Elder Quote/Belief: “After moving here to Cordova, I could understand what my mom meant by her ancestors (the Chugach Aleut) being able to live off the land.” -Mary Babic, Cordova

Mary’s mom, Sally (Barnes) Hottinger, originally from Tatitlek

Grade Level: Pre K - 2

Overview:
The Chugach Sugpiat and Eyak people wore garments for work and play, such as fur and bird skin parkas, seal boots, bearskin mittens, and waterproof rain jackets made from animal intestines. Many types of furs (sea otter, harbor seal, river otter, fox, caribou, marmot, marten, bear, arctic ground squirrel, and seal) and bird skins (murres, puffins, geese, eagles, cormorants) were used. These types of garments are what we consider traditional clothing today.

Standards:

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<td>CE2: Students should have knowledge of traditional and contemporary sewing and clothing using skins and furs.</td>
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Lesson Goal:
To learn the different types of traditional materials our ancestors, the Chugach Sugpiat and Eyak used for their clothing in the Chugach Region.

1 Arctic Studies Center, Looking Both Ways, p. 46, 48
Lesson Objective(s):
Students will:
- Learn what Chugach Sugpiat and Eyak girls and boys wore for clothing.
- Identify furs, feathers, caribou hide, and other traditional materials by matching the pieces to Chugach Clothing A to Z poster.
- Learn three Sugt’stun/Eyak words.

Vocabulary Words:

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<th>Prince William Sound:</th>
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<tbody>
<tr>
<td>Fur</td>
<td>culuk</td>
<td>culuk</td>
<td>Aadaag</td>
</tr>
<tr>
<td>Bird</td>
<td>saqulenguasagat</td>
<td>saqulenguasagat</td>
<td>d-L-k’a’t’</td>
</tr>
<tr>
<td>Fish</td>
<td>iqalluq</td>
<td>iqalluq</td>
<td>te’ya’</td>
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Materials/Resources Needed:
- Crayons/markers
- Items provided in Kit:
  - Chugach Sugpiat and Eyak puppets dressed in traditional clothing
  - Puppet Theater (included in kit)
  - Fur/ fish skin/ bird feathers swatches (all labeled accordingly)
  - 24” x 31” poster of Chugach Clothing A to Z
  - Copy of Chugach Clothing A to Z in small poster format 8” x 10”
  - Book: Furs and Feathers by Janet Halfmann

Teacher Preparation:
1. Invite an Elder/ Recognized Expert who can share their knowledge of traditional materials used for clothing.
2. Review with the students the proper ways to show respect for the guest speaker.
3. Review the cards attached to the puppets-description of their traditional clothing.
4. Review the swatches of furs, fish skin, seal intestine, bird feathers and teacher’s guide matching swatches with the Chugach Clothing A to Z poster.
5. Display the large poster of Chugach Clothing A to Z in the front of the classroom.
6. Set out individual plastic baggies with swatches of the fur/fish skin/seal intestine and bird feathers (each baggie labeled with a number) on a table.
7. Set puppets in their traditional clothing on the table.
8. Make copies of the 8 x 10 Chugach Clothing A to Z items for each student. (Attached)
9. Set out crayons, markers and copies of the Chugach Clothing A to Z items for each student.

Opening:
Allow the students to come in the classroom and look at poster and look at the different samples of the fur, fish skin, and feathers.
For the next two days, we are going to be talking about all of the animals from the land and sea, fish and birds the Sugpiat and Eyak people used for their clothing from head to toe. Ask students
the following questions to open up discussion: Why do you think they chose furs? Fish skin? What about bird feathers? Seal or bear intestine? Spruce root? Does anyone think that he/she can identify an animal based on how the animal feels? Can you identify the animal by just looking and not touching the fur? Let us explore these traditional materials.

