. Excavations here and in nearby states indicate that the people were learning more about their environment and how to most efficiently use the plants and animals around them in seasonal cycles. Nuts and other plant foods were important to the diet, as well as fish and game.
Making Stone Tools (Flint Knapping),
For hunting, cleaning hides, and cutting
Connect the dots to find an Early Archaic point (on the left) and a Middle Archaic point (on the right)!
Evidence for Late Archaic people is found throughout the state, usually in the form of small seasonal camps. Fishing technology developed; hooks, gaffs, and spears were used to take fish, especially during spring spawning. Religious beliefs were reflected in burial rituals. The dead were buried in cemeteries, often covered with red ocher, a red mineral powder, and sometimes a few tools or ceremonial blades. Hunters used spears and darts thrown with an atl-atl, or spearthrower. Beautifully polished slate objects, some in the form of stylized birds, were created, perhaps as weights for the spearthrowers. Stone axes and celts were used to shape wood. Copper was mined from Isle Royale and the Copper Country of the Upper Peninsula to make spear points, knives, awls, beads, and many other useful items.
Late/Terminal Archaic Word Scramble

Unscramble the answer to each clue given (Hint: look for the answers on the previous page!) and write your answers on the lines to the right of the scrambled letters.

1. This activity used hooks, gaffs, and spears:
   
   N I G H F S I

2. Darts were thrown with a spear thrower called an:
   
   L A T—L T A

3. Beautifully polished objects of this material were used as weights for spear throwers:
   
   E L T S A

4. Stone axes and these objects were used to shape wood:
   
   C T L S E

5. Native Americans mined this metal to make spear points, knives, awls, beads, and many other items:
   
   C P O R E P

6. The dead were often covered with this red mineral powder:
   
   E D R R E H O C

7. Burial ritual reflected these types of beliefs:
   
   L I R S O I E U G

8. In Michigan, Late Archaic people lived in seasonal:
   
   P M S C A
Early Woodland
(500 BC—200 BC)

During this time, several important technological innovations began to influence the way of life. Pottery made its first appearance, with thick, bulky, flat-bottomed vessels. Plants were cultivated, such as squash and sunflowers. These were foods that could be stored for the winter, along with nuts and dried meat. Burial mounds were sometimes built to commemorate the dead. There is evidence for interaction and borrowing from more southerly groups. These changes began to affect many aspects of life in the Midwest, including how long people stayed in one place and how many people could live together.
Making Pottery,
For cooking, storage,
And ceremony
By this time, people had adapted to the changes of the Early Woodland period. This allowed some parts of their lives became more elaborate. Nets and harpoons aided fishing, and larger seasonal camps appeared along the shores as larger groups gathered to take advantage of spring spawning. Pottery was more common, thinner, and more elaborately decorated. Important ceremonial centers marked by series of earthworks in southwestern Michigan and the Saginaw Valley. Important people at these sites were buried with many exotic and local goods. Imported and locally made pots, copper axes, river pearls, engraved turtle shell bowls, conch shell dippers, stone pipes carved in the form of animals, panpipes sheathed in copper, and other items were only for the elite. These more elaborate sites of the south were influenced greatly by the Hopewell peoples of Ohio and Illinois. A variant of this culture, called Lake Forest, was located in the Upper Peninsula and Straits area. These people were more adapted to life in the north.
Middle Woodland Crossword Puzzle

Solve the clues to fill in the puzzle!

(Hint: look for the answers on the previous page!)

Across:
2. This was often carved in the form of an animals: ________.
5. _______ peoples of Ohio and Illinois influenced people in Michigan.
7. Only ______ would have lots of exotic goods.
8. Larger groups gathered to take advantage of ____________.
9. Larger seasonal camps appeared along the ____________.

Down:
1. Life during this period became more ________.
3. The _______ peoples were more adapted to life in the north.
4. Ceremonial centers were marked by groups of ________.
6. The ________ aided fishing
Middle Woodland Matching

Match the decoration on the pot to the tool that made it!

- **Cordmarked**
- **Incised**
- **Dentate**
- **Rocker-stamped**
- **Impressed**
- **Paddle wrapped with cord**
- **Wooden comb**
- **Shell**
- **Pointed bone**
- **Woven fabric**
Late Woodland/Mississippian

(AD 600—AD 1700)

This period follows the decline of Hopewell ceremonialism and ends with the arrival of Europeans and their wealth of trade goods. Several important technological advances changed life in Michigan. Deep water gill nets allowed exploitation of fall-spawning whitefish and lake trout, which could be dried, smoked, or frozen for the harsh winters. In the south, corn horticulture became practical when varieties were developed which could mature quickly in the short growing season. The bow and arrow replaced the spearthrower as the preferred method of hunting. Populations grew and villages developed. As people began to depend more on corn, pottery styles changed, and in the southeast larger vessels were made for storing food.

In the north, the earlier Mississippian people with ties to northern Illinois lived somewhat differently, with more emphasis on corn horticulture, village life, and more durable ceramics. Mississippians with ties to Wisconsin tribes lived in the western Upper Peninsula. The Late Woodland and Mississippian people of North America were the ancestors of peoples known to us today as the Sauk, Potawatomi, Ottawa, Chippewa, Miami, and other tribes of the Great Lakes region.
How would you decorate your pottery?

Design your own below!
Can you find the Sanilac Petroglyphs? The petroglyphs (rock carvings) were cut and chipped into soft sandstone many years ago. They have always been in danger of being worn away by wind and rain, but people’s curiosity could do more damage. Visitors must stay off the rocks. Their shoes—added to those of thousands of other visitors—would erase this evidence of the past forever.

We do not know exactly what all the petroglyphs represent, but some words we use to describe them are listed below. Can you find them in the puzzle? The words may be forward, backward, up, down, or diagonal.

