Native Trade and Change

Developed by Barclay Kopchak

A Publication of Chugachmiut Heritage Preservation Department
1840 Bragaw, Suite 110, Anchorage, AK 99508-3463
With support from US Department of Education,
We would like to thank the following people and institutions for their contribution: RJ Kopchak, Cordova Historical Museum, The National Museum of Natural History at the Smithsonian Institute, Ilanka Cultural Center.

NATIVE TRADE AND CHANGE

Copyright © Chugachmiut, 2013. Produced by the Chugachmiut Heritage Preservation Department, under the supervision of Helen Morris, with assistance from Rhoda Moonin, Barclay Kopchak, Jed Palmer, Hanna Eklund, Helen Loescher and Bernice Tetpon.

Copies of this publication can be ordered from:
Chugachmiut Heritage Preservation Department
1840 Bragaw Street, Suite 110, Anchorage, Alaska 99508
Tel: 907-562-4155
Fax: 907-563-2891
www.chugachmiut.org

Funded by the United States Department Education, ANA Grant Number S356A090054. Other Heritage Kits available: Abundance of Birds, Medicinal Plants, They are Hunting, Sugpiaq Clothing, Driftwood, Grass and Plant Fibers, Honoring the Seal, Tools and Technology, Storytelling, Gathering Plants to Eat, Ancestry, Our Foods from the Sea, Symbols, Wamluk – Let’s Play, Alutiiq Hunting Hats, Traditional Fishing.
Grade Level: K-2
Overview: Where in the world are we? Students learn how maps represent local geography and how physical characteristics such as mountains, glaciers and coastal waterways affected the Sugpiaq people’s transportation choices.

Standards: AK Cultural: E2 AK Content: Geography A.1, B.1 CRCC: G(2)

Estimated Time: Two 20 - 30 minute Class Periods

Lesson Goal: To understand why (and how) the Sugpiaq traditionally traveled and traded along coastal waterways.

Lesson Objectives: Students will:
- recognize their location on a regional map
- identify possible transportation routes and modes
- tell why kayaks were ideal for local hunting and transport trade

Vocabulary Words:
Sugt’stun: qayak imaq
English: kayak sea

Materials/Resources
- Regional map
- Sugpiaq kayak paper patterns (Silhouette cut-out/ 3-D version)
- The Hunter and the Hunted, Pratt Museum Booklet on hunting with kayaks
- Qayaks and Canoes: Native Ways of Knowing by Jan Steinbright

Teacher Preparation: Review Qayaks and Canoes.

Opening: Teacher will survey students about possible modes of transportation in and around town. [foot, canoe, kayak, jet ski, jitney, gillnetter, seiner, fishing boat, ski, snowboard, ferry, plane, jet... ] How many of these transport types existed in traditional times? Which types would have been most useful for carrying belongings, people, game, fish, items to trade with neighbors?

Activities:
Class #1:
1. Examine regional map. Identify physical features (mountains, rivers, glaciers, ocean, coast line) and town. Point out location of useful resources (mountain goats, fish, sea lions, otter, seals, berries) and place resource cards appropriately around map.
2. Set up desks and chairs (*land piled with mountains*) to mimic part of coastline. Explain that floor represents ocean. Place resource cards appropriately. Ask student to carry an armload of goods (*coats, backpacks, books…*) from one side of desk arrangement (*coastline*) to another. Have students suggest best route.

3. What is the easiest route to travel around the region? Ask students to brainstorm how to gather resources and bring them home or to trade with neighbors. *(by water)* Which transportation mode would traditional people have used? *(kayaks)*

4. Return classroom to usual configuration.

Class #2:
1. Position regional map on floor and remind students of previous lesson about traditional local transportation.

2. Distribute paper kayak patterns.

3. Have students color, cut (and fold) mini-kayaks.

4. Place/tape mini-kayaks on regional map waterways.

5. Discuss which resources were now easier to gather/hunt and how they could be transported.
*Note: Early European explorers and merchants were impressed by the craftsmanship and utility of kayaks though they didn’t make their own but instead commissioned or traded the Natives for them.*
Grade Level: K-2
Overview: Students learn to identify the region’s traditional peoples and the respect for animals shown by hunters.

Standards: AK Cultural: E8  AK Content: Geography A.1, B.3; Arts B.1  
CRCC: GS(1), CE(3)

Estimated Time: 30 minutes

Lesson Goal: To locate traditional Native peoples on a regional map and appreciate their respect for the animals which they hunted.

Lesson Objectives: Students will:
- locate local village on a regional map
- identify Native peoples of home and neighboring villages
- create hunting visors with designs showing respect for animals

Vocabulary Words:
- Sug’stun: piserta  caquyaq  punagat
- English: hunter  visor  design

Materials/Resources
- Regional map
- Hunting Visor pattern
- Stiff paper, crayons, markers, stapler

Teacher Preparation: Review Background Information from “Aleut Visors” and locations of Native peoples of the region (Sugpiaq, Eyak, Tlingit). Enlarge hunting visor pattern on 8” by 11” stiff paper, one per student.

Opening: Who’s your neighbor? Is it the student sitting next to you, the folks in the house next door? Just like we know our neighbors today the traditional Native people who lived here knew their neighbors and shared similar lifestyles.

Activities:

1. Display regional map and identify home village and traditional Native peoples of the area (Sugpiaq, Eyak, and Tlingit). Talk about how they were neighbors and all lived along the Alaska coast. They often visited and traded with one another. Explain how traditional
hunters honored the animals they hunted by using decorated tools and wearing special clothing to show respect for the animals that were giving up their lives. Hunting visors were made to shade the hunters’ eyes and meant to be beautiful. Distribute hunting visor patterns to students.

2. Distribute hunting visor patterns to students. Discuss color options for traditional designs (natural dye sources for reddish brown, yellow, brown, white, gray, and black) and then have students color in the patterns adding any extra designs they think shows respect for animals.

3. Cut out visors and fit pattern around students’ heads. Staple ends into visor shape. Have students wear visors as they stand point to the area on the map their design comes from and name the Native group.

4. [Save visors for further embellishment in “Native Trade K-2 (4) – Beads Needs.”]
Grade Level: K-2

Overview: What does our environment offer us? A field trip to an intertidal zone is the starting point to appreciate how a subsistence lifestyle depends upon a deep understanding of available resources and how best to harvest, preserve, and sustain them.

Standards:  
AK Cultural: C1  
AK Content: Geography E.1  
CRCC: SS(3), GS(4)

Estimated Time: 45 minutes at Field trip site plus transport time

Lesson Goal: To understand how local resources enabled traditional peoples to survive.

Lesson Objectives: Students will:
- observe and identify subsistence resources available in the intertidal zone
- tell how traditional peoples harvested food from the sea and the shore
- describe how a subsistence lifestyle differs from a 'store bought'/modern lifestyle

Vocabulary Words:
Sug’stun:  
neget  
asertuq  
asiituq

English:  
food  
good  
bad

Materials/Resources:
- Field trip permission form
- Alutiiq Plantlore (one per student)
- Buckets
- Collection tools
- Plastic tablecloth
- Paper towels, Hand sanitizer (optional)
- Local naturalist (optional)

Teacher Preparation: Select field trip site, arrange transportation and permission forms. Remind students to dress appropriately. Review Alutiiq Plantlore and if uncertain of identifications invite local naturalist along to help identify edible plants. Assemble collection tools and plastic tablecloth.

Opening: Where does your family get its food? (pantry, store, berrying, garden, Anchorage, restaurant, hunting trips, fishing, gifts) How many of these food sources would have been used traditionally? In Alaska we call gathering food from the land and ocean a traditional or subsistence way of life. There is a traditional saying that “when the tide is out, the table is set.” On our field trip to the beach we’re going to look at all the foods we can gather there just as the Sugpiaq traditionally gathered them.
Activities:

1. At intertidal zone remind students of traditional saying “When the tide is out the table is set.” Have students point to possible food sources. Consider other resource sites, i.e., forest and ocean. Hand out Intertidal Zone Food Key Guides.

2. Lay out tablecloth and invite students to help set it with food items gathered from the beach. Optional: Taste the flavors of the intertidal zone. Oysterleaf, young violets (leaves, buds, and flowers), inflated bladders of bladderwrack (popweed), dulse, and shelled beach peas may all be nibbled raw. Beach greens need washing and can then be used in a salad or as a sandwich filler. Fresh lovage leaves are also good in salads. Nori and sea lettuce are best washed and dried and then eaten.

3. Yum! Is there anything missing? What might other foods be? (Fish from ocean, berries nearby…….) How would the Sugpiaq have been able to add to or change the menu? (trading excess items with other people) Discuss traditional transport and storage options to keep excess food. Discuss how our modern diets have changed and brainstorm why.

Grade Level: K-2  
Overview: Why are we attracted to things? What value do we place on beauty? All cultures are interested in beauty and personal adornment and Native peoples were no exception. Beads were important trade items across Alaska.

Standards:  
AK Cultural: E5  
AK Content: Arts A.6, B.1  
CRCC: CE(4)

Estimated Time:  
(I) 20 minutes to form beads  
(II) 30 - 40 minutes to oven harden clay beads  
(III) 20 minutes to decorate hunting visors

Lesson Goal: To understand how the availability of desirable decorative items promotes trade.

Lesson Objectives: Students will:  
• think about how people crave decoration  
• study how traditional peoples traded with Europeans for beads  
• decorate traditional hunting visor hats

Vocabulary Words:  
Sug’tsun: aklluq  
English: bead  
tangerhnirluni  
English: pretty

Materials/Resources:  
• Fimo Clay  
• Toothpicks  
• Glue  
• Hunting Visor Hats (made in Lesson 2)  
• See www.mnh.si.edu/arctic for examples of beaded headdress & hunting visor adornments. Explore items under Browse Cultures.  
• Parchment paper or wax paper squares – 5” by 5” (for oven use to id student artist)  
• Baking sheet

Teacher Preparation: Review clay bead construction method. Cut parchment paper into 6” squares for students to store and label beads.

Opening: Examine students’ clothing and point out ‘unnecessary’ features (ruffles, logos, designs, words, cloth patterns and colors, edging variations) Ask students why their clothing has all these ‘extras’? Wouldn’t it be boring not to have any decoration? How would the classroom look without any decoration? Everybody loves decoration, including Native peoples.
Activities:
I. Forming Beads:
1. Explain universal desire to decorate oneself and one’s belongings. Describe arrival of trade beads. Traditional Native peoples decorated themselves, their clothing, and their tools. (Share examples of face tattoos, ceremonial regalia, needle cases, etc.) When European explorers and traders arrived in Alaska about 250 years ago they brought items to trade with the local people for their furs. One of the most popular trade items the outsiders brought were glass beads. Natives already used such natural materials as shells, bone, coal, amber, copper, and slate to decorate their clothing and tools (and themselves). Native peoples immediately saw these glass beads as a way to decorate their important belongings even more.

2. Pass out small cubes of sculpture clay (two or three colors per student) and toothpicks. 
   Optional: Explain that Sugpiag people traditionally traded natural dye materials such as copper ore and iron oxide. Allow students to trade colors among themselves.

3. Demonstrate how to warm clay by pinching off small amounts and rolling small ‘snakes’ between the palms. Thin ‘snakes’ of contrasting colors may be stacked or rolled together for a striped effect. Beads may be formed either by wrapping the ‘stacked snakes’ around the toothpick, pinching the ends off and pressing them into shape, or by piercing small balls of clay with the toothpicks.

4. “Pin” students’ toothpicks to squares of parchment or wax paper with students’ names and place on baking sheets.

II. Baking Beads: To oven harden beads place skewers in 275º oven for approximately 30 minutes. Allow to cool.

III. Decoration of Hunting Visors:
1. Return beads and hunting visors to students. Distribute glue.

2. Have students ease beads off toothpicks and glue to hunting visors for added decoration.

3. Discuss how students’ hunting visors have changed. Why were beads so popular? (pretty, shiny, colorful, easily added) What would students trade for decorative items?
Grade Level: K-2
Overview: Students will role play how people trade to acquire items needed for survival by playing the “Go Trade” card game.

Standards: AK Cultural: E1  AK Content: Geography D.1  CRCC: SS(1)

Estimated Time: 30 – 40 minutes

Lesson Goal: Students will understand and be able to explain what trade is and how it is conducted.

Lesson Objectives: Students will:
- brainstorm how items are traded and why
- identify survival items needed in traditional Sugpiaq life
- play ‘Go Trade” and interpret game results
- formulate a working definition of trade

Vocabulary Words:
Sug’t’sun: aa allu
English: yes no

Materials/Resources
- “Go Trade” decks (“Foods” & “Goods”) in kit
- ‘Subsistence Needs’ Worksheet

Teacher Preparation: Make copies of ‘Subsistence Needs’ worksheets (one per student).

Opening: Teacher will examine students’ belongings and appropriate desirable items without permission or any offer of payment.

Activities:

1. Discuss student reaction to teacher taking of items and what the teacher could do or offer to make the taking more acceptable. (Possible answers: promise to use it carefully and then return it, exchange item for a newer, better version, pay money…)

2. Help students to understand trade as an offer and exchange of goods for a needed or desired item. Discuss what sorts of items the Sugpiaq people would have needed to live traditionally such as hunting tools; fishing tools; animal skins for clothing and bedding, cooking utensils, construction materials, fish, game, berries. Hand out ‘Subsistence Needs’ sheet which depict eight of the life needs categories and review them.
3. “Go Trade” card game: The goal is to trade cards with classmates until a student has at least one item from each of the life needs categories. Deal half the students ten cards apiece from the red ‘Foods’ deck; deal the rest of the students ten cards from the blue ‘Goods’ deck. Have students sort through their cards and cover any matching image on the “Subsistence Needs” sheet. What’s missing in their collections? Direct the students to walk around the classroom with their remaining cards to make deals, i.e., to trade their ‘excess’ cards with others to obtain cards needed to fill in their survival sheets. “Do you have any ______?” “I’ll give you my __________ if you give me your __________.”

4. Teach students to say “yes” (aa) and “no” (allu) in Sugcestun and encourage them to use these words when trading. Remind students that they may trade more than one card for another if needed or, alternatively they may demand extra payment if an excess item of theirs appears to be in short supply. Allow students 10 – 15 minutes to conduct their trades.

5. Have students return to their seats and cover as many matching items on their “Subsistence Needs” sheets as they can.

6. Discuss the game results. Was everyone able to trade for everything he or she wanted? Were some items scarcer than others? Did this make a difference in how hard it was to fill that survival need? In how much another student was willing to offer in trade? The survivors/winners are those who manage to trade for enough cards to completely to fill their “Subsistence Needs” sheets because they have enough food to eat and the tools to get more food. If some students were unable to fill in their sheets how might they play the game differently the next time?

