History Under Their Feet

Overview

The book *History Under Their Feet* introduces the principles of archaeology by following a dig in Williston, Vermont. In 1996, students from Westford Central School participated in the archaeological study under the guidance of a professional archaeologist.

This book serves as an introduction to a unit on archaeology. The kit contains a class set (25 copies) of this book so students can read it individually or in groups.

Objectives

Students will:

- read text about students doing archaeology
- learn new archaeology words and concepts
- understand that archaeology is a science
- complete a worksheet detailing the multiple steps of archaeology

Core Standards of Kit

- 2.2 Problem Solving Process
- 6.4 Historical Connections
- 6.6 Being a Historian

Additional Standards

- 1.3 Reading Comprehension
- 1.10 Procedures

Age level

Grades 4-8/ Ages 9-13

Time

45 minutes

Materials

- History Under Their Feet (25 copies)
- copies of "History Under Their Feet" archaeology flowchart

Background

This book introduces students to the scientific process of archaeology. Along with the worksheet, this book stresses that archaeology is more than just digging in the ground. Research, note-taking, and laboratory analysis are crucial to gaining a further understanding of the past through the artifacts that others have left behind.

There are a few points that need to be clarified about the book.

- This was a huge project! Federal law required the involvement of the professional archaeological consulting team. (Projects funded with public money must meet certain standards about preventing adverse impacts to historic resources.) Both the Williston and Westford schools worked with the consulting archaeologists. The Westford Archaeology Project lasted 4 months and included classroom work and research, excavation, laboratory work and final reports.
- NO real archaeological excavations should be undertaken without the involvement of a professional archaeologist.
- On page 11, the interpretation of the site is slightly misleading. The
 text refers to the Browns and Lamoille Rivers which are near the
 Westford Central School. The site of the archaeological dig was in
 Williston, on the banks of the Allen Brook, which flows into the
 Winooski River. Despite the author's apparent confusion about the
 names and locations of the rivers, the interpretation of a river site
 still makes sense.
- The text identifies the artifacts as being from 3,000 to 4,000 years ago. This places the time of the site in the Archaic period. The spear points and boiling stones are some of the clues that helped the archaeologists determine the period of the artifacts.

Procedure

1. Ask the students to brainstorm what they already know about archaeology.

2. Teachers may want to review or teach the following vocabulary words before reading the book.

projectile point archaeologist artifact excavate grid right angles core samples quadrant topsoil subsoil flake boiling stone wheat penny quartzite chert

- 3. Have the students read the book. Discuss any misconceptions about archaeology. (Make sure students understand the difference between archaeology and paleontology.)
- 4. Hand out copies of the "History Under Their Feet" archaeology flowchart. This worksheet reinforces the process of archaeology, as described in the book.
- 5. The answers for the fill-in-the-blank statements are taken almost word for word from the text. In case the students need extra help, the potential answers are listed below. (See the answer key for the correct order.)

Abenaki	archaeologist	artifacts
boiling stones	excavate	flakes
grid	identified	lab
park	penny	pits
reported	soil	squares
toothbrush	3,000	4,000

6. Have students keep the flowchart to review the steps of archaeology throughout the unit.

Evaluation

Make sure the students can identify the steps of archaeology. Have the students draw a cartoon illustrating the "life" of an artifact, from being covered in dirt to discovery and final inclusion in an archaeological field report.

What Next?

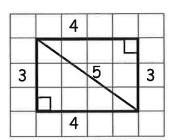
The students should have a familiarity with the process and vocabulary of archaeology. Show the "Rich and Ancient Heritage" for a more in-depth presentation about archaeology in Vermont. Proceed to lessons about the Principles of Archaeology.

Follow the suggestion on the back cover to "Make a Classroom Grid."

1. A student explains how the junior archaeologists learned to grid perfect squares. This is not how archaeologists measure the test pits in the field. However, the geometry of the 'hand calculator' may be easier for some students

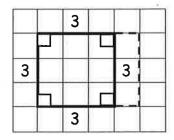
To make......1 square, you need......2 perfect triangles that measure....3 units

4 units and
5 units.



2. After making a rectangle with 4 right angles (each with 90°), students will need to remeasure the 4-unit sides and shorten them to 3 unit lengths.

