Junior Archaeologist Program



Archaeology Activity Workbook

Ages 6-12



METROPOLITAN HISTORICAL COMMISSION ARCHAEOLOGY OFFICE

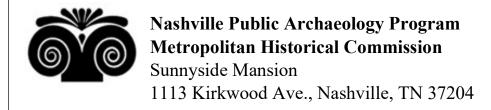
Front Cover

Several generations of students and the staff of the Metropolitan Historical Commission conduct archaeology at the Sunnyside Mansion ahead of its renovation in 2023.

Acknowledgments

This booklet was inspired by the National Park Service and their Junior Ranger and Archaeology Programs and borrows from those great resources. The booklet was designed by Dr. Adam Fracchia and Russell LeStourgeon of the Metropolitan Historical Commission.

Please send any feedback or questions to adam.fracchia@nashville.gov.



Instructions

Fill out this form to get started.

My name is		and I am	years old.
	I am studying to be an	archaeologist.	

This booklet will help you start training as an archaeological scientist.

Read through the instructions and have fun!

Activities

1) Begin your training by completing the following number of activities based on your age. You can do more activities to build on your training.

Age	Activities
6-9	5
10-12	8

Activities with a trowel require a little extra digging and are designed for kids aged 10 to 12.

- 2) After you have completed your number of activities, read and sign the pledge.
- 3) Bring your activity book to the Metro Historical Commission to receive your Archaeologist Badge.

Archaeology Activities

Activity	Page Number	Suggested Age	Completed ()
Preserving Nashville	6	All	
Matching Artifacts	7	All	
Soil Stratigraphy	8	All	
French Lick	9	All	
Building a Mound	10	10-12	
Bells Bend	11	All	
Home in the	12	All	
Mississippian Period			
Fort Nashborough	13	10-12	
Sunnyside and	14	10-12	
Dendrochronology			
Fort Negley	15	All	
Bass Street	16	10-12	
Music City	17	All	
Understanding	18	All	
Symbols: Athena in the			
Parthenon			

Archaeology in Davidson County and Tennessee

Just like the State of Tennessee, the City of Nashville and Davidson County contain a long and amazing history. Some of that history lies above the ground in the earthen mounds and brick buildings in Nashville. Much of that history lies below the ground in the soil. Archaeologists study the history below the ground. They excavate and record the soil and study the artifacts they recover to understand the people in the past.

Archaeology is the study of the people of the past through the things or artifacts they have left behind. These artifacts could be a cup, a doll, bones from a meal, or even a stone arrowhead. By understanding these objects, archaeologists try to answer questions about how people lived.

Archaeologists ask questions like:

What did people eat?

Where did they live?

What did they think about?

What did children play with?

How did people make things?

Archaeologists ask all of these questions and more. In doing so, they study **culture**: how people together did things, what they thought, and what they believed.

Archaeologists can date things by what they look like and what they are made of and where they are found in the soil. Each layer of soil or rock is carefully excavated or dug and the soils screened to separate the artifacts from the dirt. Archaeologists photograph, map, and record these layers of soil. By studying the layers of soil, archaeologists tell how old an object may be and when it was used. Then, they can study how cultures may have changed over time.

Archaeologists work with other scientists. **Historians** use written records to understand the past. **Geologists** study the soil and rocks of the earth. **Paleontologists** study ancient plants and animals through fossils. **Zooarchaeologists** study animals from the past found archaeologically.

Preserving Nashville

The history and archaeology of Nashville can be found all over Davidson County. Everybody can help preserve this heritage. Match the job with their specialty.

Architectural Historian	

Studies the past by carefully excavating soil layers in the city to better understand the artifacts and people of the past.

Historic Preservationist

Preserves the past by working with people and neighborhoods to preserve buildings.

Urban Archaeologist

Studies and documents old buildings.

Your Name:

Studies the past by looking at the animals that people had or used.

Zooarchaeologist

Explores the past and works to preserve Nashville's heritage.

Ethnobotanist

Studies the past by looking at the plants that people used.

Matching Artifacts to Understand People

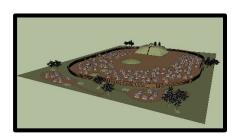
Archaeologists often use what they know of their own experiences to better understand the people they are studying. Match the object used by past people with a similar item that we use today.

