How to use the Google Slide document:
If you’re accessing the Printable Iowa Archaeology BINGO file, click File → Print and complete the field notebook by writing and drawing objects or pasting photos.

If you’re accessing the Digital Iowa Archaeology BINGO file, click: File → Make a copy → Entire presentation and then select a location to save it on your personal Google Drive. You can then modify the clickable text boxes, insert images, and insert additional pages to fit larger images.

Choose a difficulty level!
- **Explorer Level 1:** Around the House Explorer. Suitable for younger kids or those who are staying close to home this summer.
- **Explorer Level 2:** Neighborhood Explorer: Explore the backyards of your house and neighbors, farms of family and friends, your local library, museum, and parks.
- **Explorer Level 3:** Regional Explorer: With your family, travel to parks, museums, nature areas, and farms of family and friends. Visit sites from the Iowa Archaeology Google Map: [bit.ly/VisitIowaArchaeology](http://bit.ly/VisitIowaArchaeology)

**Participate for Prizes! (Deadline for prizes is August 16)**
**Accountability:** It’s important to take original photos of the tasks completed (or in the case of our few digital tasks, take a screenshot) so that we understand your level of engagement and participation. If you do not want your child to appear in any photos, try making and printing a flat stanley using a drawing or a Bitmoji! We will NOT share any images without your permission.

**Participate socially (optional but encouraged):** Share your family’s photos on social media, tag Iowa Archaeology, and use the hashtags #IowaArchaeology, #TalkofIowa and #TalkofIowaSummerCamp

- **Accomplishment:** Complete 5 tasks for a horizontal BINGO, one for each research topic!
  - Prize: Email your mailing address and the photo evidence of each child’s completed tasks and/or completed field notebook pages to elizabeth-reetz@uiowa.edu. We will mail a sticker, mini-button, and bookmark!

- **Accomplishment:** Complete 3 rows, at least two must be horizontal.
  - Prize: Email your mailing address and the photo evidence of each child’s completed tasks and/or completed field notebook pages to elizabeth-reetz@uiowa.edu. The accomplished explorer can choose a 6” x 8” spiral notebook or 8.5” x 6” zip pouch from the Iowa Archaeology Threadless Store. We’ll also mail a sticker, mini-button, and bookmark! Visit: [iowaarchaeology.threadless.com](http://iowaarchaeology.threadless.com) to view more.

- **Accomplishment:** Complete a BINGO blackout and finish all of the tasks!
  - Prize: Email your mailing address and the photo evidence of each child’s completed tasks and/or completed field notebook pages to elizabeth-reetz@uiowa.edu. The accomplished explorer can choose a Youth-size t-shirt from the Iowa Archaeology Threadless Store. We’ll also mail a sticker, mini-button, and bookmark! Visit: [iowaarchaeology.threadless.com](http://iowaarchaeology.threadless.com) to view more.
examples and hints

TO GUIDE YOUR CHILD IF THEY’RE STUMPED

Objects
Find a ceramic object: anything made from fired clay, kid’s clay crafts, ceramic or porcelain dishes
Find a stone object: retaining walls, stepping stones, slate roofs, garden borders, stone figurines or statues
Find a glass object: bottles, jars, or other containers; knick knacks; antiques; windows
Find an object that will last more than 1000 years: house foundation, metal or stone walls or fences, metal pots and pans, dishes and kitchen utensils made from metal, glass, or pottery
Find an object that will last less than 1000 years: food scraps, paper, organic textiles like cotton, wool, or leather, furniture made from wood (although metals nails and screws will not decay over time)

Field and Lab Skills
Draw a map with scale: Choose a room in your home, an outdoor space such as a patio or barn, or an area at your local park. Measure with a tape measure, reel tape, or yard stick and sketch with a ruler. For example: one inch on a ruler equals one foot on the tape measure. Look for objects that would indicate sports, hobbies, or other recreational activities to help answer the questions of “what” and “who”.
Find 3 archaeology tools: Archaeologists use many standard garden and yard tools such as shovels, trowels, and post hole diggers. Other tools include buckets, brushes and dustpans, tape measures and levels. Office and lab tools include scales for weighing, old toothbrushes for washing artifacts, and rulers for measuring. Using computers to write report, create spreadsheets and databases, and do archival research are also important.
Create a classification system: Objects can be grouped in many ways such as by color, material type, function (tools, containers, toys), shape, age etc. Each category provides different information such as what it was used for (cooking, gardening, recreation), who used it (adult, child, mail carrier) or where it could have come from (manufactured, home made, grown in the garden, natural object). There are no “wrong” ways to sort and classify objects but each method provides different kinds of information to the researcher.
Take a photo of an object with a scale: You may have objects around your home that are from parents or grandparents that can be photographed. If not look around outdoors, large trees, old buildings, even rocks are clearly more than 25 years old. The type of scale used with these objects will vary depending on the size of the object. A quarter or ruler works as a scale for smaller items, a car or person might work for photographing a tree or building--it just needs to be something that the average person would recognize.
Find an example of stratigraphy: cut bank, rock face, pile of clothes in a laundry bag, trash, sheets and blankets on a bed, anything in layers