7. Close discussion with review of trade as a means to acquire items necessary for a subsistence lifestyle.
Grade Level: K-2

Overview: Students will examine petroglyphs and the materials needed to paint them. They will create their own symbols using natural dyes and appreciate the value of pigments as traditional trade items.

Standards:  AK Cultural: A3  AK Content: Geography B.7, Arts A.3
CRCC: GS(1 & 7), CE(4)

Estimated Time: 30 minutes

Lesson Goal: Students will appreciate the enduring symbolism of petroglyphs, how they were painted, and the value of naturally occurring pigment sources as traditional trade items.

Lesson Objectives: Students will:
- view petroglyphs and identify their symbols
- observe how to mix up natural mineral dye
- create and paint personal ‘glyphs’
- understand the value of pigments as traditional trade items

Vocabulary Words:
sug’t’un:  qataq  kawerleq
English: hematite  symbol

Materials/Resources
- Regional Map: Note: Anthropologist, and author, Frederica DeLaguna located rock paintings at five locations in Prince William Sound (on cliff in bight of Boswell Bay; in cave on south shore of Hawkins Island one mile west of Palugvik; on cliff 1/4 mile west of Palugvik; in rock shelter on Glacier Island; in burial cave on Mummy Island in Drier Bay, Knight Island) and additional sites were known by local residents.
- Hematite sample, hematite pigment
- Hematite FAQs (www.ehow.com > Hobbies and Sciences)
- Crisco
- Paper bowls (to hold hematite paint; one for every 2 – 3 students)
- Paper suitable for water colors (one sheet per student)
- Paint brushes (one per student)
- Petroglyph examples: Looking Both Ways  See pp. title page, 15, 16, 99, 102, 126, 205
- Petroglyph Symbols Key
- Paper towels
- Captain Cook’s 1785 observation about Native pigments: “The men frequently paint their faces of a bright red, and of a black color, and sometimes of a blue, or leaden color, but
not in any regular figure...Their bodies are not painted, which may be owing to the scarcity of proper materials for all the colors which they brought to sell in bladders, were in very small quantities...The ores with which they painted themselves, were a red, brittle, unctuous ochre, or iron-ore, not much unlike cinnabar in color; a bright blue pigment which we did not procure; and black lead. Each of these seems to be very scarce, as they brought very small quantities of the first and last, and seemed to keep them in great care.” As quoted on p.252 in Chugach Prehistory by Frederica De Laguna.

Teacher Preparation: Review hematite locations on regional map. (See note above) Review petroglyph symbols.

Water based paint: Mix equal parts powdered hematite and water. Apply with brush onto watercolor paper.

Fat based paint: place a toothpaste serving’s worth of Crisco on a disposable surface i.e., plastic margarine tub lids) and add a ¼ to ½ teaspoon of powdered hematite. Mix with finger and apply to stone surface. Caution: this is messy. Clothing should be protected and paper towels handy.

Opening: Teacher will sketch a rudimentary - and easily identifiable - animal on the board (cat, elephant, fish, rabbit…) and ask students to name the animal. Does it exactly like the real animal or is it a symbol for that people can recognize as a stand in for the real animal? The Sugpiaq people painted symbols of animals and activities that have lasted for hundreds of years.

Activities:

2. Share examples of petroglyphs around the Chugach region. Indicate locations on Regional Map. Discuss their placement in caves, age and representation of local wildlife. Invite students to speculate as to what animals are represented. Reveal animal identities. Have students sketch their own glyphs.

8. Display hematite sample and ask what this might have to do with petroglyphs. (Possible answers: stone on which to paint; stone used to sketch design on bigger rock, basis for dye) Discuss how Sugpiaq people used natural materials for pigments (paint) before synthetic/man-made dyes were available. Explain that hematite is found around Prince William Sound in such places as Red Bluff at Johnstone Point (indicate location on Regional Map) and takes a lot of effort to locate and collect even small amounts.

9. Demonstrate how hematite produces a reddish brown color and how well it lasts when mixed with animal fat (refer to petroglyph examples). Paint a sample shape on paper. Remind students how carefully the Sugpiaq must have investigated their local resources to discover the colorful properties of this mineral.

10. Distribute bowls of hematite dye among students and have them paint their individual glyphs and label the animals represented. (Optional: Use flat stones collected during Intertidal Field Trip - Activity #3 for student petroglyphs.)
11. Explain that plant based dyes don’t last as long as hematite. Discuss how much more valuable hematite dye is because of its staying power and how hematite was considered a desirable trade item for those who didn’t live near a hematite source (Indicate inland areas on Regional Map). Captain Cook, who explored this area almost 230 years ago, described the red, black, and blue painted faces of the Sugpiag men who brought along small containers of dye to trade. He guessed that the Sugpiag painted their faces and not their whole bodies because dye was so hard to come by.
Grade Level: K-2

Overview: As students help to prepare a salmon chowder they observe the similarities and differences from Sugpiaq traditional cooking means and understand the attraction of metal cooking implements brought by early European merchants.

Standards:  
AK Cultural: B  
AK Content: Geography F.2, History A.7  
CRCC: CE(7)

Estimated Time: 45 - 60 minutes

Lesson Goal: Students compare the similarities and differences between traditional subsistence cooking methods and tools and metal implements. They gain an understanding of the attraction of metal tools as trade items and how they changed Sugpiaq subsistence food preparation and diet.

Lesson Objectives: Students will:
- compare traditional cooking tools with modern metal implements
- prepare and share halibut chowder
- discuss how tools can change cooking techniques and meal choices
- appreciate the desirability of metal cooking implements as trade items

Vocabulary Words:
- Sug’t’sun: uluaq nerusiq
- English: ulu knife

Materials/Resources:
- Traditional Native cooking methods overview [Excerpted from The Alaska Heritage Seafood Cookbook by Ann Chandonnet, pp. 268-274.]
- Ingredients: 3T butter, 1 onion, 2 potatoes, 2 cloves garlic, 6C chicken stock, 1 8oz.can stewed tomatoes, 2 large carrots, salt, pepper, ½ C milk, ½ C heavy cream, 2 lbs. halibut fillets, ½ C Cheddar cheese (optional)
- Cooking implements: hot plate, large skillet, chopping knife, chopping block, vegetable peeler, can opener, grater, stirring spoon, ladle, measuring cup
- Photos: traditional cooking area/modern kitchen; mountain goat horn; spruce root basket
- Paper bowls (one per student)
- Spoons (one per student)

**Opening:** The teacher asks students what they ate for dinner the previous night. What ingredients were used? How was it prepared? What tools or appliances were needed?

**Activities:**

3. Share examples of traditional Sugpiaq cooking items (See *Looking Both Ways* p.22 bentwood cooking & storage boxes; p.26 ulukuq – knife; p.39 mountain goat horn spoons; See also [www.mnh.si.edu/arctic](http://www.mnh.si.edu/arctic) > Sharing Knowledge >Browse >Sugpiaq >Ceremony and >Community). Have students discuss similarities and differences between modern appliances. Which ‘kitchenwares’ would students prefer in their houses? Why?

4. Describe traditional cooking methods (baking in steam pits, boiling in baskets and boxes, stick-roasting, preserving, and smoking). Compare the mountain goat horn spoon (a traditional Sugpiaq trade item) with a metal spoon. Can each spoon hold the same amount? Are they equally beautiful? Compare photo of spruce root basket and compare with large skillet. Is one easier or faster to use? What can one do that the other can’t? (*Possible answers: Both can boil things; can carry and store things in basket; skillet can keep food apart from water; *can fry and sauté in skillet, *can turn skillet into small oven) Can the way you can cook something make a difference in what’s for dinner?

5. Bring the chicken stock to a boil as students identify chowder ingredients. Were these ingredients available to traditional people? Why are these modern ingredients available in a small town? (*Possible answers: We need them to make food, recipes say you need to have them, the grocery stores sell them, *we have money to buy – or trade for - them at the store, *the grocers can earn a living by selling these items to us)*

6. Prepare chowder according to the recipe. As each cooking implement is used have students list it on the board. Discuss how many of these are in the students’ kitchens and how many of the traditional cooking implements are present in their kitchens. (8-10 minute discussion)

7. As the chowder simmers for the final ten minutes review the implements used and have students draw pictures of them and discuss (optional: and draw) what their traditional equivalents would have been. (*metal knife – slate ulu; skillet – spruce root basket; peeler/grater – ulu; can opener – no cans...*). Hang student drawings by list on board OR Have students label their drawings.

8. Serve and eat the chowder. What would the chowder have tasted like if only ingredients harvested locally were used?

9. Discuss how metal implements became available as trade items when European merchants arrived in search of furs. Recall how metal implements make preparation and cooking easier and talk about how desirable these implements were even for those living a traditional subsistence life.
Grade Level: K-2

Overview: Students observe a traditional dance and learn to recognize the symbolic movements made. Learning and sharing individual movements students learn how cultural ideas as well as items can be traded.

Standards:  
- AK Cultural: E5
- AK Content: Arts A.1 & 4, B.1 & 3
- CRCC: CE(1)

Estimated Time: 45 - 60 minutes

Lesson Goal: Students learn that ideas can be traded as well as items. Identifying symbolic dance moves and creating their own movements promotes student understanding of how one culture, one artist can influence another.

Lesson Objectives: Students will:
- observe a traditional Native dance
- learn to identify component dance moves which represent actions or beings
- learn to perform some representative movements
- invent personal movements and perform for classmates
- appreciate dance as a cultural idea
- understand that ideas can be traded as well as items

Vocabulary Words:
- Sug’tsun: agnguauq  agnguartua  agngurtukut
- English: dance  I’m dancing  we’re dancing

Materials/Resources
- Native Dance troupe

Teacher Preparation: Invite Native Dance troupe to perform in class. Ask troupe leader to be prepared to identify component dance movements which represent various actions or beings. Note: Native peoples regard dances as the property of the tribe which originated them. Dances may be offered as a gift to other groups otherwise protocol requires that express permission be obtained for an outside group to perform a given dance.

Opening: Introduces the troupe and ask students to pay attention to repetitive movements and think about actions, animals or people that they might stand for.

Activities:

10. Have Dance Troupe leader introduce dance by name (or type) only and then perform the dance. Ask students what repetitive motions they observed and demonstrate them as best
they can. Have dancers repeat these movements accurately— and any others that students may have missed. Invite students to speculate about their meaning.

12. Identify movements and their meanings and have students imitate actions. Discuss what modern day activities or people for which students might invent their own actions. Be sure to have enough suggestions to insure there’s more than one answer when students demonstrate their individual moves.

13. Have students work with individual dancers to develop personal symbolic movement. Have students demonstrate their creative movements and invite classmates to guess their meanings. Discuss whether students and dancers are trading items or ideas. Are there other ideas besides dance movements being traded? (Possible answers: dance subject, i.e., hunting, victory, migration; dance type, i.e., in formation, in groups, with singing; drum accompaniment; rhythm of song and movements; dance regalia)

14. Describe occasions where traditional peoples would meet and trade stories, songs, and dances. Discuss how watching and sharing these art forms might influence what stories, songs, and dances were performed once these encounters were over.
Grade Level: K-2

Overview: Storytelling and trading were common features of Native social gatherings. Students listen to several Chugach Legends about such traditions and trade their own stories with one another.

Standards: AK Cultural: A1  AK Content: Arts B.1  CRCC: CE(6)

Estimated Time: 30 minutes

Lesson Goal: Students learn about Sugpiaq traditions of storytelling and trading.

Lesson Objectives: Students will:
- listen to Chugach Legends about trade
- participate in story trading session
- understand that ideas can be traded as well as items

Vocabulary Words:
Sug't'sun: quyana quyanaituq
English: thank you you're welcome

Materials/Resources
- Chugach Legends Johnson & Page (1984) p.112 “The Legend of a Tlingit Warrior: “Kaa-tee-na-ah”’ - marriage bringing peace and trade to region; p.80 “The Bullhead’s Story” – short description how guests repaid hospitality with storytelling; p.86 “How Raven Brought Fire” – how Raven taught village of Urumiertuli (Sheep Bay) to make greenstone adzes and fire and was repaid with enough furs and skins to make Raven rich
- Smoked salmon or other traditional food
- Life-sized salmon photo

Teacher Preparation: Review legends.

Opening: Distribute smoked salmon treats and indicate that students should respond with a thank you. Pronounce “quyana” and have students repeat. Respond with “quyanaituq.” Would students offer anything more than a ‘quyana for a more substantial meal? How do guests at their houses ‘repay’ them for hosting a meal?

Activities:
11. Discuss Sugpiaq tradition of storytelling and trading. Read legends aloud.
15. Invite student comments. Note how stories are about ‘olden days’ and often involve animals. Talk about how things that can be touched (meals, food, furs) can be traded for things that cannot be touched, i.e., ideas.

16. Offer life-size salmon photo to a student. Have student repay this gift of a meal with his or her own short story. ‘Salmon’ may be shared around the class and traded for as many stories as there is time available.
Grade Level: 3-6  
Overview: Kayaks were a superb technologic development in coastal transportation.


Estimated Time: 45 – 60 minutes

Lesson Goal: To appreciate the kayak’s technical superiority and superb adaptation for regional transport needs.

Lesson Objectives: Students will:
- trace traditional trade routes across the circumpolar region
- associate transport modes with regional environments
- explain why kayaks were ideal for local hunting, transport, and trade in Chugach region
- examine regional differences in kayak design

Vocabulary Words:
Sugestun: qayak  imaq
English: kayak  sea

Materials/Resources
- Regional floor map
- Butcher paper (enough to sketch life-sized kayak framework designs for each group)
- “Kayak Measurements” Handout
- Photos: Boat types
- North Pacific Trade Route Map ac. 1775-1900 [Crossroads of Continents pp.236-237]
- The Way We Genuinely Live by Ann Fienup-Riordan
- The Hunter and the Hunted, Pratt Museum booklet on hunting from kayaks
- Qyaqs and Canoes by Jan Steinbright
- Scissors
- Tape

Teacher Preparation: Review kayak information [The Hunter and the Hunted; The Way We Genuinely Live by Ann Fienup-Riordan, pp.87-115; Custom kayak dimensions pp. 88-89, 91]  
Note: Decorative kayak designs and on-board amulets demonstrated respect to hunted animals’ spirits and the animals’ willingness to give themselves up to the hunter.