Artifacts of the Past

Artifacts of the Present



















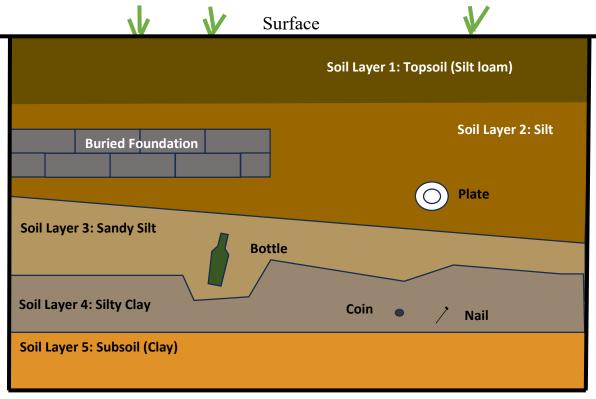


Soil Stratigraphy: Reading the Dirt

Understanding time is very important for an archaeologist's ability to understand past people. Archaeologists examine soil layers to determine how old they are and how archaeological sites formed over time. To do this, archaeologists dig carefully, recording the depth, color, and texture of each soil layer and the artifacts found in them. These different soil layers are known as stratigraphy.

Because activities occur near the surface and older soil layers are often buried, we know that usually the soil layers near the surface are younger than the soil layers below them. Without recording this information about soil layers, it is difficult to tell who was using an artifact and when. Artifacts that are found in the same layer likely entered the soil at the same time.

The profile map below shows the layers of soil that an archaeologist may encounter including soil color and texture. Use the profile map to answer questions about the archaeological site.



- 1) What is the oldest soil layer with artifacts?_____
- 2) Which artifact dates to the same time period as the buried foundation?
- 3) Which artifact went into the soil first, the bottle or the nail? _____
- 4) If the coin in Soil Layer 4 dates to the founding of Nashville in 1796, when does everything above it have to date to?

French Lick

French Lick is a funny name, but it refers to the salty water of the springs that once flowed near what is the Bicentennial Mall today in downtown Nashville. Animals were attracted to the salt and Indigenous peoples harvested the salt. At the site, archaeologists have found large clay pans used by Indigenous peoples to collect the salty water and produce salt. European traders came to French Lick to trade for furs with the Indigenous peoples and would later settle near the springs.







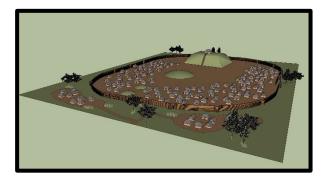
On the left is an image of people processing the water to make salt. In the center image is a broken piece of a ceramic salt pan like the ones found at French Lick and used by Indigenous peoples to evaporate water to collect the salt. The picture on the right is a pit that held a salt pan. The fire in the pit caused the soil to change colors to a bright orange and red.

Salt is an important mineral in one's diet and was often used to preserve food. Answer these questions about salt in your life.

1) How do you use salt?
2) Where do you get salt?
3) What other artifacts might you find at the French Lick Site?

Building a Mound

In many past cultures all over the world, people have built platforms or mounds. Some cultures made burial mounds of soil, brick, or stone. The ancient Egyptians originally made tombs of mud brick and over time they became increasingly larger and more elaborate pyramids.



Here in Tennessee, several cultures made mounds of earth. The Mississippian peoples that lived about 1,000 years ago built conical or cone-shaped burial mounds, flat-topped mounds for their leaders to live on, and different shaped mounds for other purposes that we do not know.

Building a large mound took careful preparation, planning, and lots of work. People had to dig and collect the soil in woven baskets and bring it to a prepared spot where it was fashioned into a pile.

Many of the earthen mounds of the Mississippian peoples have been destroyed, sometimes because someone wanted to construct a building in that location or people wanted to look for treasure. We lose a piece of the past when these mounds are destroyed.

How to build a mound

Mounds were built from soil carefully selected near the construction site. The soil was collected in baskets and carried by people to the location of the mound where each load was piled on each other. The baskets contained about 1.5 cubic feet or 55 pounds of soil. We believe that the east side of Nashville had at least four mounds. One of these mounds was conical or cone shaped and was ten feet tall and 100 feet wide. This would mean that the mound contained 15863.5 cubic feet of soil.

How many loads of dirt would it take to build one of the mounds on the East Bank near the Titans Stadium?

<u>Total cubic feet of soil</u> = how many baskets needed
One basket load
or
15863.5 divided by 1.5 =
How many pounds of dirt would that be?
The largest Mississippian mound is found just outside of St. Louis, Missouri. Monks Mound is one of the largest earthen mound in the Americas. It contains 22,000,000 cubic feet of dirt.
How many basket loads of dirt would that be?

Bells Bend

Bells Bend is a beautiful natural bend in the Cumberland River. People have been living there for thousands of years. Archaeologists have found many amazing archaeological sites in the area, some of these sites go back over 10,000 years.