Basic Needs
Find animal evidence: animals bones in the woods, antler, turtle shell, old pet collar, snakeskin, taxidermy, clothing or jewelry made from leather, bone, fur or wool
Find a former shelter: old barn or house foundations, an abandoned house, a rock shelter or overhang to keep dry in, even a deflated tent
Find a navigable path: sidewalks, footpaths, hiking or bike trails, gravel or paved roads, rivers or streams you can kayak on
Find a wild edible plant: Wild berries like raspberries or blackberries; nuts like hickory and walnuts; plants typically thought of as weeds like nettles, sorrel, hog peanut, lamb’s quarters, purslane, and wild violets; and some kinds of mushrooms (do NOT eat anything unless you are 100% sure it is safe!)
examples and hints

TO GUIDE YOUR CHILD IF THEY'RE STUMPED

Research Techniques
Find a photo taken more than 30 years ago: Share photos of yourself or your family when you were younger or find photographs in older books or at your local library.

Find a non-digital research resource: Visit your local library, museum, or historical society (if open). Or, use a bookshelf in your home with non-fiction or reference books, fact-based magazines like "National Geographic", or old family portraits or photo albums.

Find a map made more than 10 years ago: Old state highway maps, campground maps, an atlas or gazetteer, or even snapshots of maps in older books. You can also visit your local library (if open) to find examples.

Do a historical interview: Have a chat with a family friend, neighbor, or local librarian. Younger kids can ask you questions about your family's history. You might want to help your child select one or two topics to ask about and encourage them to formulate a few questions to ask that will get the conversation started.

Find your house on an aerial photo: Visit Google Earth on a computer or Google Maps on your phone or a computer (turn on the Satellite option in Google Maps).

Deeper Understandings
Find something that lacks context: You could cut a single image from a picture in a magazine or newspaper or remove an object from its logical setting and place it somewhere peculiar. Take a rock from the flower bed and put it in the house, assemble a puzzle but hide away key pieces, or quietly move items around the house. Your kids will probably recognize the outliers!

Be a good steward: Younger children can help clean up trash or debris in your backyard or garden. Older children can find a local park, walking trail, or the grounds of a public building such as a local court house. It is possible to do a cemetery cleanup, but only with permission from the manager or property owner.

Make a curated exhibit: This could include arranging photos or other images and objects so that they tell a story or communicate other information. Encourage your child to give the exhibit a title that tells the viewer what it is about (“Artifacts I Found in My Yard”, “The Stratigraphy of the Laundry Hamper”, “My Favorite Toys”, or “Summer 2020”). The objects or pictures should have descriptive labels. A display can be attached to cardboard, arranged in a box, or set out on a shelf or table top.

Learn about Indigenous Iowans: Visit the website of one of the Tribal nations listed and look for their history section. Search YouTube, but research who created and uploaded the video you are watching. Look for books and videos at your local library, including the DVDs, Lost Nation: The Ioway (parts 1 and 293), Lance Foster's Indians of Iowa.

Make a replica: Use air-dry clay or playdough to “make a clay vessel” and look at photographs of prehistoric pots to try to figure out how the designs were created. Experiment using different tools from nature to create these designs. Try making rope or cordage with raffia or strips of cloth. Encourage your child to test your cord to see how much weight it can hold. Make pigments/paints out of food scraps, flowers, or other plant parts (find instructions on the internet). Collect a variety of fist-sized rocks and to break walnuts or pound a stake into the ground. Encourage your child to compare the efficiency of different types, sizes, and shapes of rocks. Did one rock work better than the others? What was the best way to hold it or the best surface to put underneath it?
## Bingo Scavenger Hunt

**OBJECTS**

<table>
<thead>
<tr>
<th>FIND: a stone object</th>
<th>FIND: a ceramic object</th>
<th>FIND: a glass object</th>
<th>FIND: an object that will last &gt;1000 years</th>
<th>FIND: an object that will last &lt;1000 years</th>
</tr>
</thead>
</table>

**FIELD & LAB SKILLS**

<table>
<thead>
<tr>
<th>DO: draw a map with scale</th>
<th>FIND: 3 archaeology tools</th>
<th>DO: create a classification system</th>
<th>DO: photo an object with a scale</th>
<th>FIND: an example of stratigraphy</th>
</tr>
</thead>
</table>

**BASIC NEEDS**

<table>
<thead>
<tr>
<th>FIND: animal evidence</th>
<th>FIND: a former shelter</th>
<th>FREE SPACE</th>
<th>FIND: a navigable path</th>
<th>FIND: a historical interview</th>
</tr>
</thead>
</table>

**RESEARCH TECHNIQUES**

<table>
<thead>
<tr>
<th>FIND: a photo taken &gt;30 years ago</th>
<th>FIND: a non-digital research resource</th>
<th>FIND: a map made &gt;10 years ago</th>
<th>DO: a good steward</th>
<th>DO: learn about Indigenous Iowans</th>
</tr>
</thead>
</table>

**DIGGING DEEPER**

<table>
<thead>
<tr>
<th>FIND: something that lacks context</th>
<th>DO: be a good steward</th>
<th>DO: make a curated exhibit</th>
<th>DO: make a replica</th>
<th>NAME: ____________________________</th>
</tr>
</thead>
</table>

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**IOWA ARCHAEOLOGY SUMMER 2020**

**NAME: ____________________________**
Archaeology is the study of the human past through material remains—objects and places that were created, used, or changed by humans. In Iowa, archaeologists investigate time periods ranging from 13,000 to 50 years ago. Some study evidence of Indigenous peoples living in Iowa and others research 20th-century buildings in our present-day towns and cities. All archaeologists analyze the physical remains of the past in pursuit of a broad and comprehensive understanding of human culture.