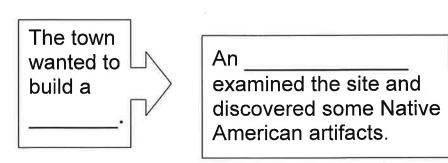
These measurements must be precise to maintain the right angles.



3. See the Squares Everywhere lesson in Additional Activities for another method to mark a perfect square for excavations.

History Under Their Feet

Using the book *History Under Their Feet*, fill in the blanks to complete the flowchart showing the steps of archaeology.

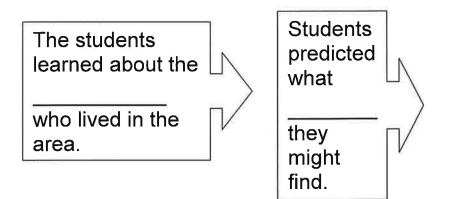


The town & the archaeologists decided to have students

the site to learn more about the Native Americans who lived there.

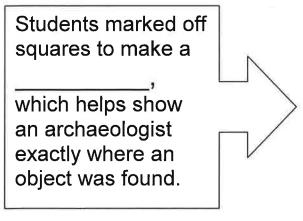
In the classroom

students prepared to be archaeologists...

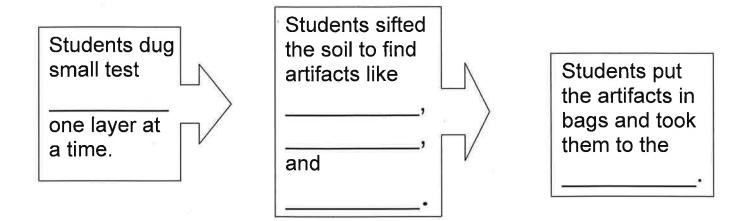


Students practiced making _____. Archaeologists use this shape to organize a dig.

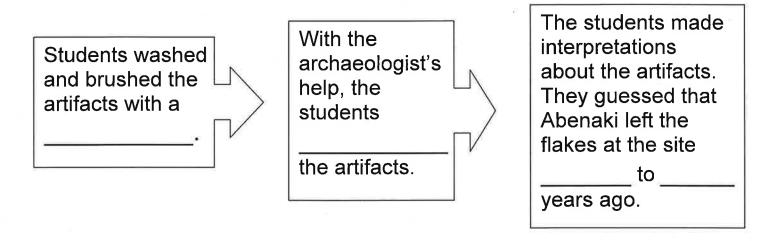
At the site...



Students took core samples of _____ to learn about the different layers of dirt.



In the laboratory...



Finally...

Like scientists, the students

what they had

learned so other people could
learn about the site, too!

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Answer Key History Under Their Feet

Using the book *History Under Their Feet*, fill in the blanks to complete the flowchart showing the steps of archaeology.

The town wanted to build a park.

An <u>archaeologist</u> examined the site and discovered some Native American artifacts.

The town & the archaeologists decided to have students

excavate

the site to learn more about the Native Americans who lived there.

In the classroom

students prepared to be archaeologists...

The students learned about the Abenaki who lived in the area.

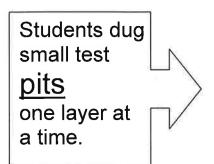
Students predicted what artifacts they might find.

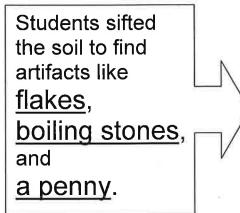
Students practiced making <u>SQUARES</u>. Archaeologists use this shape to organize a dig.

At the site...

Students marked off squares to make a grid, which helps show an archaeologist exactly where an object was found.

Students took core samples of <u>SOII</u> to learn about the different layers of dirt.





Students put the artifacts in bags and took them to the lab.

In the laboratory...

Students washed and brushed the artifacts with a toothbrush.

With the archaeologist's help, the students identified the artifacts.

The students made interpretations about the artifacts. They guessed that Abenaki left the flakes at the site 3,000 to 4,000 years ago.

Finally...

Like scientists, the students
reported what they had
learned so other people
could learn about the site,