

State Parks and Early Woodland Cultures

Key Objectives

Students will understand some basic information related to the Adena, Hopewell and early Woodland Indians, and their connections to Mounds and Falls of the Ohio state parks. The students will gain insight into the connection between the Adena culture and the Hopewell tradition, and learn how archaeologists have studied artifacts and mounds to understand these cultures.

State Parks Featured

- Mounds State Park www.in.gov/dnr/parklake/2977.htm
- Falls of the Ohio State Park www.in.gov/dnr/parklake/2984.htm

Activity:	Standards:	Benchmarks:	Assessment Tasks:	Key Concepts:
Researching the Past	SS.4.1.1	Identify and compare the major early cultures that existed in the region that became Indiana before contact with Europeans.	Students will research what was important to the Adena Indians. The students will then compile a list of items found in the Adena mounds and compare them to items that we use today.	Mounds Artifacts Tribes Adena Hopewell Mississippians
	SS.4.1.2	Identify and describe historic Native American groups that lived in Indiana before the time of early European exploration, including ways that the groups adapted to and interacted with the physical environment.	Use computers in a cooperative group to create timelines of major events from the era of the Adena to the rise of the Hopewell Indians.	
	SS.4.1.15	Create and interpret timelines that show relationships among people, events and movements in the history of Indiana.	Use computers in a cooperative group to create timelines of major events from the era of the Adena to the rise of the Hopewell Indians.	
	ELA.4.W.3.2	Write informative compositions on a variety of topics.	Students will research and write informatively about the Adena-Hopewell.	
	ELA.4.SL.4.2	Create oral presentations that maintain a clear focus, using multimedia to enhance the development of main ideas and themes that engage the audience.	Use computers in a cooperative group to create timelines of major events from the era of the Adena to the rise of the Hopewell Indians.	
Marking Time and Seasons	SS.4.1.1	Identify and compare the major early cultures that existed in the region that became Indiana before contact with Europeans.	Students will watch video tour of Great Mounds Complex and discuss how Adena and Hopewell used the mounds.	
	SS.4.1.2	Identify and describe historic Native American groups that lived in Indiana before the time of early European exploration, including ways that the groups adapted to and interacted with the physical environment.	Students will watch video tour of Great Mounds Complex and discuss how Adena and Hopewell used the mounds.	
	ELA.4.SL.4.1	Using appropriate language, report on a topic or text or provide a narrative in an organized manner, with effective introductions and conclusions, using appropriate structure, appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly and concisely at an understandable pace.	Students will conduct research and then communicate what they have clearly with one another on the topic of the mounds and their astronomical uses.	

Activity:	Standards:	Benchmarks:	Assessment Tasks:	Key Concepts:
Discovering Artifacts	SS.4.1.1	Identify and compare the major early cultures that existed in the region that became Indiana before contact with Europeans.	Students will take the video tour of artifacts at Falls of the Ohio State Park to understand the major early cultures in the region that became Indiana.	
	SS.4.1.2	Identify and describe historic Native American groups that lived in Indiana before the time of early European exploration, including ways that the groups adapted to and interacted with the physical environment.	Students will take the video tour of artifacts at Falls of the Ohio State Park to understand the major early cultures in the region that became Indiana.	

Key Resources

- [Falls of the Ohio State Park: Paleo-Indian Period](#)
- [Falls of the Ohio State Park: Archaic Period](#)
- [Falls of the Ohio State Park: Woodland Period](#)
- [Falls of the Ohio State Park: Mississippian Culture](#)
- [Mounds State Park Interpretive Plan](#)
- Fort Ancient Museum: Hopewell Tradition (Middle Woodland period)
<http://www.fortancient.org/archaeology/ohio-pre-history?showall=&start=3>
- Fort Ancient Museum: Adena Culture (Early Woodland period)
<http://www.fortancient.org/archaeology/ohio-pre-history?showall=&start=2>

Activity 1: Researching the Past

Activity Summary

In cooperative groups, students will assume the role of researchers, working together to embark on Web quests to gather information and complete a timeline of events that led the change from Adena to Hopewell. The students will then share their timelines with the rest of the class. After that, the teacher will send an article of findings to the local newspaper.