Activities:

Class 1:
1. Set up the Puppet Theater, if available, in the front of the classroom. While setting up the theater, explain to the students that you are going to have a puppet show.
2. Ask the students if they have ever been to a puppet show before? Explain to students what this puppet show is about.
3. Explain how these puppets were made to look like boys and girls of our area from long ago, the Sugpiat and Eyak people. Notice how they are wearing traditional clothing, the clothing that they wore for work and play. Share with the students that in the past, the Sugpiat and Eyak boys and girls did not have stores to buy their clothing at, so they used what they had available, which were fur from the animals, skin from fish, and skin/feathers from the birds for their clothing, hats, gloves, and boots.
4. Let’s have fun. Start with the Chugach girl puppet, “Exenia”. Explain her clothing from head to toe. Teacher can change her voice for this presentation.
5. Next the Chugach boy puppet, “Cecil”. Explain his clothing from head to toe. Puppets have sticks attached to their hands, so that they can move around their hands and point out parts of their clothing, while the teacher describes what resources everything is made of.
6. Listen to the children and answer their questions on the traditional clothing. This will be a good time to let the students feel the puppet’s clothing.
7. Now put on the Eyak girl puppet, “Sophie”. While you are getting this puppet ready, explain to the children that both Chugach Sugpiat and Eyak people have always lived in this area, and that many of their descendants (family) still live here today. Explain Sophie’s clothing from head to toe.
8. Next the Eyak boy puppet, “Galushia”. Explain Galushia’s clothing from head to toe.
9. Listen to the children and answer their questions on the Eyak clothing. Let students feel the fur and leather clothing.
10. With one of the puppets on one hand, read “Furs and Feathers” by Janet Halfmann.
11. Discuss the story including: how each animal has the right coat to keep it warm and dry. It gives us a good idea of why the Sugpiat and Eyak people chose to use these resources as material to make their clothing.
12. Discuss with the students the general external covering classifications of the animals of the land and sea from the Chugach region (feathers for birds, scales for fish, fur for mammals, etc.).
13. Teacher can explain to the students that this class will continue through tomorrow. The puppets will stay in the classroom and the students will review all the materials that go with the Chugach Clothing A to Z poster.

Class 2:
1. Invite an Elder/ Recognized Expert who can share their knowledge of traditional materials used on the clothing. Review with the students the proper ways to show respect for the guest speaker.
2. Display the large Chugach Clothing A to Z poster in front of the classroom.
3. Pass out the copies of the poster Chugach A to Z along with crayons or markers.
4. Explain to the students that today they will play a matching game. They will match up the items in the plastic bags with the Chugach Clothing A to Z poster.
5. Hold up one swatch sample at a time. Ask the student to guess what object off of the Chugach Clothing A to Z poster that this swatch belongs to.
6. Pass around the swatch for each child to feel. Ask the students how it feels? Ask them what they would use this object for if they had to make their own clothing and why?
7. Listen to the children’s answer. Help them with the right answer by showing them the alphabet picture it belongs to on the large poster you have set up in the front of the classroom. The teacher can use one of the puppets to point to the right picture on the poster.
8. Ask the students to circle that object on their sheet.
9. Continue on until you have gone over all the materials included in kit.
10. Students can finish coloring the Chugach Clothing A to Z sheets.
11. Teacher can review with the students the clothing used on the four puppets.

**Assessment:**
- Students correctly identify the materials used for clothing for boys and girls by recalling the clothing materials used on the puppets from head to toe.
- Students can identify and correctly place the furs/skins to the animals/fish on the A to Z large poster.
- Students can correctly say and point out the Sugt’sstun/ Eyak words for fur, fish and bird.
Puppets created by Mary Babic, Cordova
Poster drawings by Kelsey Hawley, Cordova
B

Boots
Cormorant
Dress
Eagle
Fish
Head dress
Ivory tusks
Jewelry-
Dentalium shells
Kayak - Qayaq
Mountain Goat
Needle Sewing Kit
-Kakwik
Otter
Parka
Quills - Porcupine
Root (Spruce) Hat
Seal
Tattoos
Utensil – Hide Scraper
Visor
Whale
X stitch
Yummy Berries
Zone – Chugach Region
Elder Quote/Belief:

“I have read somewhere that there are a million hairs per square inch on a sea otter hide. Sea otter makes a nice hat, mittens, or parka because it is so warm. It is the nicest fur around.”