The Cumberland River and the creeks that flow into it provided a habitat for fish, frogs, and other aquatic animals. Indigenous peoples used these resources, including clams and mussels. Often, we find the bones of these animals and the left-over shells. If people have lived in these areas for a long time, the shells that they threw away form a pile that archaeologists call a midden.



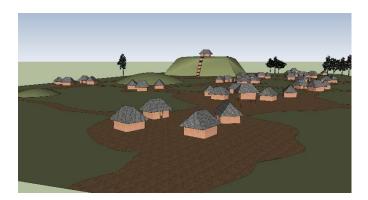
Here is a picture of a shell midden along the banks of the river at Bells Bend.

1)	What could studying the shells in this midden tell us about the people who lived here?
2)	What would happen if someone decided to dig through into this midden without recording any information?
3)	What kind of things should we find near the midden if people have been living here for a long time?

Home in the Mississippian Period

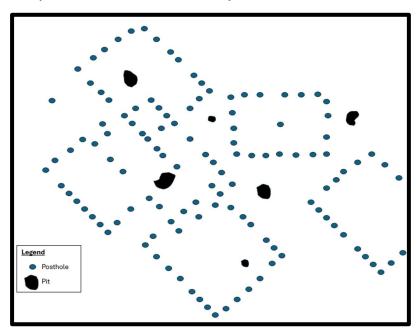
During the Mississippian period, Indigenous peoples made their buildings with posts woven with reeds and sticks and coated with clay. Often, the wood will decay and become soil again. Archaeologists often only find dark soil stains from where the wood had been or had been dug. Archaeologists carefully map these circular stains.





The picture on the left shows the excavation of two rows of postholes, showing where a building stood. The long straight line is where a wooden wall sat. The picture on the right shows what houses in a village may have looked like.

Sometimes there may be many stains in an area where many houses have been built over and over again.



Analyzing Postholes

- 1) Using the post holes as a guide trace the rectangular shape of each house.
- 2) Looking at the excavation map, how many different houses do you see?
- 3) Could all of these houses been built at the same time?
- 4) Why or why not?

Fort Nashborough



Fort Nashborough was a group of houses surrounded by a log wooden wall or stockade. Named after American Revolutionary War hero General Francis Nash, the fort was established in early 1779 in the French Lick area of the Cumberland River. The Fort contained 20 log cabins and was home to settlers. The Fort was abandoned in 1794, but the settlement grew into the town of Nashville. Nashville became the capital of the new state of Tennessee in 1796.

Living on the frontier was a challenge for the new settlers. Many supplies had to be made or traded for. Use the list below to answer questions about supplies and living on the frontier.

Supply List

Your supplies 1 iron skillet 1 keg of gunpowder 2 lbs. of tobacco 7 flour barrels 3 sugar barrels 1 lb. of spices	Your neighbors 1 tin pot 3 kegs of gunpowder 3 lbs. of tobacco 2 flour barrels 3 china plates 2 bolts of cloth	Trade Rules 1 iron skillet = 1 tin pot 1 keg of gunpowder = 4 lbs. of tobacco 3 blankets = 1 bolt of cloth 2 flour barrels = 1 sugar barrel 3 sugar barrels = 1 china plate 1 iron skillet = 2 flour barrels	
1 whiskey bottle1 medicine bottle	1 fur pelt5 whiskey bottles	1 lb, of spices = 2 china plates1 fur pelt = 2 whiskey bottles and 1 keg of	
1) What objects would	you need if you lived in the Fort?	gunpowder 1 bolt of cloth = 1 bottle of medicine 1 lb. of tobacco = 1 whiskey bottle	
2) What supplies could you get for 1 keg of gunpowder?			
3) What supplies could you get with 7 barrels of flour?			
4) Which items seems to be the most valuable or expensive?			
5) If you excavated at Ft. Nashville, which of these objects might still be preserved in the ground? Why?			

Sunnyside Mansion in Sevier Park and Dendrochronology

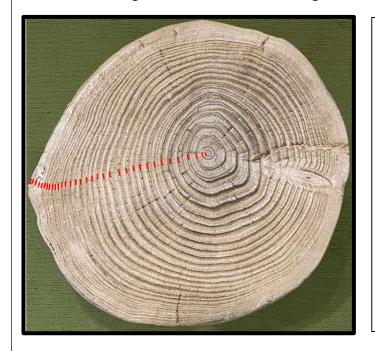
Sunnyside Mansion was a historic home built in 1852 although some of the buildings are even older. Recently, wood samples were taken from one of the log buildings. Using dendrochronology or tree-ring dating, scientists were able to date the building.