Archaeology is about reading human stories through the objects and landscapes of the past. It’s not *just* about artifacts and things. Human stories are intertwined with nature and places, and we can look for evidence of these stories almost anywhere.

For this summer archaeology activity, you will search for clues about places and objects that were created, used, or changed by people. The most important skill an archaeologist can have is good note-taking! For every BINGO task you complete, you will make notes about your observations, inferences, and evidence. Take photos or create drawings of your finds and activities to add to your archaeology field notes and record your observations about those clues so a record of your investigations is preserved for future researchers. Asking good questions is also an important part of scientific inquiry, so for each task, you will note something you wonder about the item you are investigating - even if you don't know how to figure out the answer!
Objects: Archaeologists study objects used or created by humans in order to learn about how they met their basic needs and how they perpetuated their culture. Objects give us clues to the types of activities that took place, resources that were available, and the technologies used to create them.

Field & Lab Skills: An archaeologist learns how to do so much more than excavate. Learn about tools and techniques that archaeologists use in the field and in the lab!

Basic Needs: All humans have the same basic needs in order to live: food, water, shelter, clothing, and social interaction. Discover various types of evidence that archaeologists look for to learn how past peoples met their basic needs.

Research Techniques: Many people think that archaeologists only learn about the past by excavating and studying artifacts. That is far from the truth! Explore other tools and resources archaeologists use to learn about past peoples.

Deeper Understandings: Learn about important concepts in archaeology that explain how we go about identifying and studying human cultures of the past and why it is important.
Archaeological site: a place where people lived and left objects behind

Archaeology: a scientific method for studying human cultures of the past by analyzing material evidence including artifacts, features, and sites.

Artifact: Any object made or used by people

Attribute: Characteristic of an object such as size, color, or shape

Classification: systematic arrangement in groups or categories

Classify: the process of arranging objects in groups or categories

Context: the relationship artifacts have to each other and the situation in which they are found.

Culture: the customs, beliefs, laws, ways of living, and all other results of human work and thought that the people of the same society share

Data: Facts and figures; information, especially information that can be analyzed

Evidence: data which are used to answer questions

Feature: evidence of human modification of the earth. For example: pits, mounds, trails, hearths, and ditches.

Indigenous people: the first people to be living in a place. In the U.S., we also use the terms Native Americans, American Indians, First Nations, and Alaska Natives, or the title of the Nation or band to which a person(s) belong.

Inference: a conclusion derived from observations

Observation: recognizing or noting a fact or occurrence

Scale: a ruler or object of known size that helps the viewer determine the size of an object in a photograph or drawing
Stone tools have been used by humans for hundreds of thousands of years, and because it does not break down in the dirt, archaeologists find a lot of stone materials that teach us about human activity. In Iowa, types of chipped stone tools created and used by Indigenous people include spear points, arrowheads, knives and blades, hide scrapers, axes, garden hoes, and drills. Groundstone tools include axes and adzes for woodworking, mortars and pestles for grinding food, and even stones shaped for playing games. Stone is also a durable and strong material used for building structures and foundations.

LIST THREE ATTRIBUTES OR OBSERVATIONS OF YOUR OBJECT.

LIST TWO INFERENCES ABOUT YOUR OBJECT. WHAT DO YOU THINK IT WAS USED FOR OR WHY WAS IT MADE?

WHAT EVIDENCE SUPPORTS YOUR INFERENCES?

WHAT QUESTION DO YOU HAVE ABOUT THIS OBJECT THAT CANNOT BE ANSWERED BY YOUR OBSERVATIONS? HOW MIGHT YOU FIND OUT THE ANSWER TO YOUR QUESTION?

DRAW OR INSERT A PHOTO OF YOUR FIND HERE: 
Clay is used all over the world to create ceramics (also called pottery) -- objects that have been formed with clay, hardened by firing, and decorated or glazed. Indigenous people in Iowa dug clay from the riverbanks and crafted beautifully decorated vessels for cooking and storage. Archaeological evidence suggests the first pottery in Iowa appeared more than 2000 years ago. European settlers brought and manufactured ceramic dishes made from ironware and porcelain with colorful painting and print transfers. Archaeologists study many attributes of pottery, such as shape, composition, and decoration, to learn about the people who made it and used it.

**TASK:** FIND A CERAMIC OBJECT

**OBJECTS**

List three attributes or observations of your object.

List two inferences about your object. What do you think it was used for or why was it made?

What evidence supports your inferences?

What question do you have about this object that cannot be answered by your observations? How might you find out the answer to your question?

Draw or insert a photo of your find here:
Europeans first arrived in Iowa in the late 1600s. With them, they brought glass. It is very common to find glass artifacts at historical sites in Iowa. We find bottles, jars, lantern and lamp glass, glass trade beads, and window pane fragments. Sometimes glass containers have embossed writing, which gives us clues to who manufactured these objects.