-Peggy McDaniel, Cordova

Grade Level: Pre K - 2

Overview:
Sugpiat and Eyak people were able to create beautiful clothing from animal hides, fur, fish skin, bird skin and feathers, even trees! They made their clothing as comfortable as possible while making sure that it was warm in cold weather, cool in the summer, and dry in the rainy season.

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Lesson Goal:
To become aware of the different types of traditional materials available to the Sugpiat and Eyak people for making clothing and exploring their properties.

Lesson Objective(s):
Students will:
- Learn which resource (furs, fish skin, feathers, etc.) the Chugach Region people used for clothes during each season.
• Learn what materials held in body heat, which materials let your body breathe, and which material protected you from the wet and cold to get a better understanding of why the Chugach people chose the materials they did for clothing.
• Learn four Sug’t’sun/Eyak words.

### Vocabulary Words:

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<tr>
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<th>Sug’t’sun Dialects</th>
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<tbody>
<tr>
<td><strong>Lower Cook Inlet:</strong></td>
<td><strong>Eyak:</strong></td>
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<tr>
<td>clothes</td>
<td>atkunka</td>
</tr>
<tr>
<td>Cold (snow)</td>
<td>pet snertuq</td>
</tr>
<tr>
<td>Rainy</td>
<td>qiteq</td>
</tr>
<tr>
<td>Warm (sun)</td>
<td>meqertuk</td>
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### Materials/Resources Needed:
- Book- *Color Chugach Clothing A to Z* (Make copies of the pages to color)
- Ice cubes or snow.
- In kit: Cup holders made out of different types of fur local to the Chugach region, grass, gut skin, leather, wool, and feathers.
- In kit: Fur samples, booties, sea otter pelt, seal skin pelt, fur muff, trapper hat.

### Teacher Preparation:
- Invite an Elder/Recognized expert who can share their knowledge of traditional materials used to stay warm and dry in our climate.
- Review with students the proper ways to show respect for the guest speaker.
- Review the activities plan.
- Make copies of the *Color Chugach Clothing A to Z* for students to color.
- Locate and display the cup holders made out of different types of local materials on the table. Review the information sheet on the materials and what they are made of.
- Display the fur samples, booties, sea otter pelt, seal skin pelt, and fur muff on the table. Each sample will have a tag attached with information on what it is and what is was used for.

### Opening:
(Ask students to sit in a half circle around the display table of various traditional materials used.) Encourage discussion regarding clothing with the students with the following questions:
- Why do you wear a coat?
- Why do you wear boots?
- Why do you wear a hat?
- Why do you wear a rain coat?
- Why do you wear gloves?
- Where do you get these items?
Today, we are going to talk about the furs, feathers, and fish skin and what was traditionally used to make clothing for the Sugpiat and Eyak people of our region. We will also examine why the materials were chosen for the different types of weather.

Now let’s imagine that you are a Sugpiat/Eyak boy or girl. Your parents didn’t have any stores in town to buy you a warm coat, boots, rain coat, gloves, and all the items that help to keep you cozy and dry. Your parents would have to use the local materials they caught like animals, birds, fish, roots from a tree, and even grass to make your clothing. They had to be creative and used their skills to figure out what material was best to make clothing. Imagine that!

Activities:
1. Pass around the fur samples and other resources out of the kit and talk about what each item was used for and why. Allow the students touch and feel. Encourage the students to wrap themselves with the sea otter fur. Let them try on the ear muffs as this will be a good example of the insulation properties of fur— as it will be hard for the students to hear people talking. Discuss how that is due to the fur’s density.

