

“People of the Waters” Exhibit

Oshkosh Public Museum

Oshkosh, Wisconsin

Elementary School Curriculum

November, 2017



1331 Algoma Blvd, Oshkosh, WI 54901
920.236.5799 · oshkoshmuseum.org

Lesson Plan for People of the Waters Exhibit: Journey through Time Multi-Touch Interactive Program - Glaciers

Lesson Name: **Glacial Pace**

Grade: **Elementary**

Subject Area(s): **Social Studies, Science**

Objectives: In this exploration, students will be able to learn about what glaciers are and how they shaped the landscape around them. Watch glaciers in this area change over time through the interactive topographic map in the *People of the Waters* exhibit "Journey through Time". Students will better understand how this happened by conducting the "Make Your Own Glacier" activity.

Standards Addressed:

Social Studies: Geography: A.4.2, A.4.5, A.4.6

Science: Earth and Space Science: E.4.3

Materials:

- Ice cubes with dirt and rocks (1 per every 2 students, see Teacher Prep Notes)
- Play dough
- Small pan (1 per every 2 students)

Activity: Make Your Own Glacier

Lesson Length: 20 minutes

Teacher Prep Notes: One to two days before this lesson, make a mixture of dirt and rocks of different sizes. Add approximately one tablespoon of the mixture per ice cube and make enough ice cubes for your students to share one ice cube between two students. Fill the ice cube trays with water and then freeze them.

1. Approximately 10 minutes before this activity, take the model glacier ice cubes out of the freezer and leave them out at room temperature until they begin to melt a bit and the rocks at the bottom become exposed and loose.
2. Divide your class into pairs. Tell your students that to learn about glaciers, they will play with them.
3. Have each pair take a handful of play dough and smooth it out like a pancake. Ask one student from each pair to take a model glacier ice cube and drag it (rough end down) slowly, one way across the play dough while pushing down with medium pressure. (Pairs may do this twice so each student has the chance to participate.)
4. Have each pair of students look closely at their model glaciers and playdough landscapes and discuss the following questions together. Listen to student conversations and lead a group discussion of these questions as needed.
 - a. What kind of marks does the glacier make in the play dough?
 - b. Does the glacier leave anything behind (dirt, rocks)?
 - c. Are there interesting features on the surface of the glacier like crevasses?
 - d. How is the dirt and gravel distributed throughout (randomly)?
 - e. How was the play dough "landscape" affected by the sediment in the "glacier" (scratches, grooves, large boulders picked up and then deposited by glaciers)?
5. Now, have each pair of students put their model glacier into a pan and observe it melting. (This is more similar to a continental glacier, while the scraping activity represented an alpine (valley) glacier.) Have each pair of students look closely at their model glaciers and discuss the following questions together. Listen to student conversations and lead a group discussion of these questions as needed.
 - a. What do you notice about how the rocks and dirt are distributed by the melting ice (sediment is unsorted, piles are of mixed sizes)?
 - b. Can you think of areas you have visited that show evidence of glaciers?
 - c. Describe the areas and the clues the glaciers left behind

Lesson Plan for People of the Waters Exhibit: Journey through Time Glacial Map

Lesson Name: **Wisconsin Sedimentary Rocks**

Grade Level: **Elementary**

Subject Area(s): **Science**

Objectives: The purpose of this activity is to understand glacial effect on Winnebago County geology using the Interactive Glacial Map in the *People of the Waters* exhibition. Students will be able to identify a sedimentary rock by its visual markings, and will be able to explain how sedimentary rocks are formed through erosion and compressing/cementing of smaller rocks.

Standards Addressed:

Science Connections: A.4.1, A.4.5

Science Inquiry: C.4.1, C.4.2, C.4.4, C.4.5, C.4.6, C.4.7, C.4.8

Physical Science: D.4.1, D.4.4, D.4.5, D.4.7

Earth and Space Science: E.4.1, E.4.2

Materials:

- Plaster
- Cement
- Pint-sized milk cartons, tops cut off
- Sand
- Water
- Mixing spoon
- Teaspoon
- Tablespoon
- Paper
- Pencils

Activity:

Before Coming to the Museum:

There are three main types of rocks; igneous, metamorphic, and sedimentary. **Igneous** (or volcanic) rocks are made from lava. When the magma cools, it turns into rock.

Metamorphic rocks are formed deep within the Earth's surface from the heavy pressure of the layers above the rocks and from the heat of the magma at the Earth's core.

Sedimentary rocks are made when sand, mud, and pebbles get laid down in layers. Over time, these materials squish under the pressure of more and more layers, and turn into rocks.

Glaciers are made of water, rocks, and sediment. When water on the bottom of the glacier freezes, it attaches to the Earth's surface and pulls pieces of the bedrock with it as it advances. Rocks and sediment also fall from mountains and land on the glacier's surface. The bedrock of Winnebago County is primarily sedimentary rock (specifically sandstone and dolostone) from the Laurentide Ice Sheet.

While at the Museum:

Students will observe the Interactive Glacial Map, and record what they see on a piece of paper. The Interactive Glacial Map shows changes in Wisconsin's landscape and geology caused by glaciation, including the sedimentary bedrock of sandstone and dolostone.

Students will discuss what they think is causing the sedimentary rock to form, and why they think sedimentary rocks have layers. They will then watch the changes shown through the Interactive Glacial Map's geological changes over time.

While in the Classroom:

Reminder of the different types of rocks and a discussion of what they recorded on their piece of paper in the museum.

Students will be paired or grouped. They will look at the materials, and describe them on a piece of paper before beginning the experiment. What are the materials, and what do the materials look, feel, and smell like? Then ask the students to follow directions written on a piece of paper.

Directions for Sandstone

1. In a milk carton, mix 3 teaspoons of cement with wet sand
2. Allow to dry
3. Remove from carton to review sandstone

Directions for Limestone (dolostone is too challenging to make in the classroom)

1. In a milk carton, mix 3 teaspoons of plaster with equal parts water
2. Allow to dry
3. Remove from carton to reveal limestone

Once sedimentary rocks are dried, students will record their observations including drawing and labeling the visual markings on the rocks. What do the materials look, feel, and smell like now? They will summarize what they think causes sedimentary rocks to form, and what happens to the smaller rocks through the erosion process.

Experiment Follow-up Questions

1. How are the rocks the same?
2. How are the rocks different?
3. What natural materials are in sandstone? Limestone? Dolostone?
4. What happened to the sand, plaster, and cement during the erosion process?

Extension Activities:

For English Language Learners, auditory, and visual learners, pictures can be included to the instructions, and the teacher or teacher's assistant can read the instructions to them.

A teacher could perform the exercise while the class watches, rather than asking each student (or group of students) to follow the instructions independently.

References:

Science Kids: Fun Science & Technology for Kids. Retrieved from www.sciencekids.co.nz

Lesson Plan for People of the Waters Exhibit: Journey Through Time Glacier Interactive

Lesson Name: **Scraping By**

Adapted from rockpaperglacier.wordpress.com

Original Lesson Plan by Alice Doughty

Grade: **Elementary**

Subject Area(s): **Geography**

Objectives: Students will learn how the glaciers abraded the Wisconsin landscape. Students will learn how scientists find the direction of glacier flow by the striations in rocks by creating their own striations using clay and small objects.

Standards Addressed:

Social Studies: Geography: A.4.1 A.4.2, A.4.5

Materials:

- Glacier video
- 2 colors of clay (one room temperature, and one cooled)
- Small and hard objects (pebbles, marbles, jacks)

Activity:

1. Have the students watch the glacier video in the *People of the Waters* gallery. Ask them which direction the glaciers moved. Show them the striated rock in the Paleolndian section of the timeline case. Explain how rocks and debris are trapped on the bottom of glaciers and scrape the bedrock. The directions of the scrapes tell us the direction the glaciers moved.
2. In the classroom have students flatten the room temperature clay on their table. This represents Wisconsin's bedrock.
3. Have students mold the cold clay into a ball. This represents the glacier.
4. With the small objects on the table, push the glacier ball into the objects so they stick. The small objects are the rocks and sand that the glacier picks up on its journey.
5. Have students move the glacier ball over the bedrock clay, making scratches from the small objects. The scratches will be deeper depending on the amount of pressure used and the sharpness of the objects.
6. Explain to them that these scratches are called striations. When a glacier makes these scratches, it's called abrasion. It tells us that a glacier was here and was moving in one of those directions. We can determine the direction if we know where the glacier originated. Since the glaciers originated in Canada, we know they were flowing North to South in Wisconsin.
7. Have students switch spots and try to determine the direction of each other's glaciers.

Lesson Plan for People of the Waters Exhibit: Journey Through Time Fossils, Constellations, Petroglyphs

Lesson Name: **It's About Time**

Grade: **Elementary**

Subject Area(s): **Social Studies, Behavioral Science**

Objectives: Students will be able to describe the American Indian view of cyclical time and compare it to their own lives and view of time.

Standards Addressed:

Social Studies: Behavioral Science: E.4.4, E.4.7

Materials:

- Handout
- Paper
- Writing utensils

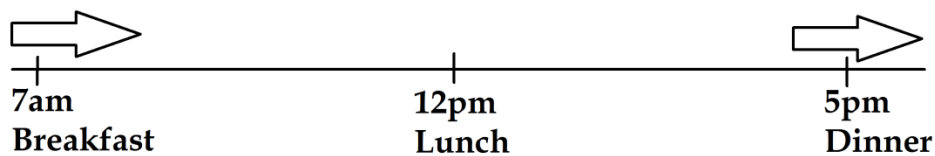
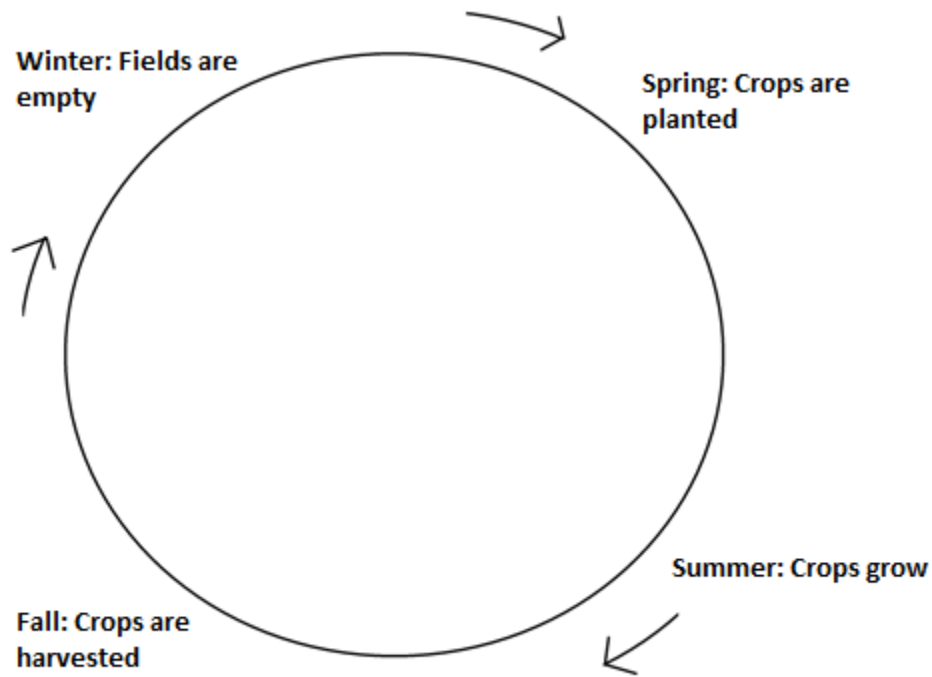
Activity:

1. In the exhibit, point out objects that are dictated by cycles (the planting and harvesting of food, life and death of animals). Discuss with the class the differences between Linear and Cyclical time that are in the table on the handout.
2. Have the students draw 2 circles. Have them fill in the first circle with a naturally occurring cycle that they saw in the exhibit. The second circle they should fill in the schedule of their day, month, or year.
3. Have them pick out events that repeat in their lives. Have them share with the class.
4. Guiding questions to ask: How are the lives of American Indians influenced by the cycles of nature? How are you influenced by those same cycles?

It's About Time

Linear Time	Cyclical Time
Views time as a thing to be saved, spent or wasted	Views time as circular and repetitive
Completes tasks in order	Makes decisions and completes tasks over a long period of thought and reflection
Focuses on the task to be complete within a certain amount of time	Focuses on the long term in tasks and relationships
Separates work/school from family and friends	Sees connections in people and events
Seeks to control time by keeping a schedule	Believes that life controls time
Focuses on the future	Focuses on the past
Cultures such as: Anglo-Saxon, Germanic, and Scandinavian	Cultures such as: Native American, African, Chinese, Japanese, Korean

Reynolds, Sana. "Linear, Flexible, and Cyclical Time: Analyzing Time in Cross-Cultural Communication.



Vocabulary

Time: A dimension in which events can be ordered from the past through the present into the future, and also the measure of durations of events and the intervals between them.

Past: Events which occurred before a given point in time, events which are usually considered to be fixed and immutable. It can be accessed through memory or, since the advent of written language, recorded history. The study of the past, in particular as it relates to humans, is called **history**.

Present: Time associated with the events perceived directly and for the first time, i.e. not as a recollection of the past or as a speculation of the future. It is equivalent to the word "**now**", and is the period of time located between the past and the future

Future: The indefinite time period after the present moment. It is the portion of the projected time line that is anticipated to occur, and may be considered as potentially infinite in its extent, or as circumscribed and finite, depending on the context

Linear time: Moving from the past into the future in a straight line, only in one direction.

Cyclical time: Time moves in a circle, emphasizing repeating events

Lesson Plan for People of the Waters Exhibit: Journey through Time/Early People Artifact Timeline Case

Lesson Name: **Point Parts**

Grade: **Elementary**

Subject Area(s): **Social Studies, Science**

Objectives: Students will be able to identify and learn the terminology for the different parts of projectile points like the examples on display in the exhibition *People of the Waters*.

Standards Addressed:

Social Studies

Geography: A.4.4

History: B.4.1; B.4.8; B.4.10

Behavioral Science: E.4.13

Science

Physical Science-Properties of Earth Materials: D.4.2

Science Inquiry: C.4.1, C.4.6

Science in Personal and Social Perspectives: H.4.3

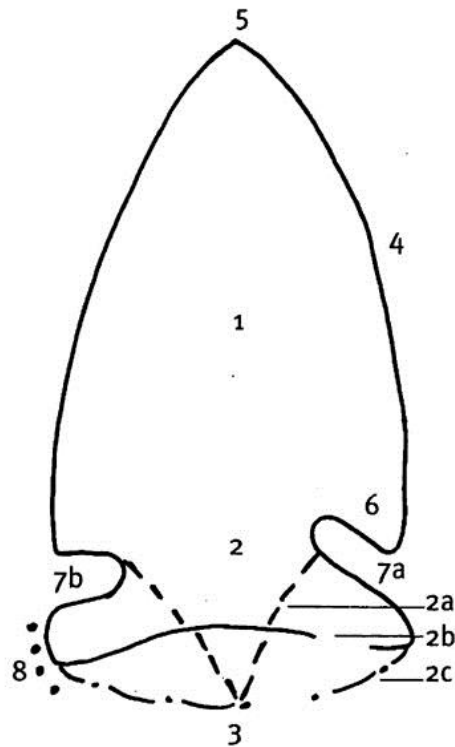
Materials: Hand-outs

- Handout 1 and 2: Projectile Point Features and Terminology
- Handout 3: Draw and Identify Point Parts

Activity:

1. Review the exhibition and displays of projectile points on display.
2. Give each of the students the handouts and review some of the terminology with them.
3. Allow each of them to select a projectile point on display and have each student use the handouts to draw and identify the various parts of the projectile point they selected using the terminology provided.