LIST THREE ATTRIBUTES OR OBSERVATIONS OF YOUR OBJECT.

LIST TWO INFERENCES ABOUT YOUR OBJECT. WHAT DO YOU THINK IT WAS USED FOR OR WHY WAS IT MADE?

WHAT EVIDENCE SUPPORTS YOUR INFERENCES?

WHAT QUESTION DO YOU HAVE ABOUT THIS OBJECT THAT CANNOT BE ANSWERED BY YOUR OBSERVATIONS?
HOW MIGHT YOU FIND OUT THE ANSWER TO YOUR QUESTION?

DRAW OR INSERT A PHOTO OF YOUR FIND HERE:
Take a look around your home. Can you identify anything that will still exist for archaeologists to find 1000 years from now? When things become buried over a long period of time, inorganic materials tend to preserve better than organic (living) materials. Inorganic materials include stone, metal, clay cement, plastic, and glass. They will not rot or decay as organic remains do. They survive especially well in an airtight environment, but they too can break down when exposed to the elements.

List the object you selected. What types of materials is it made from?

Many objects contain different types of materials. Do you think your object will be completely preserved? Or only partially preserved?

What might an archaeologist from 1000 years from now be able to learn about your culture from the object that has been preserved?

Draw or insert a photo of your find here:
Organic (once living) remains include people, plants, animals, and anything made of plant or animal matter like food, wood, paper, leather, and many fabrics. These remains break down easily and decay unless preserved under special conditions, such as hot and dry, airless, waterlogged, and very cold environments. Archaeologists do find charred seeds and wood charcoal that become preserved through carbonization, the conversion of organic matter into carbon that happens when plant remains are burned, such as in a hearth or cooking fire. Bones are organic also, but preserve well in some conditions due to their hard mineral content that includes calcium.

**List the object you selected. What types of materials is it made from?**

**Many objects contain different types of materials. Do you think your object will be completely completely decayed or broken down in 1000 years? Or could parts of it be preserved?**

**If you lived 1000 years in the future, what important knowledge would you not have if you were never able to find this object?**

**Draw or insert a photo of your find here:**
Drawing and sketching maps with a scale is an important skill for archaeologists to learn. When recording an archaeological site, a map helps to illustrate the connections between objects, artifacts, features, and the surrounding landscape. The relationships between objects are a key factor in figuring out what activities an object was associated with and how it might have been made. Adding a north arrow helps to orient your map with the cardinal directions, so whoever is viewing the map can understand its context and surrounding spatial relationship. Using a scale provides a reference for the distance between these artifacts and features. Archaeologists usually map a site with feet/inches or meters/centimeters. A map with a north arrow and appropriate scale should provide enough detail so that someone looking at the map in the future can relocate the area you mapped and understand the spatial relationship of the area and items you mapped.

**Drawing and Sketching Maps with a Scale and North Arrow**

You can draw a room in your house, an outdoor space in your neighborhood, or somewhere else. Be creative! Use a tape measure to estimate the total length and width of the area you are mapping and the distance in between each object and feature. A sketch map is approximate, so don’t worry if it is not exact. Describe the area you chose to map. Is it a room or an outdoor space? Where is it?

Measure the maximum length and the maximum width of the area you are mapping. What are the approximate dimensions (in feet or meters) of your map?

What activities are represented in the area you chose to map? What objects provide evidence of those activities? Does your map show evidence of who was using the area or how old they were?

Draw or insert a photo/scan of your map here:
Archaeologists use many different tools, depending on the task they are accomplishing. When digging sample pits to try to locate sites, archaeologists use shovels and sift soil through mesh screens. An excavation might involve careful digging with a trowel. Archaeologists carefully measure, record, and photograph all of their finds and observations. In the lab, they wash, count, and weigh their finds, document data into a computer, and prepare artifacts for storage. Archaeology also involves researching archives and maps, writing reports, and using computer hardware and software for in-depth analyses.

WHAT 3 TOOLS DID YOU FIND THAT AN ARCHAEOLOGIST WOULD USE?

WHAT TASKS WOULD AN ARCHAEOLOGIST ACCOMPLISH WITH EACH OF THESE 3 TOOLS?

DRAW OR INSERT A PHOTO OF YOUR 3 TOOLS HERE:
FIELD & LAB SKILLS

TASK: CREATE A CLASSIFICATION SYSTEM

When archaeologists bring artifacts back to the laboratory, they decide what they want to know and use classification to organize the data accordingly. For example, they often sort objects by the type of material it is made from. So, different categories would include: stone objects, glass objects, clay objects, metal objects, or others. This helps us to examine relationships between different kinds of objects.

HAVE A PARENT OR SIBLING BRING YOU 10 OR MORE RANDOM OBJECTS FROM AROUND YOUR HOME. PLACE THESE OBJECTS INTO CATEGORIES BASED ON THEIR ATTRIBUTES. HOW MANY DIFFERENT WAYS CAN YOU GROUP THESE OBJECTS? LIST SOME OF THE CATEGORIES YOU USED.

WHAT KIND OF INFORMATION WOULD EACH DIFFERENT CATEGORY PROVIDE?

