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## Living Among Giants: Cedar Trees and the Nootka

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## Living Among Giants: Cedar Trees and the Nootka

By Kathryn Lanouette

Mentor: Roberta Altman

Submitted in partial fulfillment of the requirements

for the degree of Master of Science in Education

Bank Street College of Education

Nature and culture are inseparably interwoven in fascinating ways. This curriculum explores the dynamic relationship, pushing eight, nine, and ten year olds to simultaneously learn about another culture and peer into their own culture. Three pretrip lesson plans, a focused ninety-minute museum visit to the American Museum of Natural History, and three post-trip lesson plans encourage children to construct their own understandings using their multiple intelligences and perspectives.

This multi-disciplinary curriculum explores the importance of one natural resource, the cedar tree, in the lives of the Nootka, a Pacific Northwest First Nation. Through inquiry-based discussion, science experiments, language arts, and drawing, Third and Fourth grade students learn how this amazing natural resource was (and often still is) used in everything from tools and clothing to food and shelter.

Within this curriculum, I have also included recommendations on expanding the six lesson plans, incorporating neighborhood resources, and establishing mail/ email correspondence with Nootka students living in British Columbia. The bibliography offers additional information on relevant websites, fascinating folktales, and background resources. This curriculum's central theme is easily applicable to other culture studies, making comparative cultural studies possible.

Nootka is the incorrect name given to the Nuu-Chah-Nulth (meaning "all along the mountains and seas") by British sailors. "Nut-ka" means "circling about" in the Nuu-Chah-Nulth language, Wakasshan. It is believed that sailors overheard the Nuu-Chah-Nulth describing what British ships were doing and believed this was the First Nation's name.

Today, the Nuu-Chah-Nulth chiefly territories extend along 300 kilometers of Vancouver Island's western coast, from Brooks Peninsula in the north to Point-no-Point in the south. Small inland regions are also included in the territories. A great map of present day Nuu-Chah-Nulth territories, as well as a history of the First Nation's name and political organization, can be found at the Nuu-Chah-Nulth Tribal Council website. (http://www.nuuchahnulth.org)

In the American Museum of Natural History's Hall of Northwest Coast Indians, the Nuu-Chah-Nulth are referred to as the Nootka. This hall is one of the museum's oldest, reflecting a different approach towards and understanding of the Pacific Northwest First Nations. Many resource books continue to use the word "Nootka" as well although more recent publications are making the important switch to Nuu-Chah-Nulth.

Throughout this curriculum, I have decided to use the word "Nootka" so that I am consistent with the AMNH and other resources. I would strongly suggest that all teachers explain the history of the First Nation's name and the meaning behind its change. Who tells a culture's history and how it is told is just as important to any culture study as the geography and natural resources.

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# I. RATIONALE

This curriculum was developed in response to past First Nation units, ones that I have both taught and observed. My overarching goal was to explore the connection between culture and nature, specifically the Nootka culture and the surrounding Pacific Northwest coast. It is built on the assumption that all cultures -past, present, and future - are sculpted by the surrounding natural resource.

Underneath that goal, I also wanted to clearly express, through my own language and the different lessons, that there is tremendous diversity among First Nation cultures. Although First Nations living in the Pacific Northwest share many similar natural resources, weather patterns, and traditions, they are by no means identical. Additionally, First Nations are alive and well today, living throughout the world and working in every profession imaginable – a reality lost in many First Nation curriculums.

Given New York City's vast museum resources, I also aimed to incorporate a museum's resources throughout an entire curriculum. *Living Among Giants: Cedar Trees and the Nootka* was specifically designed to capitalize on the American Museum of Natural History's (AMNH) extensive collections, both digital and physical. Through carefully designed pre- and post-trip lessons along with a structured 90-minute visit, *Living Among Giants* guides students and teachers alike through AMNH's vast resources. By focusing specifically on just a few of the AMNH's resources, students will be able to gain more from each resource. Through pre- and post-trip lesson plans, students will be well prepared for the concepts explored at the museum. Most importantly, students will have ample opportunities to apply and extend what they experienced on their AMNH trip back in the classroom, thereby strengthening what they learned at AMNH.

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Lastly, I wanted to develop a curriculum that suits the cognitive and emotional needs of eight- through ten-year-olds. Children at this age are growing socially, cognitively, and physically in exciting directions. At this age, they are beginning to look outside themselves, their families, and their culture into the broader world around them. There is not only an increased interest in their culture but other cultures as well. This widening perspective is supported by *Living Among Giants* because the curriculum simultaneously encourages looking inward and outward, at one's self and others. The numerous "windows" and "mirrors" approach also encourages reflection, an essential component of powerful learning.

Living Among Giants meets the cognitive and emotional needs of students through interdisciplinary experiential learning as well. Hands-on activities, requiring movement, observation, and critical thinking, are present throughout the curriculum. Exploration and discovery are the norm, not the exception, for all lessons as well as the museum trip. Multiple intelligences are challenged and celebrated. Since *Living Among Giants* is an interdisciplinary curriculum, Science, Art, Math, and Language Arts are continually being woven together. By intertwining subject areas around a central theme and drawing on different intelligences, students are offered numerous "hooks" into the curriculum's central idea. They are also exposed to the world as it is beyond the classroom: interconnected and dynamic.

Living Among Giants also encourages students to construct meaning. Students create meaning between facts such as average rainfall in British Columbia, a cedar tree's height, and a coastal landscape. By approaching learning as constructing instead of memorizing, students are motivated to create bridges among experiences. By linking the facts and concepts together, the students are learning at a deeper level.

Under the overarching umbrella of nature and culture, I have aimed to convey the astounding diversity among First Nation cultures and focus on one museum's collection while meeting the cognitive, emotional, and physical abilities of eight, nine, and ten year old children. With all of these goals in mind, I created *Living Among Giants: Cedar Trees and the Nootka*.

# **II. LITERATURE REVIEW**

In this section, the benefits of education in museum settings and using museum resources, both core components of *Living Among Giants*, are explained. The unique cognitive, social, and emotional needs of eight-to-ten-year-old children are also described.

#### Museum Learning

Museums afford terrific opportunities for learning. Contact with original objects and opportunities for in-depth questioning add up to make museums excellent places for children to learn. For this reason, *Living Among Giants* centers around one museum visit to the American Museum of Natural History.

One of a museum's greatest assets is the objects themselves. Students and teachers alike can come within inches of the "real thing," an exciting experience that replicas or photographs can never fully match. Skramstad (1999) noted that "the real and authentic objects, stories, ideas, and lives that are the subject matter of museum experiences have a resonance that is more powerful than all but the most compelling imaginary experiences" (p. 128). AMNH's Hall of the Northwest Coast Indians is vast, overflowing with canoes, capes, and tools. Down the hall, the Pacific Northwest Olympic Forest diorama is packed with full sized real and recreated plants and animals, lacking only the smells and sounds of coastal mountains. The objects in these two exhibits offer "a range of entry points" (Gardner, 2000, p. 188) into the hundreds of objects, be it narrative, quantitative, logical, aesthetic, or hand-on. The "points of contact" (Gillman, 1984, p. 151) with an object will vary student to student, allowing children to engage with a rain jacket or a basket in very different ways.