Trees have growth rings and you can count those rings to see how old a tree is. Trees grow different amounts each year depending on the weather. Some years when there is a lot of rainfall the trees in an area grow more (bigger rings) than years when there is less rainfall (smaller rings). If we match these different sized rings between trees, we can count backward and date how old a tree is.





Look at the diagram on the left. On the right is a log that was used to make the Sunnyside mansion.



Help us date the building. Look at the log to the left and follow the instructions.

- 1) Count the rings (Their edges are marked in red). How many did you count?_____
- 2) By comparing the rings, we know that the first ring dates to 1789, so when was the log cut down?_____

(Hint: Add your answer to Question 1 to 1789).

3) When was the building constructed?

(Hint: When was the log cut down?)

Fort Negley

During the American Civil War, the Union Army was able to retake Nashville from the Confederate Army. Nashville was the first Confederate state capital to fall to the Union in 1862. In order to stop the Confederates from taking the city back, the Union Army fortified the town, constructing trenches and forts around the city. One of these forts was Fort Negley. Many people, including former enslaved peoples, were forced to build the fort for the army and many were hurt or died.

Travel to the fort or look at the picture of the fort below and the area around it.



Fort Negley in 1864

Why do you think the Union Army chose to build a fort here? (Hint: look around at all you can see.)
Why was the fort built of earth, stone, and wood?
Where kind of artifacts would a soldier have left behind?

Archaeology on Bass Street

The Bass Street neighborhood formed around the base of Fort Negley and became a Black community after the Civil War. Unfortunately, urban renewal in the 1960s saw destruction to the neighborhood and many of its residents were forced to move.

The history of this neighborhood is preserved in the voices of its residents and their descendants. A portion of the archaeological record is also preserved below the ground.

Archaeologists rarely excavate a whole site. Therefore, they pick areas to focus on based on their research questions. Questions like: What food did people eat? What games did kids play?

Now, put on your archaeology hat:

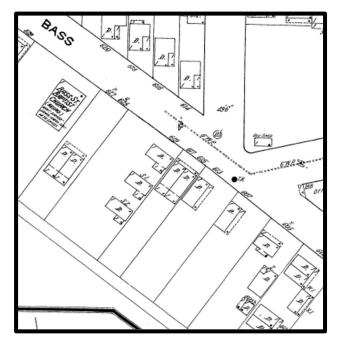
1)	What questions would you want to know about the people who called Bass Street home?
	Can you think of two research questions? Write them down below.

b. _____

?

2) Test your research question

The following map is an insurance map made in 1908. This Sanborn Insurance map shows the buildings (marked with a D for dwelling or home) that once were on Bass Street and the property boundaries or yards.



Excavation square =

Think about your research question and where you could find data to answer the questions.
Look at the map and the houses. Draw three excavation squares on one of the properties in the areas where you could answer the research questions.
Why did you put your excavation squares in those areas?
What artifacts do you expect to find?

Music City Nashville

Nashvillians have a long history making, enjoying, and producing music. Many singers and songwriters live in and around the city.

Here are some musical instruments that could be found in Nashville. Can you draw a line between the <u>instrument</u> and its <u>sound</u> and the <u>part</u> found archaeologically?

<u>Instrument</u>	Sound	<u>Artifact</u>
Jaw Harp	Hum	
Harmonica	Boing	
Playing spoons	Twang	
Banjo	Clank	

Understanding Symbols: Athena in the Parthenon

The City of Nashville has been called the "Athens of the South." Because of this comparison, the Parthenon in Centennial Park was built as a full-scale copy of the original Parthenon in Athens, Greece. It was first constructed in 1897 as part of the Tennessee Centennial Exposition and later rebuilt again. Inside the Parthenon is a giant 42-foot statute of Athena, goddess of wisdom, war, and crafts. She was believed to protect the city of Athens.





Archaeologists study symbols on the artifacts people have used in the past to understand what people believed. A symbol is something that represents an idea. Sometimes it is difficult to understand the meaning of symbols from the past.

Look at the picture of Nashville's Athena statue.	What symbols do you see?
What do you think these symbols may mean?	
Do we use any of these same symbols today?	

Junior Archaeologist Oath

I promise to explore and study the past, and

I promise to protect and preserve the archaeological resources of Nashville and Davidson County.

	Your Name	
	Date	_
Your signature	 Metropolitan H	istorical Commission Representative

Metropolitan Historical Commission of Nashville/Davidson County