Handout 1: Projectile Point Features and Terminology



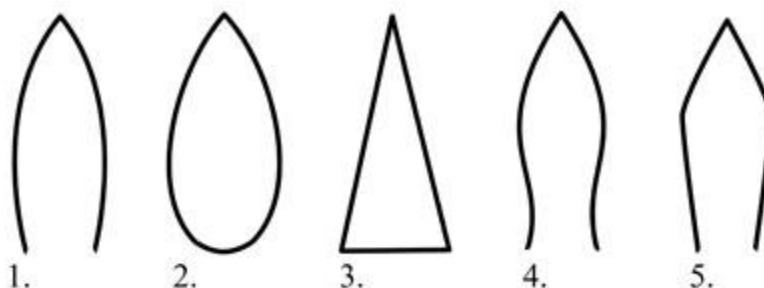
1. **Blade:** The cutting portion of the point above the hafted stem.
2. **Stem:** The modified bottom of the blade for hafting onto a shaft or handle.
 - a. **Contracting**--A haft stem that tapers from the shoulder to the base.
 - b. **Concave**--An edge (usually at the base) that curves inward.
 - c. **Convex**--Outward curving edges.
3. **Base:** The very bottom of the point.
4. **Edge:** The sides of the blade (may be serrated, beveled [steep angle], pressure flaked, etc).
5. **Tip:** The pointed top of the blade.
6. **Shoulder:** The wide portion of the blade immediately above the stem.
7. **Notching:** the portion of a projectile point that has been removed on the sides, corners, or at the base of the projectile point.
 - a. **Corner-notched:** Notches oriented at an upward angle from the basal corners.
 - b. **Side-notched:** Notches oriented perpendicular to the length of the point.

Handout 2: Projectile Point Features and Terminology

Adapted from The Florida Museum of Natural History: *Lithic Terminology*
<https://www.floridamuseum.ufl.edu/flarch/collections/bullen/terminology/>

This handout is meant to provide typical terminology used in identifying, defining, and describing projectile points and their features. It is based on information gathered from multiple sources for general understanding for each term.

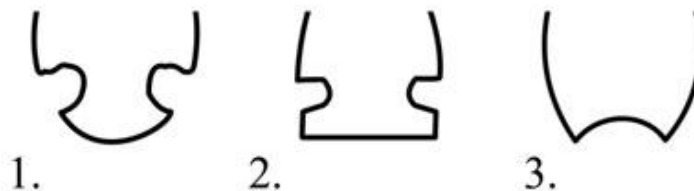
General Body Shapes



1. **Lanceolate** – a blade that expands from the tip into a curved form and gradually converges towards the base or corners.
2. **Ovate (egg-shaped)** – a blade that expands from the tip into a rounded base.
3. **Triangular** – a blade that expands from the tip into the shape of a triangle
4. **Constricted** (also called **Waisted**) – a blade that expands from the tip into a wider curved form and then tapers towards the base forming a narrow waist.
5. **Pentagonal** – a blade that expands from the tip into the shape of a pentagon

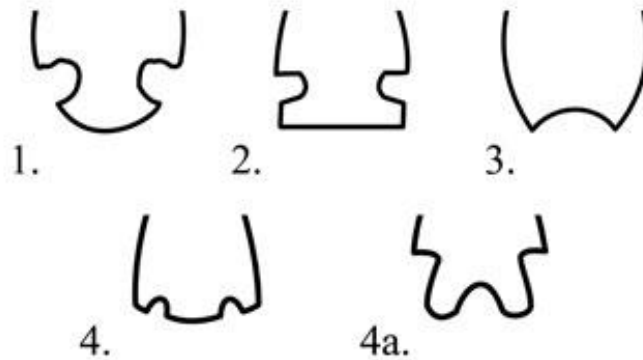
Component Parts

Base - the bottom (proximal) portion of a projectile point.



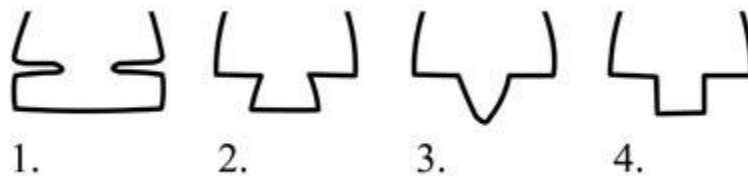
1. **Convex base**- the base protrudes proximally.
2. **Straight base**- the edge of the base is flat.
3. **Concave base**- the base is incurvate

Notch – the portion of a projectile point that has been removed on the sides, corners, or at the base of the projectile point.



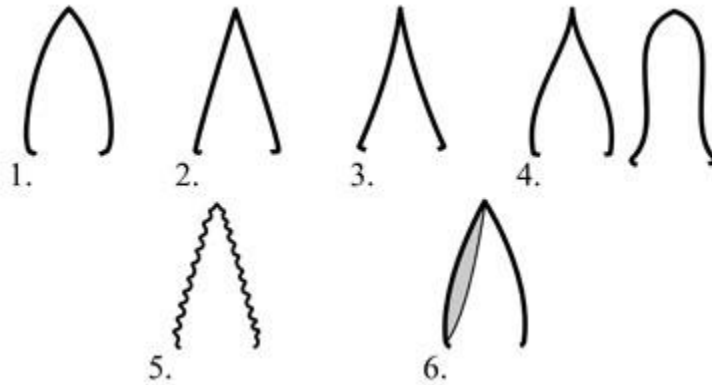
1. **Corner-notched point**- a projectile point which has been flaked where the side of the blade and the base meet.
2. **Side-notched**- a projectile point which has been flaked on the side of the blade.
3. **Unnotched point**- a projectile point which has not been notched around the hafting area.
4. **Basally-notched point**- a projectile point which has been flaked along the base of a projectile point.
- 4a. **Bifurcated** - another basally-notched projectile point which has been flaked at both corners as well as in the center of the base. Note: There are no fully bifurcated projectile points present in the Bullen Projectile Point Type Collection, but there is one type that Bullen describes as almost bifurcated.

Stem (also called **Tang**) - the basal portion of a projectile point just below the corner- or side-notched region that may be used for hafting.



1. **Expanded stem**- a stem that expands horizontally, generally as a result of side-notching.
2. **Expanding stem**- a stem that expands towards the base.
3. **Contracting stem**- a stem that converges towards the base.
4. **Straight stem**- a stem with parallel sides.

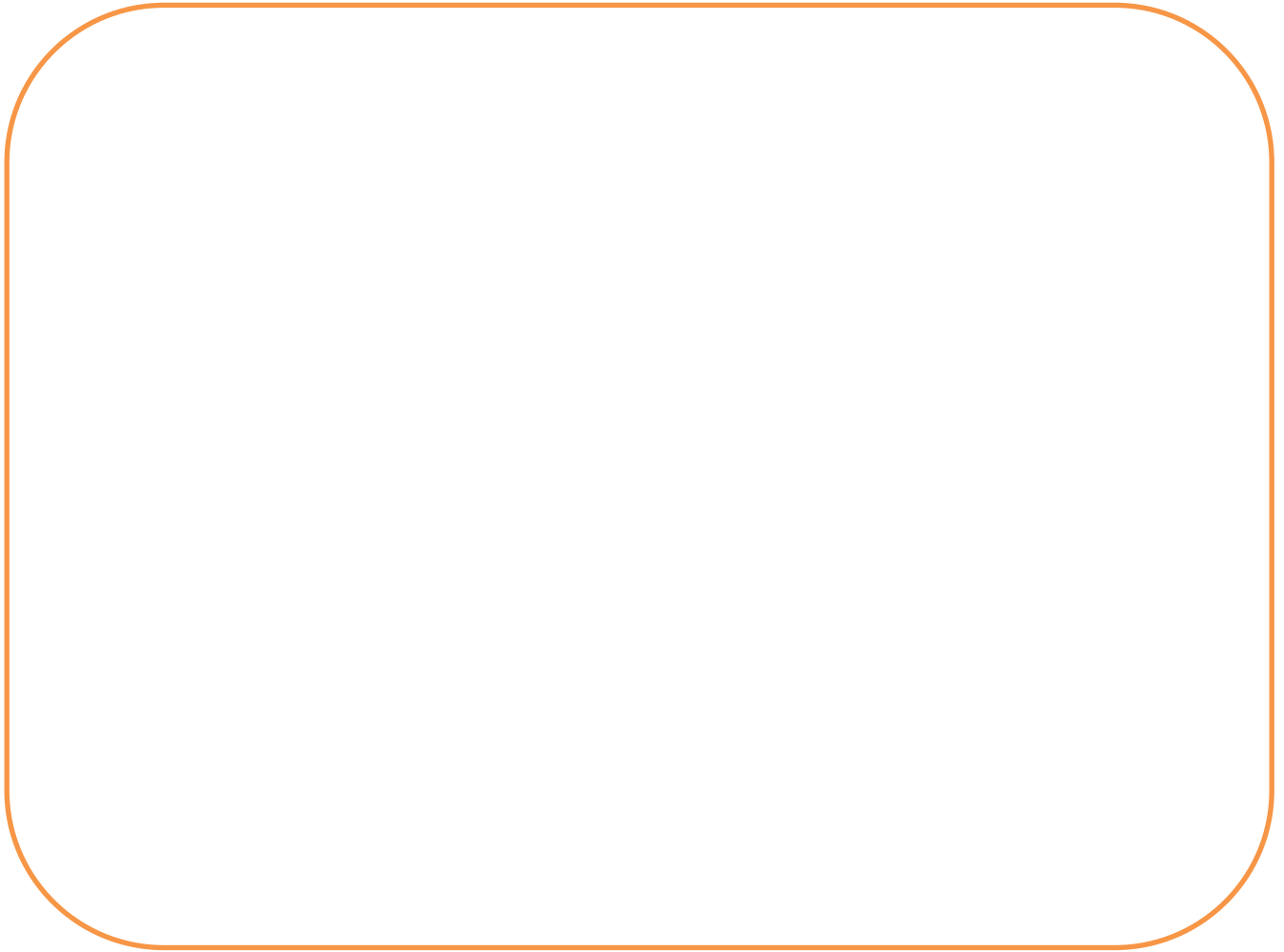
Edge - the portion of a projectile point formed by the joining of two surfaces.



1. **Excurvate edge**- a blade whose edges curve outwardly.
2. **Straight edge**- a blade whose edges are straight.
3. **Incurvate edge**- a blade whose edges curve inwardly towards the center of the body of the blade. Note: None of the Bullen Projectile Point types exhibit this trait. See Bases for an example of an incurvate basal edge.
4. **Recurvate edge**- a blade whose edges curve outwardly or inwardly from the tip of the projectile point and then curve in the opposite direction (inwardly or outwardly) as it reaches the base or corner of the blade.
5. **Serrated edge** - a blade whose edges have small flakes removed regularly resulting in a jagged, saw-like margin.
6. **Beveled edge** - a blade whose sides result from removing flakes on an angle or inclination that slopes away from either a vertical or horizontal surface.

Handout 3: Draw and Identify Point Parts

In the box provided, please select and draw one of the projectile points on display in the *People of the Waters* exhibition. Using handouts 1 and 2, please identify and label the point parts of the projectile point you selected.



Point Parts

Lesson Plan for People of the Waters Exhibit: Journey Through Time Timeline Case

Lesson Name: **What's an Artifact?**

Adapted from Classroom Archaeology: An Archaeology Activity Guide for Teachers, Third Edition
Original Lesson Plan by Nancy W. Hawkins

Grade: **Elementary**

Subject Area(s): **Social Studies**

Objectives: Students will learn what an artifact is and how archaeologists use artifacts to learn about past cultures, describe the appearance of artifacts, give possible functions of the artifacts, and suggest what the artifacts tell about the people and culture.

Standards Addressed:

Social Studies

History: B.4.1

Behavioral Science: E.4.9

Family and Consumer Science

Creativity, Critical Thinking, Communication and Collaboration: 4C1.b.2.e, 4C3.b

Materials:

- Paper
- Pencils

Activity:

1. Discuss what an artifact is and what it can show us about the people who use it. Artifacts are objects that people have made or modified. They indicate how advanced the maker's technology is and can give information about the values and practices of the people.
2. Split the students into 5 groups. Assign each group to a section of the timeline case (Paleo-Indian, Archaic, Oneota, Woodland, Fur Trade). Have students select an artifact and write a description of the appearance of the artifact.
3. Have the students assign a function to the artifact. Their theories should be logical, but may be completely untrue.
4. Have the students present to the group their artifacts and conclusions. As a group, students should draw conclusions about the culture based on all artifacts.
5. Lead a discussion about the activity. What did students learn about how archaeologists draw conclusions? How was the activity similar to the way an archaeologist works? Like archaeologists, the students described the artifacts appearance, function, and what it showed about the culture. How was the activity unlike real archeological work? They look at more than a few artifacts, compare the finding with those from other sites, know about features at the site, know the context of the artifacts, and are very conservative when they suggest artifact function and what the artifacts tell about the culture.











Lesson Plan for People of the Waters Exhibit: Early People Archaeology

Lesson Name: **Layer by Layer**

Grade: **Elementary**

Subject Area(s): **Social Studies, Science**

Objectives: In both of the modified lessons offered, students will be able to learn the basic principles and techniques of archaeological excavation along with basic archaeological terms, skills, and concepts like those displayed in the *People of the Waters* exhibition by excavating a simulated dig site. Students will be able to record their findings using the simple or complex activity sheets provided.

Standards Addressed:

Social Studies: History: B.4.1, B.4.2

Science: Science Inquiry: C.4.2, C.4.5, C.4.6

Layer Cake Archaeology:

Modified from the Archaeological Institute of America Education Department

Original Lesson Plan by Shelby Brown

Overview: Almost everyone likes cake! Digging (and eating) the layers of a cake is a fun and easy way for students to learn the basic principles and techniques of archaeological excavation. The simple cake can be designed to be completely edible, with layers filled with raisins, nuts, or candy artifacts. However, the layer cake described here uses non-edible artifacts and requires adult supervision. In this case, adults must make sure the artifacts have all been removed before anyone starts eating.

Goals: Students learn basic archaeological terms, skills, and concepts through excavating and eating a stratified cake. They use teamwork to uncover the layers, and they can observe that information is lost when layers are mixed.

Overarching goals are to:

- introduce children to the principle of stratigraphy.
- illustrate the importance of context in interpreting artifacts.
- model excavation strategies of digging horizontally, excavating one layer at a time, and leaving part of a square unexcavated until the stratigraphy has been revealed in another part.
- show how digging carelessly can mix layers and disguise chronological and cultural change.
- allow students to experience and understand that excavating an archaeological site destroys it, and afterward there is no possibility of checking information not recorded.
- show the importance of carefully recording the finds in each layer.

Although the value of careful recording in archaeology (and social science and science) cannot be overestimated, recordkeeping may need to be simplified with younger students. Students should still be asked to do some form of recording and the dig should still end with discussion of what the students observed in each layer and why it is important to dig one layer at a time.

Preparation:

- Bake three cake layers in advance, each of a different flavor and color: vanilla, strawberry, and chocolate are reasonable choices. Either pre-selected candy or non-toxic, non-melting objects may be baked directly into the layers, or (as here) toy artifacts may be added after the layers have been baked, before they are stacked to create the site. The total time needed for baking and preparing to excavate will be about one and a half hours; this does not include finding artifacts!