Opening: What do you use or wear in your life that’s been custom-made for you? Mass produced items like pants and shoes or even cars come in a variety of sizes or models which can fit you, but rarely as well as something individually sized for you. Even today’s fishermen who
have boats built for them wait until they have enough experience in the fishery to know what features and configurations would work best for them. Similarly, the Native peoples developed a system of designing kayaks from generations of experience, a system with rules of measurement by individual body size that produced a customized kayak for each hunter.

**Activities:**
1. Examine regional map. Compare relative ease of water transport versus overcoming land barriers of dense forest, glaciers, and steep mountains.

2. Consider various boat types [birchbark canoes, bearskin boat (Ahtna); dugout canoes (Eyak, Tlingit), wooden skiff (European), kayak (Yup’ik, Aleut Islanders, Sugpiaq)]. Which boat types could have been built with local materials? Which would have been most useful for travel in the Chugach region? (need to be able to go withstand waves; maneuver across tidal currents; stay dry and out of very cold water, need to use for hunting, and transport)

3. Review kayak’s usefulness: made from local materials (animal skins stretched over wood – or driftwood - frame, stitched with sinew); highly maneuverable; with cockpit covered by gut spray skirt can be righted if tipped using ‘Eskimo roll’ technique; can be used as fishing platform with harpoon and nets; can transport goods/animal carcasses lashed to surface; better for hunting because quieter than motorized boats).

4. Explain that European explorers admired the kayak’s versatility and even traded for them. But the Europeans were unable to successfully build their own. They failed to understand that the Native peoples had learned to customize each kayak’s dimensions for the particular hunter who would use it. A further refinement of Chugach region kayaks was the double prow. The lower prow works as a cutwater and the upper prow aids maneuverability in difficult sea conditions. (See Nick Tenape’s explanation, Qayaks and Canoes, p.76).

5. Divide class into teams of three. Have each team designate a hunter. Distribute scissors, tape, kayak patterns, and kayak body dimension explanations. Students will recreate the profile/side view of a kayak, and a profile of the cockpit opening, made to their hunter’s individual dimensions. (See The Hunter and the Hunted for proper dimensions.)

6. Have teams cut strips 4” – 6” wide to use as struts and adapt kayak pattern pieces to their hunters using scissors and tape. How different are the various kayaks? Why would such customized dimensions make a difference?

7. Review regional kayak designs. (See Qayaks and Canoes.)
Grade Level: 3-6
Overview: Students learn how extensive pre-contact Native trade routes were and how they affected local lifestyles.

Standards: AK Cultural: E5 AK Content: Geography D.1, History A.1.b CRCC: CE(9)

Estimated Time: 45 minutes; Optional – 30 minutes to write trade reflection piece

Lesson Goal: By modeling extended trade exchanges students comprehend how trade networks allowed goods to move over vast distances. Through discussion and writing students summarize how trade items could change lifestyles.

Lesson Objectives: Students will:
- identify traditional trade routes and distances
- model a trade network
- retell how trade networks change lifestyles

Vocabulary Words:
Sug’tsun: cemuteq ang’asiiglun
English: trade travel

Materials/Resources
- North Pacific Trade Route Map ac. 1775-1900 [Crossroads of Continents pp.236-237]
- Native trade overview [Excerpt from Crossroads of Continents pp.234—240]
- Trade card decks (one ‘deck’ with eight trade items for each of four regions; Tlingit, Sugpiag, Athabaskan, and Inupiaq)

Teacher Preparation: Read Native trade overview, Crossroads of Continents pp.234—240.

Opening: Select items from around classroom and determine place of origin. Discuss how that item was transported to the town and the distances traveled. Have students speculate how far pre-contact Native trade network extended.

Activities:
Class #1:
1. Examine North Pacific Trade Route Map. Review types of items traded from various regions. Calculate the approximate distances items traveled.

2. Trade Travel Simulation: Shuffle each of the regional trading card decks. Divide students into four regional groups (Tlingit, Sugpiag, Athabaskan, Inupiaq) and deal each student select six trading cards from his or her region. Explain that these items were either
sufficiently available in their region to be traded, or they were known to be highly popular trade items (i.e., dentalia shells). Have groups of four students with a representative from each region arrange themselves in circles. Students will trade items based on whatever takes their fancy. In a clockwise direction have students successively trade away two items and keep three. (Students A & B will trade, then B & C, then C & D…) Once there is sufficient distance from the actively trading students A & B may begin process again. Allow trades to go around circle at least twice. How far (through how many trades) did some items travel?

3. Discuss student’s reasoning for choosing some items over others. Have them hypothesize how their reasoning would have differed from traditional trading.

4. What would change about the ability to trade items if everyone were in a bunch (i.e., some trading posts surrounded by others, some on the edges)? How did these trade relationships affect Native peoples and their lifestyles? (Possible answers: could acquire trade goods which originated from farther afield than immediate neighbors’ locale; could increase own trade potential by acting as middlemen for items obtained from others; could trade for trade items; could expand type of tools and raw materials to change/update local items; could imitate clothing/decoration/hunting & cooking techniques…)

Class #2 (optional):

Referring to their trading cards, have students write about how they intend to use the newly acquired items to change their lifestyles. [Alternatively: describe all the transactions that needed to occur for a new item to have arrived at his or her trading post.]
Grade Level: 3-6

Overview: Students make a spring foraging field trip to identify local food sources and gather ingredients for a meal.

Standards: AK Cultural: C1, E5  AK Content: Geography D.1, History A.1.b, Skills A.6  CRCC: SS(3), GS(3 & 4), CE(9)

Estimated Time: Foraging Field Trip plus 30-45 minute class period

Lesson Goal: Students identify and gather locally available foods on a foraging field trip.

Lesson Objectives: Students will:
- participate in a “Food Foraging” field trip to identify and gather traditional foods
- prepare a dish using gathered foods
- discuss how cultural interaction and trade changes diets

Vocabulary Words:
- Sug’tun: neqa  neqet  nepugneq  
  English: pick  gather  picking berries

Materials/Resources
- Naturalist guide (optional)/Alutiiq Plantlore by Priscilla N. Russell
- Field trip permission form
- Gather ingredients for Wild Green Marinated Salad (8 Cups Wild Green Mix – Possibilities: chickweed, dandelion, lovage, fiddleheads, spring beauty, nettles, dock, wild mustard, lamb’s quarter, shepherd’s purse, violets, sorrel, beach greens, oyster leaf, goose tongue) [“Wild Food Cooking” – Handout of Joanna Schofield, author of Discovering Wild Plants]
- Zip-loc bags for collecting local ingredients
- “Wild Food Cooking – Group 3” Marinated Salad recipe (store ingredients: 2T vinegar, ¼ C olive oil, garlic, 2T lemon juice, ½ C roasted red peppers - or sundried tomatoes)
- Cooking pot with steamer
- Hot plate
• Salad bowl
• Paper bowls (one per student)
• Forks (one per student)

**Teacher Preparation:** Decide on field trip to area where most likely to be able to harvest number of ingredients for Wild Green Mix. Review Jessie Tiedeman’s recollections. Arrange for transport to field trip forage site and obtain permission for students’ travel.

**Opening:** What local food do you eat? A U.S. Dept. of Agriculture survey reports that Alaskans spend about $2 billion on food annually. But only 2 – 3% of this food comes from Alaska. (See Baumann, M. (2011, June 20). Naturopath, chef, team up to promote traditional foods. (See Cordova Times. p.12). Let’s explore more local/traditional food options.

**Activities:**

1. Take transport to field trip destination. Distribute and review identifications of potential ingredients for Wild Greens Mix. Remind students to check with adult to confirm identification before gathering.

2. Divide and gather.

3. Upon return clean and prepare ingredients. Follow Marinated Salad recipe. Consider which ingredients are local and which are store bought. Would these local greens been useful trade items for traditional peoples? (No, food freshness and storage problems.*)

4. Serve students. Read aloud from Jessie Tiedeman’s recollections as students eat (or don’t). Discuss how exposure to trade (store-bought) items changes people’s diets and eating style.

*Optional: In the absence of year round refrigeration the Sugpiaq did preserve foods by storing them in seal oil. Seal oil and eulachon (hooligan) oil were highly valued trade items for people of the Interior. See “Grease Trails - Native Trade 3-6 (4)”
Jessie Tiedeman Interview

Jessie Tiedeman: My mother is from Tatitlek. In the meantime we lived here [Cordova]. I lived here for eleven years. We migrated to Makaka Point. That was named after my father. We lived there for about five years and in that time I was living with my grandparents, my father’s father. In them days food was hard to get. We had to live off the land. He went seal hunting, duck hunting, and when the tide went out, he would get octopus and cockles and dry them. He had a big smokehouse. I don’t see anybody with that kind of smokehouse today that I can recall. They would just take the three of us and go down and pick up these fish for the winter. There were different ways to put them up. We salted the seal and the salt water ducks. He would smoke cockles, boil the octopus, and smoke that, get some cod fish and dry it in the sun. After three days he would take them into the smokehouse and smoke them. I don’t see anybody doing that now, you know. For the winter, he’d just put them away. He would get seal oil. We would use a lot of seal oil for our lights in a wooden, well, it’s like a stone, he had, a stone and a cloth for a wick in the seal oil. That was the light that he had.

We had a mailboat but not often. It was the Poppy II. I remember it very well. At Christmas time he would bring us some oranges and it was a big treat, but when Christmas came around we never had turkey. We had a goose and it was good. It was a good dinner for us then.

We lived there for eight years and then my parents decided they were going to come into Cordova again. It was time for us to go to school. We went to school down here in the government school at Eyak. A bunch of us went to school there. In that length of time it was a tough time to survive. We went to school for three or four years, but then my parents decided they were going to take us over to Tatitlek to my mother’s folks. Things were getting a little better then. We moved in to Tatitlek and my parents were living there. There was no water. We would get up in the morning and in order to wash our faces we had to chop a hole in the bucket. It was cold. My father would chop kindling to make heat for us. The kids are lucky today. They get up, it’s all electricity and they have heat. Then later on my husband and I married. We still lived in Tatitlek. I lived in Tatitlek for 28 years. We still had to go out in different areas to put up our winter’s supply of food. I went with my father in to Landlocked Bay. He had a little smokehouse, and he used to take some children with him in a bidarka. There were no outboards, very few, maybe two or three. So they would get in the bidarka, put a bear skin under them, and he would take them over to a place to where you put your fish, a camp smokehouse. It’s in Landlocked Bay. It’s a little cabin there. It belonged to his great grandfather, Dean’s great-grandfather. We would stay there for two or three weeks, maybe a month, putting up fish and everything for the winter. We would go back and he would haul all that stuff back in the bidarka in just two or three trips. We got an inboard-outboard later on. Things were getting modern then. We would stay longer and go in farther in Fidalgo and go get our goat, go goat hunting up in the mountains. We would get whatever we were allowed, one at that time, I think. We hiked two or three hours, brought it back, and processed that for our food. It was meat we hardly got. When you get it you try to share it with the other people you know. It was hard to get food. Then we would go home. On Christmas time you were wishing you had a nice meal. My husband would go around the point or my brother-in-law’s in the wintertime to try and get some salt water ducks. Shells were scarce, too. They’d go hunting and if they got one duck with no dogs to retrieve it, they would throw rocks at it, wishing that the duck come to the beach where they were. We would have a nice dinner that way out of ducks. We would go clam digging.
…We had to survive on what little we could get. In order to make our sugar last my grandmother would make a sugar candy, just boil it and make it hard. She would allow each of us just a little piece. It was more like a candy. We were rationed a little piece when we had a meal. She would store it and it would last a long time.

Interviewer: Was there a difference in the way the family worked together and supported each other? Life is easier, much easier, but because of it we have a lot of time on our hands. There is not always something to take up that time that is of a positive nature. Consequently, there are problems today they didn’t have in the past.

Jessie Tiedeman: That’s true. In our days people helped one another. In the community or the villages you would have somebody down on the beach and he would catch something. They cut up bear, or seal, or something, and he would share it with the whole village. If he brought in two or three logs from the beach to be cut up for winter fuel everybody would pitch in and the boys and the grandparents would be sawing those ten or twenty logs and packing them up. Yeah, everybody was helping one another in them days, there was no grudge between anybody…..

Interviewer: Did you do your cooking directly over the fire or did you have something like a skillet or a pan or pot?

Jessie Tiedeman: In my young days, when I lived with my grandfather, he had an old black pot. That pot was used for everything that I can remember. He would just wipe it out and cook whatever he wanted, fry whatever he wanted, or boil in it. Everything was cooked in that pot. In my days, the Aleuts called that a crow. One reason is because it is black, I think. I can picture a great big pot hanging down over this open fire. They had frying pans. Seal oil was used a lot in my days and bear oil. You would render that down and have it like butter…..

Interviewer: Do you think it might be possible for us, as a group here, to have the experience of barbecuing seal or some way of experiencing the old way of cooking?

Jessie Tiedeman: Yes, but I’m planning on moving, providing one day Eyak lets us move to our homestead. I don’t know, it could be any day, or whatever. You are all welcome to come out. It’s a nice place where I’m planning on moving. It’s the center of all sea foods. I am sure these boys could get a seal. I could show them how to barbecue seal. You could get some ducks. In my days loon was a good duck. It was hard to pluck. I don’t know if we’re allowed to get them or not, but we had to survive. We had to eat anything you know. It was good. And I told these boys if grandmother cooked it they would eat it, I am quite sure. They said, “Oh, no. We wouldn’t eat that yucky looking duck.” A lot of children I see are kind of finicky eaters. My grandchildren say they will never eat anything but when I fix it they eat it. I am really pleased. I think that if they had to come out and live with me I would have no problem. I think they would enjoy it. I think they are looking forward to it. I told them I am going back to my old ways. They already have more plans than I have. They are thinking their grandmother is going to live forever. But I am hoping that I can show them the way that I have lived, and what was caught in those days, and how to cook it, and what to do with it in case they are stranded on a beach someday. I am quite sure that if I got stranded any place I could survive, if a bear didn’t come and chew me up…..
Interviewer: What would you for the kinds of vegetables and fruits that you buy in the grocery? Would there be something on land that you could use?

Jessie Tiedeman: In Tatitlek there was a wild rice that the old timers used to get. It has a brown flower but there is a cluster of rice underneath [also known as a chocolate or Kamchatka lily]. Then there was like a dandelion leaf. They used it like spinach. People still do. You could grow your own potatoes. A lot of that we didn’t have in our days. We had seaweed. My grandfather used to get seaweed….He would pick it out of the water and drape it over the fence and let the sun dry it out. He would get a little smoke and smoke it. Then he would roll it up and chop it real fine. He would pack it in kegs with seal oil and he would put the cooked cockles on top. He would preserve it for the winter. In the winter time you would take that seaweed with the cockles and maybe get your smoked salmon. It was really a treat, you know, to eat smoked salmon. You would get the kelp too.