Activity Length: 90 minutes

Background

In the Early **Woodland Period**, from 1,000 to 200 BCE, there existed a people in Indiana referred to in the present day as the Adena culture. The name **Adena** is taken from the farm of a man named Thomas Worthington, who lived in Chillicothe, Ohio in the 19th century. The name Adena was given to this civilization by archaeologists to help us understand what we know or can infer about their cultures from artifacts and symbols that have been found. The Adena were not one large group or tribe, but were more likely a group of interconnected communities living mostly in Ohio and Indiana. The Adena were significant for their **food cultivation**, pottery and sizable **commerce** network that covered a larger area from the Great Lakes to the Gulf of Mexico. This period is often associated with mound builders. The Adena, who built the mounds, were the earliest of these peoples. Their successors also used the mounds.

Over a period of 500 years, the Adena culture evolved to become what we call the **Hopewell** tradition. Much like the Adena, the Hopewell were not one large group, but should be viewed as a group of interrelated societies. The name Hopewell was given to this civilization by archaeologists. Just as with the Adena, the Hopewell's trade networks connected them with other cultures. In fact, some archaeologists see the Hopewell simply as the high point of the Adena. With the Adena-Hopewell, we see the beginnings of **social hierarchy**. The evolution from hunter-gatherers to agriculture meant stability as well as economic and population growth. Out of that growth came social hierarchy. From there it is a short leap to tribes and **chiefdoms**. We do not have evidence of the Hopewell in Indiana after 500 CE, but some archaeologists think that sometime before European contact they became the Miami or Shawnee.

Vocabulary

Woodland Period: A timeframe lasting from 1000 BCE to 1000 CE, as defined by archaeologists and paleontologists to help us understand the time frame these people lived in relation to our own time period.

Commerce: A system of trading goods and services for payment or through bartering.

Food Cultivation: The use of skills and knowledge to intentionally grow food.

Social Hierarchy: A way of organizing a society in which some people hold a higher rank, status or authority.

Chiefdom: A type of hierarchy based on family or groups of families, in which leaders are usually the eldest members. Leaders are usually chosen by birthright rather than democratically or based on their achievements.

Adena Culture: Native American culture that existed from 1000 to 200 BCE. This time is known the Early Woodland period. The Adena culture was likely many interrelated Native American societies sharing a burial complex and ceremonial system. The name Adena is taken from the farm of a man named Thomas Worthington, who lived in Chillicothe, Ohio in the 19th century. The name Adena was given to this civilization by archaeologists to help us understand what we know or can infer about their cultures from artifacts and symbols that have been found. This is not a name that the people would have called themselves.

Hopewell Tradition: A Native American culture that lived along rivers in the Northeastern and Midwestern portion of the present-day United States from 200 BCE to 500 CE. The Hopewell tradition was not just one society, but a widespread group of related societies. In the 1890s, an archaeologist studying this group named them Hopewell. The name Hopewell comes from the name of the family that owned the land where the mounds were located. The name Hopewell was given to this civilization by archaeologists. This is not a name that the people would have called themselves.

Materials Required

- Computers for each group, with Internet access
- Role cards for students (researcher, writer, manager, speaker)
- Images representing our understanding of people of the Hopewell tradition
- Images representing our understanding of people of the Adena culture
- Butcher paper (to draw timeline on)
- Sample timeline
- Timelines for other cultures (Roman, Greek, Chinese, etc.)

Focus Questions

- What are timelines, and why do we create them?
- What does “prehistory” mean?
- How do people migrate? In other words, what are different ways that large groups of people move from one place to another?

Step-By-Step Directions

1. Use images of Adena and Hopewell sites in the Midwest to discuss characteristic features and the lifeways that might have been part of the Adena and Hopewell cultures based on those features. Be sure to explain that these are all assumptions on our part — really good educated guesses — because we have no one from the Adena or Hopewell people tell us about their heritage and culture. Discuss movement of tribal groups from one location to another.