Materials:

The artifacts suggested here may be replaced as the teacher sees fit, depending on the availability of other objects and on an individual teacher's ideas about the history of the cake site and the story behind the artifacts. Artifacts may also be replaced with laminated images of real artifacts.

- Chocolate, vanilla, strawberry cake mix to make layers of different colors
- Square or rectangular loaf pans (to mimic the square excavation units on an archaeological site)
- Small dolls' fast food containers and plastic dishes ("Barbie" sizes)
- Tiny plastic tools; alternatively, a small plastic (Halloween) skeleton (see the Caveat, above), jelly beans, and a small toy plastic dagger or sword (possibly from a Lego set) and/or other possible burial possession, such as a tiny bowl or jug
- Small tea set of a different style and color from the plastic
- Dishes (there are many such doll tea sets of thick, durable porcelain, but the teacher must decide whether a breakable material is appropriate)
- Shopping cart refrigerator magnet
- Small metal teaspoons (excavation tools)
- A container to hold excavated cake and cake crumbs
- Small plastic bags to hold the artifacts from each layer
- Waterproof black markers to label the bags
- For the hygienically minded, disposable gloves (to keep the cake clean during excavation)
- A big plastic tablecloth to work on!
- Record sheet for each layer (a simple version only requires a list of artifacts found in each layer; a more complex version, a description and sketch of each artifact; see samples.)

Preparing the layers:

The themes and artifacts presented here are optional and should be modified by the teacher to meet classroom goals. Lay out the three cake layers on a table. Trim the tops, if necessary, to make them level. When seeding the layers with artifacts, stay a few inches away from one edge, so that a slice can be removed from the edge of the stacked layers to reveal the stratigraphy clearly prior to excavation.

Bottom layer



For the bottom layer cut a rectangular chamber* and line it with jelly bean stones and other wares (edible or non-edible) that could represent artifacts. Plug the chamber up with half the remaining cut-away cake, leaving the surface of the chamber sunken, and top it with more jellybeans to raise the height back to surface level.

*The small skeleton originally featured in the AIA lesson plan was removed for appropriateness.

Middle layer



For the middle layer create a grid of 4 smaller squares on the cake surface by laying fine string or dental floss across the top. Gently push several small porcelain dishes and cups from a tea set into different areas of the cake. To make the analysis more complicated, leave one quarter free of porcelain artifacts and fill it with small plastic dinnerware. In this scenario, two types of dinnerware were in use here, but only one will survive into the later top level.

Top layer



For the top layer create an abandoned lot by scattering doll-size fast food cartons and gently push small plastic dishes and drinking glasses into the cake.

Stack the cake in three layers. Wrap tin foil around three sides to help hold the site together during digging. Leave one side exposed and cut off a slice of cake about an inch from the edge to reveal the stratigraphy.

Class Time: Introducing essential concepts, digging, recording, discussing, and eating will take several hours.

Procedures: Introduce archaeology

The teacher should introduce the concepts of stratigraphy and stratigraphic excavation and should define archaeological terms. See AIA *Basics of Archaeology for Simulated Dig Users*.

Assign teams: Depending on class size, the students can be divided into teams of 3 or 4 who take on responsibility for part of a layer. So that everyone can participate, two or three teams might excavate different parts of one layer, the members of each team taking turns to dig the cake and (as relevant) draw the top plan, record the finds, and write down observations.

Tell the story of the site: The teacher may (depending on the artifacts chosen) invent a story about the layers and tell it either before students begin digging or after excavation has ended. Waiting until the end of digging to tell the story allows students to develop and revise hypotheses about the site as they uncover the layers. With younger ages, however, personalizing the layers by telling students the story first may encourage greater

investment in digging properly. Making the story dramatic helps. The story should directly relate to the artifacts at the site, although some materials can be described that would logically have decayed over time and disappeared.

Dig: During excavation students should be reminded to go slowly, stay within one layer, preserve finds in bags labeled with the layer number, and draw the top plan. When the layers are different colors, it is easy for students to dig only one layer at a time.

Pitfalls: Cake is messy and it is not easy to dig. Students need to be motivated to dig carefully or the lessons and rewards of stratigraphic excavation will be lost. If the layers have too many artifacts, these may become confusing and will certainly be hard to record, yet too few artifacts mean that not everyone can find something. The team members need to know that all the members of a dig team are contributing, whether they are digging or recording, finding artifacts or not, and that it is not the main goal on this (or any) dig just to “find things.” Everyone shares in uncovering and interpreting the puzzle—and eating the cake!

Assessment: It can be difficult to grade an excavation project on results, since it is acceptable to make mistakes and learn from them. The teacher can design a series of questions about the layers that students answer in teams, so that careful observers and excavators can be rewarded for their understanding of collaborative teamwork, their careful stratigraphic digging, and their attention to detail.

Summing up: The teacher should review (or tell for the first time) the story of the site. Student teams report on their observations about each layer. Ask what would have happened (or what actually did happen!) if the students were not careful excavators. After discussing the dig, students can share the crumbled cake, possibly with (or on) ice cream.

Following up: As a subsequent activity, students can be asked to design (on paper) the possible stratigraphy under their school building. They can imagine or actually research, with assistance, life at the school site before the school was built, and depict the resulting material remains in layers shown in cross section under the present day surface. Their stratigraphic drawings can range in size from notebook paper-size to the height of the classroom or hallway wall.

Transparent Shoebox Dig:

Modified from the Archaeological Institute of America Education Department

Original Lesson Plan by Shelby Brown

Overview: The shoebox dig is created in a transparent plastic box with a lid, the sort that can be bought at a department store. The teacher tells a story about two or more cultures, and the students help create the layers and deposit the artifacts representing the cultures. Since the shoebox is transparent, students can see the layers being formed and then observe the resulting stratigraphy through the sides of the box. The class can then either dig the layers or simply discuss the logic behind an archaeologist’s careful excavation of one layer at a time. The teacher should read *Basics of Archaeology for Simulated Dig Users*.

Goals: Students will learn basic archaeological terms and concepts and will create a stratified site that archaeologists will (supposedly) later dig. They will see how information is lost if layers are mixed. The dig teaches the logic of horizontal excavation, the nature of stratigraphy, and the importance of recording and preserving the context of finds. The artifacts used in our example are simple and easily obtained, and they are not representative of genuine cultures. They permit students to focus on observation and analysis and help them avoid jumping to conclusions based on cultural cues. Alternatively, teachers may choose to add culturally specific simulated artifacts, replicas, or laminated images of real artifacts to make the lesson relevant to cultures students are studying in class.

Interdisciplinary goals are to:

- help students practice transferable skills of observation, critical thinking, inquiry, and hypothesis-testing applicable to many disciplines, including science, math, social science/history, art, and English.
- permit teachers to make connections across disciplines and engage in kinesthetic learning, including excavating, presenting orally, writing, listening, and drawing (translating three dimensions into two).

- illustrate the importance of context to the meaningful interpretation of data.
- promote teamwork, sharing ideas, academic honesty, and building on the past work of others.
- show the distinction between observations (the discoveries we make) and inferences (the stories we make up).
- engage students in thinking about multiple interpretations.
- allow for design flexibility, so that teachers can meet their own classroom's needs.

Archaeological goals are to:

- introduce principles of stratigraphy and make excavation strategies (digging horizontally and excavating one layer at a time to preserve context) clear and relevant.
- show that our knowledge of the past is incomplete and illustrate how some of its gaps came to exist.
- illustrate how careless work can affect interpretation, destroy context, and disguise cultural change.
- emphasize that excavation and archaeological research are not treasure hunting, but rather ethical endeavors to restore a past culture's heritage.
- teach students how to measure, map, draw, and understand a top plan and cross section (translate three into two dimensions).
- allow students to experience and understand that excavating an archaeological site destroys it, and afterward there is no possibility of checking information not recorded.

Although record-keeping needs to be simplified with young children, they should still be asked to do some form of recording if they dig, and the dig should still end with discussion of what the students observed in each layer and why it is important to dig one layer at a time.

Preparation:

- The teacher should first read *Basics of Archaeology for Simulated Dig Users*.
- They will need to obtain one or more transparent shoe boxes, sand, dirt or potting soil, and an assortment of artifacts. The layers will be created from different soils and sand so that they can easily be distinguished. Artifacts need not be culturally specific, and they can vary depending on what is left over from earlier projects and on an individual teacher's ideas about the history of the site and the story behind the artifacts. Alternatively, the teacher may choose to have the dig focus on a specific culture. As described, this two-layer site is not associated with any genuine archaeological cultures.

Materials (for two layers):

The teacher may vary the content and complexity of the layers.

- Sand, not too fine and dusty, for a bottom layer of sand-dwellers
- Soil, not too fine (of a uniform consistency that will help make it easy to spot artifacts), for an upper layer of dirt-dwellers
- A piece of plastic or a plastic tablecloth to work on
- A pre-selected number of artifact types for each layer (perhaps 3 items of 5 types in each layer; for example, 3 green beads, 3 plastic fish, and so on, for a total of 15 artifacts in each layer)
- Sugar cubes, clay, or plastic building blocks to create features (if desired)
- A piece of plastic or a plastic tablecloth to work on

Supplies (if excavating):

- Transparent plastic shoe boxes
- Spoons (excavation tools) or miniature trowels
- Containers for excavated dirt
- Small sieves
- Small plastic bags to hold the artifacts from each layer
- Waterproof black markers to label the bags
- Pencils
- Brushes

- Clipboards
- Artifacts and/or laminated images of artifacts
- Record sheet for each layer (a simple version only requires a list of artifacts found in each layer; a more complex version, a description and sketch of each artifact; see samples provided)

Class Time: If students create but do not excavate their site, the lesson should only take a few hours, including clean-up. If students excavate, the lesson is best carried out in two stages (creation/ discussion, then excavation/discussion) over at least two days. If there is only one shoebox for the class (rather than several for groups or teams to work with) and students take turns removing only a spoonful or two of dirt at a time, even digging and clean-up should take about an hour and a half.

Procedures:

Divide students into culture groups. The teacher divides students into groups representing each layer of the dig site. Each group belongs to a culture with different characteristics. The teacher shows the students some typical artifacts of each culture (already pre-determined) and then gives them time to choose, in addition:

- 4 foods their culture likes to eat
- 3 items of clothing people wear
- 2 favorite colors
- 1 favorite animal

Introduce archaeology and the dig:

The class learns basic rules and procedures of archaeology (*Basics of Archaeology for Simulated Dig Users*)

Tell the story of the site and create the layers (Two-layer site, simple story):

The teacher tells a story about the earliest culture of beach-dwellers. For example, a group of people lived on the sand near the shore. They ate fish (represented by plastic fish) and wore purple and green beads because . . .

- Students representing the beach-dwellers take turns putting sand and small objects into the shoebox.

Then the teacher explains that sea level rose or some other change occurred, and the beach-dwellers moved away. Soil built up and new people moved in.

- Students representing the new dirt-dwelling group take turns adding soil and new artifacts.

The layers must be thick enough to be easily distinguished in cross section (and during digging, if the students will excavate; thin layers can easily be mixed together).

Dig or discuss: Afterwards, students can either dig the layers they created, or they can simply observe and discuss the stratigraphy through the side of the box.

Pitfalls: Also see "Dig Design Tips" in *Basics of Archaeology for Simulated Dig Users*.

Sand and loose potting soil can be messy and, even when they are packed down tightly, are far easier to remove than the hard soil at a real site. Students need to be motivated to dig carefully, or the lessons and rewards of stratigraphic excavation will be lost. If the layers contain too many artifacts, these may become confusing and will be difficult to record, yet too few artifacts mean that not everyone can find something. The team members need to know that all the members of a dig team are contributing, whether they are digging or recording, finding artifacts or not, and that it is not the main goal on this (or any) dig just to "find things." Everyone shares in uncovering and interpreting the puzzle that is the site.

Assessment: It can be difficult to grade an excavation project on results, since it is acceptable to make mistakes and learn from them. The teacher should design a series of questions about the layers (see below) that students answer in teams, so that careful observers and diggers can be rewarded for their understanding of collaborative teamwork, their careful stratigraphic analysis, and their attention to detail.

Summing Up: Students answer and discuss the following questions about the two-layer site described above:

- Which group lived in the area first? Which layer is the earlier layer? (In stratigraphy, each layer builds upon the last, and lower layers are earlier than the ones above.)
- What would happen if an archaeologist dug deeply and excavated dirt and sand together, instead of first removing the dirt separately, and then the sand? (The two cultures would be mixed together!) If the site will not be excavated, the teacher or a student can illustrate by digging with a spoon through both layers and bringing up dirt, sand, and artifacts to show the class.
- Why would it be better to dig each layer carefully and separate the artifacts from each layer? (To preserve the relationships between finds, keep the remains of different cultures separate, and be able to draw meaningful conclusions about them.)
- How would the students of each culture feel if their culture's remains were merged with the other culture's remains?
- What would happen to the stratigraphy if there were an earthquake?

Grand finale: One student can be selected to shake/tilt the box sideways! Even the logic of stratigraphy will cease to work in an earthquake zone.

Following up: As a subsequent activity, students can be asked to design (on paper) the possible stratigraphy under their school building. They can imagine or actually research, with assistance, life at the school site before the school was built, and depict the resulting material remains in layers shown in cross section under the present day surface. Their stratigraphic drawings can range in size from notebook paper-size to the height of the classroom or hallway wall.

In the real world, a dig ends with questions that are still unanswered and reconsideration of hypotheses that were not validated. It is important to record these questions that may be investigated by future researchers.

SAMPLE RECORD SHEET 1 (SIMPLE)

BOX # _____ TEAM # _____

Recorders' Names:

List of Artifacts in LAYER _____

List of Artifacts in LAYER _____

List of Artifacts in LAYER _____

List of Artifacts in LAYER _____

SAMPLE RECORD SHEET 2 (COMPLEX)

BOX # _____ TEAM # _____

Recorders' Names:

Layer:		Type of soil:	
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Comments:			

Layer:		Type of soil:	
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Comments:			

Layer:		Type of soil:	
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Comments:			

Layer:		Type of soil:	
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Comments:			

Layer:		Type of soil:	
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Artifact	Type/Number	Observation	Sketch
Comments:			

Basics of Archaeology for Simulated Dig Users

Shelby Brown

THE ARCHER SCHOOL FOR GIRLS

LOS ANGELES, CALIFORNIA

Archaeological excavation is conducted in a scientific manner and the process of digging and thinking about a site teaches skills of critical thinking and analysis that carry over to many different topics and disciplines. The following definitions, rules, and suggestions will help teachers explain archaeology and the goals of excavation to their students and allow them to conduct a simulated dig in a professional manner.

DEFINITIONS

Archaeology

Archaios = old, ancient *Logos* = word, study

Archaeology is a discipline, a systematic approach to uncovering the past, and a way of thinking.

Archaeologists dig up and study the physical (material) remains of people who lived long ago, including their public architecture, private houses, art, objects of daily life, trash, food, and more, to answer questions about who the people were, how they lived, what they ate, and what their lives were like.

Excavation

Archaeological excavation is digging, recording, and interpreting the physical remains of the people who lived in an area in order to understand their culture.

Site

Any place where humans left remains.

Culture

The beliefs and behavior of a group of people. These cannot be excavated; however, the material culture (the objects and structures) people leave behind give us clues to their beliefs and behavior.