Interviewer: Would it be cooked or would you eat it just as it came from the barrel?

Jessie Tiedeman: You could eat it right from the ocean. We preferred just dipping it in boiling water and eating it, or dipping it in seal oil. In fact, they do that today. They eat herring spawned on the kelp if they dip it in seal oil. My grandchildren won’t eat the seal oil. They go for the butter instead….

Interviewer: What about gumboots [also known as baidarki or chitons]?

Jessie Tiedeman: Your dad asked me that. He said he had gotten some and forgotten how to cook them. I was taught to take cold water and put your gumboots in and let them come to a boil. As soon as they come to a boil, you got to have a mallet or a stick to squish and stir them around. When the black skin starts falling off that is a sign you gotta take them out. If you boil them too long they get tough. Your dad used boiling water and he said they were tough. It just takes a few minutes.

Excerpted from Discovery Program, 1980.
Out of Our Time – The Storytellers Oonechwug Edowchu,
Grade Level: 3-6

Overview: Students will experiment with traditional cooking with rocks in baskets and consider the advantages of the metal pots brought by Russian traders.

Standards: AK Cultural: C1  AK Content: History B.1.b  CRCC: SS(2)

Estimated Time: 30-45 minute class period

Lesson Goal: Students will understand the advantages of a metal pot over a basket for cooking and the accompanying changes in lifestyle and diet.

Lesson Objectives: Students will:
- experiment with traditional cooking method
- appreciate why metal pots would be attractive trade items
- hypothesize how traditional lifestyle would change with metal pot use

Vocabulary Words:
Sug'tsun: allat'stun Egganeq rrakiq cukunaq nalltuleq
English: how to cook differently basket (metal) pot

Materials/Resources
- Commercially made water tight basket or metal pan
- Lid for basket or pan
- Rocks—fine-grained, solid, non-porous, and dry. Rocks should be small enough to be picked up with a pair of tongs and enough to fill a cookie sheet. Rocks must be dried thoroughly to prevent them from exploding.
- Meat: moose, deer, stew meat, or chicken (about 1 lb.)
- Knife to cut meat and cutting board
- Tongs
- Baking Sheet
- Oven
- Candy thermometer
- Graph paper (optional)

Teacher Preparation: Collect rocks and place on cookie sheet. Bake for 45 minutes at 300º. Assemble cooking materials.
Opening: “The Native peoples of Alaska utilized their natural resources such as beach grass, birch bark, cedar bark, spruce root, and baleen to make containers for gathering, storing, and cooking. For cooking, a tightly woven or bark basket [or bentwood basket or hollowed log] was filled with water and food, and hot rocks heated from a fire were added to the basket. The heat from the rocks would boil the water and cook the food. Fish or fish backbone were often wrapped and tied in willow bark before cooking. As the food cooked, the cooking rocks were periodically replaced with hot rocks from the fire to maintain the desired cooking temperature in the basket. Various types of rocks were used depending on the cooking site. Round, fine grained, solid, non-porous river rocks were preferred.” (Moses & Krieg, 1988, p.51)

Activities:
1. Review cooking experiment steps and remind students to imagine that the rocks were heated in a fire and the basket or pan was a traditional woven basket or bentwood box. Decide how often to check the water temperature. Prepare white board to list water temperatures and times.

2. Designate students to perform various tasks:
   (a) Cut meat into 1” chunks
   (b) Fill basket/pan with lukewarm water
   (c) Measure water temperature: note temperature on board and time taken
   (d) Place rocks (carefully!) into basket/pan with tongs
   (e) Measure water temperature with the addition of every X number of rocks or every Y minutes: note temperature on board and time taken
   (f) Add meat................................. and let cook until done
   (g) Measure temperature of water once meat is done and note on board
   (h) Take out meat with tongs and examine (DO NOT EAT MEAT. Discard meat)
   (i) Calculate cooking time

3. Discuss how this basket cooking process compares with metal pot cooking. (*Optional: Boil meat in metal pan on stovetop and time process for comparison.*) Which is more efficient? Note what a desirable trade item a metal cooking pot would be. Discuss how traditional lifestyles would have changed with the adoption of metal cooking pots. (*Optional: Graph the progress of the water temperature changes using time for the x axis and temperature for the y axis.*)
Grade Level: 3-6

Overview: Without a common language Native peoples were able to maintain trade relations.

Standards: AK Cultural: E6
AK Content: Geo. D.1, History B.1.b
CRCC: CE(9)

Estimated Time: 45 minutes

Lesson Goal: Students hypothesize how Native peoples were able to maintain trade relationships without a common language and consider how different cultures communicate and interpret gestures.

Lesson Objectives: Students will:
- hypothesize how people without a common language were able to trade
- dramatize trade encounters
- compare student conclusions with actual descriptions
- comprehend the differing cultural values of gestures

Vocabulary Words:
Sug’tsun: cemuteq
English: trade

Materials/Resources
- The Native People of Alaska (2002) p.43 Trade vs. warfare description
- Furs and Frontiers in the Far North (2009) pp.15-19 descriptions of 18th c. annual trade fairs in far north, including p.19 European captain’s preference for on-board trade and Native preference for on-shore trade; p.93 Native description of silent trade to Otto von Kotzebue (1816)
- Trade item cards

Teacher Preparation: Review The Native People of Alaska trade description.
**Opening:** How do you communicate intentions without words?

**Activities:**
1. Review map of Alaskan languages. Describe historical ‘raiding and trading’ relationships of Native peoples and invite students to speculate on how trades were conducted between different language groups, between different language groups if there was a history of warring. Remind students how even gestures vary from culture to culture (*Greetings*: hand waves, hand shaking, cheek kissing, bows, salaams, → Inupiat “yes”=raised eyebrows; “no”=look down).

2. Divide students into small groups to work up silent trading skits from greeting to trade offers to departure. Give each group a selection of trade cards as props. Emphasize that skits must be wordless.

3. Have groups perform skits. Discuss similarities and differences. Invite students to identify those gestures which are culturally modern American. (*Possible answers*: head nodding & shaking to indicate yes & no, crossed arms to indicate finality, balled fist...)

4. Read accounts of actual silent trade (as recounted Otto von Kotzebue – 1816, and Beechey Expedition 1826) and invite student comments.
Grade Level: 3-6

Overview: Students learn about Native trade in pigments and the use of hematite in creating enduring petroglyphs.

Standards: AK Cultural: E2  AK Content: Geography B.7, Arts A.3  CRCC: G(1 & 7), CE(4)

Estimated Time: Two 45 minute classes

Lesson Goal: Students learn about the symbolic petroglyphs of Prince William Sound and the hematite pigment with which they were painted. Students understand the value of enduring dyes as trade items.

Lesson Objectives: Students will:
  ● study petroglyph symbols of Prince William Sound
  ● identify hematite and its dyeing properties
  ● experiment with hematite dust to reproduce petroglyph paint
  ● create personal petroglyphs
  ● compare vegetable dyes with mineral (hematite) dye

Vocabulary Words:

<table>
<thead>
<tr>
<th>Sugt’stun:</th>
<th>qatag</th>
<th>suq</th>
<th>kawerleq</th>
</tr>
</thead>
<tbody>
<tr>
<td>English:</td>
<td>hematite</td>
<td>spirit</td>
<td>symbol</td>
</tr>
</tbody>
</table>

Materials/Resources:
  ● Vegetable dye sources (spinach, beet, onion)
  ● 3 Crockpots
  ● Colander
  ● ‘Petroglyph Symbols’ Handout [Chugach Prehistory pp.102-105]
  ● Hematite (solid and powder forms)
  ● Geologist’s Mineral Kit and scratch glass (for mineral identification), directions for use
  ● Allen Marquette, PWS Science Center Outreach Program Coordinator (and geologist)
  ● Old socks (one to three – depending on number of demos desired)
  ● Hammers (one to three – depending on number of demos desired)
  ● Crisco
  ● Paper bowls (small; for distributing dyes and rinse water); plastic lids or styrofoam trays on which to mix Crisco and powdered hematite.
  ● 5 Bowls (large; for hematite, vegetable dyes, and saltwater)
  ● Saltwater
  ● Paint brushes (one per student)
  ● Flat rocks
• Paper towels
• Chugach Prehistory (1956) pp.5-6 Hematite (qatag) – obtained from red bluff at Johnstone Point on Hinchinbrook Island and from a seam between the south shore of Post Etches and Signal Mountain above English Bay - was used for red paint of pictographs. Sugpiaq made paints from copper ore (Landlocked Bay in Port Fidalgo), and were also able to produce black, yellow, gray, brown, and blue colors from rocks and earth.

p.103 Anthropologist, and author, Frederica DeLaguna located rock paintings at five locations in Prince William Sound (on cliff in bight of Boswell Bay; in cave on south shore of Hawkins Island one mile west of Palugvik; on cliff 1/4 mile west of Palugvik; in rock shelter on Glacier Island; in burial cave on Mummy Island in Drier Bay, Knight Island) and additional sites were known by local residents. p.105 Close resemblance to petroglyphs of ancient ‘Cook Inlet Eskimo’ and rock paintings at Cape Alitak in Kodiak and Kachemak Bay (among others). Possible shamanistic purpose, of unknown age.

• Captain Cook’s observation about Native pigments: “The men frequently paint their faces of a bright red, and of a black color, and sometimes of a blue, or leaden color, but not in any regular figure...Their bodies are not painted, which may be owing to the scarcity of proper materials for all the colors which they brought to sell in bladders, were in very small quantities...The ores with which they painted themselves, were a red, brittle, unctuous ochre, or iron-ore, not much unlike cinnabar in color; a bright blue pigment which we did not procure; and black lead. Each of these seems to be very scarce, as they brought very small quantities of the first and last, and seemed to keep them in great care.” As quoted on p.252 in Chugach Prehistory by Frederica De Laguna.

**Teacher Preparation:** The night before Class#2 place quantities of spinach, chopped beets, and shredded red cabbage, or grated carrots in three separate Crockpots barely covered with water. Allow to simmer overnight. (See also [http://www.ehow.com/info_8257954_properties-uses-hematite.html](http://www.ehow.com/info_8257954_properties-uses-hematite.html) for hematite FAQs and [http://www.ehow.com/how_12089295_make-colored-markers-vegetable-dyes.html](http://www.ehow.com/how_12089295_make-colored-markers-vegetable-dyes.html) vegetable dye options). Ask some students bring in old socks for hematite pounding.

**Water based hematite paint:** Mix equal parts powdered hematite and water. Apply with brush onto watercolor paper.

**Fat based hematite paint:** place a toothpaste serving’s worth of Crisco on a disposable surface i.e., plastic margarine tub lids) and add a ¼ to ½ teaspoon of powdered hematite. Mix with finger and apply to stone surface. **Caution: this is messy. Clothing should be protected and paper towels handy.**

**Opening:** How long does art last? What gives art color?

**Activities:**
**Class #1**
1. Display petroglyph photographs and indicate petroglyph locations around Prince William Sound. Discuss use of enduring paint made from hematite and ability to withstand rain and saltwater. Identify symbols’ probable subject matter and use by shamans.

2. Distribute “Petroglyph Symbols” Handout and have students identify symbols.
3. Display hematite and demonstrate scratch plate identification method. *Have students firmly hold specimen to test in hand and make just one pass over the streak plate, pressing firmly. Several distinct streaks of color are required, but each streak should be drawn separately and not be the result of made by rubbing the specimen back and forth as though they were working in a coloring book. The excess powder is blown off the plate’s surface and fingers should not touch the plate. Once the surface has several color streaks use a damp cloth or paper towel to clean most of the material off. Don’t submerge the tile in water as it is unglazed and water absorption damages it.* Brainstorm how this mineral could be transformed into paint. Remind students of limited sources for hematite and how its rarity made it a valuable trade item for people not living near hematite veins. Point out Sugpiaq resourcefulness in making use of such a mineral.

4. Have volunteers place hematite samples inside socks and pound into powder.

5. Distribute paper bowls with dabs of Crisco, flat rocks, and small amounts of hematite powder. Invite students to experiment to combine Crisco (a little at a time!) and powder to produce paint on top of a disposable surface, i.e., margarine tub lids. (A roughly one to one ration of powder to Crisco produces a satisfyingly lasting paint.) *Note: Hematite is messy and colors all it touches.* Have students protect clothing and have paper towels handy. Have students record their recipe.

6. Place centrally located bowls of salt water around classroom and have students daub flat rocks with hematite paint (in petroglyph form if possible). Can students’ paints survive being dunked in saltwater? Which recipe is the most successful? [Have students compare dipping a bare finger into the saltwater with dipping a finger covered in Crisco. Note water shedding properties of grease.]

7. Reserve some hematite paint for use in Class #2.

   **Class #2**

   1. Distribute paper suitable for water coloring. Review petroglyph symbols and have students sketch their own versions.

   2. List vegetables used for dye-making and invite students to speculate on resulting dye colors. Pour out Crockpot contents into bowls to observe results.

   3. Strain bowls’ contents into smaller bowls for student use in painting personal symbols. Distribute brushes and have students paint symbols using as many dye types as possible. Have students use some hematite paint as well. Label symbols.

   4. Share results. Have students describe their personal symbols. Have they created art? Have they created something spiritual (something referring to the unseen world of spirits)? How do their ‘glyphs’ differ from those of the Sugpiaq?
5. Have students predict how long their ‘glyphs’ will stay brightly colored. Hang ‘glyphs’ in sunlight and check the relative longevity of the colors over days. Why would a long lasting dye be a valuable trade item?
**KNIFEWORK – NATIVE TRADE 3-6 (7)**

**Grade Level:** 3-6  
**Overview:** Comparing the usefulness of knife types and their historical role as trade items.

**Standards:**  
*AK Cultural:* B4  
*AK Content:* History A.1, Science A.3  
*CRCC:* CE(7)

**Estimated Time:** One to two 45 minute class periods

**Lesson Goal:** To compare the relative usefulness of knife types, determine their chronological order, and explain their historical role as trade items.