THESE OBJECTS ARE NOT IN THEIR ORIGINAL CONTEXT. WHAT ADDITIONAL INFORMATION WOULD HELP YOU DETERMINE WHAT THESE OBJECTS WERE USED FOR OR WHO USED THEM?

DRAW OR INSERT A PHOTO OF YOUR CLASSIFICATION PROJECT HERE:
FIELD & LAB SKILLS

TASK: PHOTOGRAPH AN OBJECT OLDER THAN 25 YEARS OLD, USING A SCALE

When archaeologists publish a report, they photograph the artifacts they are discussing and include a scale or ruler next to the artifacts. This provides the viewer of the photograph a frame of reference to help determine the size of the artifact. When people find artifacts and they would like to learn more information about them, they will often send a photo of the object to an archaeologist. Without some sort of scale in the photo next to the object, it is challenging to understand how big or small the object might be. The size of an artifact can very much influence an archaeologist’s interpretation! The best types of scales are rulers with inches or centimeters. Using a commonly known object, such as a dollar bill or a coin, is also a good way to add a frame of reference for scale in a photograph.

WHAT OBJECT DID YOU CHOOSE TO PHOTOGRAPH?

WHAT DID YOU USE FOR A SCALE?

WHAT WOULD BE CONFUSING ABOUT THIS OBJECT IF THERE WAS NO SCALE FOR REFERENCE?

INSERT THE PHOTOGRAPH OF YOUR OBJECT WITH A SCALE HERE:
Archaeologists determine how old objects are by examining the order in which artifacts and related materials were laid down or deposited below today’s ground surface. Stratigraphy refers to the layers of material that have accumulated. The general rule is that the oldest objects were deposited first and, therefore, are the most deeply buried. It should be noted that disturbances that take place after the materials were deposited such as burrowing by animals, can rearrange the original stratigraphy. Archaeologists must be observant and watch out for evidence of these kinds of disturbances. Objects become buried through natural processes. There are always small particles of dust and dirt in the air that will accumulate on surfaces (think of the dust that accumulates on the surface of unused objects in your house). Outdoors, this process is more noticeable when wind blows in dirt, sand, leaves and other materials. Rain and floods can move sand and dirt washing it away from some areas and depositing it in others. Animals, insects, and even other people coming into an area can leave behind more material adding new layers to the stratigraphy of a site.

WHAT KIND OF STRATIGRAPHY DID YOU STUDY?

HOW MANY DIFFERENT LAYERS ARE THERE?

DESCRIBE THE OLDEST LAYER, WHICH IS ALSO THE DEEPEST LAYER. DOES IT CONTAIN ANYTHING INTERESTING THAT YOU CAN IDENTIFY?

MAKE AN INFERENCE: HOW LONG DID IT TAKE FOR THESE LAYERS TO BUILD UP? WHAT IS THE EVIDENCE FOR YOUR INFERENCE?

DRAW OR INSERT A PHOTO OF YOUR FIND HERE:
Archaeologists can learn a lot from the animal bones found in archaeological sites. The bones can tell us what kind of animals people hunted for food and if they had pets or domestic animals to help with work. The kinds of animals represented will also be a clue to what the environment was like. Are these the kinds of animals that live in the woodlands, grasslands, or deserts? Animals provide people with more than just meat to eat. Fur, feathers, hides were used for clothes, tents, blankets, and decorations. Bones and sinews were used for tools and string.

**LIST THREE ATTRIBUTES OR OBSERVATIONS OF YOUR ANIMAL FIND.**

**LIST TWO INFERENCES ABOUT YOUR OBJECT. WHAT ANIMAL DO YOU THINK THIS FIND CAME FROM? WAS THIS OBJECT USED OR MODIFIED BY HUMANS?**

**WHAT EVIDENCE SUPPORTS YOUR INFERENCES?**

**WHAT QUESTION DO YOU HAVE ABOUT THIS OBJECT THAT CANNOT BE ANSWERED BY YOUR OBSERVATIONS? HOW MIGHT YOU FIND OUT THE ANSWER TO YOUR QUESTION?**

**DRAW OR INSERT A PHOTO OF YOUR FIND HERE:**
Everyone needs a shelter. We often think of shelters like houses, apartments, or trailers. Shelters can be very different in structure and style, but they all serve to protect us from the elements. In Iowa, archaeologists study evidence of shelters that include historic houses, barns, and outbuildings; rock shelters; and traditional Native American structures like wickiups and earthlodges. These shelters were warm and dry and made good use of the available local materials and technology. By studying shelters, archaeologists learn about the people who built them—what they used for building materials, how they organized their living space, what activities took place in the shelter, and sometimes even the number and ages of people living in the shelter.

List three attributes or observations of your shelter. What materials is it made from?

List two inferences about your shelter. How old is it? Can you tell who constructed the shelter or what types of activities took place there?

Who lived there? What evidence supports your inferences?

What question do you have about this shelter that cannot be answered by your observations? How might you find out the answer to your question?