Material Culture

Tangible remains of cultural behavior: the tools, houses, art, food, and other objects and structures of people who lived in the past. Remains made of *inorganic* (never living) materials, such as stone and clay, survive better than those of *organic* (once living) materials that can rot and decay, such as wood, plant fibers, and animal hides. Both survive best in dry, sealed (air-tight) environments.

Artifacts

The objects, tools, pottery, and other items people used that have survived to be found by archaeologists. Artifacts are made or modified by humans and are portable.

Features

Structures made or modified by humans, such as buildings, pits, post holes, and caves, that are not portable.

Context

The association of artifacts and features found within a particular area or layer, and the relative position and relationship of this area or layer to the ones above it and below it. The context of archaeological finds is what allows us to interpret them and understand their function and meaning.

Strata (Layers)

(stratum = layer)

Dirt, rubble from fallen buildings, and other debris that have built up in layers around the artifacts and features of past cultures. Successive strata may reflect entirely different time periods and cultures or different times within a single culture.

Older layers are on the bottom, unless an earthquake, human activity, or other catastrophic event changes their position.

HOW SITES BECOME LOST

Human theft and re-use are significant reasons why objects, art, structures, and sites disappear.

- Buried sites are seriously damaged by illegal digging, a form of theft.
- Even very large, famous monuments (the pyramids of Egypt, the Colosseum in Rome) that have been in view, unburied, for thousands of years, have suffered during the periods when they were not considered culturally important and protected. Aside from some damage by time and weather, the exterior stones of the pyramids and half the outer ring wall of the Colosseum, along with all its structural and decorative stone and metal attachments, were removed and re-used by people. On a smaller scale, vandals and graffiti also damaged the sites. Now that the monuments are tourist attractions, they are protected again by society.

Students wonder how a site can become covered over with layers of dirt.

- ✦ Think about what happens today if the trash collectors go on strike. In the ancient world there was generally no trash collection, and since foodstuffs and many of the materials people used were bio-degradable, ordinary trash could build up, decay, and turn into soil on a site even while it was inhabited. After a while, people sometimes needed to raise their floors or their entire houses above the accumulated sediment. This might happen several times, and each rise in floor level left a new layer.
- ✦ Disasters cause strata to form. If houses burn down in a fire or are damaged by an earthquake, the owners may not clear all the rubble away, but rather smooth the site over and build on top. The new houses will be located in a new layer above the layer of earlier houses. If many houses burn down, a whole city may rebuild itself on top of the fallen houses. A city that started on flat ground may end up on a hill made of earlier layers, each layer from a different time the houses burned or were re-built for other reasons. Repeated floods may similarly damage a site and cause layers to build up.

One famous ancient city in Italy, Herculaneum, was located near the volcano Mount Vesuvius. Lava and mud from the eruption of the volcano buried the city. The ashes hardened and turned to stone. Many hundreds of years later a new city was built on top of the stone, right above the old city.

- ✦ If people abandon a city (perhaps because of drought or war), the houses eventually start to fall down from neglect. People scavenge building materials, animals move in, and grass and trees start to grow over the structures. After a long, long time, the city can disappear from sight, covered by dirt and greenery.

EXCAVATION

Excavation is one way archaeologists find out about a site, but it is not the only way, and not the first way. When archaeologists dig, they always do so for a reason, and they have some information about the area that leads them to think they will find a site. They are knowledgeable about the place being excavated, and they have specific questions. They do not just look around for somewhere to dig and then go treasure-hunting. Reading stories, listening to farmers' reports, examining maps, walking the landscape to get a big picture of possible habitation, using technology such as ground-penetrating radar to peer under the ground—these and other techniques all help archaeologists figure out where and when people lived in an area.

In classroom excavations, the teacher should know the story

of the site and stress in his/her back story that there have been surface finds leading to an interest in digging the cake/shoe box/schoolyard area. Ideally, the dig will begin with examination of such finds. The teacher should design the dig with a story in mind and, after showing students the surface finds, discuss with them what kinds of inferences or hypotheses they can generate. Alternatively, the teacher may choose to start with the story to engage younger students' interest.

Excavation units

Archaeological sites are generally divided up into squares to help archaeologists record finds precisely as they dig. The small-scale digs described here are created in a square or rectangular cake pan, in a rectangular shoe box, or (in the schoolyard digs) in larger squares or rectangles dug into the ground. These mirror the shape of archaeological excavation units.

Digging with trowels

When digging, archaeologists excavate horizontally and do not dig holes. They use flat masons' trowels rather than gardening trowels, which are more like scoops, because archaeologists remove soil in flat, horizontal movements designed to expose but not scoop out artifacts. They do not remove any finds until they have noted their position and found all the objects around them that could be related in some way. Otherwise, they could miss important associations between artifacts, or they might accidentally dig through two layers and merge the artifacts from different contexts.

Since trowels do not come in small enough sizes (and can be expensive), for most of our dig lessons students use spoons, even though these are not ideal. In our dig kits we provide miniature plastic trowels when they are available. Spoons are more like gardening trowels than masons' trowels, and it can be hard to use them *without* digging holes, especially since the soil in a simulated dig is far looser than in a real site. Nevertheless, the principle of horizontal excavation should be emphasized. Since the shoebox sites are small, it is possible to pack the soil down firmly and to dig carefully, removing small spoonfuls of dirt and using proper procedures.

Numbering layers, contexts, and finds

Archaeologists record everything, and they do so far more carefully than will be possible for students, especially younger ones. Every find is recorded horizontally and vertically, and not just each layer, but also each feature and each change within the layer is also numbered separately.

In a relatively simple simulated dig, just keeping track of layers will be sufficient to make the point that preserving context is important. However, it is essential to label and bag artifacts separately, even when they come from the same layer, whenever there is something clearly different about their environment. Changes in soil texture, soil color, and finds signal a

significant difference that must be noted. A trash pit dug into a floor or a ring of stones used as a fire pit will be given their own number and the finds will be separately labeled. When excavators do not see any changes, or are not sure exactly what they are seeing, they generally make a transition to a new layer at a pre-determined, arbitrary depth, such as 10 cms. They do this to ensure that they are not accidentally mixing artifacts from different contexts.

In most cases it will not be possible or productive for teachers to enforce this level of care in recording, but they should emphasize the basic principle and require some form of record-keeping.

Noticing changes within and between layers

As they dig, archaeologists pay attention to the color, texture, hardness, composition, and even smell of the soil they remove. In the cake excavation, students will be able to note color and perhaps smell as they dig, and the layers may have texture differences as well (or texture can be added in the form of nuts and raisins). In the shoebox digs there should be differences in soil color, texture, hardness, and composition. Even the odor of a layer may be enhanced by adding herbs or ground coffee. A schoolyard dig, if composed of only one layer, can incorporate horizontal changes; for example, a "fire pit" (a circle of stones with charcoal inside) could have darker soil above or in it, perhaps darkened with ashes or dark potting soil.

When students notice a change in a layer or encounter artifacts, they should dig more slowly, removing small amounts of soil horizontally rather than digging deeper in one area. They can brush finds to expose them. As they remove spoonfuls of soil and put them into a container, they should check for small artifacts they might have missed. Ideally, they will sieve the soil as archaeologists do. Only when they have exposed all the artifacts at the same level may students remove them and bag them, labeling the bag with the specific, unique layer number.

Archaeologists generally sieve the soil they excavate, either gently shaking the dry dirt through a screen, or floating the soil in water before screening it (water-sieving) to catch small objects, seeds, and other finds missed during digging.

Top plans and record sheets

Even with very young children, the teacher should make an effort to explain the concept of a top plan (used to record the location of all artifacts in a square in every horizontal layer) and a record sheet (used to list finds, describe and possibly draw artifacts, and write comments about the objects, their context, and the layer in which they were found). The teacher should help students draw the rough location of artifacts on graph paper, and children should record to the best of their

ability the types of artifacts in each layer, possibly describing and sketching each artifact as well.

- A simple top plan for each layer can consist of a sheet of graph paper with a square or rectangle drawn on it representing the top view of the cake/shoe box/schoolyard excavation area.

Young students, who are too young to measure artifacts and plot them on a top plan, can practice with two pieces of graph paper on which the dig square is outlined. On one, the teacher sets out small pieces of candy. Students count down and across to locate the candy, and then they do the same on the other piece of graph paper to plot the point. If they plot all the candy correctly, they may be allowed eat it. The teacher can substitute raisins or small keepsake objects instead.

- Sample record sheets are included in the lessons. The record sheet may need to be varied slightly depending on the age of the students and the number of artifact types in each layer. The teacher can create his or her own record sheets based on the ones included here.

Excavation materials

- Trowels, miniature trowels, or spoons (excavation tools)
- Shoe boxes (if relevant)
- Containers for excavated dirt
- Small plastic bags to hold the artifacts from each layer
- Waterproof black markers to label the bags
- Pencils
- Brushes
- Top plans
- Record sheets
- Clipboards
- "Artifacts" and/or laminated images of artifacts
- Small sieves

Schoolyard digs of larger scale need additional supplies:

- Inexpensive masons' trowels instead of spoons
- Screens (if feasible) to check for small finds

DIG DESIGN TIPS

- Students will be able to identify the transition from one layer to the next more easily if the colors of the layers are different. Sand, dark soil, and white vermiculite can be included to create strata of varying colors and textures. Teachers can also mix in other components (coffee, sugar, herbs, birdseed) to add more variety in texture and even smell. (Caveat: additives can sometimes sift down into lower layers and confuse the diggers.)
- On a real dig, the soil becomes compacted and objects are held in place. The soil on simulated digs is generally loose,

which makes it easier for objects to be moved out of position. When creating a dig, the teacher should compress the soil layers as much as possible to mimic the harder layers on a real site.

- The teacher should know the story of the site and keep it in mind while designing the dig. The changes that occur in the artifacts from one layer to the next cannot be haphazard; they should make sense and allow students to make inferences and develop hypotheses as they dig.
- To help students analyze the dig site and test their assumptions, some surface finds should be visible to indicate the nature of the site. Alternatively, the site can be imagined as already partially uncovered. Some finds may even seem contradictory. Before students begin to dig, they should discuss what they expect to discover based on the finds. Then, as they excavate, they can revise their ideas and reinterpret.
- Preserving the context of finds is important, not just for comparing the finds from one layer to the next, but also for identifying artifacts associated meaningfully within a layer. Ideally, artifacts that are separated but belong together can be included in some of the simulated dig layers. Students will see how careful, horizontal digging and brushing expose the full context and clarify the connection between finds. For example, a pot's shape or design may only be recognizable once all the pieces have been found, or its function only understood once the spilled contents have been excavated.
- Recording and measuring are essential. Even very young children should attempt to record and draw the site and finds as well as they can.

START AND END WITH QUESTIONS

Start by asking what conclusions students draw from the surface finds. *What do they expect to find as they dig? What questions do they have?*

What do students think they might notice about the artifacts in different layers that would suggest a change within the same culture rather than a change to a different culture?

Students can be guided to think of an answer using artifacts relevant to their grade level.

- A change in Game Boy typology or skirt styles might show a change within one culture, or the frequency of appearance of certain song titles might increase or decrease.

What might suggest a completely different culture?

A change to different, all-new artifacts between one layer and the next might show a more sweeping change in people or culture. The language of written documents might change, for example. Evidence of violence followed by new types of artifacts might reveal cultural changes associated with war. The following AIA lesson plans reinforce the importance of noticing changes.

- In the **Layer Cake Archaeology** project, students will see a site in transition: from a bottom layer containing a work area (or a burial ground, if appropriate), to a middle layer where artifacts from the daily life of two contemporary cultures were preserved, to an upper level containing objects from the one culture that survived, topped off with a modern trash dump on the surface.
- In the **Transparent Shoebox** and **Shoebox Digs**, a change in the material culture of different groups with different interests is shown through changes in food and artifacts.
- In the **Schoolyard Dig**, the teacher will have the greatest opportunity to develop a complex site and “back story” in just one layer. One-layer sites are more than sufficient for teaching the importance of digging carefully and preserving artifacts’ relationships to the objects around them. One realistic way to do this is to place related objects near one another (such as a bowl and a spoon, or the beads of a necklace). Another is to break something (a pot with an image that cannot be fully understood if pieces are missing, for example) and scatter the pieces in the same area. If a two-layer site is possible, cultural change can be indicated in a wide variety of ways, including a change in ceramic style from one pot type in one layer to a variation or a totally different type in the next.

SUMMING UP AND THINKING AHEAD

Digs hardly ever answer all the questions the archaeologists had in mind. They generally lead to further questions that the excavators hope will be answered by additional digging at this or other sites. At the end of excavation, the class should summarize the questions students have answered. *What new questions have come up? What kinds of evidence would students expect to find if they continued to dig in this area?*

At this point the teacher can tell the story of the site if it has not yet been revealed. S/he should point out how unlikely it is that in a real-world situation the archaeologists would learn the story of the site the way their teacher can tell it to the students!

Lesson Plan for People of the Waters Exhibit: Early People Archaeology

Lesson Name: **Dig Site Sketch**

Grade: **Elementary**

Subjects: **Art, Social Studies**

Objectives: Students will learn how archaeologists dig and record their findings. Students will observe the excavation site in the *People of the Waters* gallery and draw objects in their correct locations on a sketch map.

Standard Addressed:

Social Studies

Geography: A.4.1, A.4.4

Behavioral Science: E.4.9

Art and Design

Making Connections: K.4.4

Visual Thinking: H.4.2, H.4.4

Materials:

- Excavation sketch map handout
- Pencils

Activity:

1. Explain to the students how archaeologists carefully dig layers in the soil and use grid lines to organize where they dig. Point out some of the tools that they use in the field and the kinds of objects and features they may find.
2. Break the students into small groups and have them take turns observing the excavation site in the gallery. Have each student pick a small section of the site to draw. Students should fill out the grid coordinates of their square and draw in the objects and features that they see.
3. When done, have the groups try and find each other's objects in the excavation site based on their sketch maps.

Extension activity: Have students write a report on their sketch. Have them include what the objects are and what that might tell us about the people who lived there.

**Excavation Record Report
Sketch Map**

Page _____ of _____ pages

Site Name: _____

Site Number: _____ Excavation Block: _____

Excavation Unit: _____ Level / Zone / Stratum: _____

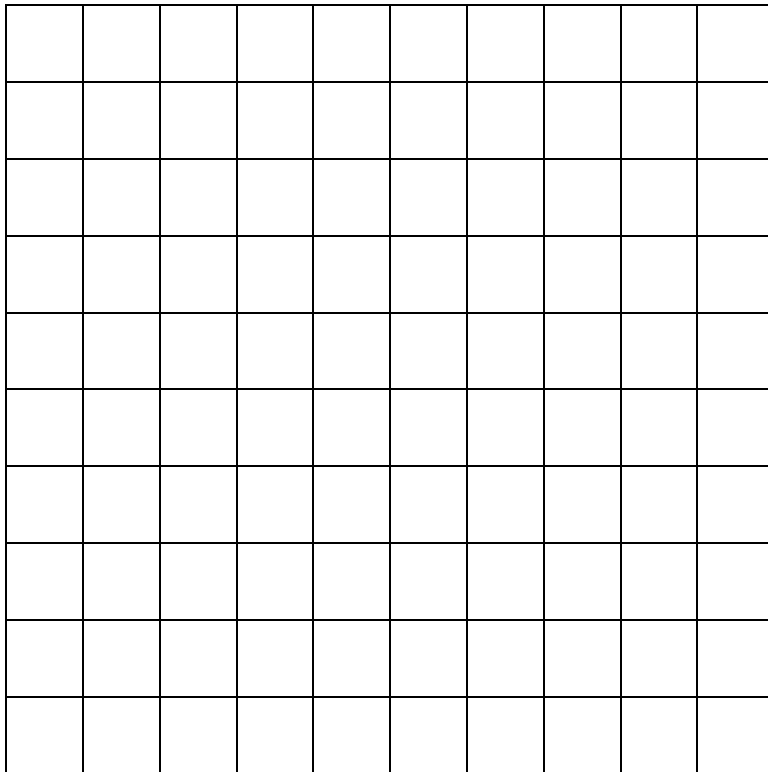
Purpose of Map: _____

N _____

N _____

E _____

E _____



N _____

N _____

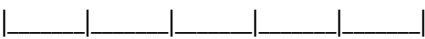
E _____

E _____



Grid North

magnetic azimuth: _____

centimeters:  (scale: 1 cm = 10 cm)

Note: Be sure to include the following information:

- coordinates of the unit's corners using the blanks provided.
- location of elevation measurements (if taken).
- slope arrow(s) and slope measurement(s).
- a key to all symbols used in mapping.
- Munsell color and U.S.D.A. soil texture descriptions.
- any necessary comments or explanations for this sketch map.