**Lesson Objectives:** Students will:
- identify knife types
- compare their ability to cut various materials
- explain their historical role as trade items
- calculate labor required to trade pelts for trading post knives

**Vocabulary Words:**  
Sug’stun: *nerusiq*  
English: knife

*Sugpiaq* *iperqaq*  
English: sharp

*Sugpiaq* *iperqakcak*  
English: sharper

**Materials/Resources**
- Allen Marquette, Community Education Program Coordinator, Prince William Sound Science Center, geologist, [amarquette@pwssc.org](mailto:amarquette@pwssc.org)
- 3”–5” long pieces of shale or slate – the softer the better – and another harder rock for on which to grind the shale – (In Cordova, rock such as the pepper and salt granite rocks used as rip rap on the Sheridan River Bridge Road.) (one set per student) OR spalled samples of local rock with which students can experiment with creating a knife edge.
- Safety goggles
- Knife samples (clamshell, copper blade, stone knife, steel knife)
- Sample materials to cut (fish skin, tanned leather, small branches, meat, twigs, grass stalks)
- Looking Both Ways Crowell, Steffian, & Pullar (2001) p.110 – Sugpiaq origin of slate-grinding technique 6,000 years ago, about 4,500 years ago perfected techniques for long sharp-edged bayonets and double-edged butchering knives; only appeared in adjacent regions 4,000 years ago; Middle Era (1500 BC – AD 1100) extensive trade, more salmon harvested, slate ulus.
• http://www.onagocag.com/knapping.html - good links for definitions and techniques for knapping
• http://conncoll.academia.edu/AnthonyGraesch/Papers/330373/Modeling_Ground_Slate_Knife - information about slate knives in Alaska and traditional subsistence salmon processing
• http://www.youtube.com/watch?v=ZE9BL8bK84k&feature=related – video presentation on how to make and use a slate or shale tool

Teacher Preparation: Review Out of Our Time (pp.44-45, 69) and Looking Both Ways (p.110) selections. If shale or slate is available students may knapp their own blades following the directions from the listed websites. If not, consider spalling off some samples from local rocks in the general shape and thickness for a hand held cutting tool for students to try knapping.

Activities:
Class #1

1. Discuss tools required for subsistence lifestyle (cooking implements, utensils, hunting tools – bow and arrows, harpoons, fish hooks and nets,... *knives). Constant need to cut, slice, divide, separate, and clean game, fish, berries, wood, roots….. What resources were available to the Sugpiaq to make knives? (Possible answers: stones (which sorts?), shells (which sorts?), animal teeth)

(Optional: If shale or slate is available students may knapp their own blades following the directions from the listed websites. If not, consider harvesting some sharp rocks locally for students to try knapping. Safety goggles should be worn.)

2. Display knife samples and identify source material. How to compare them? Have students brainstorm a cutting hardness scale. List suggested materials from easiest to hardest to cut. Select six to try (i.e., tanned leather, fish skin, meat, small branch, twigs, grass stalks).

3. Designate ‘knife students’ and distribute one knife type to each. Make class predictions about various knives’ cutting abilities.

4. Designate student ‘stations,’ one station per type of material to be cut. Supervise and have students record cutting failure/success by each knife type and material cut.

5. Have each knife student visit each of the cutting stations and cut target sample for (up to) 30 seconds. Station students record cutting ability (Cut through target all the way; cut through target part way; didn’t cut through target.)

6. Collate class results on board. Were student predictions accurate?
Class #2

1. Research Middle Period resource development and slate knives probable origin in Chugach region and role as trade item. Review class results from knife comparison experiments and place in order of increasing cutting ability. Consider how this reflects order of development over time.

2. Discuss advantages of steel knife. Under the trading post barter system Natives had to pile up otter pelts equal to the height of the desired trade item. (Read Out of Our Time pp.44-45, Art Tiedeman’s description of such a trade arrangement and p.69, Agnes Nichols’s narration of Russian/Native interaction and trading.)
Art Tiedeman Interview –

Interviewer: Do you remember stories that your grandfather told you?

Art Tiedeman: Oh, some of them. I haven’t got the memory I used to have. At times I can remember all of them and then there’s times that I’m not interested. He’s told us a lot of different stories. My grandfather he was the best shot in Nuchek and there was about eleven hundred people.

He was a great hunter, the big great hunter and he was the chief, also. And there was bow and arrows, no guns, bow and arrows and he was the best bowman. He had the most furs and he also got the first gun that was ever there. In order to get that, the only way they could get that, was they had to pile fur. They stand the gun up like that and they had the furs. They laid the furs down, no matter what it was, sea otter, mink, land otter, anything, they just piled them up like that on top of them. When it got to the top, you press them down, then he got the gun. Man, that must have cost about, well, I would say, in them days furs were high, I would say a million dollars. For that’s what he paid for it. Because he got his count probably a hundred and thirty sea otters. Each sea otter in them days run around all the way from thirteen hundred to two thousand dollars. That’s in the old days when the money was worth something too, because when I was fourteen years old I went out with my dad and the old man after we built the boat, an, heck, they got $2000 for a sea otter then. That’s poaching.

Interviewer: Are they hard to get?

Art Tiedeman: No, not now. This country has loads of them. They’re overrunning the country now. They should open the season up. They ain’t worth much now, but them days they was worth a lot. We were poaching, you know. And man, they brought in a lot of money. Well, anyhow, that’s how he got his gun.

Excerpted from Discovery Program, 1980.
Out of Our Time – The Storytellers Oonechguk Edowchu,
Grade Level: 3-6
Overview: Students learn to perform Native dances and teach others. Students model means by which abstract cultural ideas are exchanged.

Standards: AK Cultural: E7  AK Content: Geography B.3, History A.6  CRCC: CE(1)

Estimated Time: two to three 45 minute class periods

Lesson Goal: Students will learn a Native Dance sufficiently well to teach others and produce an instructional video to do so.

Lesson Objectives: Students will:
- observe, learn, and perform a Native Dance
- organize and write a script to teach others a Native Dance
- produce a Native Dance instructional video

Vocabulary Words:
Sug'tsun: agnuaq agnuarta
English: dance dancer

Materials/Resources
- Native Dance troupe
- Flip Video camera

Teacher Preparation: Invite Native Dance troupe to perform and teach a dance. Request that Troupe Leader to be prepared to talk about Native dance protocol. [Note: Native peoples regard dances as the property of the tribe which originated them. Dances may be offered as a gift to other groups otherwise protocol requires that express permission be obtained for an outside group to perform a given dance.]

Opening: What can be traded? It’s easy enough to imagine how one item can be traded for another (otter pelts for moose hides, dried halibut for caribou jerky…) but ideas can be traded as well. Ideas like dances or songs can be exchanged at social gatherings or given as thanks. Within the particular dance or song are contained cultural ideas about what movements are involved in a dance, what rhythms or subject matter are appropriate.
**Activities:**

**Class #1**

1. Have Troupe Leader explain Native dance protocol (*dances belong to the dancers and their people, dances must be expressly given to another group, dances can be part of a social gathering or of a trade*).

2. Have Dance Troupe perform dance and video them. Have troupe teach students the dance. Make sure students understand underlying symbolism of movements.

3. Have students perform dance for troupe and video same. What movements or words are hardest? Is it easier to remember something whose underlying meaning is understood or is simple imitation easier?


**Class #2**

1. Divide dance instructions into three (or four) distinct sections. Have student groups each organize and write a two minute script for a particular section and assign roles (narrator, dancers, drummer…)

2. Rehearse and revise group scripts.

3. Video each group dancing.

4. *Optional:* While other groups are video-ing have students write individual introductions to their teaching video.

5. Discuss how Native groups influenced one another by trading and gifting dances.

**Class #3**

1. Review video sections and critique. Re-video or edit as needed.

2. Combine video sections into whole (Native Dance Troupe performance; student sectional instructions; student performance).

3. Enjoy the show.

4. *Optional:* Invite another class to view the video. Are they are able to learn dance from video alone?
Grade Level: 3-6

Overview: Students learn to distinguish between pre- and post-contact Native history and investigate the material changes brought about in 1793 by the establishment of Fort Konstantinovsk, the fortified Russian trading post at Nuchek on Hinchinbrook Island.

Standards: AK Cultural: B4  AK Content: History A.1, Science A.3  CRCC: CE(7)

Estimated Time: 45 minutes

Lesson Goal: Students will discuss the transformation of a traditional trade location into a Russian trading post and the resulting changes in Sugpiaq life.

Lesson Objectives: Students will:
- research the establishment of Russian Trading Post at Nuchek
- discuss the disruption caused by the Russian merchants
- make and compare traditional tinctures with Russian tea and sugar
- articulate how new trade goods influence lifestyles

Vocabulary Words:
Sug’t stun: sarsaq  neqniq
English: tea  sweet

Materials/Resources
- Ingredients for herb ‘tea’ (Need 2-3 Cups of chosen herb to produce 1 Cup – finely minced – to produce herb tea. Possible tree herbs; Tree Tea – bark of birch, willow, high bush cranberry, or devil’s club; Aromathera-Tea – wild roses, pineapple weed, valerian, mint, spruce tips, Labrador tea, wormwood; Discovery Tea – chickweed, fireweed stem, bladderwrack tips – From “Wild Food Cooking” Handouts by Janice J. Schofield, author of Discovering Wild Plants)
- Tea brick (traditional method of packing tea), tea bags
- Sugar
- Cedar branch/ hemlock branch cambrium layer for natural sweetener
- Pot to boil water
- Cups/mugs (two per student)
- Crossroads of Continents Fitzhugh (1988) p.193 Summary of results of Russian contact
- Chugach Prehistory De Laguna (1956) p.64 – early Russian imports at Konstantinovsk
Out of Our Time (1980) p.69 Agnes Nichols’s narration of Russian/Native interaction and trading.

Teacher Preparation: Review history of establishment of Russian trading post at Nuchek. Gather tea making ingredients and supplies.

Opening: The Russian desire for furs (to trade with the Chinese, to provide warm clothing for themselves, and even to use as a sort of national currency stored in the Sable Treasury in Moscow) pushed explorers and merchants across Siberia to Alaska. Peter the Great sent Captain Vitus Bering on several expeditions to search for fur sources along the coastline of the Bering Sea. In 1741 on his second voyage Bering landed at Kayak Island. Reports of fur bearing sea mammals from this voyage inspired Russian hunters and merchants to follow. Sea otter pelts were especially coveted because they could be traded by the Russians to the Chinese for tea, a highly desirable trade good. By 1792 sea otter and arctic fox pelts considered so valuable that Russians forbade their use by Natives and thereby forced hunters to wear bird-skin clothing. (Oakes 2007 p.140). In 1793 Fort Konstantinovsk was established at Nuchek on Hinchinbrook Island. In 1799 the Russian-American Company was granted an imperial trade monopoly in Alaska and directed to administer the Alaskan Territory for the Tsar. The local population was forced to hunt for furs and trade them exclusively with the Russians, at rates that the Russians controlled. The trade goods that the Russians offered to the Natives (steel pots, knives, and needles; tea, sugar, and flour) brought about changes in the Suqpiaq traditional lifestyle and diet.

Activities:

1. Have students research the establishment of Fort Konstantinosk at Nuchek and to make lists of positive and negative impacts this trading post had on the Sugpiaq lifestyle.

2. Boil water and prepare herb ‘tea.’ Serve students tonic/tea in cups. How does it taste?

3. Add traditional sweetener of cambrium layer of cedar branch and discuss taste change.

4. Read aloud Agnes Nichols’s narration of the Russian arrival and display tea brick.

5. Display tea brick, the pre-tea-bag method for transporting tea for trade.


7. Add sugar and compare taste with traditionally sweetened herb tea.

8. Discuss how people would learn to want these new products.

9. Referring to student positive/negative impact lists discuss same.

10. Optional: Have students imagine what it felt like to have a first taste of sugar and incorporate it into a story about the arrival of the Russians at Nuchek.
**Grade Level:** 7-9  
**Overview:** Students reason why groups pursue trading or raiding and revise their conclusions in light of the historical record.

**Standards:** AK Cultural: E6  AK Content: Geography B.3, History B.1.d  CRCC: GS(1)

**Estimated Time:** 60 minutes

**Lesson Goal:** Students will gain insight into how and why groups chose to trade with or raid one another.

**Lesson Objectives:** Students will:
- recognize the long history of the Sugpiaq in the region
- compile reasons why groups pursue trading or raiding
- revise their reasoning in light of research on trading traditions

**Vocabulary Words:**
<table>
<thead>
<tr>
<th>Sug’t’sun:</th>
<th><em>suluciqa</em></th>
<th><em>cemuteq</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>English:</td>
<td>traditional lifestyle</td>
<td>trade</td>
</tr>
</tbody>
</table>

**Materials/Resources**
- “Archaeology and Memory” DVD (15 minutes)
- ‘Trade Traditions’ Handout

**Teacher Preparation:** Review *Trade Traditions* Handout.

**Opening:** Trading and raiding are two options for acquiring goods. Why choose one over the other?

**Activities:**

12. Watch “Archaeology and Memory” DVD (15 minutes). Ask students to guess approximate population of Sugpiaq people.

17. Explain that at the time of European contact there were approximately 1500 – 2,000 Native inhabitants of Prince William Sound living in 10 – 12 communities of 100-200 people each. While each community typically had temporary camps near food sites such as salmon streams or shellfish beds their more permanent settlement locations were chosen for their strategic advantages, i.e., not at the ‘dead ends’ of bays. Often communities had a regular place of refuge with steep cliffs where women and children might safely stay when the men were absent for longer periods of time. Review the locations of neighboring peoples
Koniaq, Dena’ina, Ahtna, Eyak, Tlingit) and their relative populations. (See Research Sheet)

18. Divide students into small groups to brainstorm reasons for the Sugpiaq to choose trading or raiding to acquire goods and then share their thoughts with the class.

19. Have students read (or read aloud) Research Handout: note trade traditions.

20. Discuss and compare how trade traditions and student reasons for choosing trading or raiding compare. Do they need to revise their underlying assumptions? (10 minutes)

21. Optional: Summarize the class discussion in writing.
Trading Traditions

As early as 1200 BCE there were well-established routes across Alaska and Canada for trade items such as obsidian, copper, silica, amber, and meteoritic iron. Soapstone traveled from the Central Canada Arctic to the North Alaska Coast. (Issenman, 1997, p.9) Trading was a significant social practice among all the peoples of Southeastern and South Central Alaska and an important factor in inter-tribal relations. The sea-going mobility of the coastal peoples linked them in an extended zone of relationships both peaceful and violent. Intertribal warring and raiding propelled the movement of objects and people (slaves and captives) between groups. (Crowell, 1988, p.130) The development of traditional coastal lifestyles depended on exchanges with interior populations as well as with each other. And trade depended upon a sense of safety with the trading partner and a regard for the hereditary rights of each group.