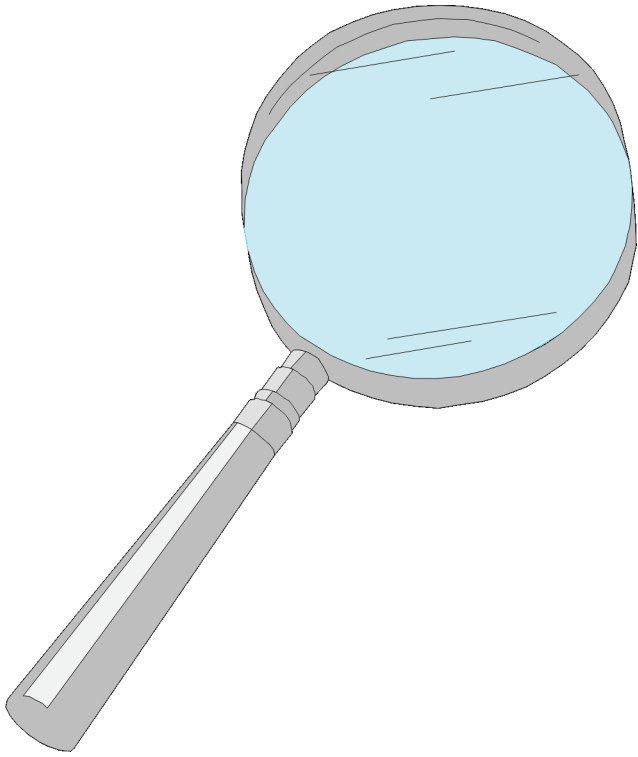
2. Place students in mixed-ability groups and give each student a role within the group per materials listed above.

3. Students conduct research from their role's perspective, aspiring to sequence the connection between the Adena culture and the Hopewell tradition. Students can use computers and Internet access to embark on a Web quest that will lead to the eventual creation of a timeline of early woodland Indiana Indian tribes.

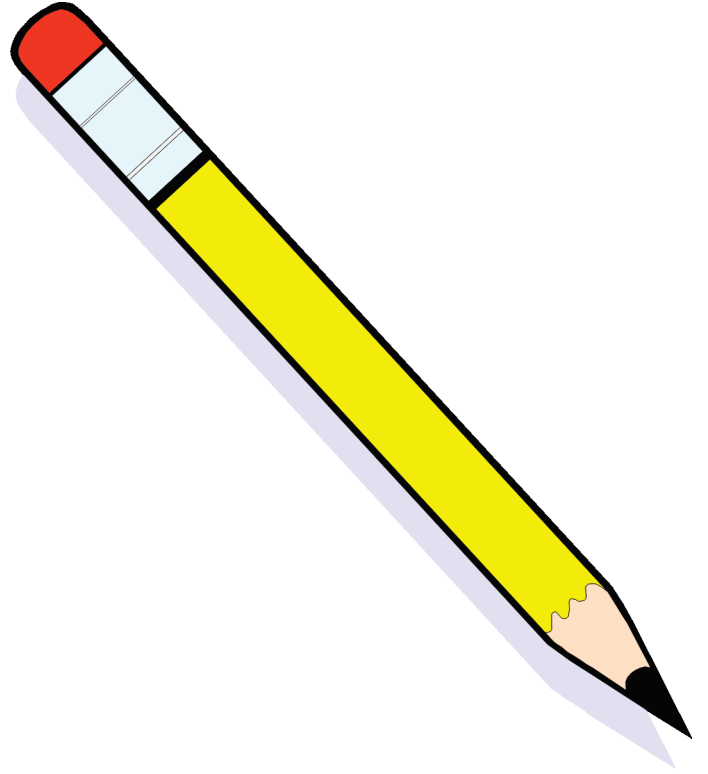
Each group's timeline of events should include:

- a. Dates (years) in which each culture is believed to have lived
 - b. Pictures of each important event listed (neatly drawn and relevant)
 - c. Names of each student in the group and the role assigned to each
 - d. A title
4. The students will then report all findings to classmates, one group at a time.
 5. Compare with the class what was happening with other cultures during the time that the Adena and Hopewell were living. (Greek/Roman, Chinese, etc.) to help them understand that these cultures were developing and changing simultaneously.
 6. Discuss how migration and evolution of human beings is still relevant today (e.g., how people change, do people tend to move from one area to another, why people move).
 7. Talk out their experiences in moving from place to place. Discuss the pros and cons of moving, including personal reasons for their feelings. If one group has more information than another group, allow the students to decide how to add, delete and create one timeline.
 8. Involve the students in writing an article to share with other classes or the local newspaper.