Recorded by: _____ Date Recorded: _____

Supervisor's Approval: _____ Date Approved: _____

Lesson Plan for People of the Waters Exhibit: Early People Longhouse

Lesson Name: **Culture and Customs**

Grade: **Elementary**

Subject Area(s): **English Language Arts, Social Studies**

Objectives: Students will observe and learn about their cultural customs and behaviors, those of their classmates, and the American Indians that live(d) in this region.

Standards Addressed:

English Language Arts

Reading: RI.4.7

Writing: W.4.1, W.4.2, W.4.3

Speaking and Listening: SL.4.4

Social Studies

History: B.4.1, B.4.10

Behavioral Science: E.4.2, E.4.3, E.4.9, E.4.11, E.4.13, E.4.14

Materials: Handouts

- Family Culture Observation Form
- Longhouse Culture Observation Form
- Aspects of Culture

Extension Activities: Autobiographical Art Project

- Have students make small handmade book, collage, or poster including photos (or copies of photos) and other memorabilia relating to their family culture and its history.

Activity One: *What Is Culture?*

1. Ask students what they think culture is. Record their ideas on a large sheet of paper. Use the Handout "Aspects of Culture" to spur additional ideas.
2. Give students the Definition of Culture and then solicit additional ideas for the brainstorm list.

Definition of Culture

- Culture consists of all the different things that identify you and where you come from. These include race, ethnicity, religion, country or city, languages, age and financial status.
- Culture means all these things -- all the ways people live together and define themselves.
- We each participate in family, community, economic, linguistic (language) and religious cultures based on who we are and the people with whom we associate.
- Culture is learned and transmitted from one generation to another. Children learn their culture from their families and their various communities.

Activity Two: *Observe Culture*

The purpose of this activity is to help students become observers of their family cultures that is familiar and unfamiliar.

1. For Homework, have students write out a report answering the questions on Handout "Family Observation Form".
2. Based on the list the students developed during the "What is Culture?" exercise, have them identify aspects of culture on display in the Longhouse. They can do this on their own or in groups designated by the teacher. They can record their findings on the handout provided.
3. Have the students or groups present their observations to the class.
4. Point out similarities and differences in their observations and discuss possible reasons for the differences.

Handout: Family Culture Observation Form

Family Members: Who lives in your family?

Birth: Where were you born? Your parents? Grandparents?

Communications: What language(s) do you speak at home? What language(s) do your parents/grandparents speak?

Shelter: What is your home like?

Religion/Beliefs/Rituals: What religion, if any, do you practice? What religious beliefs do you have? Do you go to a special place to observe religious holidays? How else do you show your religious beliefs?

Holidays: What holidays do you celebrate? How do you celebrate each holiday?

Economics/Jobs: What jobs do people in your family do at home? What jobs do people in your family do outside the home?

Clothing: What kinds of clothes do the members of your family wear? What kinds of clothes do members of your family wear for special occasions or religious holidays? How or where do you get special clothes, if you wear them?

Food: What foods do you eat at home? What foods did your parents eat as children?

Recreation: What activities do your family members participate in together?

Art: What kind of art or decoration is there around your house, if any? What arts do people in your family practice (for example, music, painting, dance)?

Handout: Longhouse Culture Observation Form

Cultural Aspect	Observe and Explain

Handout: Aspects of Culture

Culture is...

- Customs
- Beliefs
- Way of Life
- How People Live
- Religion
- Ethnicity/Race
- Language
- Gender
- Age group
- Sports
- Membership in clubs and other groups
- Hobbies
- City/State/Country
- Holidays
- Material Goods
- Traditions
- Food/Drink/Eating Customs
- Immigration
- Calendar
- Agriculture
- Dress
- Rites of Passage
- Rituals
- Transportation
- Written Information (for example, books, sacred texts)
- Unwritten Information (for example, sayings, stories, jokes)
- Family Unit
- Economy/Money
- Education
- Entertainment (for example, music)
- Art

Lesson Plan for People of the Waters Exhibit: Early People Longhouse

Lesson Name: **Comparing Houses**

Grade: **Elementary**

Subject Area(s): **Social Studies, English Language Arts**

Objectives: Students will compare and contrast features and objects in the Oneota longhouse to their own homes, then write a story about living in the longhouse featuring at least 3 objects.

Standards Addressed:

Social Studies

Behavioral Science: E.4.3

English Language Arts

Writing: W.4.3

Materials:

- Handout
- Paper
- Pencils

Activity:

1. Have the students explore the Oneota longhouse in the *People of the Waters* gallery. Have them take note of what objects are in the longhouse. (Buffalo and elk hides, jars, benches, fire pit, bags, bowls, bone scrapers, hoe, shell spoons, corn, wild rice, turtle shell bowl, bow)
2. Either on their own or with the whole class, have the students fill out the worksheet, comparing and contrasting the objects found in the longhouse to similar objects in their own home.
3. Have the students write a story from the perspective of an American Indian living in the longhouse, featuring at least three of the objects they found.

Extension activity: Explain to the students the importance of storytelling to American Indians. Split the students into groups and have students read their story to the group.

Longhouse, Comparing Houses Worksheet

Longhouse Object	My House Object	What is the same? Compare	What is different? Contrast

Lesson Plan for People of the Waters Exhibit: Early People Natural Resources

Lesson Name: **Natural Living**

Grade: **Elementary**

Subject Area(s): **Social Studies, Science**

Objectives: Students will be able to define what a natural resource is. Students will be able to identify what natural resources the Native Americans in this region used and understand their importance to daily life. Students will observe and identify the use of natural resources in their daily life.

Standards Addressed:

Social Studies

Geography: A.4.4

History: B.4.1, B.4.10

Behavioral Science: E.4.13

Science

Physical Science: D.4.2

Earth and Space Science: E.4.1, E.4.7, E.4.8

Life and Environmental Science: F.4.1, F.4.4

Materials: Worksheets

- Plant Resources
- Soil/Rocks/Minerals Resources
- Sunlight/Air/Water Resources
- Animal Resources
- Natural Resources in My Life

Activity:

1. Before visiting the Museum, explain to the class what a natural resource is along with a few common examples (see Key Term with Introduction and Examples).
2. Divide students into four groups, each representing one of the four natural resources listed, and assign them to complete their natural resource worksheet using the *People of the Waters* exhibits.
3. Afterwards, each group should present their findings to the other groups. For homework, have each student complete a "Natural Resources in My Life" worksheet to hand in to the teacher or present their observations to the class.

Introduction:

- Using the Key Term, explain to the students what natural resources are and that humans depend on them to make the things we need. Ask the students to list what the Earth's natural resources are and list their responses on the board. You can bring in some visual examples (see example lists below). It may also be helpful to go outside to get more ideas. You should end up with a list that includes the following items: plants, animals, soil/rocks/minerals, and sunlight/water/air. This way, students are fully prepared to conduct the identification activity in the People of the Waters Exhibition and at home.

Key Term: Natural Resource

- A natural resource is something that is found in nature and can be used by people. Earth's natural resources include light, air, water, plants, animals, soil, stone, and minerals.

Natural Resources Examples

Plants	Animals	Soil/Rocks/ Minerals	Water/Air/Light
Cotton t-shirt	Leather shoes	Bricks	Beverages
Flour	Wool Sweater	Glass window	Oxygen
Paper towels	Hamburger	Soda Can	Lakes and Rivers
Basket	Feather pillow	Car	Home for animals
Book	Ice cream	Coins	Solar Power
Apple	Fish	Driveway	Vitamins
Wood table	Honey	Jewelry	Wind Power
Rice	Leather baseball	Pottery	Pollinates plants
Popcorn	Travel (horse)	Grows Plants	Recreation

Plant Resources Worksheet

Plants are a natural resource that people and animals use. Write down and explain five examples of plant resources you see on display in *People of the Waters* by answering the questions listed below.

What is it?	How was it used?

Bonus Observation: Is there anything on your list that can be connected to other natural resources? How?

Soil/Rocks/Minerals Resources Worksheet

Soil, rocks and minerals are a natural resources that people and animals use. Write down and explain five examples of these resources you see on display in *People of the Waters* by answering the questions listed below.

What is it?	How was it used?

Bonus Observation: Is there anything on your list that can be connected to other natural resources? How?

Sunlight/Air/Water Resources Worksheet

Sunlight, air and water are a natural resources that people and animals use. Write down and explain five examples of these resources you see on display in *People of the Waters* by answering the questions listed below.

What is it?	How was it used?

Bonus Observation: Is there anything on your list that can be connected to other natural resources? How?

Animal Resources Worksheet

Animals are a natural resource that people use. Write down and explain five examples of animal resources you see on display in *People of the Waters* by answering the questions listed below.

What is it?	How was it used?

Bonus Observation: Is there anything on your list that can be connected to other natural resources? How?

Natural Resources in My Life

You use natural resources in many ways every day. Write down and explain examples of resources you use in your daily life by answering the questions listed below. Try to list at least one example of each resource (Plants, Soil/Rocks/Minerals, Sunlight/Air/Water, and Animals).

What is it? What natural resource is it using?	How do you use it in your life?

Bonus Observation: Is there anything on your list that can be connected to other natural resources? How?

Lesson Plan for People of the Waters Exhibit: Early People Natural Resources

Lesson Name: **Natural Resources Hunt**

Grade: **Elementary**

Subjects: **Environmental Education, Agriculture, Food and Natural Resources**

Objectives: Students will learn about the natural resources found in the region. Students will explore the *People of the Waters* gallery, identifying objects that were made with natural resources.

Standards:

Environmental Education

Questioning and Analysis: A.4.2

Knowledge of Environmental Resources and Systems: B.4.8

Agriculture, Food and Natural Resources

Animal Systems: AS1.a.2.e, AS4.a.1.e

Natural Resources: NR1.a.1.e, NR3.a.3.e

Plant Systems: PS1.a.1.e

Materials:

- Worksheet
- Pencils

Activity:

1. Explain to the students about the types of natural resources found in this area and their importance to early peoples. The rivers provided transportation, fish, and rice. Trees and reeds could be made into mats, baskets, shelter and canoes. Animals provided bones, leather and fur for clothing, tools, and blankets. Soil was cultivated, and plants provided medicine.
2. Students will explore the gallery and fill out the worksheet. They must find an item in each category to draw and answer questions about it. The four categories include water, soil and rock, animal, and plant and tree.

--

Water

What is this object?
What is it made from?
How does its creation affect the natural resource?

--

Soil and Rocks

What is this object?
What is it made from?
How does its creation affect the natural resource?

--

Animal

What is this object?
What is it made from?
How does its creation affect the natural resource?

--

Plants and Trees

What is this object?
What is it made from?
How does its creation affect the natural resource?

Lesson Plan for People of the Waters Exhibit: Early People Natural Resources

Lesson Name: **Traveling Fish**

Grade: **Elementary**

Subject Area(s): **Agriculture, Food, Natural Resources; Science; Science & Engineering;
Science Inquiry; Social Studies**

Objectives: The purpose of this activity is to use the Natural Resources Display in the *People of the Waters* exhibition to understand sturgeon's impact on Wisconsin culture and ecology. Students will be able to explain what sturgeon look like, their body structure and function, where they live, how they travel, and how they are important to the American Indians of Wisconsin.

Standards Addressed:

WI DPI: Agriculture, Food, and Natural Resources

- Animal Systems: AS2.a.1.e, AS5.a.1.e
- Environmental Service Systems: ESS2.d.1.e
- Natural Resources: NR1.a.1.e, NR1.b.4.e, NR2.a.3.e, NR3.a.2.e,

Science

- Science Connections: A.4.2
- Science Inquiry: C.4.1, C.4.6, C.4.8

Social Studies

- Geography: A.4.4, A.4.6
- History: B.4.10

OASD:

Science

- Science & Engineering Practices: SEP.2: (4), SEP.6: (4)
- Earth & Space Science: ESS2.E: (4), ESS2.A: (4),

Social Studies

- Geography: 1, 2, 4
- History: 8

Materials:

- Projector
- Overhead projector markers
- Map of Wisconsin Waterways (attached)
- Highlighters
- Pencils
- Classroom television with access to YouTube

Activity:

Before Coming to the Museum:

Sturgeon have been on the Earth for more than 130 million years (Schmitt Kline, Bruch, and Binkowski, 2009; WI DNR, 2012), and they lived alongside dinosaurs and glaciers. While the glaciers melted into lakes, new home for the fish were created in Wisconsin's waterways. In Wisconsin, two species of sturgeon still exist; the lake sturgeon and the shovelnose sturgeon. This exercise will focus on Lake Sturgeon.

Project the below image for all students to see. What characteristics do you see when looking at the Lake Sturgeon?

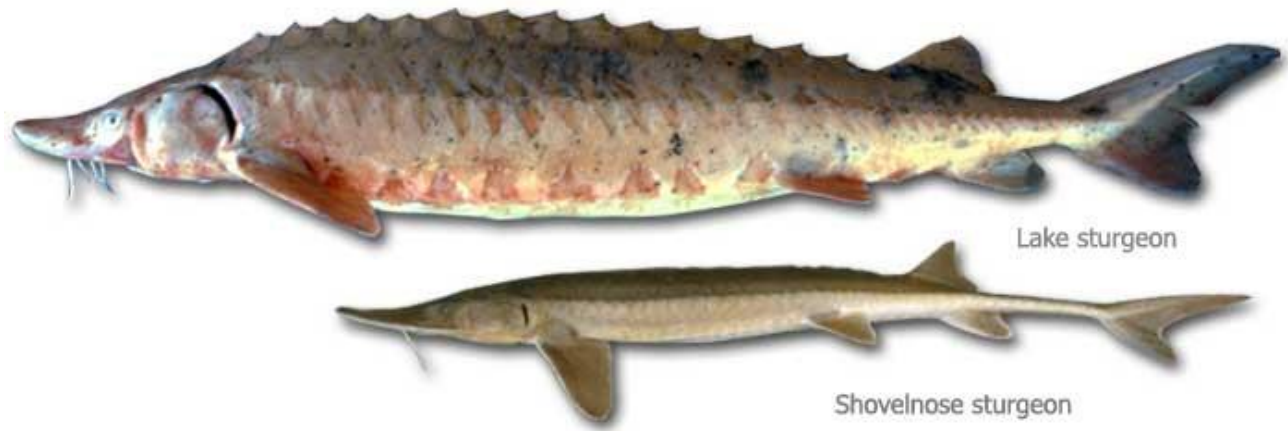


Image of sturgeon (WI DNR, 2012).

