

Digging in the Dirt to Discover the Past

Theme: Cultural & Historical

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Subject Areas

History/Social Studies,
Mathematics, Science

Duration

One or two class periods
(considerable teacher preparation
required)

Setting

Outdoors and indoors

Skills

Grid layout, deductive reasoning skills,
assumption, inference building, writing,
note taking, cataloging

Charting the Course

Today there are many archeological sites
located along the Bay and its tributaries
in the region called "Down Jersey."

Vocabulary

Artifact, archeologist, archeology,
archeological site, culture, civilizations,
tools, archeological dig, supposition,
educated guess, hypothesis, facts,
allegations, assumptions, presumptions,
clue, journal, looted, historical data,
relics, archeological stratification

Correlation to NJ Core Curriculum Content Standards

Social Studies	Mathematics
6.9 (1, 2)	4.1 (1, 7, 8)
6.5 (1, 5)	4.3 (6, 9)
	4.4 (1, 2, 3, 5)
Science	4.5 (2, 4)
5.2 (2, 4, 5)	4.7 (1, 8)
5.3 (2)	4.9 (1, 2, 3, 4, 5)
5.4 (3, 4, 5)	4.12 (1, 3)
5.5 (2, 4)	
5.8 (1)	



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■ Objectives

1. Ethics of leaving cultural resources in site
2. Honing deductive reasoning skills
3. Introducing terms listed in vocabulary
4. Discussing Native Americans in the context of how remains may give clues to cultural past
5. Learning to articulate your feelings of disappointment with a socially acceptable response
6. Developing creative writing skills
7. Discussing links between past and present day uses of natural resources

■ Materials

Shovels, trowels, paint brushes, stakes, string, journals, pens, items to use as artifacts; rocks, eating implements, small bottles, piece of pottery, beads, money, piece of glass (suggest sea glass without sharp edges), metal — depending on the direction you may wish the students’ “stories” and interpretation to lead

■ Making Connections

Native Americans were the first to make use of the fertile shores of the Delaware Bayshore. Their use of the local resources and what later evolved into colonial use has a connection to present day applications. Today there are many archaeological sites along the Bay and its tributaries. Many of these sites have been excavated by untrained curiosity seekers. As a result the knowledge that could be gained

by expert inspection has been lost. A number of locations have been expertly excavated and have yielded insights into the Lenape or Delaware Indians.

■ Background

Excerpts from *Archeology for the Young* original activity submitted by Gretchen Brown

The plot had been located, and the new student archaeologists at Woodland Country Day School were ready to start. They understood about sectioning off the earth, with each one working on his own area. They knew that they had to use their tools carefully; they were not to rush and hurry. They were looking for signs of earlier civilizations. They realized that this spot might reveal artifacts from several centuries. Excitement ran high as they approached the dig.

Imagine their feelings when they found that the dig had already been disturbed. The feeling of disappointment was greatest, for these were beginners and this was to be their first dig. Then came anger, personal anger. How could someone do this to them? Now they wouldn’t be able to assemble the clues to the past.

Most of us can relate to these feelings. Sites have been looted, inadvertently or otherwise. While it is understandable that people want to pick up an intriguing object found in their path, they need to be taught at an early age to respect the integrity of historical data and why it is not a good idea to take found objects. (For example, if along the river bank there are ten pottery shards that appear

ancient, and each of nine people takes one, by the time the tenth person comes along and takes the last piece, you have completely lost something that might have been a key in understanding the area.) Without the supervision of a trained archaeologist digging for relics is an especially damaging practice. Many river banks throughout Southern New Jersey are unearthed by naive persons who ultimately destroy any chance of acquiring knowledge about Native Americans. The position in which objects are found in relationship to each other is particularly important to assembling assumptions about the past.

Many local archeological remains have been destroyed by development. An Indian camp was destroyed by the construction of Route 55, without any prior archeological investigation. Conversely a different site was investigated for historical significance before construction, thus some information was derived.

As teachers, it would appear that we need to teach our children to respect these cultural resources. Considering how long it has taken to teach children about caring for their environment, i.e., littering and pollution, it may take us many years to teach this new concept of “don’t touch, don’t disturb.” But we have to begin sometime or we will have lost countless examples of historical information. If the vandals who destroyed the “Arch” in Utah had been trained from childhood to respect these national treasures,



one hopes that this destruction would never have occurred. Theoretically, taking a pottery shard is just as bad as destroying the Arch in terms of the valuable information derived from qualified examination.

But, you ask, how can children be taught about the importance of historical knowledge, when it is such a temptation to take a piece of history home? This is a difficult question. We can expose our children to exhibits and museums, and we can provide slides and videos, but we have limitations in providing children with a hands-on experience: an experience that might foster an interest in pursuing a career in archaeology, or at least respecting artifacts. Perhaps your local historical society or museum has available to you a traveling exhibit of core artifacts — artifacts which have been professionally examined and catalogued so your students could actually feel and study the objects up close.