2. Pass around the cup holders and ask students the following questions about the materials:
   - Are they soft?
   - Are they hard?
   - Are they smooth?
   - Are they scratchy?
   - Could these materials be used to make clothing to keep you warm?
   - Could these materials be used for clothing to keep you dry?
   - Could these materials be used for clothing to keep you cool?

3. Inform the students that we will be doing a science experiment with these items. Explain the experiment on insulating properties of the materials. To do this, we will put ice water into each cup and let sit for ten minutes. We will then feel the outside of the cup to find out what material is best for the winter and cold days. Before we do this experiment, let’s guess which material is best for the summer and warm days? Which material is best for rainy and wet days? Which material is best for cold and windy days? Now let’s find out.

4. Place cup holders on a table or flat surface.
5. Fill with snow or ice
6. Pour in very cold water.
7. Cover cup with lid.
8. Check time and allow sitting at least ten minutes.
9. While waiting for ten minutes to pass, hand out the Coloring Chugach A to Z book and crayons. The students can work on a few drawings. Each drawing has a description of how it is used with the clothing. The teacher may choose a few pages out of coloring book to read to the students.
10. At the end of ten minutes, teacher can now pass around the cups one at a time. Students can feel the cups. After the students have the chance to pass them around, ask students:
    - Which cups felt warm?
    - Which cups felt cold?
    - What material would be better in the summer?
    - What material would be better for wet and rainy days?
    - What material would be better for the winter?
11. Discuss with students about insulation and what types of clothes they wear for seasons and weather. Correlate it with the traditional clothes worn by Sugpiat and Eyak kids in the different seasons and weather.

**Assessment:**
- Students can correctly identify the samples of fur, fish skin, seal intestine, and the other traditional clothing resources shared.
- Students can explain which furs and resources were used for the different seasons and weather in the Chugach Region.
- Students can correctly say and point to the different Sugt’stun/Eyak words for clothing, cold, rainy, and warm.
**Clothing: Sinew and Stitches**

**Elder Quote/Belief:** “She had a little box that had strands of porpoise sinew, and you could peel a piece off there as thin as you wanted it.” - Bill Hjort, talking about his grandmother

**Grade Level:** Pre K-2

**Overview:**
In the Chugach Region, tendons of large whales, porpoises, and seals were made into sinew thread. Porpoise sinew thread was used for fine sewing. Our ancestors also used goat and bear sinew. The thread was dried, split, and twisted into a three strand thread. The thimble used was a small, semi-circular piece of thick skin, with a slit parallel to the straight edge. Sewing needles were made of copper and bone. An awl was used to punch holes in the thick skin, and afterwards sewn with a bone needle that had an eye. Before they made the holes, they chewed the skin and allowed it to dry.

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**Lesson Goal:**
To become aware of the inventive ways our Chugach Region ancestors used to make their own thread from sinew, traditional stitch used for sewing clothes and the importance of a sewing bag and the tools.

**Lesson Objective(s):**
Students will:
- Learn how the Chugach people used the tendon of the animal for making thread to sew their clothing.
- Learn a new word-SINEW and what it means.
- Learn the steps it takes to process sinew into sewing thread.
- Learn the traditional stitch, the overcasting stitch, which starts from back to front and from left to right.
- Learn why the sewing kit was so important and aware of the tools in a sewing bag, for instance; needle, thimble, awl, and an animal skin scraper.
**Vocabulary Words:**

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<th>Prince William Sound:</th>
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<tr>
<td>sinew</td>
<td>(thread) kelugkaq</td>
<td>kelugkaq</td>
<td></td>
</tr>
<tr>
<td>Skin scraper</td>
<td>keligsu’n</td>
<td>keligsu’n</td>
<td></td>
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<tr>
<td>Sewing kit</td>
<td>kakiwik</td>
<td>kakiwik</td>
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**Materials/Resources Needed:**

- Hole punch
- Paper
- Scissors
- Markers

Provide in kit:

- Ivory needle holder (traditional design)
- Heavy lacing cards with colored shoe laces
- Plastic needles, foam pieces, cord
- Pattern for the sewing kit/kakiwik (Counceller, 2009)
- Laminated sheet on the sinew of a porpoise tail, p. 20
- Chugach Clothing A to Z flash cards
- Book: *Alutiiq Traditions-An Introduction to the Native Culture of the Kodiak Archipelago* by Amy Steffian & April G. Laktonen Counceller, pgs. 32-33

**Teacher Preparation:**

- Invite an Elder/Recognized expert who can share their knowledge of processing sinew and using the sinew to sew into a garment.
- Review with students the proper way to show respect for the guest speaker.
- Review the activity lessons.
- Review and familiarize yourself with the sewing technique in *Alutiiq Traditions*, pgs 32, 33.
- Display the moose sinew, imitation sinew, antique flesher, awl, needles, and thimble on a table.
- Cut out the sewing kit from the pattern included in the kit. Punch out the holes around the outside of the foam pieces.

**Opening:**

Students arrive in classroom and they are able to look at the items on the table. The lesson today is all about SINEW- pronunciation ‘sin-u’. The definition of sinew: A tendon which is prepared to use as a cord or thread.

Start discussion with the students opening with: I am wearing this shirt. Teacher tugs on her sleeve. What do you think is holding my shirt together? Oh yes, its string. Explain to the students about how there were no stores to buy thread for sewing, so the Chugach people had to
think about what to use to sew up their clothing, hats, and boots and use what was available from their area. They found that there was a stringy tendon along the bones of different animals, like porpoise, seals, bears, and whales. This would work well for sewing thread. Chugach people wanted to use every part of the animal with no waste. Again, say the word SINEW. Sinew is string or thread.

Activities:

Class 1:

1. Pass around the sinew (moose bone) from the kit.
2. Teacher can show the students the laminated picture of the porpoise tail out of Bobby Stamp’s book. Now show the students the sinew out of the kit that has been scraped off into strands. Explain to the students how much work it was to make sinew. This is how they made sinew: They would strip the tendon that was on the tail end of the porpoise and cut the fat and the hide away. Show the students the flesh scraper. Demonstrate how to use the flesh scraper on a cardboard cut into the shape of a porpoise tail. Then they would soak it in sea water for about five days in a cool place. It was then sundried or dried in a smoke house. After all the meat was scraped off it got hard and it was pounded and the strands were twisted into thread that was used to sew skins together, clothing, coats, and boats. So much work, just to make string! Think about it! And now, today, you can go to the store and buy it. The Chugach and Eyak worked so hard in their everyday life, didn’t they?
3. Show the students the strands of sinew. Hold the strands in the palm of your hands and rub it together, the warmth of your hands soften the sinew to make thread. Pass this around for all the students to feel it, soften it, and make thread.
4. Now show the students the imitation sinew, and how to separate it into three strands for sewing. Let the children touch the imitation sinew and separate the waxed string.
5. Show the students the tools used in a sewing kit. Demonstrate the flesh scraper. How it was used to scrape all the meat off the hide. An awl was used to make holes in the hide, so it was easier to sew. Show students the thimble. A thimble was used to protect your finger and push the needle through the hide. Now demonstrate the way to use a thimble. A bone needle was very sharp so the thimble was a very important tool. A needle was made from the bones of animals.
6. Show the students the sewing kit. Explain how important this sewing kit was to the women and the men. Women used their kit for sewing everything from clothing to boat covers. Men used their sewing kit to mend their boat covers and clothing while out hunting.
7. Show students the Chugach Clothing A to Z flash cards. Review each picture card and explain to students what is has to do with the Chugach and Eyak clothing that was stitched together with sinew. End with the X-stitch. Demonstrate the stitch on the sewing card included in the kit. Let the students practice this stitch with their own card, plastic needle and cording. This is the stitch they will use on their own sewing kit. Students will make a sewing kit in next class.
**Class 2: Sewing bag (Kakiwik)**