Lake Sturgeon anatomy has not changed in the millions of years they have been on Earth. When they existed alongside dinosaurs, their bodies were the same as they are today. With this body, sturgeon have survived glaciers, whatever killed off the dinosaurs, and humans (fishing and pollution).

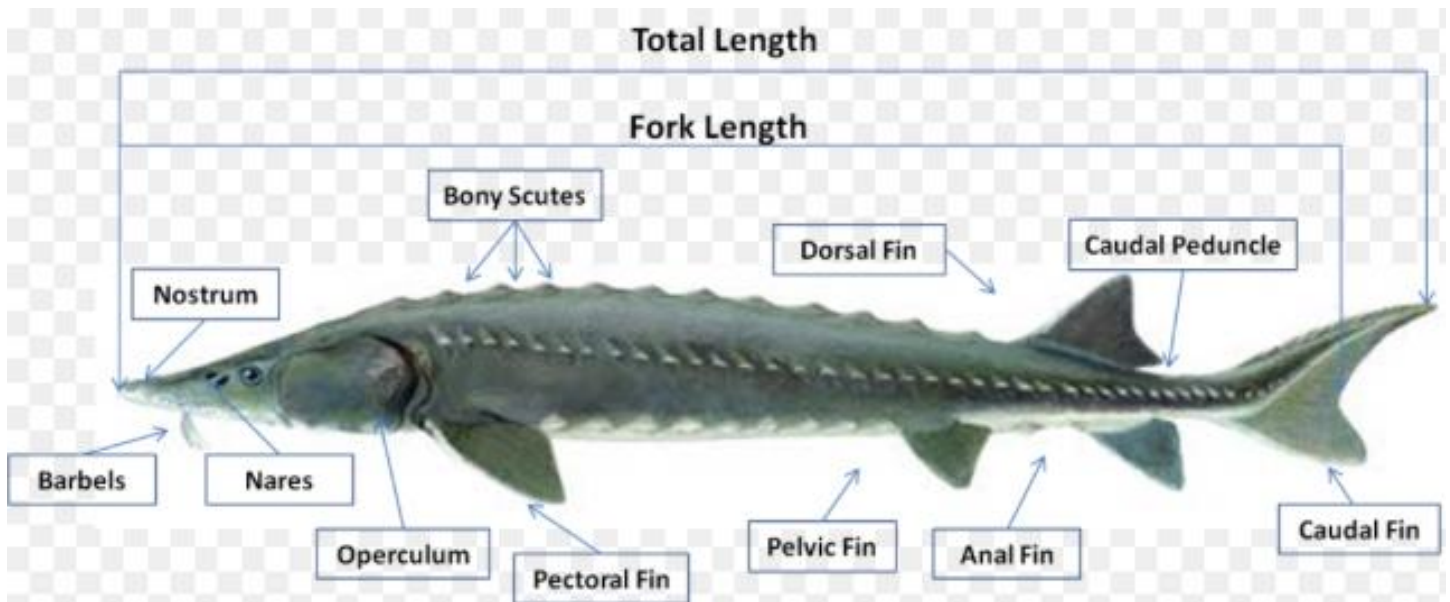


Image of Lake Sturgeon physical characteristics (Michigan State University, 2017).

Vocabulary:

- Anal fin: used for stability
- Barbels: feelers used to help detect food
- Caudal fin: tail fins help sturgeon move forward, but do not allow them to move backwards
- Dorsal fin: keeps the Lake Sturgeon upright, and helps prevent the body from tipping or rolling over
- Notochord: a flexible cartilage-encased rod that replaces a backbone
- Pectoral fin: helps to keep the Lake Sturgeon from sinking and also helps with steering
- Pelvic fin: help prevent the fish from rolling to the left and right
- Scutes: armor-like layer that protects the Lake Sturgeon

The anatomy of the sturgeon includes (WI DNR, 2012)

- a long body that is thicker toward the mouth and skinnier toward the tail
- many different colors, although Lake Sturgeon in Wisconsin tend to be gray, olive-brown, or black and a milky, yellow-white underside. Younger Lake Sturgeon are usually lighter in color
- a shark-like **caudal fin**, with the upper lobe longer than the lower lobe
- a **notochord** that runs the entire length of the body. Most fish today have a backbone with vertebrae
- **scutes** that are pointy and sharp when the Lake Sturgeon is young, and smooth-out as they age. **Scutes** on Lake Sturgeon are a physical characteristic that has been part of their biology since the time of the dinosaurs. Other fish scales have evolved into smaller, more flexible versions.

- four **barbels** on the lower side of their snout. The **barbels** can sense food at the bottom of the water as the Lake Sturgeon skim through
- no teeth, but a protruding mouth and lips to suck up their food



Close-up image of scutes (WI DNR, 2012).

Ask the students:

- Why do they think Lake Sturgeon bodies stayed the same after more than 130 million years while other animals and fish evolved?
- Are scutes better or worse than scales?
- Are the shark-like fins good or bad for a Lake Sturgeon?

Now, project the attached Map of Wisconsin Waterways so that all students can see, and give each student a paper copy of the map, highlighters, and a pencil. Explain that the Great Lakes were formed from glaciers.

Ask them to find Lake Winnebago, Lake Michigan, Lake Poygan, Oshkosh, and Winnebago County on the map. Using a pencil, write-in where Oshkosh is. If they live in another city, allow them to also find where their home town is and county, if other than Winnebago. Ask them to find the Menominee, Wolf, St. Croix, Namekagon, Chippewa, and Flambeau rivers on the map. Color the cities they find in green, counties in yellow, and waterways in blue.

Identify that all of these waterways that are shaded in blue are where Lake Sturgeon live. Ask the students:

- Where do you think the rivers begin?
- Where do the rivers end?
- How do you think the sturgeon travel through Wisconsin?

While at the Museum:

Ask the students to bring pencils and their maps of Wisconsin with the cities, counties, and waterways shaded-in.

Gather around the Natural Resources Display in the *People of the Waters* exhibition. Allow students time to view the Multi-touch Interactive Program, and see the Lake Winnebago Region surrounding Oshkosh. Before beginning, allow them time to interact with the Touch Table and Equipment. Watch the AV Program, and identify that Lake Winnebago is home to the largest self-sustaining sturgeon population in North America.

Next move onto the Living Cultures Display, and review the Graphic Band Collage with Interpretive Content. Using the map and its legend, ask the students to write on their map (with pencil) the Wisconsin American Indian nations and tribes that are near their shaded locations.

Ask the students if they see any connections?

While back in the Classroom:

Reservation locations are not ideal, and the Wisconsin Tribes and Nations had very little say in where the reservations could be located. The Menominee Nation asked for their reservation location, because the Wolf River runs through it. Historically, Menominee have always lived near water and sturgeon (Schmitt Kline et al., 2009). The Menominee paid close attention to the Lake Sturgeon's life cycle. The ancestral spawning grounds were in Keshena Falls. Ask the students to find Keshena Falls, which is now part of the Nicolet National Forest, on their maps.

Aside from the food provided by Lake Sturgeon, Keshena Falls' spawning location has spiritual significance. "Even today, it is said that when the spring meltwaters rise in the Wolf River and cascade over the rock cataract, the Manitou who inhabits the falls plays his drum to call the sturgeon to the spawning grounds. Now every spring at the annual Menominee

Sturgeon Feast and Celebration Powwow, drums and dancers echo the story, as more than five hundred people celebrate the return of sturgeon to the Menominee Tribe," (Schmitt Kline et al., 2009, pg 188-189).

Watch the following YouTube video, *The Sturgeon Moon* by Alex Zacarias <https://youtu.be/20fumpO-K5U>

Using their maps and what they learned from the YouTube video, ask the students the following questions:

- Why would the American Indian Tribes and Nations live near the same waterways as Lake Sturgeon?
- How do the students think Lake Sturgeon could be important to American Indians in Wisconsin?
- Why are natural resources, like Lake Sturgeon, so important?
- Considering their current location away from their ancestral homes, ask the students to reflect on why they think the "Menominee Nation celebrates the return of sturgeon to the Menominee Tribe."

Extension Activities:

For ELL, auditory, and visual learners, pictures can be included on the instructions, and the teacher or teacher's assistant can read the instructions to them.

A teacher could perform the exercise while the class watches, rather than asking each group to follow the instructions independently.

References:

Geoscience News and Information. (2017). *Wisconsin lakes, rivers, and water resources*. Retrieved from <http://geology.com/lakes-rivers-water/wisconsin.shtml>

Michigan State University. (2017). Lake sturgeon and coupled Great Lakes – Tributary ecosystems. *Long-term Ecological Research – Cheboygan River, MI*. Retrieved from <http://www.glsturgeon.fw.msu.edu/sturgeon/phylogenetics>

Schmitt Kline, K., Bruch, R. M., Binkowski, F. P. (2009). *People of the Sturgeon. Wisconsin's Love Affair with an Ancient Fish*. Madison, WI: Wisconsin Historical Society Press.

Wisconsin Department of Natural Resources. (2012). *Fishes of Wisconsin: Lake and shovel nose sturgeon*. Retrieved from <http://dnr.wi.gov/topic/fishing/sturgeon/>.

Zacarias, A. (2013). Sturgeon Moon The Story. *YouTube*. Retrieved from <https://youtu.be/20fumpO-K5U>.

Map of Wisconsin Waterways



Lake Sturgeon are a threatened species in much of the United States. In Wisconsin, we can find Lake Sturgeon in the Menominee, Wolf, St. Croix, Namekagon, Chippewa, and Flambeau rivers, and Lakes Poygan, Winnebago, and Wisconsin. It is very rare to see a Lake Sturgeon in the Wisconsin and Mississippi Rivers, Madison lakes, and Lakes Michigan and Superior. On this map, highlight all of these areas where Lake Sturgeon live.

Lesson Plan for People of the Waters Exhibit: Early People Natural Resources

Lesson Name: **Subsistence**

Grade: **Elementary**

Subject Area(s): **Social Studies**

Objectives: The purpose of this activity is to understand the importance of subsistence to the American Indian peoples of Wisconsin using the Natural Resources Display in the *People of the Waters* exhibition. Students will be able to explain the importance of natural resources and seasonal activities to the culture and lifestyle of Early Peoples, understand the important aspects of subsistence culture, and an appreciation for the family structure in the context of seasonal work.

Standards Addressed:

Social Studies

Geography: A.4.4, A.4.6

History: B.4.1, B.4.2, B.4.3, B.4.4

Political Science and Citizenship: C.4.1

Behavioral Sciences: E.4.3, E.4.4, E.4.13, E.4.15

Materials:

- Poster board
- Paper
- Pencils
- Crayons
- Markers
- Colored paper
- Scissors

Activity:

Before Coming to the Museum:

See "Forward" and Chapter 1 in Satz, Ronald N. *Chippewa Treaty Rights: The Reserved Rights of Wisconsin's Chippewa Indians in Historical Perspective*. Madison: Wisconsin Academy of Science, Arts and Letters, 1991.

Subsistence activities are important in the context of culture and survival for American Indians in the state of Wisconsin. Tools, food, toys, and clothing have been created from natural resources found in the Wisconsin wilderness, including from animal bones. Subsistence activities are often seasonal, and important to the American Indian people and their families for both survival and tradition.

While at the Museum:

Gather around the Natural Resources Display in the *People of the Waters* exhibition. Allow students time to visit the Reading Rail and Deer Skeleton interactive. Ask the students to carefully read the text in the Reading Rail and interact with the "Touch a Tool" to see which tools were made using deer bones. Also, provide students with time to look at the Elk Skull and Bone Tools artifacts.

Continue on to view the food storage reviewing the Oneota pottery painting, and open the flip door with the hidden food cache. Read the Bounty of the Land and Water interpretive panel to discuss what early people ate, ancient farming, and using stone and copper tools.

Discuss what types of activities the tools and artifacts may have been used for. Review with students the importance of activities, and how some activities may be seasonal and why.

Back in the Classroom:

Discuss what subsistence means to the students after gaining a perspective from the museum and text, and how the natural environment directly supports survival. Early peoples harvested, gathered, hunted, and trapped a variety of foods. Each member of the family participates in subsistence activities, and those activities often revolved around the four seasons of the year. Living off of the natural environment has become a continued tradition and lifestyle for American Indian peoples today.

In small groups, ask the students to create a "day in the life" description of Early Peoples their own age in each of the four seasons of the year. Allow them to be as creative as they'd like by drawing or charting or writing a timeline on a large piece of poster board. Remind them that Early Peoples did not rely on clocks or calendars. Ask the students to present their creations and walk through a "day in the life" of their Early Person.

Finally, ask the students to reflect and journal about what they've learned related to their own lives. Questions to ask include:

- How is your life affected by the changing seasons compared to how an Early Person's life was affected?
- How might you respond differently to a snow day, rainy day, or hot summer day than they would?
- What are some differences between your lifestyle and an Early Person's lifestyle?
- What similarities are there between your family's division of work to that of Early Family's division of work?
- How is your lifestyle similar?
- How would your life be different if you were more closely involved in these types of activities and experiences?

Extension Activities:

For ELL, auditory, and visual learners, pictures can be included on the instructions, and the teacher or teacher's assistant can read the instructions to them.

A teacher could perform the exercise while the class watches, rather than asking each group to follow the instructions independently.

Treaties and Treaty Making - Objectives

The purpose of this extension activity is to understand the importance of treaties to the American Indian peoples of Wisconsin using the Natural Resources Display in the *People of the Waters* exhibition. Students will be able to understand that treaties are contracts between nations, some of the difficulties inherent in treaty making, and the importance of mutual understanding in treaty making.

Standards Addressed:

Social Studies: History: B.4.5, B.4.9, B.4.10

Materials:

- A project attached to a computer
- Handout of the Treaty with the Chippewa, 1837 (available at <http://www.glifwc.org/TreatyRights/TreatyChippewa07291837Web.pdf>) note highlighted section at the end of the document
- Blank Copy of a Treaty
- Whiteboard
- Dry erase markers
- Pencils

Activity:

After completing the above activity, and paying special attention to the deer, watch *Hunting Deer: Sharing the Harvest* (<http://theways.org/story/hunting-deer>).

Explain to the class that “a treaty is a formal and binding agreement between two nations and, according to the Constitution of the United States, treaties entered into by the United States are part of ‘the supreme Law of the Land.’ For negotiations to take place fairly, both parties must give their consent to the agreement at hand and should fully understand all aspects of the agreement.

“Land ownership can be recognized through a formal title or a deed to the land or property or, as in the case of Wisconsin’s Chippewas, can be recognized in a treaty with the federal government...When the Chippewas ceded land to the United States, they chose to retain certain rights to that land, or property; those reserved rights included hunting, fishing, and gathering” (Satz, 2017, pp 8).

Divide the class into two groups of very unequal size.

Explain to the larger group that the smaller group owns the playground, and the larger group wants to negotiate to purchase the playground land and equipment (the whole thing). Allow them to discuss amongst themselves what this means.

Tell the smaller group that they own the playground, they are not willing to sell the entire thing, and will only allow the larger group to *use* the playground. Allow them to discuss amongst themselves what this means.

Choose one negotiator and one note-taker from each group.

With the two groups separated by distance in the classroom, ask the note-takers to draw the playground together on the whiteboard. Allow group members to notify their negotiator of missing or forgotten equipment. Negotiators may interject as they see inaccuracies while the two note-takers agree on the playground map.