Yet the objects alone cannot ensure a meaningful, thoughtful exploration. It is the questions asked and how they are asked that makes for an educative experience. Burnham and Kai-Kee (2005) aptly note "[I]eading questions, however - questions with preness (sic) of what is possible - do not, in the end, lead anywhere" (p. 73). With this warning in mind, Living Among Giants suggests questions based on observation, not fact. Questions that "negotiate the world of wonder and possibility" (Bruner, 1986, p. 126), instead of questions that require mere recitation and memorization. During the museum visit, time is set aside to sit in front of dioramas and displays for a long time. Questions act as hooks, reeling in students' curiosity and casting it out into new waters. Duckworth (1996) noted, "The right question at the right time can move children to peaks in their thinking that result in significant steps forward and real intellectual excitement" (p. 5). It is also important to remember that students' themselves are often capable of asking the questions that will challenge them most! With thoughtful questions (both from the teacher and the students), the AMNH's resources can spring to life, making possible meaningful connections and exciting conversations. Living Among Giants aims to ask these questions.

It should be noted that as "children become familiar with the museum setting, their concentration increases, their ability to carry out assigned tasks increases, and their sense of comfort in the museum increases" (Hein, 1985, p. 22). By using photographs of AMNH objects in pre-visit lessons, focusing the museum visit, and using materials and techniques similar to those used in the classroom, *Living Among Giants* makes every effort to prepare students for their visit. Each successive trip to AMNH will only build upon previous trips, resulting in more focused and relaxed students.

Overall, museums are exciting, powerful spaces for learning. Close contact with hundreds of original objects, combined with the questions that ensue, make "object-

based-discovery-education" (Shuh, 1982, p. 9) possible. Students' comfort with the museum's resources increases steadily, through pre-visit lessons and familiarity with reproductions of the original objects, making the actual visit itself as focused and effective as possible.

#### <u>Developmental</u>

Living Among Giants is written specifically for eight-to-ten-year-old children. Their cognitive, social, and emotional developmental needs shaped this curriculum, from the overall theme and the lessons created to the language used in discussions and the museum resources selected. In the paragraphs that follow, the unique needs of this age group are discussed.

#### Cognitive

Most eight to ten-year-olds fall into the "concrete operations" stage (Piaget, 1972, p. 69), a time when a child's reasoning ability is becoming more logical. For example, "concrete operational children cannot yet apply logic to problems that are hypothetical, purely verbal, or abstract" (Wadsworth, 1996, p. 76). They are in transition between the preoperational and formal operations stage, leaning heavily on the concrete when juggling multiple variables, abstract thoughts, or complex situations. It is especially important that teachers remember to root all abstract discussion in concrete examples. Cohen (1972) reiterates this when she wrote:

The capacity of eight and nine-year-olds to understand ideas and concepts is clearly beyond that of children younger. Yet eights and nines have trouble with abstractions that are either completely outside their experience or that they

cannot grasp by analogy. For example, the concept of necessity is clearer to them when it refers to food or the teacher's demand that they bring a pencil than when it refers to freedom of nations, or is described as the 'mother of invention.' Concepts of time, space, and number have deepened, but children at this level can extend their learning in only one of them at a time. (p. 246)

Given eight- to ten-year-olds emerging abstract cognitive abilities, I selected a culture study exploring the Nootka, a Pacific Northwest Coast First Nation, which lived (and still live) in British Columbia. Exploring this tribe's culture, especially the Nootka's cultural relationship with surrounding natural resources, is well suited to eight-to-ten-year-old children' developing abstract thinking abilities because there are enough concrete supports to help with the bigger abstract concepts.

Mitchell (1934) detailed the emerging abstract abilities of middle childhood when she wrote:

The problem, which begins about seven and continues so long as education continues, is how to provide not only first-hand data, but tools whereby the relationship inherent in such data may be discovered, and how to build up images of the distant and long-ago which are comparable in vividness and satisfying quality with those gained through immediacy. (p.18)

Visiting the AMNH, reading from different sources, looking at images of Nootka objects, and exploring a terrain model all complement emerging abstract thinking. Miller (1985) stated a similar conclusion when he wrote: "Conceptual materials should be introduced in the physical mode of representation. Only later should students advance to use of the

more abstract pictorial and symbolic modes" (p. 32). The suggested extension involving a terrain model and the AMNH's resources (photographs, objects) are excellent embodiments of this approach.

The concrete operational child is also developing morally and ethically. Piaget (1972) wrote: "After seven or eight years of age, the child becomes capable of making his own moral evaluations, performs freely decided acts of will, and exhibits moral feelings" (p.104). Understandings of right and wrong become more nuanced and independently constructed. Cohen (1972) observed:

The capacity to conceptualize in terms of what is right and what is wrong is a process that develops separate from the specific values to which right and wrong become attached. Growth in moral behavior in general follows a zigzagging path from self-interest to social responsibility. (p. 224)

Living Among Giants inherently confronts moral and ethical issues – be it the Canadian government's past and contemporary relationship with the Nootka or the mere presence of Nootka objects in a New York City museum. Eight- to ten- year olds are just at that age where such moral and ethical thinking is emerging. Living Among Giants attempts to meet these needs head on by honestly and thoughtfully grappling with the moral debates that exist in museum and First Nation education. (See Note to Educators.)

Eight-to-ten-year-old children's understanding of time is another exciting development. Their comprehension and use of terms such as "past," "present," and "future" is well established by eight years and "more specific forms of historical time" (Vukelich, 1984, p. 44) are understood by about ages nine or ten. With this emerging sense of time, students are able to move beyond the 'here and now' towards the distant and long ago. Yet because their understanding of time is still developing, past events must be clearly explained and supported using concrete examples. Throughout *Living Among Giants*, two time periods are continually referenced: the present and four hundred years ago. The time between these dates are mentioned but the main focus is on contemporary Nootka culture and pre-European contact Nootka culture (1600s). These two dates were selected for two reasons. First, children at this age are starting to "differentiate the past into periods" (Vukelich, 1984, p. 47). Pre-European and present day are two categories that eight-to-ten year olds are capable of understanding. Second, the later time period explores the Nootka culture before the devastating impact of disease and genocide, and the contemporary period explores the thriving legacy of the culture today. I wanted to show Nootka culture as active, changing, and dynamic, not stagnant, fixed, and rigid. The impact of explorers and settlers is discussed throughout the curriculum, but the two major time periods are present day and 400 years ago.

#### Social & Emotional

Eight-to-ten-year-old children are developing socially and emotionally as well cognitively. As egocentrism fades away (a defining characteristic of the preoperational stage), the seven to eleven year old begins assuming the viewpoint of others. As might be expected, there is "usually systematic progress in cooperation" (Wadsworth, 1996, p. 67). Educators can expand this widening perspective through careful word choices and lesson plans. Bruner (1986) summarized it well when he wrote:

The language of education, if it is to be an invitation to reflection and culture creating, cannot be the so-called uncontaminated language of fact and

'objectivity.' It must express stance and must invite counter-stance and in the process leave place for reflection, for metacognition. (p. 129)

What a teacher says and how they say it is just as important as group work and discussion in widening students' perspectives.

In the middle years (8-11 years), children are also constantly defining and redefining their notion of self within a range of communities – be it in the classroom, the neighborhood, or the home. Cohen (1972) captured this pushing-and-pulling when she wrote: "Their growth need to be self-directed comes into conflict with their childhood need for sufficient adult control and authority to allow them to feel safe and taken care of" (p. 219). By creating a curriculum that balances independent work with small group and whole class instruction, *Living Among Giants* aims to balance the often-conflicting needs of "middle years" children. Additionally, by exploring the Nootka culture, students have the opportunity to look into their culture, giving them both a "mirror" to look at their culture and a "window" to see out to other cultures.