■ Procedure

Warm Up

Talk to the class about the importance of archeological study of an area. If known, discuss some local examples of sites that were excavated and studied. Relate the importance of preserving sites intact for in-depth and thorough study by the professionals. Describe the problems associated with people who are unaware of an area's important historical and cultural significance and how they may ruin the potential of an area by exploring and removing artifacts. If available,

show students some artifacts and have them describe what they tell about the past.

The Activity

Please note: The excavation plot should be set up by the teacher well in advance of the lesson. Items buried should be representative of the time and culture that you would like to convey. A variety of readily available items can be used to “mimic” items from the past. These could also be constructed from modeling clay, etc.

1. There is another activity you can do with children of third grade or higher. And that is what the prospective archaeologists at Woodland Country Day School were embarking upon. The summer before I planned to use this teaching tool, my son and I “seeded a dig.” We dug a rectangle about 9'x6' and about a foot deep. On the bottom layer we put a ring of stones with ashes and an animal bone and covered it all with dirt. There were several more layers and they contained buttons, coins, a candle holder, a scrap of material, some gold beads, a piece of pottery, a rusty hinge, dice, and part of a cup handle. Plant an object or two that students are unlikely to be able to identify. This should generate a lot of creativity. We placed these to represent layers of civilization. We created this site in the summer to give it nine months to settle.

And yes, when we went to dig, we found that someone had started to turn the ground over

for another class's garden. Fortunately all was not lost. We did set up our plot lines and everyone excavated in his own spot. Each child had the pleasure of finding his own piece of “history.”

I confess I have not done this every year because of the preparation involved, but I would like to make it a yearly event. I feel that this type of kinesthetic activity provides the hands-on experience children need and thus promotes an active role in finding pieces of the past. My fourth graders loved it.

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2. A grid should be constructed that allows students to record objects' placement to one another both at depth and distances from marked stakes. The age of the students may determine how elaborate you wish make the grid and recording procedure. This aspect can be used in conjunction with a math activity. Ideally someone should be able to reconstruct the site using recorded coordinates that have been triangulated with the stakes.
3. Put the students in teams and assign them various jobs. Some students should record their findings in a journal, others can dig or catalog. Let the teams develop conclusions about their excavation. Have students write a story about the people who used this site based on the assumptions they have drawn from the

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artifacts they discovered.

This would be an opportunity to discuss the differences between supposition, educated guesses, facts, allegations, assumptions and presumptions.

Wrap Up

Discuss disappointment of previously excavated site.

Review journal entries.

Discuss conclusions made about peoples from objects found and relationships of objects to other objects. Discuss stratigraphy of the site.

Write a story about the unidentifiable object. What does the student suppose the purpose of the object was? What is it made of?

Why would prehistoric settlements border rivers? Why would Indian remains be more prevalent on high ground areas adjacent to rivers? Why would Indians go to the shore in the summers?

What may be deduced from what's not present?

Creative writing assignment about unidentified objects' presumed purpose.

Extensions

Mrs. Brown's class was disappointed when they discovered their site had been disturbed, just as many archaeologists have been devastated and thwarted by looters. This unplanned event presents an opportunity to

discuss the damage done by untrained or greedy persons. Why not make one mock looted site and one plentiful site. This way students can experience the frustration of sites that are disturbed or destroyed. Have the students use the painstaking mason trowels and brushes that archaeologists utilize to uncover small layers at a time. Layers can be devised to correlate to time periods; stone tools, points, pottery, glass, buttons, metal, plastic, transistor, a computer chip... limited only by your imagination. The layers could be more specific to a time period being studied in class. Some class time should be spent discussing stratigraphy. In general older objects would be found at deeper depths. Discuss what might alter this placement; plowed fields, frost, earthquakes, floods, tree roots, dumps, construction...

NEVER USE A KNOWN ARCHEOLOGICAL SITE FOR AN EXCAVATION.

Another possible extension is to have students imagine what we (today's society) would leave behind. Most of what we throw away ends up in a sanitary landfill that is buried with a layer of soil every day (much like the stratified layers that actually exists in nature.) What clues to our life-style would a student 100, 200, 300, 400 years from now find? A cross-sectional drawing/diagram could be made to show the various "artifacts" that such a site would include.

Resources

Books by Herbert Kraft
listed in reference materials

Historic Themes and Resources book pages 4, 39, 57, 109.

The Turtle Stone, The Legacy of the Abbott Farm video and *Teacher's Study Guide* were developed to teach 4th through 8th graders about archeology. It focuses on the history and way of life of the Lenape Indians, the philosophy and practice of archeology, prehistoric artifacts found at the farm of Dr. Charles Abbott and the part they played in New Jersey history, and the roles of citizens and government in managing our cultural resources.

For more information contact:

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Provide the following: name, school and address, phone number and grade(s) taught.