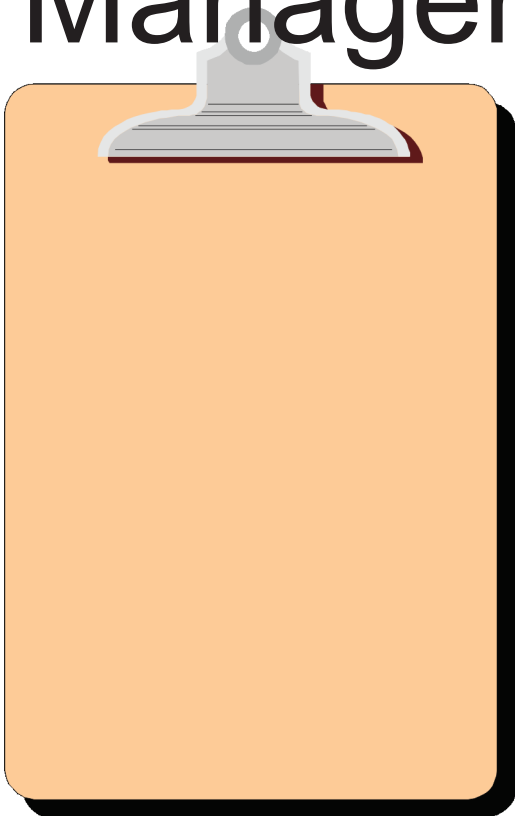
Researcher



Writer



Manager



Speaker



Activity 2: Marking Time and Seasons

Activity Summary

This activity introduces the mysterious relationship between the seasons, astronomical features, and some mounds structures created by the Adena and the Hopewell.

Activity Length: 60 minutes

Background

The Woodland Period is often associated with mound builders. These earthworks were used by early Woodland peoples for various religious and ceremonial reasons. More than 300 of these mounds have been identified in central Indiana. All of them are on the eastern side of a river. When the mounds were used by the Adena-Hopewell, they had no trees. They removed the trees with fire to keep the view open. Adena and Hopewell are names given to these groups by archaeologists, not names they were known by in the time in which they lived.

Each mound has four main parts: embankment, ditch, platform and gateway. The embankment is the actual earthen mound, which creates the perimeter around the ditch. The dirt removed from the ditch was used to build up the mound. The ditch is in the middle of the enclosure and is dug first. Dirt was loaded into baskets and placed on the mound. The platform was located in the center of the ditch at ground level. Finally, the gateway serves as a break in the outer embankment, creating an opening for people to enter the enclosure at ground level.

The mounds at Mounds State Park were built around 250 BCE. The Great Mound is the largest among ten found at the park. The Great Mound was most likely used for ceremonies, but we do not know for sure. The Adena built the mound but the Hopewell used it for burials. Fiddleback Mound is in the shape of a figure eight (much like a fiddle). Archaeologists believe that Fiddleback was a **midden** (i.e., a trash heap). The Circle Mound is actually rectangular. Most of the mounds on the park's map are grouped at the southern end of the property. Circle Mound is on the northern end. Fomalhaut Mound is relatively small, standing only about a foot high. Unlike the other mounds, it has two gateways. The final mound on the park's map is Woodland Mound. It is a small mound likely used for **astronomy**.

Archaeologists believe that the complex of mounds at Mounds State Park was constructed primarily to help the Adena-Hopewell track astronomical events over the course of a year. In other words, the mounds served as a calendar to tell the peoples of the Woodland Period when the seasons were going to change.

Vocabulary

Woodland Period: A timeframe lasting from 1000 BCE to 1000 CE, as defined by archaeologists and paleontologists to help us understand the time frame these people lived in relation to our own time period.

Archaeologists: Scientists who study humans from the past using information gained from artifacts and other data collected through digging beneath the surface of the ground.

Midden: A landfill usually full of valuable information that helps archaeologists understand daily life of the group they are studying.

Astronomy: The study of stars, moons and planets, and their changing positions across the sky.

Materials Required

- Virtual video tour of the Great Mounds Complex <https://vimeo.com/123750827>
- Marking Time and Seasons Worksheet

Focus Questions

- What changes do you see outdoors in each of our four seasons?
- How does the changing of the seasons affect the work people do or how you spend your time?
- What are some of the ways that we mark/tell time today?
- How do you think Woodland cultures were able to “tell time” without paper calendars?
- How were lessons and stories passed on in these Woodland period cultures?