Winter was an important trading season for the Dena’ina as ‘beach people’ traded goods with their upriver neighbors. Upper Cook Inlet bands would trade eulachon oil and dried fish in exchange for squirrel parkas and blankets from the Upper Susitna Dena’ina at the annual spring trade fair held at Sand Island Mouth. Shem Pete recalled the ‘grease trail’ between the Beluga and Susitna Rivers. (Rendered fish and seal oil or grease was a prized trade item across Alaska. Harvested and dried foods could be preserved for long periods of time when packed in oil. It also was used to keep twisted sinew lines pliable, as a skin salve, and fat otherwise lacking in Interior people’s diets.) Some Dena’ina place names reflect the importance of trade; Point MacKenzie was Dilhitunch ‘del’ usht Beydegh, the point where hooligan (eulachon) are transported. (Kari & Fall, 2003, pp. 22, 74-83)

The Atna people living along the headwaters of the Copper River, traditionally maintained a clear sense of territoriality and land use law. Lieutenant W.R. Abercrombie, a US government explorer, noted in 1898 that the Atna had by common consent divided their valley into distinct districts. Each band kept to its own territory when hunting or fishing and resented any intrusion by a neighboring band. He observed that it was not uncommon early in the fishing season for one band to go hungry if the salmon were running in a neighbor’s territory. It could mean war if boundaries were violated. (US Dept of Fish & Wildlife, 2005, p.22) On the other hand salmon were so numerous at the mouth of the Copper River that fishing boundaries, if any, were extremely fluid. (Birket-Smith & DeLaguna, 1938, p.114)

In the early days of the Russian traders the Atna used to carry their trade items, chiefly furs, clothing, and copper, all the way over the mountain divide and through the Lowe River Valley which empties into Upper Valdez Arm to reach the Nuchek trading post on Hinchinbrook Island, perhaps because the Copper River was so dangerous. To use that route the Atna paid tribute to the [Sugpiaq] at Ellamar for the privilege of passing through their territory. Later when a quarrel disrupted the arrangement, or because of fears arising from the measles epidemic of 1868, trade was carried on through the Eyak, and the Atna themselves also visited the [Sugpiaq] at Nuchek. (DeLaguna, 1956, p.3) The Sugpiaq maintained a look-out at Nuchek to ward off any poachers of what they regarded as their sea otter hunting territory. (Birket-Smith & DeLaguna, 1938, p.111)

The Sugpiaq got along relatively well with the Koniaq of Kodiak Island but less so with their neighbors to the north and east. The Eyak, less numerous than their neighbors, acted as a buffer between the Sugpiaq and the Atna, as well as between the Sugpiaq and the Tlingit peoples. The Eyak considered themselves more closely related to the Tlingit because both groups divided
themselves into Raven and Eagle moieties. There was a great deal of intermarriage between Tlingits and Eyaks as well as a gradual northward expansion by the Tlingit. The Eyak frequently served as middlemen in trading relationships.

The Tlingit had clearly established trade routes. Traditionally they offered outside groups eulachon grease, dried halibut, woven Chilkat robes, and carved cedar objects. A major trade fair was held at the mouth of the Nass River in the spring for Tlingit, Haida, and Northwest Coast bands. June was the time for specialized trading trips into the Alaska/Canadian Interiors along ‘grease trails’ or to other villages for specific goods such as greenstone or preserved herring spawn. (Langdon, 2002, p.109; Oberg, 1973, p.108) Specific villages held specific trading rights. For example, the Tlux’naxadi clan of Sitka held the right to import copper from the Copper River. Kalervo Oberg writes that the defense of trading rights was one of the few issues which would unite otherwise feuding communities against a common enemy. (Oberg, 1973, p.107)

Estimated Native populations at time of European contact:
Alutiiq – 1,500-2,000
Atna – 1,000
Dena’ina – 3,000
Eyak – 200-300 (guesstimate)
Koniaq – 8,800
Tlingit – 15,000
Grade Level: 7-9

Overview: Students model and analyze how trade maximizes satisfaction levels with material goods.

Standards: AK Cultural: E7  AK Content: Geography E (1), Government G (1), Math B (1)  CRCC: CE(9)

Estimated Time: 60 minutes

Lesson Goal: Students model how trade maximizes satisfaction levels with material goods and discuss the trading efficiencies of the traditional messenger feasts.

Lesson Objectives: Students will:
- dramatize the efficiency of trade through food exchanges
- research traditional Alaskan Messenger Feasts
- analyze trading efficiencies

Vocabulary Words:
Sug’t stun:  
piturseq  asertuq  asiituuq  
English:  
feast  good  bad

Materials/Resources
- Snack food items (mix of junk food, fresh and dried fruits) (one per student)

Teacher Preparation: Review Messenger Feast materials.

Opening: Why do economists dislike gift giving? It’s inefficient! How happy were you with Aunt Matilda’s gift of a ‘cool’ clothing item?

Activities:
13. Randomly dispense snack food items to students, one per student. Note price of each item. Ask student to assess their personal satisfaction level with food received on a scale of one to ten and describe why. Is satisfaction related to price? Is satisfaction related to personal preference? Is satisfaction related to health considerations?

22. Add up the assessment points to determine a general satisfaction level.
23. Brainstorm how general satisfaction level could be increased. Trade! Allow students two to three minutes to trade snack foods with one another. Reassess student satisfaction levels. Have they generally increased or decreased? What is the post-trade general satisfaction level? How does that compare with the pre-trade level? The results should warm every economist’s heart.

[Note: Satisfaction levels can be compared percentage wise. Divide the post-trade satisfaction point total by the pre-trade total, i.e., \( \frac{72}{57} = 1.41 \). Move the decimal point two places to the right and subtract 100, i.e., \( 1.41 \rightarrow 141-100 = 41 \). The result is the percentage increase in the general satisfaction level achieved through trade, i.e., 41%.


25. Discuss the similarities in the inter-village programmed giving of the Messenger Feast reflects the results achieved in the class trade exercise.

26. Optional: Summarize the class discussion in writing.

Note: This Activity Plan was adapted from an exercise developed and presented by the Planet Money Guide on National Public Radio, Spring 2011.
Grade Level: 7-9

Overview: Students research the “Fur Rush” and compare the utility of various fur types.

Standards: AK Cultural: E6 AK Content: History B.1.b CRCC: CE (2)

Estimated Time: two 60 minute classes

Lesson Goal: Students act out how trade maximizes satisfaction levels with material goods and the trading efficiencies of the traditional messenger feasts.

Lesson Objectives: Students will:
- research the Russian fur trade
- explain the cultural effects of Russian trade
- discriminate among fur types, their utility and trade-ability

Vocabulary Words:
Sug’stun: amiiq iiqamaq qaigyag qaigyaq qaigym qilua
English: fur otter seal seal intestine

Materials/Resources:
- Furs and Frontiers in the Far North (2009) pp. xi -10,70-77 Brief overview of Russian impetus to acquire furs
- The Native People of Alaska (2002) pp.110-113
- Out of Our Time (1980) (p.39) John Klashnikoff’s description of forced otter hunting,
- Fur samples (sea otter and one other type: wolf, rabbit, caribou, beaver…. ) and seal intestine sample


Opening: Where does the value of fur lie? Does it lie in its utility or its fashionableness?

Activities:
Class #1

27. Research history of Russian expansion into Alaska and fur trade. Discuss the ramifications of world market concerns versus local market concerns.

28. Display fur samples and brainstorm how to evaluate their utility. What constitutes utility? (availability, usefulness for a given purpose) How could students test utility?
29. Establish three criteria for evaluating fur utility (*warmth, insulation factor, hairs per square inch, resistance to moisture, water retention, strength, size, feel…*) and devise means to quantify same.

**Class #2**

1. Divide the class into three groups and assign each a criterion to test. Have groups describe and write down their proposed test. How are they employing the Scientific Method?

2. If necessary have groups peer review another group’s methodology and discuss any needed modifications.

3. Conduct tests and summarize results. Which furs were determined to be most useful and why?

4. Test the seal intestine sample and compare the results. Would seal intestines have been more or less useful than furs in the Chugach region’s temperate climate? Would seal intestines have been an important component of world trade in clothing materials? What does the answer say about the primary considerations of the world clothing market?
Grade Level: 7-9
Overview: Students compare and discuss the shared culture traits and geographic relationships that propelled the Eyak into their role as trade middlemen.

Standards: AK Cultural: B1, E7  AK Content: Geography B.3 & 4, D.3, E.2, History B.1.b  CRCC: GS(5&6), CE(9)

Estimated Time: one 60 minute class period

Lesson Goal: Students analyze middleman role as product of shared cultural traits and geographic location.

Lesson Objectives: Students will:
- research and compare cultural traits of Atna, Eyak, Sugpiaq, and Tlingit
- discuss probable factors that lead to Eyak role as middlemen
- consider the effects of geography on trade relations

Vocabulary Words:
Sug’tsun: imaq ikamaq guyaana
English: sea otter thank you
Eyak: φi-ya’ya’t sa’s aua’ta’

Materials/Resources
- The Eyak Indians of the Copper River Delta, Alaska (1938) Kai Birket-Smith & Frederika DeLaguna
- The Native People of Alaska (2002) pp.30-45 (Sugpiaq/Alutiiq); pp.78-93 (Athabaskans); pp.94-110 (Tlingit and Haida)
- Ahtna, Eyak, Sugpiaq, and Tlingit research packets (extracted from Birket-Smith & DeLaguna, and Langdon materials)
- ‘Cultural Traits’ Handout

Teacher Preparation: Review research packets and ‘Cultural Traits’ handout.

Opening: What is the role of a middleman?
Ask for a student volunteer and - at a short distance from the class – quietly share the following:
Both the Dena’ina and the Eyak served as buffers between peoples and as trade middlemen. The Dena’ina, located in Cook Inlet acted as middlemen between the Koniag of Kodiak and the Sugpiaq of Lower Cook Inlet with tribes of the Interior. Do you know which groups used the Eyak as middlemen?

Ask student to relay information to the rest of the class and return with student answers.
Once student returns thank him/her for serving as the teacher’s middleman.
[Optional: Offer middleman student extra credit for service rendered.]
Discuss why need for middlemen might have arisen.  (*nervousness about dealing with sometime enemies, distance from trade partner, concern over safe passage to trade partner’s land, desire to avoid disputed territory/established land use areas, own manpower needed elsewhere...*)

Activities:
1. On a map review the relative geographic locations of the Dena’ina, Koniag, Sugpiaq (Lower Cook Inlet and Prince William Sound), Eyak, Ahtna, and Tlingit peoples.

2. Divide the class in four with one group smaller than the others. Randomly assign each of the three larger groups a Sugpiaq, Ahtna, or Tlingit identity. The smallest group is Eyak.

3. The Eyak inhabited the coastal region from Cordova south to Icy Bay, an area at the geographic confluence of three major peoples: to the west the Sugpiaq of Lower Cook Inlet and Prince William Sound; to the north the Ahtna of the Copper River; and to the southeast the Tlingit. Never very numerous, the Eyak’s intertribal role evolved into that of buffer and trading middlemen. They may have originally migrated from the Alaskan Interior to the coast but were isolated by the near confluence of the Childs and Miles glaciers for an extended period of time. The Eyak language shows some relationship to the Athabaskan language family but is distinct enough that it appears on linguistic maps of Alaska as unique. (*See vocabulary above*). Eyak mythology says that the rapids of the Copper River swallowed upriver travelers.

4. Distribute appropriate research packets to each group and a ‘Cultural Traits’ worksheet. Have students read their packets and identify the cultural traits appropriate to their group.

5. Remind students of relative populations of each group at the time of contact with Europeans [Ahtna - 1,000; Eyak – 200-300(?); Sugpiaq of Prince William Sound - 1,500-2,000; Tlingit - 15,000] Discuss how the groups’ cultural characteristics overlap and the relative geographic positions could have affected and/or promoted the Eyaks’ role as trade middlemen.

<table>
<thead>
<tr>
<th>Cultural Traits – Answer Sheet</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Beliefs – Raven mythology → A, E, S, T</td>
<td>Kayaks → E (to ltd. extent), S</td>
</tr>
<tr>
<td>Beliefs - shamanism → A, E, S, T</td>
<td>Knives – copper blades → A, E, S, T</td>
</tr>
<tr>
<td>Canoes - bark → A</td>
<td>Ornaments – copper jewelry → A, E, S, T</td>
</tr>
<tr>
<td>Canoes - dugout → E, S (to ltd. extent), T</td>
<td>Ornaments – dentalium shells → A, E, S, T</td>
</tr>
<tr>
<td>Containers – bentwood boxes → E, S, T</td>
<td>Ornaments – labrets → E, S, T</td>
</tr>
<tr>
<td>Containers – folded bark → A, E</td>
<td>Ornaments – tattooing → A, E, S</td>
</tr>
<tr>
<td>Containers – spruce root baskets → E, S, T</td>
<td>Ornament – porcupine quillwork → A, E</td>
</tr>
<tr>
<td>Dogs – hunting → A, E, S</td>
<td>Potlatches → A, E, T</td>
</tr>
<tr>
<td>Dogs – hauling → A</td>
<td>Social Organization – chiefs, nobility, commoners, slaves → S, T</td>
</tr>
<tr>
<td>Garments – fringed leather → A</td>
<td>Social Org. – chiefs, commoners, slaves → A, E</td>
</tr>
<tr>
<td>Garments – gutskin outerwear → E, S</td>
<td>Social Organization – moieties → A, E, T</td>
</tr>
<tr>
<td>Garments – woven blanket → T</td>
<td>Totem Poles → E, T</td>
</tr>
<tr>
<td>Hunting - mountain goats → A, E, S, T</td>
<td>Throwing Boards (for launching spears) → S, T</td>
</tr>
<tr>
<td>Hunting – seals → E, S, T</td>
<td></td>
</tr>
<tr>
<td>Hunting - whales → S</td>
<td></td>
</tr>
</tbody>
</table>
The Eyak People

Eyak territory extended from Cordova Bay in Prince William Sound eastward to Icy Cape along the coast and up the Copper River as far as Childs and Miles glaciers. Never very numerous - perhaps 200-300 at the time of contact- the Eyak were hemmed in by the Sugpiaq to the west, the Ahtna to the north, and the expanding Tlingit to the east. They spoke their own distinct language, Eyak, distantly related to the Athabaskan languages of the Interior. Anthropologists theorize that the Eyak migrated from the Interior and then evolved their own language over centuries of isolation caused by the near confluence of the Childs and Miles glaciers across the Copper River.

Like the Tlingit and Ahtna peoples the Eyak divided themselves into two moieties. Tribal members were other Ravens or Eagles and only married partners of the opposite moiety. Indeed, even intermarriage between the Tlingit and Eyak followed these moiety rules. All the grown men in a given house belonged to the same moiety. In each Eyak village there were two potlatch houses, one with a Raven totem outside and the other with an Eagle totem. Each moiety was headed by a chief, one of whom was also the tribal chief. Chieftainship was often hereditary. Beyond the chiefs there was no special class of nobility as there was among the more elaborate family systems of the Northwest Coast cultures.