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Group alignment also takes on greater importance during the middle years. Cohen (1972) noted that during this age, "children test and stretch themselves in constructive competition and cooperation" (p. 210). Eight-to-eleven-year-old children are developing "the fine art of compromise and a growing sensitivity of the unique qualities of individuals" (Cohen, 1972, p. 221), a learning curve that is full of bumps and scrapes. *Living Among Giants* provides many chances for students to work collaboratively, offering many chances for compromise. Additionally, *Living Among Giants* is structured to utilize many different intelligences, be they linguistic, musical, logical, spatial, bodily-kinesthetic or personal (Gardner, 1993, p. 77). Given this emphasis on differing ways of thinking,

students will hopefully increase their awareness of their classmate's unique abilities as well as their own.

As with all children, it is especially important to remember that eight- to ten-yearolds are "whole children responding in a total way, and what they feel is a constant factor that can be constructive or destructive in any learning situation" (Cohen, 1972, p. 210). Their comfort level, both socially and intellectually, impacts their engagement in different situations. *Living Among Giants is* designed with every intention of pushing children within a supportive, structured curriculum. Csikszentmihalyi and Hermanson (1995) captured this point well when they wrote, "The learning experience involves the whole person, not only the intellectual but the sensory and emotional faculties as well" (p. 67). In fact, including the personal and emotional will only make learning more effective. Not only is there space for a student's emotions, *Living Among Giants* attempts to actively incorporate these feelings.

Overall, the cognitive, social, and emotional needs of eight-to-ten-year-old children are dynamic and thrilling. Abstract as well as moral thinking is developing along with a broader sense of others. Notions of time are expanding beyond the "here and now." Cooperation and compromise are visible in group situations. An exciting time, to say the least.

# **III.** CURRICULUM

# LIVING AMONG GIANTS: CEDAR TREES AND THE NOOTKA

Multi-Disciplinary Museum/School Curriculum

By Kathryn Lanouette

Dear Fellow Educator,

Did some Pacific Northwest First Nations really weave clothes out of trees? How could they build wooden canoes longer than subway cars? Did they really cook dinner in a cedar box? Were the trees in that region really as a big as totem poles or even bigger?

These questions and many more are answered in *Living Among Giants: Cedar Trees and the Nootka*, a Museum/School curriculum centers around the American Museum of Natural History's collection. This multi-disciplinary program explores the importance of the cedar tree in the lives of the Nootka, both in the present and in the past. Through inquiry-based discussion, science experiments, language arts, and drawing activities, students learn how this amazing natural resource was used in everything from tool and clothing to food and shelter.

This exciting curriculum includes three pre-trip lessons, a focused ninety-minute museum visit, and three post-trip lesson plans geared towards Third and Fourth grade students.

- <u>Pre-visit lessons</u> introduce the Pacific Northwest region, the First Nations who lived there (and who continue to live there today), the different parts of the cedar tree cross-section, and how these different parts of the tree were used.
- The <u>museum visit</u> takes place in the Hall of the North American Forest and the Hall of Northwest Coast Indians, both located on the first floor near the 77<sup>th</sup> street entrance. A touch cart with cedar bark shreds, craved boxes, and woven raincoats will be available as well. Combined with an original Haida canoe spanning over sixty feet, towering totem poles, life-size dioramas, and small longhouse replicas, this visit will be memorable.
- <u>Post-trip lessons</u> tackle the science behind making water-repellant clothing, the challenge of finding food, and the lives of the Nootka living four hundred years ago as well as today.

Please contact me with any questions about *Living Among Giants: Cedar Trees and the Nootka*. I would be delighted to talk with you further about this exciting program and how it can be woven into your existing curriculum.

Here's to extraordinary learning,

Kathryn Lanouette

### **NEW YORK STATE STANDARDS**

The following New York State Standards are met in Living Among Giants: Cedar Trees and the Nootka.

#### Arts

Standard 4: Understanding the Cultural Contributions of the Arts

#### English Language Arts (ELA)

Standard 1: Language for Information and Understanding Standard 2: Language for Literacy Response and Expression Standard 3: Language for Critical Analysis and Evaluation

#### Mathematics, Science, and Technology (MST)

Standard 1: Analysis, Inquiry, and Design Standard 3: Mathematics Standard 7: Interdisciplinary Problem Solving

#### Social Studies

Standard 3: Geography

## **PRE-TRIP LESSON #1: INTRODUCTION TO THE NOOTKA**

#### Standard:

Social Studies/ Standard 3: Geography

#### Age:

Third and Fourth Graders (eight-to-ten-year old children)

#### **Purpose:**

- Locate the Pacific Northwest Region in a map of North America.
- Become familiar with the climate, food, clothing, shelter, and tool resources available in the Pacific Northwest Region -- both today and four hundred years ago.

#### Materials:

- ✤ Large map of North America and the Western Hemisphere
- Illustration or photograph of typical Pacific Northwest habitat (1600s)
- Chart paper and markers

#### **Procedure:**

- Looking at a map of North America, ask students to guess what the *climate* is like in the Pacific Northwest Region. Draw upon personal experiences, the correlation between equator and climate, and photographs. Write responses on chart paper and discuss. (Note: It may be helpful to define "climate.")
- Explain that we are going to look at a Pacific Northwest drawing showing a typical Pacific Northwest science. Explain that, as a class, we are going to try to figure out what in this picture could have been used as food, clothing, shelter, and tools by the Nootka living four hundred years ago.
- Pass out an illustration of a typical Pacific Northwest habitat to each student, asking him or her to look just for things to eat. Allow students in groups of two or three to work together.
- Record students' ideas.
- \* Next, ask students to just find possible clothing materials. Record students' ideas.
- Continue with shelter and tools, recording ideas.
- At the end, a list of possible food, clothing, shelter, and tool materials will be written up. Mention that this list will be used in the following lessons to compare against new information learned.

#### Follow-up Activities:

- This lesson could be easily adapted into four lessons, with each lesson focusing on just food, clothing, shelter, or tools. Examples of each could be provided, along with opportunities to draw the food, clothing, shelter, or tools in use.
- Look at different tools (drawing, photographs, and replicas), exploring how the Nootka might have used them.

Research the food, clothing, shelter, and tools used by Nootka living in Canada today.

#### Assessment:

Before beginning the second lesson, ask students to locate the Pacific Northwest Region on a North America map. Ask students to describe the climate in that region, providing photographs for support. Ask students to recall a few ways to make food, clothing, shelter, and tools from the region's natural resources.

#### Standards:

Mathematics, Science, and Technology (MST)/ Standard 1: Analysis, Inquiry, and Design/ Standard 3: Mathematics/ Standard 4: Science

#### Age:

Third and Fourth Graders (eight-to-ten-year-old children)

#### **Purpose:**

- \* Learn the names and parts of a Pacific Northwest Coast cedar tree.
- Explore how these different parts were used by the Nootka to make clothing, shelter, and tools. (Refer back to the list created in pre-trip lesson #1.)

#### Materials:

- Photographs of cedar trees with humans to show scale
- ✤ Diagram of cedar tree, labeling the different layers
- Small slices of cedar trees with all layers intact
- Separate examples of each layer
- Chart paper and markers
- Observation sheets (one per student)
- Pencils and magnifying glasses (one per student)
- Measurement String: String marked in one foot increments

#### **Procedure:**

- Review the climate (wet and mild) and *natural resources* of the Pacific Northwest Coast by referring back to the North America map and the illustration of a typical Pacific Northwest scene. (Note: It may be helpful to define "natural resource.")
- Highlight the prevalence and size of the trees in this region, showing photographs of the trees.
- Using photographs as prompts, ask students to guess the *height* and *circumference* of the cedar trees in this region, writing estimates on chart paper. Use the Measurement String to model each student's estimate. (Note: It may be helpful to define "height" and "circumference.")
- Reveal the average height and circumference of cedar trees growing in the Pacific Northwest Region.
- Using the Measurement String, lay out the string in a large open area to show how tall and wide cedar trees can grow.
- With the size and region of the tree now established, announce that predetermined groups of two will be given a small cross section of a tree to observe and document the tree's different layers (*bark, phloem, sapwood, heartwood, rings.*)
  Explain that students will be looking at five different parts of the cross-section, recording all observations on their Observation Sheet.
- Model recording observations on chart paper formatted like the Observation Sheets.