Step-By-Step Directions

- Take a virtual video tour of the Great Mounds Complex at Mounds State Park to learn how we think the Adena and Hopewell people used these earthworks to mark time and the seasons. <https://vimeo.com/123750827>
- Read pages six through ten on the PDF of the Mounds State Park Interpretive Plan about the mounds complex. http://www.in.gov/dnr/parklake/files/sp-Mounds_State_Park_IMP_2011.pdf
- Talk about the meaning of the winter solstice, summer solstice and constellations discussed in the virtual video.
- Invite the students to write a paragraph explaining how the mounds were used by the Adena-Hopewell and compare it to how we use calendars today.

- Have the students if they can draw the mounds complex as it might look during winter solstice, summer solstice, and springtime when the Fomalhaut star rises. What things will change with the seasons: trees, plants, animals, shelter, food for people and animals to gather?
- To better help students understand the value of the oral traditions in which lessons and stories were passed down in early Woodland cultures, ask students to talk with a parent, grandparent or other adult about ways they marked time when they were a 4th grader. What helped them wake up each day? What signaled the end of the day? What important events or changes reminded them of a change in the seasons? Ask the students to take notes and report back orally to the class on what they discovered.

Marking Time and Seasons

Name: _____

Directions: Draw the mounds complex as it looks on each of the following occasions. How do these changes throughout the year make the landscape look different in terms of:

- plants and trees
- animals seen
- food available for hunting or gathering
- shelter

Summer Solstice

Star Fomalhaut Rises

Winter Solstice

Activity 3: Discovering Artifacts at Falls of the Ohio

Activity Summary

This task is designed to assess the ability of students to understand the types of artifacts that would be buried with people of the Mississippian Culture of long ago. Mississippian is a name given to this group by archaeologists, not a name they were known by in the time in which they lived.

After discussing Mississippian Indians who lived along the Ohio River near Falls of the Ohio State Park, the students participate in a mock dig and discuss how items discovered might have been used and where the artifacts should go after being discovered. The students will then compile a list of items actually found in Mississippian cultures and compare them to items we use today. The students will gain an understanding of what items were important to the Mississippian Indians. The students will present their findings from the mock dig to another classroom, and will write letters for the school newsletter or to a local newspaper discussing their feelings toward the project.

Activity Length: 90 minutes

Background

The **Mississippian Culture** was another mound-building **civilization**. These people lived in the Midwestern portion of the country from 800 to 1600 CE. The Mississippians built large mounds with platforms on top, upon which they built houses and important public buildings. The **staple food** for this culture was maize (what we call corn). Evidence tells us that Mississippians used river shells to strengthen their pottery. Like the Adena-Hopewell, Mississippians had a large trade network. The Mississippians had a similar but more fully evolved social hierarchy than the Adena-Hopewell. The hierarchy included use of the chiefdom as a **political structure**. The Mississippians left behind physical evidence of their daily life. We call such items artifacts. Studying these artifacts can help us understand who the Mississippians were and what their life was like. Mississippian is a name given to this group by archaeologists, not a name they were known by in the time in which they lived.

Collecting artifacts is illegal without permission from the property owner. Qualified archaeologists who have submitted a plan and been

granted a permit by the DNR Division of Historic Preservation & Archaeology (DHPA) are the only people who have permission to dig for and collect artifacts on state property.

Sometimes accidental discoveries happen. If someone finds an artifact it's best for them to leave it alone, make note of the location, and immediately contact the park's office.

If someone reports that what they've found may be human remains, the park office will immediately call the county coroner's office.

Another issue to consider is something called NAGPRA, which stands for Native American Graves Protection and Repatriation Act. This federal law makes sure that important Native American cultural items — especially human remains but also other sacred items — are returned to their descendants if they are found. Archaeology is a science, but there are larger questions to consider: What does it mean to dig up another culture's family and heritage? Sometimes these activities can go against religious beliefs of native people. What do you think of the morality of conducting archaeological research? What are the pros and cons?

Vocabulary

Mississippian Culture: A culture of mound builders that lived in the present-day Midwestern Southeastern and Eastern parts of the United States from 800 CE to 1600 CE. This is defined by archaeologists and paleontologists to help us understand the period in which these groups lived in relation to our own time. The name of the culture is taken from the Mississippi River Valley.