Like their surrounding neighbors the Eyak shared Raven Cycle myths, though Eyak mythology is considered closer to that of the Northwest Coastal tribes than those of Northern Alaskans. Shamans held positions of great importance and the belief that certain animals were transformed humans was common. The Eyak held potlatches to celebrate important events such as weddings, funerals, and the naming of infants. They lived in houses built of red cedar, spruce, or hemlock planks with a central fire pit. The houses could hold from 20 to 50 people. The eye ornaments painted on doors & paddles were reminiscent of Northwest Indian Coastal art as were some of their hunting visor designs.

The Eyak hunted both seals and sea otter. Typically they clubbed or harpooned seals when the seal were beached on a sand bar or ice and harpooned sea otter in the water. It is not clear if the Eyak used throwing boards like the Sugpiaq. On land the Eyak hunted mountain goat and bear, often with the help of dogs. The desire to hunt bear sometimes led them into Sugpiaq territory. The Eyak also hunted beaver (used for beaver tooth knives as well as its meat and pelt), fox, lynx, marten, muskrat, and weasel. Birds such as duck, geese, swan, ptarmigan, and grouse were hunted. But the Eyak avoided the loon because of the story of the boy who had once turned into a loon. There were also prohibitions against hunting wolves, thought to be transformed humans, and against hunting land otters, thought to be the re-incarnation of drowning victims.

Salmon was the Eyaks’ most important food source. Salmon were so plentiful around the Copper River Delta that fishing rights were not specific to particular sites. They harvested salmon, herring, eulachon, and clams and strung them up on spruce root lines to dry. Meat and fish were also smoked for winter use. Rendered seal and eulachon oil preserved foods such as fresh and dried berries and eggs. Seal and eulachon oil were important trade items with the upriver Ahtna whose local diet lacked sufficient fat. The Ahtna offered copper, sinew, and
worked skins in return. Goat horn spoons were used for eating and watertight spruce root baskets were used for cooking with heated rocks.

The Eyak traveled among their villages by dugout canoes similar to those of the Tlingit, Haida, Tsimshian though smaller in size. Specialty canoes were built: longer, more slender canoes for racing and larger canoes with prows carved to represent either the Raven’s or the Eagle’s head for war parties. The Eyak handled these canoes with great dexterity though breaking waves or strong rapids were problematic. They traveled up the Copper River but didn’t venture into Ahtna country. The Eyak believed that the river was controlled by a malevolent spirit that stole travelers who ventured into the rapids. Kayaks designed like those of the Sugpiaq were used chiefly for hunting sea otter.

Raiding and trading occurred frequently. The Eyak fought mostly with the Sugpiaq, often over the kidnapping of Eyak women when out berrying. The wars were typically of short duration, though captured slaves were kept for a lifetime of servitude. Trading was an important activity for the Eyak. Not only traders themselves, until the 19th century the Eyak played an important role as middlemen between the Ahtna and the Sugpiaq and between the Tlingit and the Sugpiaq. Trade brought the Eyak items such as decorative porcupine quills, copper blades and ornaments from the Interior, dentalium and abalone shells and blankets from the south, and specialty furs and knives from the east.

Sealskins were popular trade items with the Ahtna. But seal gut was also valuable to the Eyak as raw material to make waterproof garments. Unlike the Tlingit who used seal gut to wrap their precious woven blankets in the Eyak employed the seal gut to sew long tunics known as kamleikas using a watertight stitch done with an eyeless bone needle or awl.

Europeans first knowledge of the Eyak was obtained by a 1783 Russian expedition under Potan Zaikov exploring the waters near Kayak Island. There was general confusion among the Europeans as to whether the Eyak were a separate tribe. The arrival of the commercial salmon industry disease and exploitation proved devastating to the tribe. By the turn of the 20th century only 60-80 Eyaks remained.

This overview is based extensively on The Eyak Indians of the Copper River Delta, Alaska by Kaj Birket-Smith and Frederika De Laguna with some information from Steve Langdon’s Native Peoples of Alaska and www.eyaktek.com.
Cultural Traits
A = Ahtna; E = Eyak; S = Sugpiaq; T = Tlingit

1. Read the provided material about your tribe.
2. Circle the appropriate letter to indicate which cultural traits apply to your tribe.
3. Share your results with the class and note the results of other groups.
4. Which traits do these peoples share?

Beliefs – Raven mythology → A, E, S, T
Beliefs – shamanism → A, E, S, T
Canoes – birch bark → A, E, S, T
Canoes - dugout → A, E, S, T
Containers – bentwood boxes → A, E, S, T
Containers – folded bark → A, E, S, T
Containers – spruce root baskets → A, E, S, T
Dogs – hunting → A, E, S, T
Dogs – hauling → A, E, S, T
Garments fringed leather → A, E, S, T
Garments – gutskin outerwear → A, E, S, T
Garments – woven blanket → A, E, S, T
Hunting - mountain goats → A, E, S, T
Hunting – seals → A, E, S, T
Hunting - whales→ A, E, S, T
Kayaks→ A, E, S, T
Knives – copper blades→ A, E, S, T
Ornaments – copper jewelry → A, E, S, T
Ornaments – dentalium shells→ A, E, S, T
Ornaments – labrets→ A, E, S, T
Ornaments – tattooing→ A, E, S, T
Ornament – porcupine quillwork→ A, E, S, T
Potlatches → A, E, S, T
Social Organization – chiefs, nobility, commoners, slaves → A, E, S, T
Social Organization – chiefs, commoners, slaves → A, E, S, T
Social Organization – moieties → A, E, S, T
Totem Poles – A, E, S, T
Throwing Boards (for launching spears) → A, E, S, T
**Grade Level:** 7-9  
**Overview:** The ‘Grease Trails’ from coastal Alaska to Interior Alaska were vital trade routes. For coastal Alaskans they gained secure trading partners. Interior Alaskans gained the fats/lipids they needed for a healthy diet.

**Standards:** AK Cultural: E2    AK Content: Geography E1, E2    CRCC:

**Estimated Time:** one 60 minute class

**Lesson Goal:** Students will understand that trade didn’t just improve people’s standards of living, trade filled in the missing elements in subsistence living.

**Lesson Objective(s):** Students will:
- survey dietary needs and regional food availability
- reason why “lipids were worth more than gold” as trade items
- refine their understanding of the relative worth of goods as potential trade items

**Materials/Resources**
- “The Chilkoot Trade Routes with Dan Henry and Joe Hotch” - Tlingit Trade DVD
- “Traditional Trade Routes Panel Discussion” DVD
- Boiled potatoes or dry toast – one per student
- Butter or margarine
- Knife to spread butter
- [www.dietaryguidelines.gov](http://www.dietaryguidelines.gov)

**Teacher Preparation:**
**Opening:** Distribute boiled potatoes (or toast) to students. Allow half the class to add butter to their food. Ask the other half how it feels about their lack of butter.

**Activities:**
1. Have students research the following:
   - Human dietary requirements for fat (lipids).
   - Health consequences of a diet deficient in fat

2. Review with students the availability of fat (from marine mammals and salmon) among coastal Native peoples. Have students work in teams to conjecture and research where the Native peoples of the Interior, particularly those at a distance from salmon streams, would have been able to obtain needed fat. (Students should research relative fat content of game animals of the Interior.)
3. The “Grease Trails” to the Interior were vital trade routes. For coastal Alaskans, particularly for the Tlingit, they gained caribou skins, clothing and copper from the Athabaskans. Interior Alaskans gained the fats/lipids they needed for a healthy diet from seal oil and eulachon (candlefish) oil.

4. Discuss what makes anything a valuable trade item. (Rarity, beauty, utility, weight, i.e., how heavy it is to transport)

5. Watch “The Chilkoot Trade Routes with Dan Henry and Joe Hotch” (17 minutes). Compare with discussion about trade item value. (Note: DVD was made by a 21(!) year old filmmaker.)

5. Optional: Watch “Traditional Trade Routes Panel Discussion.” (113 minutes)
Grade Level: 7-9
Overview: Students evaluate how and why Native peoples selectively adopted Western clothing.

Standards: AK Cultural: B4  AK Content: History A.1, Science A.3  CRCC: CE(7)

Estimated Time: two 60 minute classes

Lesson Goal: Students examine the selective adoption of Western clothing by Native peoples and test the relative advantages of various clothing items.

Lesson Objectives: Students will:
- research how and why Native Alaskans selectively adopted Western clothing
- analyze the relative advantages of traditional clothing over Western clothing
- compare Native outfits’ source materials

Vocabulary Words:
Sug’tsun: atkuk mingqiluni minqun

English: clothing sewing needle

Materials/Resources
- Slides of traditional Native outfits by region [Ak. Eskimo Footwear p.17, Fig.19 “The exquisite intestine clothing of the Aleut hunter and the cormorant clothing of the woman appeased the spirits of the animals they depended on.” Painting by Charles Huhn – originally pub. “Description Ethnographique des Peuples de la Russie” – Crossroads of Continents p.38-Chukchi woman, p.43 Bering Sea woman dancing, p.52-Unagan hunter]
- Photos of outfits of early European explorers, Russian merchants, American whalers, missionaries, prospectors [Ak. Eskimo Footwear p.6, Fig.9 “Aleut dyed seal intestine cape decorated with cormorant feathers and strips of skin made in the style of a Russian great coat, 19th c.”]
- Chugach Prehistory by Frederika de Laguna (1956) p.237 (quotation from Strange (1786) admires Native fur garments and desire to procure Tlingit Chilkat blankets - or possibly PWS goat blanket)
- Sinews of Survival Issenman (1997) p.24 North Slope excavation indicates constant clothing styles form 1500-1850 – contact year 1826 – with post-contact style changes gradual and selective; p.40 – traditional Arctic clothing needs, need to release moisture as well as to insulate.
- Crossroads of Continents (1988) p.57 Gutskin Cape & caption
- The Native People of Alaska Langdon (2002) p.40 – Alutiiq personal adornment pre-contact
- Leather and seal gut samples (10” by 10”; to sew together)
- Awl, artificial sinew, needles, dental floss
- Two pairs of wool mittens
- Paper bowls
- Winter gear magazine ads

**Teacher Preparation:** Review Alaska Eskimo Footwear. Have students read Introduction to prepare for class. Ask some students to bring in two pairs of wool mittens.

**Opening:** How have students dressed today? For utility? For fashion? For warmth? For peer acceptance? How do students prioritize their clothing choices?

**Activities:**

**Class #1:**

14. Display slides of pre-contact Native outfits and identify source material. Discuss their particular adaptations to environment.

30. Display slides of European outfits worn by early explorers, by merchants, by whalers, by missionaries, prospectors, and identify source material. Discuss their particular adaptations to environment.

31. Review watertight stitch method [Alaska Footwear p.37 stitch diagram]. Have one volunteer stitch leather samples together in an 8”-10” seam with sinew. Have a second volunteer stitch leather samples together in an 8”-10” seam with dental floss.

32. Compare how tight the seams are. Experiment with pouring water through seams. Which thread prevents water seepage better?

33. Distribute “Women’s Tools and Skin Preparation” for reference.

34. Repeat process with seal gut.

35. Divide students into small teams and distribute uncaptioned examples of pre-contact Native outfits. Have students identify source materials and possible regional origin. Correct student conclusions where necessary.
Class #2:

1. Have volunteers soak wool mittens in cold water. Place two mittens in freezer and wear second mittens. Hold that thought.

2. Distribute second set of clothing examples (19th century Native outfits). Note that even though Russian and American trading posts brought Natives access to Western clothing they only selectively adopted Western style clothing. Have students identify materials and any changes due to European influences. Hypothesize why some clothing or decorative items changed and others not.

3. Allow students to remove mitten. Was it comfortable? Warm? A good idea for cold weather? *(Note: Wool’s inability to wick moisture away from the body is a chilling disadvantage.)* Retrieve mitten from freezer and evaluate its usefulness in Alaskan winters.

4. Review ads for winter gear and discuss which attributes are attempts to replicate Native clothing innovations.
NUCHEK TRADING POST & RUSSIAN ORTHODOXY – NATIVE TRADE 7-9 (7)

Grade Level: 7-9
Overview: Students research the cultural changes brought about conversion to Russian Orthodoxy and imagine their own changes in the face of cultural assimilation.

Standards: AK Cultural: E1   AK Content: English D.1, History A.6   CRCC:E1

Estimated Time: one to two 50 minute classes

Lesson Goal: Students will discuss Russian Orthodoxy and its effect upon Sugpiaq spiritual life as well as how their own belief systems could be changed.

Lesson Objectives: Students will:
● research the establishment of Russian Trading Posts and missionary effort
● discuss how Sugpiaq spiritual life was transformed
● imagine how their own belief systems could be changed

Vocabulary Words:
Sugcestun: agayuiiq puusirwik apasinaq
English: church church priest

Materials/Resources
- “Sugpiaq Lucit – The Ways of the Sugpiaq” DVD
- Crossroads of Continents Fitzhugh (1988) p.193 Summary of results of Russian contact
- Chugach Prehistory De Laguna (1956) p.3 – Tlingit and Atna came to Nuchek to trade, also used Eyak as middlemen; p.64 – early Russian imports at Konstantinovsk, ‘Greek’ Orthodoxy “supplanted or supplemented” Native beliefs, Christian burial practices became common.
- Shem Pete’s Alaska: The Territory of the Upper Cook Inlet Dena’ina Kari & Fall (2003) p.19 [quoting from Znamenski; 1998:4-5 “Native Culture Through Orthodox Eyes” from Alaska History 13:1-27] “It appears that the Dena’ina adopted the Russian Church as part of a strategy of accommodation to the new challenges and that the church eventually became integral to indigenous culture….Most importantly, the rich ceremonialism of
Orthodoxy, along with the lack of excessive social control, apparently matched Dena’in cultural expectations. It might be suggested that for the Dena’in, Russian Orthodoxy became a convenient bridge that connected their traditional and new American worlds.”

**Teacher Preparation:** Review history of Russian contact and Native conversion to Russian orthodoxy, particularly *Making History – Alutiiq/Sugpiaq Life on the Alaska Peninsula* Partnow (2001) pp.84-91 “Russian Orthodoxy and the Alutiiqs.”