- Break class into two groups, handing out a cross-section and two Observation Sheets to each pair.
- Ask students to record their observations about each part, noting color, texture, size, and smell.
- Once all students have recorded their observations, discuss their findings by writing up student responses on chart paper.
- Announce that in the next class they will explore how these different parts of the cedar tree were used in many different ways.

#### **Follow-up Activities:**

Locate buildings and other structures in the neighborhood that are as tall and/or as wide as average cedar trees. Use the Measurement String to assist with estimation.

#### **Assessment:**

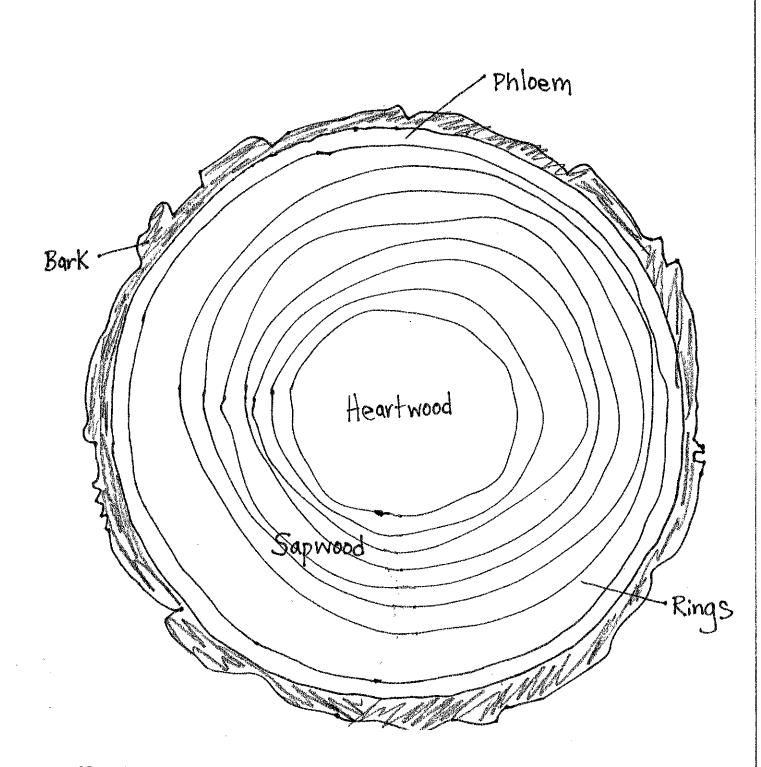
Ask students to write a poem about one layer of a tree, asking them to use their observation notes to create a multi-sensory picture with their words.

## **OBSERVATION SHEET FOR PRE-TRIP LESSON #2: ANATOMY OF A CEDAR TREE**

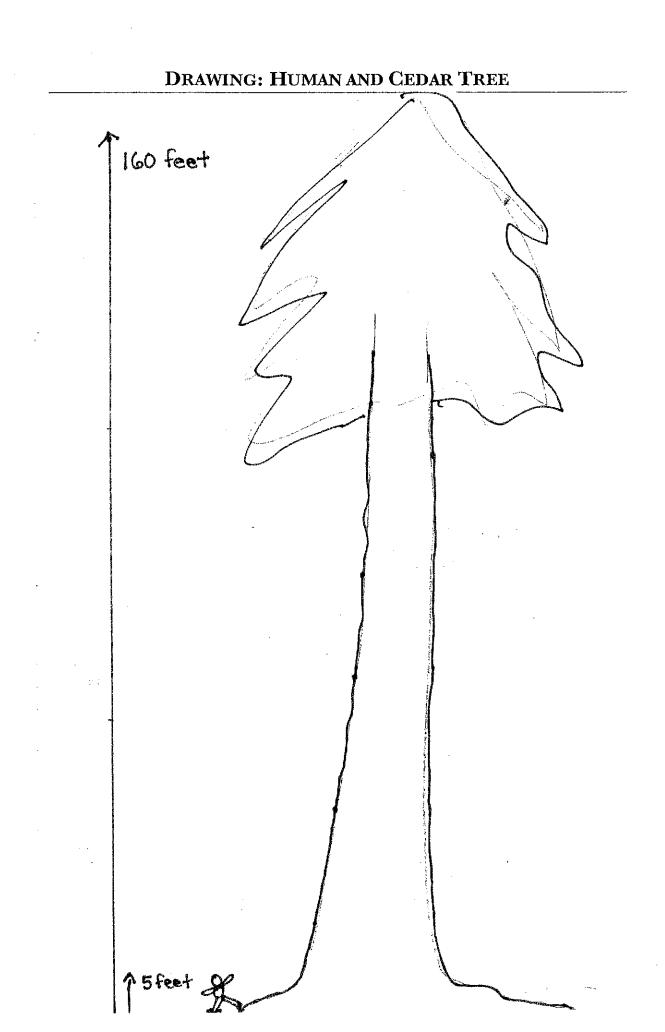
**Directions:** In the space below, describe each layer. Be sure to describe the color, texture, and the smell of each layer. \*\*Hint: Use your magnifying glass to get a closer look! \*\*

LAYER	COLOR	TEXTURE	SMELL
Bark			
Phloem			
Sapwood			
Heartwood			
Rings			

## TREE CROSS-SECTION



Note: An excellent color illustration of a tree cross-section can be found in Gibbons, G. (2002) Tell me, tree: All about trees for kids. Boston: Little, Brown, & Company.



## PRE-TRIP LESSON #3: CEDAR HERE, CEDAR THERE, CEDAR EVERYWHERE

#### Standard:

✤ Mathematics, Science, and Technology (MST)/ Standard 4: Science

#### Age:

Third and Fourth Graders (eight-to-ten-year-old children)

#### **Purpose:**

- Learn how all parts of the cedar tree were used by the Nootka to meet their shelter, food, clothing, and tool needs.
- Learn what parts of the cedar tree are still used today by the Nootka.

#### Materials:

- Photographs of original Nootka tools, clothing, and shelter. Includes: halibut hook, cooking box, fish trap, comb, hat, child's blanket, and bark beater.
- Pencils
- Worksheet
- Chart paper and markers

#### **Procedure:**

- Review the class list of the six different cedar tree parts
- Review the characteristics of each part, explaining that the different properties resulted in different parts being used for different purposes. (Note: It may be helpful to define "properties.")
- Handout images of: halibut hook, cooking box, fish trap, comb, hat, child's blanket, and bark beater.
- Using their worksheet, explain that student groups of two or three will be asked to guess what part (or parts) of the cedar tree were used to make the items and to explain why they think that part was used.
- Using one image, model this on large chart paper formatted like their Worksheet.
- Break students into groups.
- After everyone has finished, go through each item, recording the materials possibly used and noting the students' rationale regarding their selection.
- Announce that students will have a chance to see these exact objects during their upcoming trip to AMNH.