Civilization: A complex society with cities, hierarchy and a centralized power structure.

Staple food: An ingredient that is an important part of everyday nutrition.

Political Structure: Organized control over a community of people and the distribution of power.

Materials Required

- Soundslides for Falls of the Ohio artifacts: www.in.gov/dnr/parklake/cent/fallsfossil/index.html
- Plastic storage boxes filled approximately $\frac{3}{4}$ full with sand (use 1 per 2-3 students if possible)
- Mock items buried in the sand, including necklaces, clothing, pottery, silverware, etc.
- Twine or yarn to grid the boxes into four quadrants
- Clipboards
- Grid sheets with four quadrants so students can identify where in the box items were located
- Small trowels and toothbrushes

Focus Questions

- How do we learn about people of the past?
- What does an archaeologist's job involve?

Step-By-Step Directions

1. Prepare for the activity by setting up plastic containers with "artifacts" buried in sand.
2. Discuss the role of an archaeologist in understanding and interpreting past cultures. Watch the short video from our interpretive staff at Falls of the Ohio discussing how archaeology has helped us understand the site and life along the Ohio River.
3. Take the students on a virtual tour of artifacts (spear points,

projectile points, etc.) found in the collections at Falls of the Ohio State Park. www.in.gov/dnr/parklake/cent/fallsfossil/index.html

4. Introduce the activity by telling students they will become archaeologists for a day and will be carefully looking for artifacts at a dig site. Explain that students should "grid" their site into four quadrants using the string or yarn, and use the grid sheet to record the approximate location of anything they find. They

should excavate carefully, using the trowels to move sand and the toothbrushes to gently brush off sand when they find a portion of an artifact.

5. For each artifact, they should also write down what they think it is and what it might be used for. What might be a comparable item in the Mississippian culture?

6. Discuss what the students found. Talk about what should happen to artifacts such as stone tools or projectile points if students find them — discuss the importance of leaving things in place or, at the very least, documenting their location when found. What would be the positives and negatives of keeping artifacts that were found? Discuss briefly the laws related to protecting human remains of Native cultures (NAGPRA).

7. Ask students to make a list of what future archaeologists might find that WE have left behind. What do you think these things might tell those who find them about us?

8. Ask students to write a letter to future archaeologists telling them what they learned about other cultures by examining their artifacts, and include drawings. Then ask students to write about the items they think WE might leave behind, and what that says about our culture.

9. Create a classroom “time capsule” for the letters and pictures.

Extension Ideas

- Plan a field trip to Mounds State Park in Anderson to view the ten earthworks built by the Adena and Hopewell people.
- Plan a field trip to Falls of the Ohio State Park in Clarksville to learn about Woodland Indians who lived along this big river.
- Discuss the Mississippian Culture, which appeared after the

Hopewell Indians and extended to the time period of French/Spanish contact.

- Read *The Circle of Thanks*, a compilation book of poems and folklore describing the various Native American Indian groups. Ask students to write original poems based on what they have learned about the Adena, the Hopewell, and the Mississippian cultures.
- Let students — either individually or as a group — build a model of the mounds complex at Mounds State Park.

Resources

- Bruchac, Joseph, and Murv Jacob. *The Circle of Thanks*. Mahwah, NJ: BridgeWater, 1996. Print.
- Obenchain, K. M. & Morris, R. V. (2010) *50 Social Studies Strategies for K-8 Classrooms* (3rd ed.). Columbus, OH: Merrill Prentice Hall Radonjic,
- Brankica. “The Hopewell Culture.” *Hopewell Culture*. Ed. Kristian A. Werling, David W. Koeller 25 Sept. 1996. Web. 04 Dec. 2012. www.thenagain.info/webchron/northamerica/hopewell.html.
- “What Do You Want to Know Today?” *Kidipede*. Karen Carr, 3 Dec. 2012. Web. 04 Dec.
- 2012. <www.historyforkids.org/>.
- Society for American Archaeology, Resources for Educators www.saa.org/publicftp/PUBLIC/resources/foredu.html
- Society for American Archaeology, Archaeology for Educators www.saa.org/publicftp/PUBLIC/educators/index.html
- National Park Service NAGPRA-www.nps.gov/nagpra/

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Activity 3: Discovering Artifacts at Falls of the Ohio

Grid Sheet