Provide each student with a copy of the Treaty with the Chippewa, 1837. Allow the negotiators to discuss each group’s provisions, payment types, or terms of sale. Have the two groups create one treaty that resembles the Treaty with the Chippewa, 1837.

After a final treaty is agreed upon by both sides, ask all students to sign the agreement, and then witness each other signing the agreement. Discuss with the students what difficulties there were in making that treaty. Was the bargaining situation fair? Why or why not?

Finally, add that in the 1800s, the United States treaty commissioners could not speak the Chippewa language, Ojibwa, and the Chippewa treaty commissioners could not speak English. The entire process was conducted through interpreters. Ask the students how the playground treaty might have ended differently if the groups couldn’t speak the same language. Considering the size of the two groups, would that have been fair?

References:

See “Forward” and Chapter 1 in Satz, Ronald N. *Chippewa Treaty Rights: The Reserved Rights of Wisconsin’s Chippewa Indians in Historical Perspective*. Madison: Wisconsin Academy of Science, Arts and Letters, 1991.

Satz, R. (2017). The Anishinabe people and their relationship to the environment. Parts 1 and 2. Retrieved from WisconsinAct31.org at <https://www.education.wisc.edu/soe/about/resource-service-units/student-diversity-programs/american-indian-curriculum-services/why-act31/why-act-31-sample-main-page/for-teachers-lessons-by-subject-sample-page/ss-lesson-treaty-rights-tribal-sovereignty>

The Ways. (2017). Hunting Deer: Sharing the Harvest. *Great Lakes Culture and Language*. Retrieved from the Wisconsin Media Lab at <http://theways.org/story/hunting-deer>

Lesson Plan for People of the Waters Exhibit: Travel and Trade Discussion Questions

Lesson Name: **The Value of Trade**

Adapted from the Glenbow Museum Teacher Resource for "Fur Trade: Shaping an Identity"

Grade: **Elementary, Middle, and/or High School**

The exhibits in the Travel and Trade section (including the object timeline section "Fur Trade") explore the time in history before, during, and after the Fur Trade through the examination of artifacts. Students will utilize interactive elements in the exhibition *People of the Waters* to explore trade activities. One interactive display entitled "Native Trade Routes" allows students to see how and where materials traveled to/from Wisconsin. The second interactive display is a trade game entitled "Let's Make a Trade!" that allows students to participate in a digital game of how American Indians and Europeans traded goods and the value placed on those goods.

These Pre-visit and Post-visit activities will reinforce the ideas presented in the exhibition and link classroom learning to the Museum experience. Most activities require few materials and can be adjusted to meet the age and needs of your students.

Pre-Visit Activity:

What is trade?

1. Begin a discussion by asking the students to think about something they need and share a few answers. Continue by asking them to think of something they want and share again.
2. Discuss with them the difference between needs and wants. A need is something that is necessary for survival, such as food and shelter, whereas a want is simply something that a person would like to have.
3. People have to make choices about what things they need and what they want. Why? (People's first concern is survival. Money is often a deciding factor as well.)
4. Have them think back in time when the American Indians came in contact with European people.
 - a. Did they use money then? (No, they traded)
 - b. What is trade? (Trade is the exchange of goods.)
 - c. Why do people trade? (To acquire things they do not have or can't get except through trade.)
5. Ask the students if they think the American Indians people needed to trade? Why or why not? Why did they trade? Have a discussion about the American Indians' use of what was available to them to meet their basic needs. They did some trading with other American Indians groups before the Europeans, what did they trade with them and why? (Were the things they traded wants and/or needs?)
6. Ask the students if they do any trading? What items are traded? Do we still trade today?
7. Have students brainstorm and make a list of objects they might like to trade (5 -10 items). Ask them to decide how they are going put a value on items (not money but some other measure such as 1 baseball card = 2 Pokemon cards or 1 Barbie = 3 outfits of clothes for a Barbie.) Note: This will be challenging and is included to help student begin to consider how complicated the trading process was especially when trading is between different cultures.
8. Finally, ask students whether they like the concept of trading or do they prefer using money. Why or Why not?

9. After returning from your visit to the Museum, talk about what students learned about trading that will add to their ideas from the pre-visit discussion.

Post-Visit Discussion and Activities:

1. After returning from your visit to the Museum talk about what students learned about trading that will add to their ideas from the pre-visit discussion and activities. The following activity can follow this discussion or be done at another time.
2. Trade still holds an important political role in modern times as nations often use trade to solidify old relationships or to create new ones. Yet, how easy is it to trade when you cannot understand one another's language or cultural differences?
3. The purpose of this activity is to discover the intricacies of trade by experimenting with different languages in a mock trade. Through this activity students will have a better understanding of how frustrating trade could be for the parties involved especially if you cannot understand one another.

Activity:

1. Split your class into 2 groups representing the Europeans and the American Indians.
2. Send one group into the hallway (or somewhere that they cannot overhear the other group).
3. Have the Europeans decide what they are going to charge, in beaver pelts, for the following items:
 - a. A Hudson Bay blanket
 - b. A pound of glass beads
 - c. A hatchet head
4. Have the American Indians group come up with hand signals to represent the following:
 - a. "Can we trade?"
 - b. "How much does it cost?"
 - c. "I accept that price."
 - d. "I will not pay that much."
 - e. "Can we negotiate a different price?"
5. If the groups feel it is necessary, they may want to write down the prices and hand signals so as not to forget during the trade.
6. If possible, have the American Indians rearrange the furniture or "landscape" within the classroom and have them decide with the teacher where the trading post will be within the room.
7. Each group must also pick two representatives for their group that will do the trading. These representatives must be brave, good listeners, generous and people that you are comfortable and confident will represent your group in the best possible way.
8. Let the Europeans back in the room and tell them where the trading post is in the room and let them navigate to that spot.
9. To begin the trade, have the Europeans start with the American Indians; remember, they say no words, but use only hand signals, and ultimately cannot understand the words being said to them.
10. Discuss with the groups what happened in the trade and the difficulties in communicating with each other.

Travel and Trade Guiding Questions:

The following guiding questions for the *People of the Waters* exhibition area "Travel and Trade" will assist in stimulating class discussion about the exhibit. The guiding questions are appropriate for grades: Elementary, Middle, and/or High School.

Trade Map

1. Which object traveled the furthest? How many times might it have been traded before reaching its final destination?
2. Trade routes were well established before European arrival. What kinds of objects were American Indians trading?
3. How did American Indians transport their trade goods?
4. What were the major trade routes in the U.S.?

Trap and Trade game

1. Why was it increasingly difficult to catch furs in the later generations?
2. What kinds of trade goods did Europeans bring over to trade?
3. Who were the three nations that traded with American Indians?
4. How did the fur trade goods impact American Indian life?

Lesson Plan for People of the Waters Exhibit: Living Cultures

Discussion Questions

Lesson Name: **Living Cultures**

Grade: **Elementary, Middle, and/or High School**

These discussion questions and accompanying activities are directed to meet the Wisconsin Education Act 31 statute. The activities recommended are from resources available through WisconsinAct31.org and their partners. Wisconsin Education Act 31 refers to the statutory requirement that all school districts provide instruction in the history, culture, and tribal sovereignty of the twelve American Indian nations and tribes in the state. WisconsinAct31.org is meant to support educators and librarians in identifying and collecting instructional materials to support Act 31.

The exhibits in the Living Cultures section of the *People of the Waters* exhibition explore the persistence of the American Indian people and their culture by observing and understanding what the people and culture are like today. Students will learn about Chief Oshkosh and his heroic efforts for his people, participate in the interactive exhibit called "What's in a Name," and see the contemporary faces and lands of the tribes as they exist today.

These questions and activities will reinforce the ideas presented in the exhibition and link classroom learning to the Museum experience. Most questions and activities require few materials and can be adjusted to meet the age and needs of your students.

- Chief Oshkosh "Leader in Troubled Times" by Wisconsin Media Lab: Wisconsin Biographies
 - <http://wimedialab.org/biographies/oshkosh.html>
 - Video (online)
 - "Create an Idea Map" Activity (online)
 - "Design a Trading Card" Activity (online)
 - Story Summaries and Guiding Questions (included for discussion)
- Tribal Nations in Wisconsin Presentation
~adapted from WisconsinAct31.org lesson plans by Josh Jackson
- WisconsinAct31.org lesson plans for 11 different American Indian nations in Wisconsin by Josh Jackson
 - Menominee Nation
 - -Lessons: 11, 12
 - Ho-Chunk Nation
 - -Lessons: 19, 21

WISCONSIN BIOGRAPHIES

Chief Oshkosh – Leader in Troubled Times

Summary

During a time when the United States government was pushing many American Indian nations off their lands, Chief Oshkosh worked to negotiate treaties that would allow the Menominee to stay in their homeland. He also promoted his people's traditional forest management practices, known today as sustainable forestry.

Guiding Questions

1. What historic events did Chief Oshkosh take part in during his life?
2. How did Oshkosh become chief of the Menominee?
3. Describe the Menominee's and the United States government's relationship.
4. What societal pressures on the Menominee existed at the time of the treaty signings?
5. What is Chief Oshkosh's legacy?

Tribal Nations in Wisconsin Presentation

Adapted from WisconsinAct31.org lesson plans by Josh Jackson

Depending on the size of the class, break the class up into groups (4-5 is recommended), each group is required to research one of the 11 American Indian Nations in Wisconsin. The groups will have the next 3 weeks to gather information about your Nation and then one week to create your presentation.

- Things that must be included in the presentation:
 - Nation
 - Language
 - Population
 - Status
 - Information on one of the following themes:
 - Land and land usage, Resources, Religion
 - History of the Nation
 - Look at the Nation today
 - Synthesis, analysis and connection to what you already know.

The presentation can be done in whatever way that you as a group decide on. You can create a PowerPoint with the information and present that; you can create a poster, a video, anything that you want to do as a group. When you have decided on what you want to create, check in with the teacher to make sure this is something that can be done in the time frame.

Introduction to Lesson Plans by Josh Jackson

Thinking back on my own educational path in school, the one thing that seems the most pervasive now is the traditional view of American Indians that I received growing up. I had exceptional teachers but there was something that was always missing when it came to learning about American Indians. Even as a college student, it was not until I began working on this unit that I realized how little I knew. This unit, therefore, was a journey for me to grow but also to create something that represents the larger scope of issues around how to teach about American Indians.

This unit would not have been possible without the help and time of Ryan Comfort from the University of Wisconsin-Madison. As a non-American Indian, I had these preconceived ideas and notions that had to be broken down prior to even making any progress on this unit. There were multiple occasions that I would leave a discussion with Ryan and not know what to say or how to process what had happened to my schema. After years of inaccurate schema reinforcement, I had to break down my thinking for any progress to be made.

The unit that follows is the journey for me. I had to think about American Indians in a way that I had never thought or be taught. When I began this unit, it was completely from the framework of American Indians as a culture and people of the past. I could not get past the way in which I had learned about American Indians and I had no idea how to begin to think about American Indians in a contemporary fashion. As time progressed and work continued, I was able to begin to see how important it is to present the American Indians in a contemporary light.

The following unit is a combination of Language Arts, Social Studies, and Science. It is designed to be an inquiry-based unit around deconstructing the prejudices that are prevalent about American Indians, and also, to create a sense of appreciation for all the different cultures and people in Wisconsin. The history of Wisconsin is not a single strand of history but rather a shared history among all the people and events. Ignoring American Indian's place in this shared history does all of us a disservice.

This unit hopes to highlight our shared history and show that American Indians are still a part of that fabric. By using storytelling as a mode of communication in Language Arts or by looking at the recent history of the Ojibwe and spear fishing rights, the place of the American Indians is today, not yesterday.

Hopefully, this unit is seen as a starting point for teaching about Wisconsin American Indians in the classroom. This is not a catchall for how to teach American Indians in the 4th grade. It was created based on a hypothetical classroom and was an exercise in curricular planning but the rationale was to show that it is possible. As I began to work on this unit, I realized that I had taken on an exercise that was beyond the scope of a single person. The hardest thing to get past was asking for help and getting started. It is easy to plan a unit on a topic that a person is familiar with, but with limited familiarity the process becomes more difficult. It takes diligence and the willingness to step outside of one's comfort zone to create growth both for educator and student.

Standards for Lesson

Wisconsin Model Academic Standards

Geography

A.4.4 "Describe and give examples of ways in which people interact with the physical environment, including use of land, location of communities, methods of construction, and design of shelters."

A.4.5 "Use of atlases, databases, grid systems, charts, graphs, and maps to gather information about the local community, Wisconsin, the United States, and the world."

A.4.7 "Identify connections between the local community and other places in Wisconsin, the United States, and the world."

History

B.4.7 "Identify and describe important events and famous people in Wisconsin and United States history."

B.4.8 "Compare past and present technologies related to energy, transportation, and communications, and describe the effects of technological change, either beneficial or harmful, on people and the environment."

B.4.9 "Describe examples of cooperation and interdependence among individuals, groups, and nations."

B.4.10 "Explain the history, culture, tribal sovereignty, and current status of the American Indian tribes and bands in Wisconsin."

Political Science

C.4.1 "Identify and explain the individual's responsibilities to family, peers, and the community, including the need for civility and respect for diversity."

C.4.4 "Explain the basic purpose of government in American society, recognizing the three levels of government."

C.4.6 "Locate, organize, and use relevant information to understand an issue in the classroom or school, while taking into account the viewpoints and interests of different groups and individuals."

Economics

D.4.6 "Identify the economic roles of various institutions, including households, businesses, and government."

Behavioral Science

E.4.11 "Give examples and explain how language, stories, folk tales, music, and artistic creations are expressions of culture and how they convey knowledge of other peoples and cultures."

E.4.13 "Investigate and explain similarities and differences in ways that cultures meet human needs."

E.4.14 "Describe how differences in cultures may lead to understanding or misunderstanding among people."

E.4.15 "Describe instances of cooperation and interdependence among individuals, groups, and nations, such as helping others in famines and disasters."

MMSD

Geography

#3 "Explain how physical environment affects the way people live."

#5 "Describe the importance of the movement of people, ideas, and goods, to, from and within Wisconsin."

History

#1 "Examine primary and secondary sources of Wisconsin's history."

#2 "Construct and interpret a timeline of significant people (groups and individuals) and events in Wisconsin's history."

#4 "Describe and explain the history, culture, and contributions of the American Indian tribes and bands in Wisconsin."

Political Science

#1 "Identify the major Wisconsin and U.S. treaties and how they affected Wisconsin tribes."

Economics

#4 "List Wisconsin's natural, human, and economic resources."

Behavioral Science

#1 "Compare and contrast individual perspectives and differences"

#2 "Define culture."

#3 "Explain how personal opinions and choices are shaped by one's family and community."

#5 "Describe the arts and literature, traditions, customs, and celebrations of the diverse cultural groups in Wisconsin including Wisconsin Native Americans."

NCSS

- **Culture and Cultural Diversity**

- This is one of the guiding standards in terms of the way the unit was designed. As largely social studies based unit, the concept of cultural diversity is seen from the beginning by trying to decompose the prejudices and extract the differences that are there. these differences are not frowned upon, but rather looked at critically and appreciated.

- **Time, Continuity, and Change**

- For this unit, this manifests itself in the form of looking at the changes that American Indians have made based on multiple facets but also, through the lens of a shared history. As time continues, so does the history and legacy of American Indians in Wisconsin and their ever-changing ways.