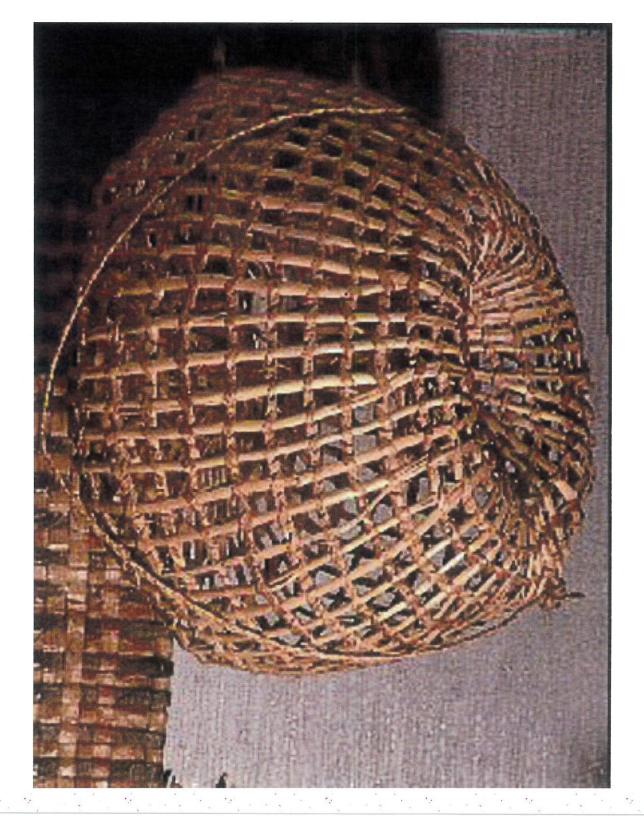
#### **Follow-up Activities:**

- During the museum visit, direct students to some of the objects, asking them to notice anything new about the object now that it is in front of them.
- Ask students to find wooden objects in their homes. Have them record what part of a tree these objects were made from based on the texture, appearance, and smell of the wood.

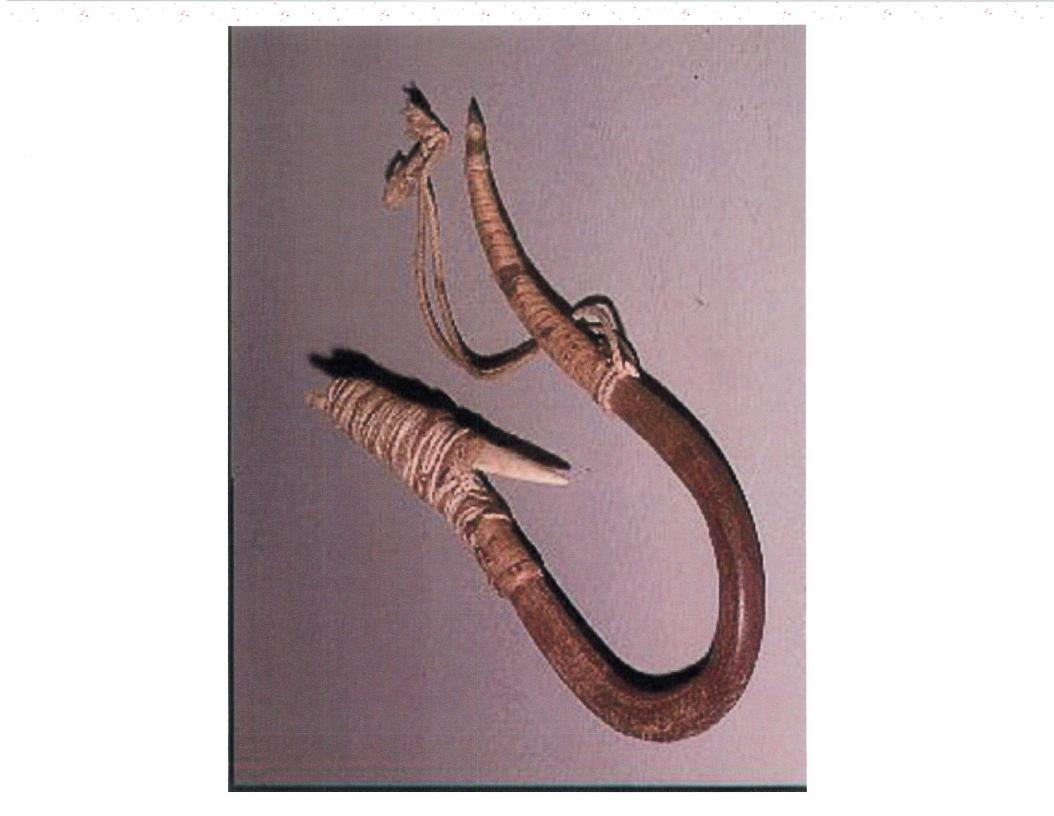
## WORKSHEET FOR PRE-TRIP LESSON #3: CEDAR HERE, CEDAR THERE, CEDAR EVERYWHERE

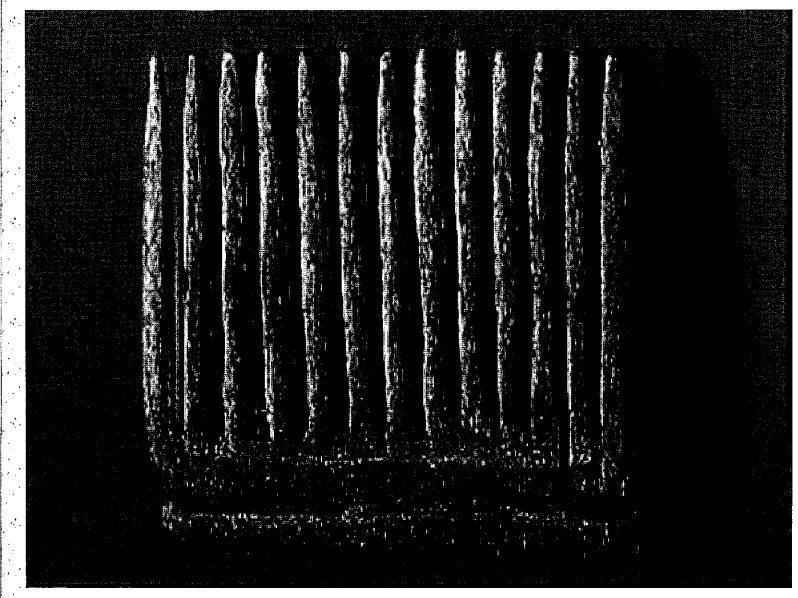
**Directions:** Look closely at the photographs. Using your Observation Sheet from Pre-Trip Lesson #2, decide what part or parts of the cedar tree where used to make the Nootka object. Then explain why you made this choice.