Draw or insert a photo of your find here:
People travel to obtain the resources they need, to maintain connections to family and friends, or just for fun. Travel can be short trips such as going to the store or a visit to grandparents or it can be a permanent change of location like moving to a new home in a different town or country. People can choose to travel for fun and adventure or to keep connected to other communities, but sometimes people travel because it is necessary to find resources that they need or to find a safe place to live. Indigenous people in Iowa traveled seasonally to hunting and fishing camps via trails and waterways. They also traveled extensively to trade, and archaeologists find trade goods from all across the country in Iowa. Early settlers built trails and roads for hand carts, stage coaches, buggies, and eventually automobiles. Today, we utilize many different types of recreational trails to get exercise and experience nature. Archaeologists refer to roads and trails as a type of feature, meaning it is evidence of human modification of the earth and cannot be picked up like an object or artifact.

LIST THREE ATTRIBUTES OR OBSERVATIONS ABOUT YOUR FEATURE.

LIST TWO INFERENCES ABOUT YOUR FEATURE. HOW WAS IT BUILT? WHO USES IT? WHAT IS YOUR EVIDENCE?

HOW DO PEOPLE GET AROUND YOUR NEIGHBORHOOD TODAY?

FIND AN OLDER FAMILY MEMBER OR FAMILY FRIEND AND ASK THEM HOW THEY TRAVELED TO AND FROM SCHOOL WHEN THEY WERE A CHILD. HOW IS IT DIFFERENT FROM THE WAY YOU TRAVEL?

DRAW OR INSERT A PHOTO OF YOUR FIND HERE:
Plant remains in archaeological sites are clues to what people at the site were eating and how they obtained it. Some plants such as nuts, berries, herbs and cattails were gathered wild. These provided food, medicines, fibers for weaving or making string and dyes for creating beautiful objects. Other plants were domesticated, that is, seeds were saved from one year to the next and planted in gardens and farm fields. Examples of domestic crops grown by indigenous people in Iowa are corn, beans, squash, pumpkins, and sunflowers. Wood was also important. It was used for everything from building houses to making fires for cooking and heating. Native people were very aware of the qualities of different kinds of wood and knew which kinds made the best bows or arrow shafts and which made the hottest fires or were best for building houses.

Do NOT eat any plants without parental supervision.

LIST THREE ATTRIBUTES OR OBSERVATIONS ABOUT YOUR PLANT.

WHERE DID YOU FIND YOUR PLANT?

HOW DID YOU KNOW IT WAS EDIBLE?

CAN THIS PLANT BE USED FOR ANYTHING ELSE BEIDES FOOD? IF YES, HOW?

CAN YOU IDENTIFY ANY OTHER PLANTS GROWING NEARBY YOUR WILD EDIBLE PLANT?

DRAW OR INSERT A PHOTO OF YOUR FIND HERE:
Historical photographs are an excellent resource for investigating a local place and finding out what it looked like many years ago. To be able to notice and identify changes to a place through time, we can use historic and modern photographs of the same location and analyze the differences between them. Sometimes archaeologists will find a historical photo of a building that no longer exists! If there are people in these photos, we can get more insight into their culture, including: activities, hobbies, technology, or clothing and hairstyle trends.

Are there buildings in your photo? List three attributes or observations about the building or buildings.

Are there people in your photo? List three attributes or observations about the person(s).

List two inferences about your photo. What was this place used for? How was it designed and built? Why do you think this building was built? Why this location? Who are these people?

What evidence supports your inferences?

What question do you have about this photograph that cannot be answered by your observations? How might you find out the answer to your question?

Insert a photo or scan of your historical photo here:
Archaeologists can learn about how people lived in the past by examining old written records such as newspaper or magazine articles, journals, and diaries and by looking at old photographs and drawings that were created many years ago. At the Office of the State Archaeologist, we have created an archive of over 275,000 articles, reports, photographs, and more! However, we still travel to libraries, museums, and colleges or universities to learn even more from their archival and historical collections.

Find a place you can do research that is not your home computer or internet. You can visit a library or look at books or old photo albums that friends or family members may have around the house.

From your research, write a short description about a person who lived before you were born. You can include information about their life, for example, what their clothes were like, how they traveled, who their family was, or what school was like for them. Be sure to document if your story is about a specific person such as your grandmother or George Washington or if it is more generally about a person who lived in a certain time period like the 1960s or the 1800s:

Where did you find this information? Does your resource indicate when it was published?

What else would you like to know about this person or this time period? How can you find out more?

Insert a photo of your research resource here:
Archaeologists look at historical maps because they often show features like roads and structures that no longer exist. They might also show a change in the landscape, such as a river that has changed course or the expansion of a town or city. New construction happens all the time, and maps record a snapshot in time. Instead of digging immediately, archaeologists look for evidence on maps to help decide if there is anything below the ground surface that might be affected by planned construction. Some historical maps even show us who owned the land up to 150 years ago so the ownership can be traced back and connected to different families.

**List three attributes or observations about your map. Does it say when it was made? Who illustrated it? What was it intended to show?**

**Does the map have a scale? What units of distance does it use?**

**Identify the map’s north arrow or compass.**

**Does the map show features that could be useful to an archaeologist? If so, what are they?**

**Bonus: Look up this map’s location using satellite imagery on Google Maps. Has anything changed since the map was made? What do you notice?**

**Insert a photo or scan of your map here:**
Archaeologists conduct oral interviews for two big reasons: 1) not all interesting information the past was written down, so asking someone how things happened in the past and documenting their information provides a deeper understanding of that history and 2) everyone’s story is different and multiple perspectives and interpretations are important. A man might have a completely different perspective or interpretation than a woman when recalling a past event. People of different socio-economic backgrounds or ethnicities have different perspectives on culture and past lifeways. Our knowledge of the past becomes richer and deeper as we document more and more diverse perspectives. Archaeologists often conduct interviews to ask about landscape and environmental change, how certain objects were used, or what people visited or lived at a certain place. If we were to ask your best friend about you, do you think they’d tell a different story about you than would a close family member?