- **People, Places, and Environments**

- This can be seen through the looking at the importance that nature plays into the lives of American Indians. Whether it is the Menominee and their sustained-yield forestry or the Ojibwe and their rice, the relationships between the environments and the people are analyzed.

- **Individual Development and Identity**

- This is the standard that frames the unit based on the ideas of having the students look at different cultures and histories and begin to appreciate and look at the impact that has been made on these cultures. By breaking down stereotypes, looking at the influence of mainstream culture on American Indians, the interactions of European Americans and American Indians, the students are gaining appreciation for the differences in people.

- **Individuals, Groups, and Institutions**

- Through the use of simulations in this unit, the unit offers the students the means to study the interactions of American Indians with European Americans. By having them act out the interactions, they can begin to internalize the feelings and then report out these feelings. The historical look also offers the ability for students to look at the changes that have occurred, for better or worse, between the two parties.

- **Power, Authority, and Governance**
 - By looking at the clan structure of the different Nations and the sovereignty of American Indian reservations, the students are gaining experience working with different forms of governance that is not consistent with mainstream governance. The experience with this alternative form of governance offers the students a case study to compare the governance form they are most familiar with.
- **Production, Distribution, and Consumption**
 - This standard is met through the activity and lesson around the Menominee and sustained-yield forestry based on the principle of production and use of the resources present. By using a simulation, the lesson takes on a real-world experience and gives them the agency to think about how the Menominee manage their forest.
- **Science, Technology, and Society**
 - By infusing science and language arts, the interaction between society and science is being seen through the lens of telling stories. These stories rely on the students recreating the information that they have learned in the lesson and then adapt the stories to fit what they have seen in the natural world.
- **Global Connections**
 - By looking at something local and breaking down the barriers that exist, the students will now be equipped with the means to make connections to the world based on the lessons within this unit.
- **Civic Ideals and Practices**
 - This unit is built on the foundation of civic discussion and creating culture and routine in the classroom, especially around self-governance as a class. The students are allowed to identify their own rules and laws and then analyze the ways in which American Indians use similar or different government and the meaning of that.

Lesson #: **11**

Grade: **4th**

Subject Area: **Social Studies**

Topic: **Who are the Menominee?**

Essential Questions

- Who are American Indians Today?
- What is prejudice and how does it affect the way that you look at American Indians?
- How can an understanding of American Indians today help us understand our shared history?

Context

This is the first lesson of the section of the unit around the Menominee Nation of Wisconsin. This lesson is meant to begin to talk about the Menominee: who they are, where they originated, and other important factors. The following lessons will discuss the aspects that you will want the students to represent in their presentations and research.

	Procedures/Activities	Materials
Introduction/Investment	<p>On the board represent the following information:</p> <ul style="list-style-type: none">• Tribe: Menominee• Geography: Shores of Green Bay and the Menominee River, moved inland by American policies to their current location along the Wolf River• Language Family: Algonquian• Pop: 7,000• Status: Federally Recognized with a reservation. (Taken from The Menominee by Ourada) <p>**By doing this, we are beginning to model what type of information we are looking for from the students in regards to their presentations.**</p> <p>This part will also be important to the introduction of the project the students will be doing and also the way in which they are expected to take notes.</p> <p>See the "Guided Note Sheet" on pg. ____ of this. This will be the manner of taking notes and also what information they will collect on all the presentations as well.</p> <p>For introducing the presentation, use the "Presentation Requirements and Rubric" on pg. ____ of this. This outlines the expectations and also the specific areas that the students need to concentrate on.</p>	<p>*Guided Notes sheet</p> <p>*Presentation Requirements and Rubric</p> <p>*Whiteboard, chalkboard, etc.</p>

Content	<p>The major content that is necessary can be found in Ourada's book but the content most important to this lesson is:</p> <ul style="list-style-type: none"> • The Menominee were hunter-gatherers that did farming of wild rice • Known for their tree management • Prior to being placed on their current reservation, the leaders, such as Chief Oshkosh were able to persuade the US and Wisconsin to not send them away. • One of two American Indian nations in Wisconsin to have their own community college. • The Menominee were terminated in 1959 no longer allowing them to have the reservation but were reinstated in 1969. • Very complex tribe structure <ul style="list-style-type: none"> ○ Different clans represented different areas of expertise and duties <p>Took the path of non-assimilation and many of the children were forcibly 'assimilated' due to the private schools.</p> <ul style="list-style-type: none"> • This would be a great point to talk about the concept of assimilation • To model this, tell one student that they must act like a chicken or receive more homework. <ul style="list-style-type: none"> ○ At some point, the student will find that this is very hard. Ask that student why it was hard to do at some point. • You would hope to have the students realize that assimilation does not work because American Indians are not Europeans. <p>The purpose of the content is to make sure that the students have a general idea of who the Menominee were and think about who they are today.</p> <p>Make sure to highlight how much the Menominee had to fight to keep their land and not be forced to give up a major part of their identity.</p>	
Whole-Class Activity	<p>As you are giving the students the information in one of the few times of lecturing, play "lecture bingo" Pick out some of the key ideas from the information that you will discuss with the class such as Menominee, Oshkosh, trees, reservation and allowing the students to place the words wherever they want. The object is to give them an active means of listening.</p> <p>As for an activity, there won't be one as a large group but rather the activity will be done during the practice time.</p>	*Lecture Bingo sheets

Practice	<p>For this lesson, I really want the students to create maps and see the huge swatches of land that the Menominee lost as a part of the treaties and cessation of land.</p> <p>To give all students access, have a map with the lines already created showing the different areas but it would be up to the students to write what it meant.</p>	<p>*Map of Wisconsin</p> <p>*Projector to show the different periods of land allotment.</p>
Assessment	<p>For the students, have an exit slip and have them write down what they learned today in class. Easy and simple way to see if the topics need to be touched on again.</p> <p>Add exit slips to KWL chart</p>	Exit slips

Lesson #: **12**

Grade: **4th**

Subject Area: **Social Studies**

Topic: **The Creation of the Menominee and the Clan system**

Essential Questions

- Who are American Indians Today?
- What is prejudice and how does it affect the way that you look at American Indians?
- How can an understanding of American Indians today help us understand our shared history?

Context

	Procedures/Activities	Materials
Introduction/Investment	<p>Start the class with telling the students to close their eyes and listen to the story. This will be very similar to the activities that are done in the Language Arts portion of the unit.</p> <p>http://www.uwsp.edu/museum/menomineeclans/origintext.shtm</p> <p>Play this audiotape that describes and have the students listen to the story. Ask them what it makes them feel. Make sure to emphasize the different animals that the speaker talks about because that will be important.</p>	
Content	<p>For the important content, see the "whole group Activity" because the content being taught is contained in that part of the lesson.</p> <p>Some additional things that should be mentioned:</p> <ul style="list-style-type: none"> • Menominee did not have one sole leader <ul style="list-style-type: none"> ○ Clans and clan leaders were part of a committee that ran the nation and made decisions • Each of the clans was responsible for one area but the decisions were made a group and even within the clans, decisions were not delegated to one person 	

	<ul style="list-style-type: none"> ○ Huge emphasis on the community running the clan and there was a shared responsibility for anything and everything. 	
Whole-Class Activity	<p>Break up the class into five different groups. The five groups are:</p> <ul style="list-style-type: none"> ● Bear – The speakers of the Tribe <ul style="list-style-type: none"> ○ The leaders of the tribe but only because of a mutual respect ● Eagle – The Warriors of the Tribe <ul style="list-style-type: none"> ○ Fought the battles but also served as major opponents to war ● Wolf – The Harvesters of the Tribe <ul style="list-style-type: none"> ○ Hunters and gatherers of the tribe responsible for food other than rice ● Crane – The Builders of the Tribe <ul style="list-style-type: none"> ○ Responsible for buildings and necessary objects like baskets, canoes, bags, etc. ● Moose – The Rice-Gathers of the Tribe <ul style="list-style-type: none"> ○ In charge of harvesting, distributing and protection of rice. Very important to the Menominee. <p>Each of these tribes had one thing that they were the experts of. During this time, let the teams know that they are going to be the experts and that they must cooperate in order to survive.</p> <p>Ask the students what it's like to not be an expert in everything. Talk about the dependence on each of the groups.</p>	
Practice	<p>For this part of the lesson, have the students write in their journals what it felt like to have that dependence on the other parts of the tribe.</p> <p>What can you relate these clan structures to in your lives right now?</p>	
Assessment	<p>The students' assessment will be a homework assignment. Have the students discuss what they feel when they think of the following things in the context of being part of a clan structure.</p> <ul style="list-style-type: none"> ● Police, firefighter, Doctor and teacher 	

Lesson #: **19**

Grade: **4th**

Subject Area: **Social Studies**

Topic: **Who are the Ho-Chunk?**

Essential Questions

- Who are American Indians Today?
- What is prejudice and how does it affect the way that you look at American Indians?
- How can an understanding of American Indians today help us understand our shared history?

Context

	Procedures/Activities	Materials
Introduction/Investment	<p>On the board, represent the following information:</p> <ul style="list-style-type: none">• Tribe/Nation: Ho-Chunk• Geography: Headquarters are in Black River Falls. Many areas around the state with small parcels of land. 6 tribal casinos• Language: Siouan• Population: 6,000+• Status: Federally recognized without a reservation <p>Have the students look at this and begin to compare it to the two other Nations that have been looked at in the class.</p>	
Content	<p>The major content to know about the Ho-Chunk:</p> <ul style="list-style-type: none">• Known as the Winnebago (People of the stinking water) But in the Algonquian language, this is not considered an insult• Ho-Chunk means "People of the big voice" or "People of the sacred language."<ul style="list-style-type: none">○ Only tribe that speaks a non-Algonquian language -> speak Siouan Language• Broken up into 12 different clans<ul style="list-style-type: none">○ Earth clans such as the Bear Clan<ul style="list-style-type: none">▪ War-time Chiefs○ Sky clans such as the Thunderbird Clan<ul style="list-style-type: none">▪ Peace-time Chiefs• Only American Indian Nation without a formal reservation<ul style="list-style-type: none">○ Lands owned by the Ho-Chunk that they bought and as the tribe buys more and more land.○ 2,000+ acres in Wisconsin○ Their lands in 1825 consisted of most of SW Wisconsin, including Madison• Black Hawks War had a large impact on the land<ul style="list-style-type: none">○ Due to some Ho-Chunk supporting Black Hawk, US government used this to take away their land• Ho-Chunk lands were rich in the Galena, which is a lead ore.<ul style="list-style-type: none">○ Very important to the reasons for Ho-Chunk losing	

	<p>their lands</p> <ul style="list-style-type: none"> ○ Tie this back to the simulation around why the Americans decided to take this land from the Ho-Chunk 	
Whole-Class Activity	<p>For this lesson, lecture bingo would be a great way to involve all the students and also engage them into the information that they will be learning. In reality, this lesson, like the two other “starting” lessons are very important to the students getting a sense of the history of the Ho-Chunk Nation.</p> <p>As a major aspect of the lecture bingo, make sure that the students stop and talk about the things that they have. When the first student gets bingo, have them stop and explain two of the three terms that they got. This way, each student is accountable for knowing the information.</p>	
Practice	<p>First, read the quote, “Do you want our country? Yours is much larger than ours. Do you want our wigwams? You live in palaces. My father, what can be your motive?” (Quote from Speaker Little Elk, 1829)</p> <p>For the practice of this lesson, have the think-pair-share in small groups about the quote and what it means.</p> <p>With the talks that have already been done around loss of lands, try to push the students understanding about why someone would take the lands from the Ho-Chunk.</p>	
Assessment	<p>The assessment will be based on the conversations as a group and in the pairs. As for the formal assessment aspect, offer the students the chance to take what they learned and apply it to other tribes.</p> <p>What are common themes you have noticed? This would be a good question to ask to have the students apply their understanding.</p>	

Lesson #: **21**

Grade: **4th**

Subject Area: **Social Studies**

Topic: **Ho-Chunk Lands Today?**

Essential Questions

- Who are American Indians Today?
- What is prejudice and how does it affect the way that you look at American Indians?
- How can an understanding of American Indians today help us understand our shared history?

Context

	Procedures/Activities	Materials
Introduction/ Investment	<p>Show a map of the Ho-Chunk lands. Ask the students what they notice when compared to the lands of the Menominee and Ojibwe.</p> <p>Based on their responses, push the students to predict why the Ho-Chunk may have had less land than the other Nations.</p>	
Content	<p>The important information for the map is:</p> <ul style="list-style-type: none"> • 1832- Black Hawk War which pitted the US government against any Nation that had any relations with the Sauk <ul style="list-style-type: none"> ○ Gave the US the ability to push the Ho-Chunk out and take their lead-rich land ○ Pushed the Ho-Chunk to lands in Iowa ○ Only a few people signed the treaty but were not from the Bear Clan... VERY IMPORTANT • 1847 – Cede the land in Iowa for land in the northern parts of Minnesota <ul style="list-style-type: none"> ○ Used as a buffer between the Sioux and Chippewa who were enemies • 1855 – Again forced to cede their land in Northern Minnesota but receive better land for planting <ul style="list-style-type: none"> ○ Less land but better land. • 1863 – Cede land in southern Minnesota for land in South Dakota. <ul style="list-style-type: none"> ○ Chief Baptiste described as “bad country for Indians.” ○ Not very suitable for the Ho-Chunk with few trees and cold weather • 1865 – Ho-Chunk moved from South Dakota to lands in Eastern Nebraska <ul style="list-style-type: none"> ○ This is the land that the Winnebago of Nebraska still live on. ○ The Ho-Chunk in Wisconsin are ancestors of those that never left Wisconsin or those that returned from the land cessions that they made 30+ years. • It wasn't until 181 when the US Senate passed a special bill allowing the Ho-Chunk to buy 40-acre homesteads. <ul style="list-style-type: none"> ○ The federal government would not grant the Ho-Chunk reservation status. 	

Whole-Class Activity	<p>To put the Ho-Chunk in a contemporary framework, begin with the Badger Army Ammunition Factory in Sauk City.</p> <ul style="list-style-type: none"> • Most contaminated of all ammunition sites in Wisconsin • Costs of \$250 million for cleanup • Land it being sold to the Ho-Chunk... <p>After you have talked about this, ask the children what they think. Is this good or bad? Why?</p> <p>After discussing this idea of the land, ask them to think about whose land this actually is? Why are the Ho-Chunk 'buying' the land back from Wisconsin?</p>	
Practice	<p>Have the students write a letter stating their opinion on the issue of buying the land back and what it means to the Ho-Chunk and the personal feelings of the students.</p> <p>This is to tie the social action aspect into the lesson because this offers the students a first-hand experience doing something that has some meaning behind it.</p>	
Assessment	<p>For the assessment, have each student fill out an exit slip of what they know and add it to the list of things that they have learned in the unit so far about American Indians. This way you can see what they students are grasping and also, if there are things that need to be talked about again.</p>	

Living Cultures Guiding Questions:

The following guiding questions for the *People of the Waters* exhibition area "Living Cultures" will assist in stimulating class discussion about the exhibit. The guiding questions are appropriate for grades: Elementary, Middle, and/or High School.

Mural

- How many tribes currently live in Wisconsin?
- Where are their reservations located?
- What does "Sovereignty" mean?
- Native life is not so different from ours. What kinds of activities do you see American Indians doing?

Map

- Who was Chief Oshkosh and why was he important?
- Why is it important to understand where place names come from?
- Imagine only a few people knew English. What would you do to raise awareness of that language?
- What is languages importance to culture?