	What Part of the Tree?	Why?
Halibut hook		
Cooking box		
Fish trap		
Comb		
Work hat		
Child's blanket		
Bark beater		









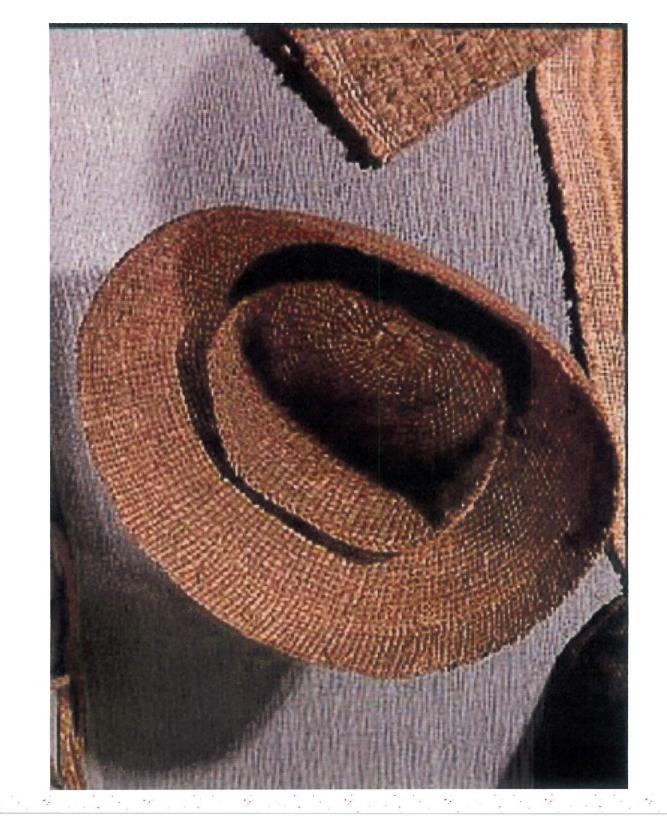
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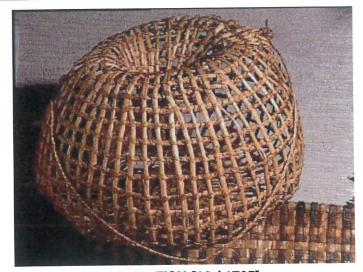
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Full Image and Description

**Original Catalogue Page** 



# TRAP, FISH [16 / 1765] NORTH AMERICAN ETHNOGRAPHIC COLLECTION Culture: NOOTKA, CLAYOQUATH Locale: BC, VANCOUVER ISLAND, WEST COAST Country: CANADA Material: PLANT FIBER Dimensions: H:39.2 D:24 [in CM] Donor: JACOBSEN, F. Acquisition Year: 1897 Published in: *FROM THE LAND OF THE TOTEM POLES.* ( by JONAITIS, ALDONA MISCELLANEOUS PUBLICATIONS, 1988)

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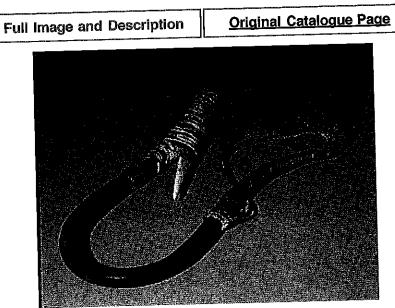
# BOX, COOKING [16 / 1793] NORTH AMERICAN ETHNOGRAPHIC COLLECTION Culture: NOOTKA, CLAYOQUATH Locale: BC, VANCOUVER ISLAND, WEST COAST Country: CANADA Material: WOOD, METAL

Donor: JACOBSEN, F. Acquisition Year: 1897 <u>Morthwest Coast Indians Hall, Floor 1</u>

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# HALIBUT HOOK [16 / 1711] NORTH AMERICAN ETHNOGRAPHIC COLLECTION , CLAYOQUATH

Culture: NOOTKA, CLAYOQUATH Locale: BC, VANCOUVER ISLAND, WEST COAST Country: CANADA Dimensions: L:16.5 W:7.5 [in CM] Donor: JACOBSEN, F. Acquisition Year: 1897 Morthwest Coast Indians Hall, Floor 1

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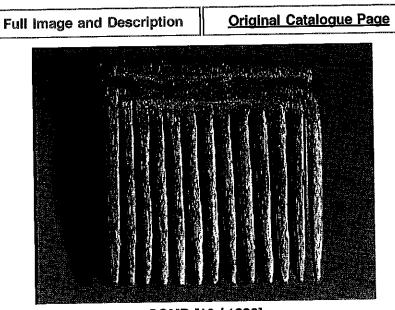
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# COMB [16 / 1830] NORTH AMERICAN ETHNOGRAPHIC COLLECTION Culture: NOOTKA, CLAYOQUATH

Locale: BC, VANCOUVER ISLAND, WEST COAST Country: CANADA Dimensions: L:9.5 W:28 [in CM] Donor: JACOBSEN, F. Acquisition Year: 1897

Full Image and Description Original Catalogue Page



## BLANKET, CHILD'S [16 / 1878] NORTH AMERICAN ETHNOGRAPHIC COLLECTION Culture: NOOTKA, CLAYOQUATH Locale: BC, VANCOUVER ISLAND, WEST COAST Country: CANADA Material: BARK (CEDAR) Dimensions: L:60 W:55 [in CM] Donor: JACOBSEN, F. Acquisition Year: 1897 <u>Morthwest Coast Indians Hall, Floor 1</u>

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Full Image and Description Original Catalogue Page



BARK BEATER, FOR CEDARBARK [16 / 2096] NORTH AMERICAN ETHNOGRAPHIC COLLECTION Culture: NOOTKA, CLAYOQUATH Locale: BC, VANCOUVER ISLAND, WEST COAST Country: CANADA Dimensions: L:23 W:6 [in CM] Donor: JACOBSEN, F. Acquisition Year: 1897 <u>Morthwest Coast Indians Hall, Floor 1</u>

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Full Image and Description





# HAT, WORKING WOMAN [16 / 9759] NORTH AMERICAN ETHNOGRAPHIC COLLECTION

Culture: NOOTKA Locale: BC Country: CANADA Dimensions: D:33 [in CM] Donor: HUNT, GEORGE Acquisition Year: 1904

# MUSEUM VISIT AMERICAN MUSEUM OF NATURAL HISTORY

#### **Standards:**

- Mathematics, Science, and Technology (MST)/ Standard 1: Analysis, Inquiry, and Design/ Standard 3: Mathematics
- \* Art/ Standard 4: Understanding the Cultural Contributions of the Arts
- Social Studies/ Standard 3: Geography
- English Language Arts (ELA)/ Standard 1: Language for Information and Understanding

#### Materials:

- Trip Sheets for each student
- Pens
- Clipboards
- Measurement String

## **Part One** (approximately five minutes)

Location: In front of the Nootka canoe, 77th street entrance

- ♦ Welcome to the museum rules and description of visit's activities.
- Explain how the cedar tree was used by many Pacific Northwest Coast First Nations for clothing, tools, food, and shelter. Announce that we will be seeing what the region looks like as well as real examples of tools, shelter, clothing, and food.

## Part Two (approximately 25 minutes)

Location: Hall of North American Forests, Olympic Forest diorama

- Students should sit on the floor in front of the diorama.
- ✤ Ask students to guess what ecosystem this represents.
- \* Ask students to look at the diorama, silently noticing as many things as they can.
- Guide looking with questions about the climate, smells, and sounds.
- Ask students what could be used for tools, food, clothing, and shelter, adding in additional facts when appropriate. Reinforce awareness of the cedar trees' prevalence and size in this ecosystem whenever possible.
- Announce that we are about to look closely at a big tool made from a giant cedar tree.

## **Part Three** (approximately 10 minutes)

Location: Nootka canoe, 77th street entrance

- \* Briefly explain the canoe's age, use, material, and long trip to New York City.
- \* Ask students to estimate the length of the canoe, encouraging students to explain their answer.
- ✤ Unfurl the Measurement String (Lesson #2) and measure the canoe with students.
- \* Ask students to imagine the cedar tree's size that turned into this canoe!
- Explain that we are going to move into the Hall of Pacific Northwest Indians where the focus will be on Nootka clothing, shelter, and more tools.