INTERVIEW SOMEONE OUTSIDE OF YOUR FAMILY TO LEARN SOMETHING NEW ABOUT YOUR COMMUNITY’S PAST. PLAN TO ASK ABOUT SOMETHING SPECIFIC. FOR EXAMPLE: ARE THERE ANY INTERESTING FAMILY STORIES ABOUT YOUR GRANDPARENTS? WHAT WAS SCHOOL LIKE WHEN YOU WERE MY AGE? OR HOW HAS THE NEIGHBORHOOD CHANGED SINCE YOU MOVED HERE?

WHO DID YOU INTERVIEW?

WHAT DID YOU ASK? WHAT DID YOU LEARN?

DID SOMETHING ABOUT YOUR INTERVIEW SPARK YOUR CURiosity TO LEARN MORE? WHAT WAS IT?

WITH PERMISSION FROM YOUR INTERVIEW PARTICIPANT, INSERT A PHOTO OF YOU TOGETHER HERE.
Landscapes and town-scapes as we see them in the present are not fixed and static, but are dynamic and active. The environment and landscape evolves through time. Cities and towns rapidly expand to places that used to be fields and forests. Rivers meander and change their flow throughout time. We build new buildings, parks, and trails, while we deconstruct others. Archaeologists use aerial photographs from the past and present to search for features in the landscape, like roads and buildings. The earliest aerial photos we have in Iowa were taken in the 1930s! By comparing the landscape in aerial photos from each decade, we can tell when buildings were constructed or removed, when forests turned to fields, and when fields became developed as urban areas. We can also see how features in the landscape relate to our area of study, like how close or far away the nearest river is located. We can also use aerial and satellite photos on our phones to document where we find archaeological sites!

FIND YOUR HOUSE ON SATELLITE IMAGERY, LIKE GOOGLE MAPS OR GOOGLE EARTH. LIST THREE OBSERVATIONS ABOUT WHAT YOU SEE IN THE PHOTOGRAPH.

WHAT OBJECTS OR FEATURES OTHER THAN HOUSES CAN YOU SEE?

WHAT TIME OF YEAR WAS THE PHOTOGRAPH TAKEN? HOW CAN YOU TELL?

HOW WOULD IT LOOK DIFFERENT IF IT WAS TAKEN DURING A DIFFERENT SEASON? WOULD YOU BE ABLE TO SEE MORE OR LESS?

INSERT A SCREENSHOT OF YOUR AERIAL PHOTOGRAPH HERE. IT CAN BE AT ANY SCALE AND YOU DO NOT HAVE TO INDICATE WHICH HOUSE IS YOURS.
Context refers to the relationship artifacts have to each other and the situation in which they are found. The relationships between objects are a key factor in figuring out what activities an object was associated with and how it might have been made. The stratigraphic context, that is the order in which objects were buried, provides evidence for the relative ages of the objects. When a single artifact is collected from a field without a record of its original location, we lose its context. The bigger picture is that we lose information about the relationship and association that artifact has with the rest of the archaeological site or landscape it came from. It becomes a missing piece of a big puzzle. This is like taking a story book and ripping out random pages. What information is lost when you are missing pages of a book?

Find and photograph something that is out of place or doesn't belong. What is your item and why do you think it is not somewhere it originally belongs?

List two inferences: Who brought the item here? What were they doing?

What information is missing from this object's story because it is out of place?

What new story does the object have in its newly discovered place? How does this compare to what you think is its original story?

Draw or insert a photo of your find here:
Archaeological sites are very fragile resources. Many artifacts do not preserve well. Objects made from organic materials like plant fibers, wood, or leather decay rapidly unless they are in extremely dry or very cold situations. Sites are worn way and destroyed by natural processes such as erosion, flooding, and disturbance by burrowing animals. Archaeological sites are also damaged or looted by humans, or sometimes destroyed during construction. As a result, the archaeological sites that we have today are only a small fraction of what were originally here. Archaeological sites can be compared to endangered natural resources in that once they are gone, they are gone forever. Good site stewardship is about identifying and preserving these sites and protecting them for the future.