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Bear
Bird
Bowman
Canoe
Club
Deer
Feet

Hands
Panther
Petroglyphs
Rake
Spiral
Tracks
Europeans first arrived in Michigan in the mid-seventeenth century. First the French, then the British, and finally the Americans entered the area in small numbers. Native people remained the dominant population. White traders, missionaries, and a few settlers established ties to native communities, leading to gradual cultural changes on both sides. Disease, warfare, and disruptions of cultural practices placed increasing stress on native peoples, but cultural continuity remained strong. The exchange of furs and other woodland products for European trade goods brought Michigan into an international economic system. With the help of their Indian neighbors, Europeans learned how to survive in a new environment, adapting themselves to a frontier way of life.
Fur Trade Maze

Help the Native Americans find their way to the fort! They start out in the wilderness of Michigan’s interior where they hunted and trapped animals like beaver, deer, and muskrat. They travel by both land and water to bring furs to the fort, where they will trade for European goods like kettles, cloth, and beads.
Once the United States took full political control over Michigan, Euro-American settlement began in earnest. An enormous wave of settlers entered the area, transforming the forests into farms, the bays into ports, and hamlets into cities. Loggers clear-cut most of the state, mines were dug and failed, manufacturing industries developed, and technology transformed lives. Michigan became the 26th state in 1837. Although written records document much of the process, archaeology adds to our understanding of details seldom noted.
American Word Search

Can you find 13 words hidden below that relate to the American period in Michigan?
(Hint: Words can be found going forwards, backwards, up, down, or on a diagonal!)

Word Bank:

<table>
<thead>
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<th>Cities</th>
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<tr>
<td>Farms</td>
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<td>Loggers</td>
<td>Settlers</td>
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<td>Manufacturing</td>
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<td>Mines</td>
<td>Settlement</td>
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<td>Written Records</td>
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Help the settler’s family find their way into the newly-formed state of Michigan, from their old home in upstate New York to their new home in Hubbardston, Michigan. They will have to travel the Erie Canal to Buffalo, New York where they can take a ship to the port of Detroit. In Detroit, they will take the railroad to Owosso, Michigan, where the railroad ends. The rest of the trip will be by oxcart.
To Learn More about Archaeology, Check Out These Books at Your Local Library!

- *Archaeologist's Tools* by Anders Hanson, ABDO Publishing Company, 2011. (Pictures explain many of the tools used to do archaeology. Ages 7-10)
- *Archaeologists dig for Clues* by Kate Duke (Let’s Read-And-Find Out Science, Stage 2). NY: Harpercollins Juvenile Books, 1997. (Kids go on a dig in a field and at a laboratory, learning that archaeology is a search for clues. Archaeological terms are defined. Ages 5-9)
- *The Archaeology of North America* by Dean R. Snow. NY: Chelsea House Publishers, 1990. (A brief history of Native American culture around North America illustrates how archaeologists thousands of years later have learned about these ancient people from what they left behind. Ages 11-18)
- *Right Here on This Spot* by Sharon hart Addy, illustrated by John Clapp. Boston: Houghton Mifflin Company, 1999. (This picture book provides a wonderful introduction to archaeology and concept of history for the youngest readers. Ages 4-8)
- *Who Came Down that Road ?* By George Ella Lyon, illustrated by Peter Catalanato. NY: Orchard Books, 1992. (This picture book explains the concept of history to even the youngest child. Ages 4-8)
Answer Keys:

Match the Artifact:
Ax: 3, Drill: 6, Fish hook: 1; Pipe: 5, Knife: 2, Earrings: 4

Crossword Puzzle:

Michigan Word Search
Z S V C F F R I P Y S G C I W
X Q I A S N A X S N P A N E Q
Z X J E D G R T D N S I T E J
W X G B L Y C S O A P O I N T
R C D A L H H I Y I X I P A W
Y E R R F P A G Y D K Z S G F
T R L A E S I O S N B F Y I X
R A H R A U C L V I D R C H E
O M R T T Q X O O O Q N A U C T
W I U O U Y D E J E A V Y I N
E C A H R X Y A Q L L X G M O
L S Y X E R P H F A D W D C
R K Q M Y M S C Z P O B A T B
B R E V A E R D J O B M Y Z
G F B C Z Q M A R M T Q H X

Late Archaic Word Search
C T M J W N Z O I G S T Z W I
X R N M G P B C Z B G C H B Q
J X J A H P R E D O C H E R H
H A T M L B K I T A T A M
J E V M D P Q B L W L G I Z B
K R A E P S W O K R L L A H R
E I E V W H R I G Z B W N T C W
E V O E Z C E Z Q B S S B T Z
S D T V O K G K Q P A C Q R
A L B G H N S D M H B O P
H V A E R T U A L K D A T Y
J P L I H I C D O G Y H M E
R C F S I R I E M E O U T
P R I C O P P E A T R A R M E
H S Q F S T V Y Z B W A D O

Late Archaic Word Scramble:
1. Fishing, 2. Atl-atl, 3. slate, 4. celts, 5. copper, 6. red ocher, 7. religious, 8. camps

Middle Woodland Crossword:
1. elaborate, 2. stone pipe, 3. Lake Forest, 4. earthworks, 5. Hopewell, 6., harpoon, 7. elites, 8. spring spawning, 9. shore

Middle Woodland Matching:
Cordmarked: Paddle wrapped with cord; Incised: Wooden comb; Dentate: Pointed bone; rocker-stamped: shell; impressed: woven fabric

Find the Petroglyph

[Image of a petroglyph with letters to be found]
American word Search
Archaeologists are scientists who learn about humanity’s past by studying physical remains!