## **Part Four** (approximately 45 minutes)

Location: Hall of Pacific Northwest Coast Indians, with touch cart

- Explain that students will be broken into two pre-assigned groups -- the rain jacket group and the longhouse model group. Point out that both groups will switch after twenty minutes.
- ✤ At the rain jacket station:
  - 1. Start by asking students to look carefully at the jackets.
  - 2. After looking silently, ask students to describe how the jackets might feel, smell, and sound when they are on your body.
  - 3. Using touch cart examples, let children try on sample rain jackets, asking them what feels, smells, and sounds differently than they imagined.
  - 4. Ask students to look closely at the weaving techniques.
  - 5. Bring attention to the original woven objects that students saw in Lesson #3 photographs. Solicit observations about the weaving techniques, asking questions like "Where do you think they started?"
- ✤ At the model longhouse station:
  - 1. Start by having students look carefully at the longhouse.
  - 2. After looking for a minute or so, ask students to describe what they see in the model, focusing on what people appear to be doing and what tools, clothing, shelter, and food is visible in the recreation.
  - 3. After discussing and describing what is in the model, ask students to select one person in the model. Ask students to imagine being that person.
  - 4. Handout the museum trip sheets and pens.
  - 5. Ask students to imagine what their chosen person is doing, how they might be feeling, and whom they are related to in the model.
- Switch groups after twenty minutes so that each group visits each station.

### **Part Five** (approximately five minutes)

Location: Hall of Pacific Northwest Indians

- Once both groups have finished both stations, gather the group as a whole.
- Reinforce the importance of the cedar tree in many Pacific Northwest First Nations' lives. Solicit examples of how the Nootka used this giant natural resource.

# TRIP SHEET AMERICAN MUSEUM OF NATURAL HISTORY

## Name:

## **Directions:**

Look very closely at the Nootka plankhouse replica. Imagine that you are one of the people that you see in the model. Try to answer the following questions in your writing:

- How old are you? What are you doing?
- ✤ Are you using any tools?

✤ How are you feeling and why?

✤ What is the weather like?

✤ What did you eat most recently?

\* What smells are in the air?

#### Standards:

- \* Arts/ Standard 4: Understanding the Cultural Contributions of the Arts
- Mathematics, Science, and Technology (MST)/ Standard 1: Analysis, Inquiry, and Design/ Standard 4: Science

#### Age:

Third and Fourth Graders (eight-to-ten-year-old children)

#### **Purpose:**

- Explore how different materials and weaving techniques affect clothes' water repellency.
- Apply the scientific method by hypothesizing, testing predictions, and validating predictions based on observation and experiments.

#### Materials:

- Measurement tape marked in one inch intervals
- Three woven materials approximately 4x4 inches in size Possible materials: cedar, grasses, and plastic
- Spray water bottle
- ✤ Construction paper
- Prediction sheets

#### **Procedure:**

- ◆ Take predictions on how many inches of rain Vancouver Island receives annually.
- Show the real amount using the measurement tape. Compare this number to New York City's average rainfall.
- Discuss materials selected by the Nootka for rain clothing, referring back to clothing seen during the museum visit.
- ✤ Make predictions about which material will repel water the best: cedar, grasses, or plastic.
- In small groups, test different materials by exposing them to continual spray bottle misting. Record how much water gets through by looking at the construction paper underneath.
- Record results. Discuss findings.
- Look at the weaving materials and techniques used by the Nootka using the pretrip lesson #2 photographs. Compare and contrast to materials and techniques used by the class.

#### **Follow-up Activities:**

Provide additional materials that the Nootka might have used for clothing. Weave them and test their water repellency properties.

- Learn about different weaving techniques used by the Nootka. Experiment with different weaving techniques and test their water repellency abilities.
- Look at how rain jackets are made presently. Study the materials used and the construction process. Compare to the Nootka rain jackets from four hundred years ago.

#### Assessment:

Introduce a new material and weaving technique, asking students to follow the scientific method to make predictions about the water repellency properties.

# **PREDICTION SHEET FOR POST-TRIP LESSON #1:** WEAVING TREES INTO CLOTHES

**Directions:** Record your predictions. Test the material. Record your results. **\*\***Hint: It might be easiest to write down all your predictions first, test all the materials second, and then record all the results.

MATERIAL	PREDICTION	RESULT
Cedar		
Grasses Plastic		

# **POST-TRIP LESSON #2:** WHAT'S FOR DINNER?

#### Standards:

- Social Studies/ Standard 3: Geography
- Mathematics, Science, and Technology (MST)/ Standard 1: Analysis, Inquiry, and Design
- English Language Arts (ELA)/ Standard 1: Language for Information and Understanding

#### Age:

Third and Fourth Graders (eight-to-ten-year-old children)

#### Purpose:

- Learn about the different food sources available to Nootka living four hundred years ago, drawing upon the pre-trip lesson #1 chart and the AMNH dioramas.
- ✤ Discover what foods were eaten, how frequently, and which tools were used.
- Practice hypothesizing based on specific facts.

#### **Materials:**

- ✤ Organizer Worksheet (food source/ difficulty vs. amount/ tools)
- Pencils

## **Procedure:**

- Prior to the lesson, make a list of possible animals that the Nootka might have eaten four hundred years ago.
- Ask students to look at the list, asking for any addition or changes given the museum visit or further thought.
- ✤ With this revised list hanging on the wall, break students into groups of three.
- \* Ask students to decide which food sources were most difficult to attain, listing them from easiest to hardest.
- Ask students to list the food sources according to the amount of food provided. Example: whale= big yield, hard to catch/ salmon - smaller yield, easier to catch
- \* Ask students to list possible tools used to catch or gather these foods.
- Make a class chart, collectively deciding where to rank the different food sources, their difficulty level, and the tools required.
- ✤ Ask whole class to hypothesize which foods were hunted/ gathered most frequently using which tools.

#### **Follow-up Activities:**

- Conduct individual research projects on specific animals and plants eaten by the Nootka four hundred years ago.
- Research specific Nootka tool designs and try making them in class.
- Listen to Nootka elders' oral stories of hunting different animals.
- Compare Nootka food sources four hundred years ago to Nootka food sources today.

## Assessment:

Ask students to draw the hunting or gathering of three Nootka food sources, including special tools that might have been used and the number of people participating.

# ORGANIZER FOR POST-TRIP LESSON #2: WHAT'S FOR DINNER?

**Directions:** For each food source, estimate how difficult it would be to catch or gather the food, what amount of food would result, and what tools would be needed. **\*\***Hint: The first one is already completed as an example!

FOOD	DIFFICULTY	AMOUNT	TOOLS
Whale	Very Hard	Lots	Harpoon Boat Rope Knives

# **POST-TRIP LESSON #3: A DAY IN THE LIFE**

#### Standards:

English Language Arts (ELA)/ Standard 1" Learning for Information and Understanding/ Standard 2: Language for Literary Response and Expression/ Standard 3: Language for Critical Analysis and Evaluation

#### Age:

Third and Fourth Graders (eight-to-ten-year-old children)

#### **Purpose:**

- Summarize and extend newly acquired knowledge about the Nootka.
- Personalize the daily life of Nootka living four hundred years ago.

## Materials:

- Pencils
- Writing Paper
- Reminder Sheets Climate, First Nation, Shelter, Food, Clothing, Tools
- Information Review Sheet includes information learned about the climate, shelter, food, clothing, and tools learned throughout the five previous lessons and the museum visit.

#### **Procedure:**

- Announce that students have a chance to describe an average day in a Nootka persons life four hundred years ago.
- Explain the importance of including as many realistic details as possible to make it as accurate as possible.
- Facilitate the writing process by asking students what age they will be in the story and what daily events they will describe.
- Point out the Information Review Sheet hanging on the wall as a resource.
- Allow time for sharing and editing.