**BE A GOOD STEWARD. VISIT A SITE THAT YOU FEEL HAS HISTORIC OR CULTURAL VALUE. THIS COULD BE A PARK OR A HISTORIC BUILDING IN TOWN OR NEAR YOUR HOME, OR EVEN YOUR BACKYARD. LOOK AROUND AND SEE IF THERE IS TRASH THAT NEEDS TO BE PICKED UP TO HELP KEEP THE AREA IN GOOD SHAPE, AND ENJOYABLE FOR OTHER VISITORS. IMPORTANT NOTE: DO NOT GO ON PRIVATE PROPERTY WITHOUT PERMISSION. ONLY PICK UP TRASH IN PUBLIC AREAS.**

**WHAT LOCATION DID YOU CHOOSE TO HELP CLEAN UP?**

**WHY DO YOU THINK HELPING KEEP THINGS CLEAN HELPS PROTECT CULTURAL RESOURCES?**

**DRAW OR INSERT A PHOTO OF YOUR SITE OR THE TRASH YOU PICKED UP HERE:**
**DEEPER UNDERSTANDINGS**

Sharing knowledge with the public. Archaeologists are scientists and often work on big teams where data is shared between other scientists and non-scientists who can contribute more information and different perspectives. Every little part of the puzzle helps. If we do not share information about our finds with the public, the public misses out on important stories about our collective past. It is our ethical responsibility as archaeologists to share the knowledge we generate with the public. It is also important for archaeologists to consult with community members and our Tribal partners to gain a deeper understanding of the knowledge we interpret. One way we do public outreach creating exhibits that highlight artifacts, research, and people. In Iowa, you can find archaeological exhibits at many campus museums, nature centers, local historical societies, and other public facilities.

**Task: Make a Curated Exhibit**

Select 5-10 personal objects and/or photographs that tell a story about yourself or your family. Choose a theme for your exhibit. Do these objects focus on one person? A family hobby? A past vacation? Your objects and photographs can be placed on a large table or the top of a bookshelf for all to see. Give your exhibit a title. Create a label for each object that lists the following: what is the item? Where did it come from?

**What is your exhibit theme?**

**What objects are included in your exhibit? What does the object mean to you?**

**How will you treat the objects in your exhibit with care and respect? How will you let others know to treat them with care and respect?**

**Insert a drawing or photograph of your curated exhibit here:**
Archaeological research is just one way to learn about the past. The descendant communities of the people we study are incredible keepers of knowledge. They enrich our understanding of past cultures and teach us important knowledge about their contemporary culture. At the Office of the State Archaeologist, we consult with up to 30 different Tribal communities who all have ancestral ties to the land we now call Iowa. These tribes live all over the Midwest and Great Plains, and include the Ioway, Otoe, Omaha, Missouria, Ponca, and Ho-Chunk/Winnebago, among many others. The Sac & Fox Tribe of the Mississippi in Iowa is the only federally recognized Indian tribe in Iowa. They refer to themselves by their Tribal name, Meskwaki ("Red Earth People"). When we are writing about or talking about the history of our Tribal partners, it is important to get information directly from Tribal community members and use books and resources that they create.

LEARN ABOUT INDIGENOUS IOWANS. WATCH A VIDEO OR READ A BOOK CREATED BY INDIGENOUS IOWANS OR VISIT THE WEBSITE OF A TRIBAL NATION THAT IS HISTORICALLY AND/OR PRESENTLY ASSOCIATED WITH THE STATE OF IOWA. HERE ARE SOME TERMS THAT YOU CAN SEARCH FOR ON THE INTERNET: "MESKWAKI POWWOW", "MESKWAKI CULTURAL CENTER AND MUSEUM", "RED EARTH GARDENS", "IOWA TRIBE OF KANSAS AND NEBRASKA", "OMAHA TRIBE OF NEBRASKA", "PONCA TRIBE OF NEBRASKA", "OTOE-MISSOURIA", "HO-CHUNK NATION". HINT: YOU CAN FIND VIDEOS OF THE MESKWAKI POWWOW ON YOUTUBE!

WHAT TRIBE DID YOU RESEARCH FOR YOUR WEBSITE, BOOK, OR VIDEO?

WHAT IS THE NAME OF THE RESOURCE YOU INVESTIGATED?

LIST ONE NEW THING YOU LEARNED ABOUT THE TRIBE'S FROM THE RESOURCE YOU FOUND.

LIST ONE NEW THING YOU LEARNED ABOUT THE TRIBE'S CULTURE TODAY.

INSERT A PHOTO OR SCREENSHOT OF YOUR RESOURCE:
Ever wonder how something was made? So do archaeologists! Archaeologists can test their hypotheses about past technologies by trying these technologies themselves and comparing the results to actual archaeological artifacts. We call this experimental archaeology. Experimental archaeologists try to a replica from scratch to figure out and better understand how past peoples made it. They are trying to learn: What materials work best? What are the best techniques? What is the most efficient way to do this? In Iowa, experimental archaeologists do flint knapping to make chipped stone tools; make tools from animal bone; create and decorate pottery vessels and experiment with firing techniques; use plant fibers and animal sinew to make cordage for sewing and wrapping things together; and more!

Conduct an experiment to make a replica of another object or replicate an older technology. For example, you can use play-dough or air-dry clay to make and decorate a pot by looking at photographs of prehistoric pots to figure out how the designs were created; make rope out of cord, find a stick to shape into an atlatl; or make paint or dye using fruits, vegetables or flowers. Can you use a rock to drive a stake into the ground or break a walnut shell? Do an experiment to find what kinds of rock work best and the best technique for the job.

What item or task did you replicate? Were you able to replicate all of this object or task? Or only part of it?

What materials did you use in your experiment?

What was most challenging about this experiment?

Is your replica as sturdy or durable as the original? Why or why not?

What did you learn about the skills or techniques required to do this replication?

Draw or insert a photo of your replica/experiment here: