LESSON 4: FIND IT, RECORD IT

Students follow a child named Alex on a journey through time to learn the importance of archaeology and the scientific method used in recording data.

Level: Grade 5
Subjects: Social Studies, Language Arts
Estimated Duration: 40 minutes

MATERIALS

- bristol board
- ruler, metre sticks, pencil, paper
- five classroom objects
- classroom set of *Field Notes* activity sheet (available at: http://www.virtualmuseum.ca/Exhibitions/Spirits/English/Dig/fieldnotes.pdf)

LEARNING OUTCOMES

Students will:

- examine a child's journal of a visit to Bonnechere Provincial Park in the Ottawa Valley, in eastern Ontario, Canada
- discover where and how archaeologists find artifacts and how data is recorded
- learn the basics of the Borden Numbering System, and how to record the exact location of an artifact within a number and letter grid

TEACHER BACKGROUND

Borden Numbering System

Basin Depot is an historical and archaeological site along the Little Bonnechere River. It was a small settlement in the late 1800s which supplied local lumber camps. If you visit Basin Depot during a dig you'll see archaeologists and volunteers hard at work. But before the digging could start, Basin Depot had to be given a Borden Number in order to record it as an archaeological site. The Borden System is a grid that covers Canada. Each site is located by two capital letters: the first represents the latitude (North/South) and the second represents the longitude (East/West). Each square is divided further and is shown by lower case letters after each capital. So Basin Depot's Borden numbers are BkGk-2 and BkGk-3. The number at the end tells you the order of the archaeological sites found in the Borden square.

The Scientific Method

When archaeologists try to piece together the puzzle at an historical site they always take the same steps in the same order. This is called scientific method. This helps them sort through the puzzle and keep track of the pieces. The first thing they do is draw a map of the site. To map the site, a datum point is chosen at the outer edge of the site (usually a large boulder or concrete marker — a permanent reference point). All measurements are taken from the datum point. To set up a grid for digging, a baseline is run from this datum point through the centre of the site to the other side of the site and a series of squares is set up along and outwards from this baseline. This makes the site look like a large graph paper has been put on top of it.

Each 1-metre square is given its own number and is excavated separately. First, they remove all the grass from the square. The archaeologist uses a number of different tools, though it's usually a trowel, to carefully scrap away the soil while looking for artifacts. When they find something they record its position in the square by marking it on a sheet of graph paper. The objects are numbered in the order in which they are removed. The number of the square and the site Borden Number are also recorded so the location of the artifact will always be known, even without the map. They also record features, such as the remains of a campfire or stains in the soil, on the graph paper and give them a number.

HOOK

Read the following passage to the class. Ask students what one should do if they uncover an artifact. Why is it important to preserve these objects? Why should we record its location?

> Dear Diary,
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> We made it here at last! I asked if I could take a look around and just when I thought I'd get away my parents said, "Yes, if you take Katie with you!" I knew they would say that! Before we left they told us that if we got lost or something we should look for the park staff. They wear Ontario Parks uniforms.
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> We went to the playground to make sandcastles. A woman came over to see a funny shaped rock I found in the sand. She said her name was Helen and I said, "Mine is Alex." She checked to see if the rock was a Native arrowhead. Too bad it wasn't! I asked how she knew about arrowheads and she said because she was an archaeologist. I said, "What is an archaeologist doing at Bonnechere Provincial Park?"
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> She said that one day a woman found an arrowhead while she walked along the beach. Instead of taking it home, she did the right thing and gave it to the staff. It was taken to an archaeologist who said that it was about 3000 years old. That's how people knew there was an important cultural site here. She said that if I found something I should tell staff and not touch or remove it. If I keep my eyes open, who knows what I might discover!
>
> Alex

(From *Discover the Spirits of the Little Bonnechere: A Cultural Heritage Activity Book for Youth*, Friends of Bonnechere Parks 1998; available from the electronic bookstore of www.bonnecherepark.on.ca.)

PROCEDURE

1. Explain to students the Borden Number System to the class.
2. Explain The Scientific Method to the class.
3. On a piece of bristol board, draw a grid 60 cm x 50; divide into 10 cm units.
4. Draw a datum point at the bottom left corner. Label the grid with points North and East.
5. Lay the grid on a table or floor where it is visible to all students. Randomly place the five classroom objects on this grid. Some items should overlap more than one square.
6. Divide class into groups of 3 or 4 students. Give each student a copy of the *Field Notes* activity sheet.
7. Ask students to independently record the location of each item on their *Field Notes*, using the coordinates on the grid.
8. Remove all items from the grid on the bristol board. Ask students to take turns defining a number/letter location and asking a group member to place the object on that position on the grid.