**Opening:** The Russian desire for furs (to trade with the Chinese, to provide warm clothing for themselves, and even to use as a national medium of exchange stored in Moscow’s Sable Treasury) pushed explorers and merchants across Siberia to Alaska. (Bockstoce, 2009, p.xi) Peter the Great sent Captain Vitus Bering on several expeditions to search for fur sources along the coastline of the Bering Sea. In 1741 on his second voyage Bering landed at Kayak Island. Reports of fur bearing sea mammals from this voyage inspired waves of Russian hunters and merchants. In 1793 Ft. Konstantinovsk was established at Nuchek on Hinchinbrook Island, a traditional Native trading site. In 1799 the Russian-American Company was granted an imperial trade monopoly in Alaska and directed to administer the Alaskan Territory for the Tsar. In addition to their trading and administrative activities the Russians sent Russian Orthodox priests to convert the local population.

Due to overharvesting sea otter production declined to such a point by 1815 that the Russians shifted their focus to trade in terrestrial fur bearers such as beaver, mink, and fox. Consequently the Russians expanded their trading posts northward and modified their more severe trade terms. Missionaries replaced outright subjugation. (Langdon, 2002, p.112)

**Activities:**

**Class #1:**
1. Give overview of traditional Sugpiaq spirituality.

2. Watch “Supiaq Lucit – The Ways of the Sugpiaq” video on contemporary village life. Note how many communal events center on religious gatherings.

3. Discuss changes in Sugpiaq spiritual orientation.

4. Research and review history of Supiaq conversion to Russian Orthodoxy materials.

**Class #2:**
1. Imagine the arrival of aliens* intent upon making our town part of its galactic trade network (“Wild salmon, a new taste sensation for ‘Betelgeusers!’”).

2. Have students write descriptions of their reaction to falling in thrall to Alien technology and its shiny unemotional efficiency-at-all-costs approach to government of Territory Earth. Which of our human traits would be first affected? How would our culture be changed?
* Note: Makin, a 20th century Supiaq man, recalled oral traditions about the first arrival of the Russians observed by hunters around Nuchek who told fellow villager of these ‘strange beings.’ “Smoke was coming out of their mouths, they had shining suckers all the way down their bodies like cuttlefish [buttons] their heads were bandaged [caps] and their legs ended in hoofs [boots]. When Russians fired their guns, the Natives believed that the earth was bursting. They thought flour was ashes and that snuff was the charred dust from a fire-producing drill and that hard tack was meant to be dried salmon roe. – The Chugach Eskimo by Kaj Birkett-Smith (1953) p.10.
Grade Level: 10-12  
Overview: Students create personal trading cards and discuss what they reveal of their personal cultures and compare this reasoning to archeological analysis of Native artifacts.

Standards: AK Cultural: A7  AK Content: Arts B.4, History A.6  CRCC: CE(3)

Estimated Time: two 60 minute classes

Lesson Goal: Students create personal artwork and draw conclusions about what this reveals of the artist’s culture. This analysis is compared with archeologists’ techniques and conclusions from Native artifacts.

Lesson Objectives: Students will:

- design and create personal trading cards
- analyze what card subjects and execution reveal about the artist’s culture
- compare this analysis to archeological conclusions about Native artifacts

Vocabulary Words:

<table>
<thead>
<tr>
<th>Sug’tsun:</th>
<th>ggwii</th>
<th>illpet</th>
<th>kawerleq</th>
<th>lumacerpet</th>
</tr>
</thead>
<tbody>
<tr>
<td>English:</td>
<td>I</td>
<td>you</td>
<td>symbol</td>
<td>tradition</td>
</tr>
</tbody>
</table>

Materials/Resources

- Blank artists’ trading cards
- Drawing materials (colored pens, crayons)
- Petroglyph analyses; DeLaguna, Holmes conclusions [Chugach Prehistory (1956) p.63 Discussion of possibilities of iron source, p.103 meaning of petroglyphs; Crossroads of Continents (1988) p.266 Spotted mask photo caption – uncertainty of meaning of spot motif]

Teacher Preparation: Review archeologists’ conclusion materials.

Opening: What does art reveal about its creator?

Activities:

Class #1

15. Have students design three personal trading cards. One card should represent a belonging of great personal (not necessarily monetary) value; one card should represent a desired or coveted item; one card should express personal artistic creativity. Have students brainstorm and sketch possible card designs.
36. Distribute blank cards and drawing materials. Draw! (Students may label subject matter if
uncomfortable about personal artistic abilities.)

37. Share results and discuss what cards reveal about personal priorities, material desires and
adolescent cultural interests, sources of artistic influence.

Class #2

1. Formulate a cultural profile of the class based on the trading cards either in individual
essays or through class discussion.

2. Read archeological research on petroglyphs or ‘spot motif’ and note lack of certainty.

3. Discuss the similarities between class’s analysis of personal trading cards with archeological
investigations. How accurate is each?
Grade Level: 10-12

Overview: Trade and social interaction among Native peoples influenced one another’s cultural development to the point where it is sometimes difficult to discern whether an object’s design is the result of this interaction or the product of generational diffusion. Archeologists’ identification of artifacts depends upon their ability to discriminate among artistic and cultural attributes by analogy and comparison with artifacts of known origin. Students will train their eyes to classify artifacts by design.

Standards: AK Cultural: E1  AK Content: Arts B.1 & C.1, History C.3  CRCC: CE(3&9)

Estimated Time: 60 minutes

Lesson Goal: Students will discriminate among and classify traditional design motifs. By comparing results with actual identifications students will revise their classification standards.

Lesson Objectives: Students will:
- closely examine and compare traditional Native head gear
- construct a classification system to discriminate among design types
- compare their results with archeologist’s descriptions
- revise the student classification systems
- categorize a second set of unlabeled traditional Native head gear with revised systems

Vocabulary Words:
Sug’stun: pisurta  punguat  caquyaq
English: hunter  design  hunting visor

Materials/Resources
- www.mnh.si.edu/arctic
- Traditional Native head gear [Crossroads of Continents Fitzhugh & Crowell (eds.) (1988) Photos at pp.48,49,164-165, 286, 290-293, 295]
- Crossroads of Continents Fitzhugh & Crowell (eds.) (1988) (article by Bill Holm) “Art & Culture Change at the Tlingit-Eskimo Border” pp.281-293 (one copy per student)
- Hunting Visor and Hat typology (Lydia Black)

Teacher Preparation: Review head gear photos and Holm’s article.

Opening: Archeologists often work backwards. They examine artifacts, the end results of the creative process, and classify their origin and meaning by comparisons with artifacts of known origin. They develop classification systems through painstaking and informed observations. How good is your eye?
Activities:
1. As a class visit [www.mnh.si.edu/arctic >Sharing Knowledge >Browse] to review varieties of headwear.

2. Divide student into small groups. Assign each group a particular Native identity (Sugpiag, Tlingit, Yupik, Athabaskan) and have students carefully examine at least six hunting hats from their region [www.mnh.si.edu/arctic >Sharing Knowledge >Search >Hunting hats >student group identity] and decide on points of comparison (color, shape, animal motif, material, use of trade items such as beads, dentalia shells...).

3. Sketch the hats to highlight their identifying features. Develop a checklist for describing the hats (i.e., a) visor or not, b) basic material used, c) use of color, …)

4. Compare group results. How long is everyone’s checklist? Could one group use another’s classification system? How are the hats similar or dissimilar? Discuss necessary detail level of classification system.

5. Read “Art & Culture Change at the Tlingit-Eskimo Border” by Holm. Have students refine their classification systems based on Holm’s descriptions. OR Compare student systems with Lydia Black’s Classification Chart.

6. Discuss how students would distinguish between similarities of design based on cultural diffusion and those based on cultural influence?
Captioned Clothing – Native Trade 10-12 (3)

**Grade Level:** 10-12  
**Overview:** Students curate a museum display of pre- and post-contact Native clothing highlighting influence of trade.

**Standards:** AK Cultural: B4  AK Content: English A.4, History A.6  CRCC: CE(7)

**Estimated Time:** three 60 minute classes

**Lesson Goal:** Students curate a museum display of pre- and post-contact Native clothing highlighting influence of trade and learn to write informative captions.

**Lesson Objectives:** Students will:
- visit a local museum to learn how museums present information
- curate a museum display of pre- and post-contact Native clothing
- research and select essential information relating to display
- compose captions which explain Native clothing choices influenced by environment and trade

**Vocabulary Words:**
- Sugcestun: usuwanarluni lla  qitertuq lla
- English: it’s cold  it’s raining

**Materials/Resources**
- Field trip permission form
- Photos of pre- and post-contact Native outfits by region
- 4 – 5 Large scale photos of Native outfits
- Tangible trade item examples (beads, dentalium shells, sea lion whiskers…)
- Cardboard for mounting captions
- ‘Tack Tabs’ (Elmer’s)
- “Tips of Caption Writing” Handout by Aurora Lang, Cordova Museum Curator

**Teacher Preparation:** Review Alaska Eskimo Footwear pp.1-39
Class #1 (Field Trip) Arrange to visit local museum and tour with emphasis on how display decisions are made and labeled.
Class #3 – Consider inviting museum tour guide to help edit caption work. Arrange to use display case or area for final presentation to public.
**Opening:** Discuss how museums communicate information to visitors? (*Possible discussion points: museum location, architecture, display space, exhibition choices, exhibit arrangements, interactive exhibits, tours, lighting, *captions*)

**Activities:**

**Class #1**

16. Visit local museum to observe how display decisions are made and how information is presented to visitors. Have students note considerations regarding target audience, space limitations, interest levels, competing or overlapping subject areas. Have students pay particular attention to caption writing style, length, and visual clarity.

38. Discuss how information relating to display items or areas is presented. Note caption writing style information.
   
   *Optional:* Have students write a caption style paragraph of a museum tour guide’s role. (And included with museum thank you note?)
   
   *Optional:* Have students compose ‘tweets’ of museum tour guide’s role.

**Class #2**

1. Review research on clothing type and changes [Alaska Eskimo Footwear pp.1-39]. Have students in pairs identify information essential to understanding sample images. Discuss and compare information choices.

2. Divvy up visual clothing examples to student pairs and have them draft appropriate captions.

3. Compare and critique results. Sufficient detail? Extraneous or overlapping information? Assumptions about visitor knowledge? Vocabulary level?

**Class #3**

1. Exchange captions for peer review and final editing. (*Consider having museum tour guide on hand to help with editing.*) Have original authors provide and print final texts and mount onto cardboard.

2. Have students work together to integrate captions, trade items, and determine final placement. Discuss how museum tour guide insights are incorporated into display arrangement. Discuss how information has been distilled to reach the display.

3. Place display in central area for public viewing. Ta da!
Museum Labeling
Aurora Lang, Curator, Cordova Museum

There aren’t any universal museum writing rules, but here are some tips to keep in mind when you write your museum labels.

Who is your audience?
Who is going to read your labels? Where are the labels going to be displayed? You could have the same theme but very different labels depending on who your audience is and what you want them to get out of it. Are the labels going to be displayed in a professional setting like a conference? Or are they going to be in a children’s area like an elementary school library? Is a family going to experience it together? Will you be writing for locals who already have some knowledge, or visitors who have no local experience?

Remember the Big Picture!
This means to stay on topic. For example, if your general theme is about survival and you are talking about a parka it would be appropriate to discuss environmental conditions in which it was worn, the materials used to make it, or the differences between it and other outerwear. It would not add anything to the ‘survival’ theme to discuss artistic styles of parkas, for example.

Keep it short & concise!
Only about half of museum visitors read labels. People are more likely to read shorter labels than a longer label. A common aim for many labels are about 50-100 words for a caption label for an object or small group of objects. Introductory labels that introduce the theme or the main point can be a little longer – 200 to 300 words. Keeping it short and concise is really tough, but important. Please remember that these are merely guidelines and do not fit every situation.

Keep it simple!
If you give people a shopping list to remember with a dozen items, chances are they might have a difficult time remembering all twelve things. The same is true with museum labels. Introducing too many ideas or themes may be overwhelming. Consider quality over quantity.
Grade Level: 10-12
Overview: Students research and review the history of Russian trade with Alaska and analyze its pros and cons by putting ‘trade on trial.’

Standards:  
AK Cultural: E4,5,6,& 7  
AK Content: English A.1,3,&4; C.5, E.1; History A.1, B.1.b  
CRCC: GS(1&5)

Estimated Time: Three to four 60 minute classes

Lesson Goal: Students assess the effects of trade with Russia on Sugpiaq culture by dissecting and discussing its pros and cons in a mock trial setting.

Lesson Objectives: Students will:
● research the effects of trade with Russia on Sugpiaq culture
● assess the pros and cons of the trade relationship
● participate in a mock trial placing ‘trade on trial’
● formulate a personal judgment synthesizing the trial’s results

Vocabulary Words:
Sugt’stun: sutiyaq  tuukuk  asertuq  asiiituq
English: judge  chief  good  bad

Materials/Resources
● Crossroads of Continents Fitzhugh (1988) p.193 Summary of results of Russian contact
● Chugach Prehistory De Laguna (1956) p.3 – Tlingit and Atna came Nuchek to trade, also used Eyak as middlemen; p.64 – early Russian imports at Konstantinovsk, ‘Greek’ Orthodoxy “supplanted or supplemented” Native beliefs, Christian burial practices became common
● Out of Our Time (1980) p.69 Agnes Nichols’s narration of Russian/Native interaction and trading.

Teacher Preparation: Review history of establishment of Russian trading post at Nuchek.
Activities:

Class #1
7. Research the history of Russian trade relations with Alaska Natives with an eye toward eventual analysis of its impact on the Sugpiaq lifestyle.

Class #2
1. Divide students into small groups to discuss pros and cons of Russo-Alaskan trade relationship and make summary notes.

2. Have groups brainstorm questions for the prosecutor and the defense to ask the “Trade experts.” Develop paragraph each might use as an opening statement at the mock trial.

3. Assign roles for the Mock Trial: judge (sutiyaq), 3 or more prosecutors, 3 or more defense counsels, Witnesses: Sugpiaq/subsistence hunter, Sugpiaq/subsistence villager, Russian Orthodox priest, Russian traders, expert trade historian

Class #3
1. Allow time for prosecutors and defense counsels to decide on the order of their witnesses and questions. Have witnesses review their source materials.

2. Set up classroom as mock courtroom and assume appropriate seats.

3. Invite the prosecution and defense to present 2 - 3 minute opening statements.

4. Prosecution and defense take turns calling witnesses, examining and cross-examining them. Judge referees where necessary. (Consider limiting time per witness.)

5. When witnesses are finished invite a volunteer to make concluding remarks for each side. (Note: Why a volunteer and not specifically a prosecutor or defense counsel? Knowing that a volunteer will be called to the task helps insure that each student pays sufficient attention to be ready).

Class #4 (or homework assignment)
Write a personal judgment of the mock trial, synthesizing the testimony.