#### **Follow-up Activities:**

- Read students' stories aloud to the class or in small groups.
- Publish the classes' stories in a small book.
- \* Read aloud historical fiction about Nootka children living four hundred years ago.
- Establish mail/ email correspondence with school children of Nootka descent.

#### Assessment:

Read students' writing, looking to see if their stories include realistic details regarding shelter, food, clothing, and tools.

# **IV. RECOMMENDATIONS AND APPLICATIONS**

This curriculum represents one way to teach about First Nations, both living long ago and today. It attempts to focus specifically on one cultural region (the Pacific Northwest) and within that, on one First Nation (the Nootka). *Living Among Giants* is designed to comfortably extend instruction over six to eight weeks. There are numerous opportunities to extend this curriculum further, making a longer unit not only feasible but also comprehensive. Different extensions are described below:

## Mail & Internet Correspondence

If possible, establishing a mail or Internet correspondence with children of Nootka descent would be powerful. This would help students better understand contemporary Nootka culture as explained and expressed by Nootka children. At the Bank Street School for Children, correspondence was established between the 9/10s in Joe Bacal and Vicky Spencer's class and a class in Kwethluk, Alaska. Much of the correspondence took place over the Internet, using discussion forums. This project, funded in part by the National Geographic Society Education Foundation, connected students from vastly different parts of the country in a contemporary way. A similar exchange with students in New York City and students of Nootka descent living in British Columbia would expand both groups' understanding of their cultures. It would also strongly reiterate that the Nootka culture and its people are alive and well today, not merely a relic of the past. Personal knowledge of contemporary Nootka culture would be especially helpful for "Post-Trip Lesson # 3: A Day in the Life" because students would be well prepared to write about Nootka life four hundred years ago as well as Nootka life today.

### Art: Weaving Explorations

In *Living Among Giants*, traditional Nootka weaving techniques and materials are discussed. Particular attention is focused on such practical matters as water repellency and material creation. A smaller unit, focusing more intently on the aesthetics and patterning of Nootka weavings, would deepen the curriculum.

#### Terrain Model

A terrain model would be an excellent extension of this curriculum. A terrain model would be especially helpful in building students' comprehension of geography since many geographical terms and forces are referenced throughout *Living Among Giants*. It would be most helpful to start working with a terrain model before beginning this curriculum, and then expanding on it as the curriculum gets underway. Terrain models are best linked to individual mapmaking and terrain model construction.

#### Comparison Study

Living Among Giants: Cedar Trees and the Nootka would be well complemented by a similar unit on a Plains tribe's relationship to the buffalo. Many exciting similarities and differences exist between the Nootka and some Plains Native Americans. The American Museum of Natural History has numerous dioramas, objects, and digital images to support a Plains Native American study similar to Living Among Giants.

#### **Traditions**

At the Nuu-chah-nulth Tribal Council website, there are dozens of video clips recording Nootka individuals talking about the role of women, governance, spirituality,

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resilience, and renewal in their culture. After watching and listening to different recordings, students could then research and videotape traditions in their own cultures. This extension would provide fresh opportunities to look out "windows" and look in "mirrors."

## Additional Trips

Living Among Giants focuses exclusively on AMNH's resources, both electronically and at the museum itself. Many other resources are available throughout New York City, in libraries, museums, and the tales of individuals. For example, the National Museum of the American Indian in New York City is an excellent resource.

#### A. References

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#### **B. Resources**

Bancroft-Hunt, N. & Froman, W. (1998). People of the totem: The indians of the pacific northwest. Norman, OK: University of Oklahoma Press.

Edinger, M. & Fins, S. (1998). Far away and long ago: Young historians in the classroom. York, ME: Stenhouse Publishers.

A fantastic teacher resource that clearly and thoughtfully explains one Fourth grade teacher's approach to teaching history in an active, personal way. Helpful sections on the collaboration between Dalton School and the American Museum of Natural History for a curriculum on the Pacific Northwest Coast Indians.

Gibbons, G. (2002). Tell me, tree: All about tress for kids. Boston: Little, Brown, and Co. An excellent introductory book on trees, explaining their different layers. Simple text labels complement detailed colored illustrations.

Shemie, B. (1992). House of wood. Plattsburg, NY: Tundra Books.

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Walens, S. (1992). The Kwakiutl. New York: Chelsea House Publishers.

#### **Folktales**

Normandin, C. (Ed.) (1997). Echoes of the elders: the stories and paintings of chief lelooska. New York: DK Ink.

A collection of five tales carefully recounted and illustrated by Chief Lelooska. A CD of Lelooska telling the stories is included with the book.

Normandin, C. (Ed.) (1998). Spirit of the cedar people: More stories and paintings by chief lelooska. New York: DK Ink.

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Oliviero, J. (1995). The day the sun was stolen. Illustrated by Sharon Hitchcock. New York: Hyperion Books for Children.

#### <u>Contemporary</u>

Hirschi, R. (1996). People of salmon and cedar. Illustrated by Deborah Cooper. New York: Cobblehill Books.

The lives of Pacific Northwest Coast Indians, living hundreds of years ago and living today, are skillfully described. Illustrations and photographs emphasize the relationship between people and their environment. An entire chapter, "Giving Thanks to the Cedar," clearly describes how the cedar tree was and is used.

Lewis, C. (1970). Indian families of the northwest coast: The impact of change. Chicago: University of Chicago Press.

A comprehensive adult resource detailing the changing life of Pacific Northwest Indians.

#### <u>Websites</u>

American Museum of Natural History/ Department of Anthropology Retrieved on June 18, 2006 from the World Wide Web:

http://anthro.amnh.org/anthro.htm

The AMNH's Anthropology Department Webpage is an amazing resource! Hundreds of original object images are available at this website. All images from pre-trip lesson #3 were found at this website address.

Minnesota State University - Mankato.

Retrieved June 18, 2006 from the World Wide Web:

http://www.mnsu.edu/emuseum/cultural/northamerica/nootka.html

This website offers information about the Nootka living hundreds of years ago, detailing general seasonal migrations patterns, dress, and societal structures.

Nuu-chah-nulth Tribal Council

Retrieved June 18, 2006 from the World Wide Web:

http://www.nuuchahnulth.org/index.html

An outstanding Website that describes Nootka contemporary governance and territories. The section on culture includes video recordings of Nootka individuals talking about the role of women, governance, spirituality, resilience, and renewal. Audio recordings of the Nuu-chah-nulth alphabet, common phrases, and sea creature vocabulary can be accessed from this site as well.

From:	"Kathryn Lanouette" <kathryn.lanouette@gmail.com></kathryn.lanouette@gmail.com>
To:	<li>lindag@bankstreet.edu&gt;</li>
Date:	9/11/2006 5:50:21 am
Subject:	AMNH photo approval for Kathryn Lanouette's thesis

Hello Linda -

I spoke with you last week about finally receiving approval from AMNH to use seven of their digital images in my thesis. Approval has been granted. I think everything is now set with my thesis (yippee!) but please let me know if there is anything else outstanding.

Many thanks, Kathryn Lanouette

------Forwarded message -----From: Barry Landua <landua@amnh.org> Date: Aug 24, 2006 2:43 PM Subject: RE:AMNH Anthropology Image Request To: kathryn.lanouette@gmail.com

Dear Ms. Lanouette,

Your request is approved gratis. Please read, sign and fax the attached Permission form to my attention at 212-769-5334. Please contact me in the future for any further usage of these images or any others you may be researching.

Best, Barry Landua

Barry Landua Manager of Digital Imaging Division of Anthropology American Museum of Natural History phone 212-769-5665 fax 212-769-5334 http://anthro.amnh.org