1. Pass out supplies to each student: a cutout foam sewing bag (pre-punched holes) and cording.
2. Show the students how to use an awl onto a piece of leather to punch the holes. Let each of the children practice with the awl and make a hole in the leather sample. Show the students the holes that are punched in their sewing bags and how it represents the punched hole an awl will make.
3. With markers create designs on your bag, or cut designs out of the foam sheets and paste those designs on your sewing bag. If the students want to add a stencil to their bag, they can cut out a flower shape from a piece of paper. Use the negative as a stencil with your markers to create a repeated pattern of the same flower shape on their sewing bag.
4. Show the students the overcast stitch. From back to front and left to right. The stitch they practiced with their sewing card in the last class.
5. Students will use cording, like a shoe lace, to do the overcast stitch and close up your sewing bag.
6. In the finished bag, include a plastic needle and imitation sinew.
7. Teacher may show the students how to add a bead or a button to close up their sewing bag.

**Assessment:**
- Students can correctly say the word sinew.
- Students can describe where sinew comes from and how it is made.
- Students correctly identify the overcast stitch used on the traditional sewing bags.
- Students can correctly say and point to the different Sug’t stun/Eyak words for sinew, to twist sinew for sewing and sewing bag.
**Elder Quote/Belief:** “They chew on sealskin seams for the baidarka and there was some sort of chemical reaction between your saliva, the sealskin, and the porpoise sinew that created a waterproof stitch.” Bill Hjort statement in Chenega Diaries

**Grade Level:** Pre K - 2

**Overview:**

The Chugach and Eyak people were able to create beautiful outdoor clothing using salmon skin and seal intestine. The people sewed the fish skin and/or the seal intestine together with a waterproof stitch.

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**Lesson Goal:**

To understand that salmon and seals were used by Chugach and Eyak people for making clothing. To learn how creative Chugach and Eyak people were with the development of their clothing out of these products. To understand how the Chugach and Eyak people learned to transform salmon and seal intestine into making useful clothing for the different weather here in the Chugach region.

**Lesson Objective(s):**

Students will:
- Learn that the salmon and seals were harvested to make clothing.
- Learn what kind of clothing was made with salmon skin.
- Learn what kind of clothing was made from seal intestine.
- Learn three Sugt’stun/Eyak words

**Vocabulary Words:**

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<th>Lower Cook Inlet</th>
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<tbody>
<tr>
<td>Red salmon</td>
<td>nikliq</td>
<td>nikliq</td>
<td>cha’ch’</td>
</tr>
<tr>
<td>Seal (harbor)</td>
<td>qaigyaq</td>
<td>qaigyaq</td>
<td>geeLtaag, keeLtaag</td>
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</table>
Seal skin | ammia gaigyam | ammia gaigyam | geeLtaag tah

**Materials/Resources Needed:**

- Seal intestine parka in shadowbox.
- Seal intestine sample in case.
- Seal intestine stitch sample.
- Stuffed seal (make up a seal for this Clothing kit).
- Stuffed salmon (make up a salmon for the Clothing kit).
- Fish skin sample.
- Fish skin doll.
- Laminated seal intestine and salmon skin tanning information sheet.
- Imitation seal intestine piece made out of rip stop fabric for the students to practice the waterproof stitch on.

**Teacher Preparation:**

- Invite an Elder/ Recognized Expert who has led a subsistence lifestyle in your region. Ask him or her to share subsistence values, experiences, and stories. Ask the Elder to share their knowledge of traditional materials used for clothing.
- Review with the students the proper ways to show respect for the guest speaker.
- Review the information sheet on Chugach clothing for the outdoors-waterproof clothing made from seal intestine and fish skins.
- Familiarize yourself with the materials and resources in kit.

**Opening:**

Talk with the children about how the Chugach and Eyak people used every part of the animal. The Chugach people did not believe in wasting anything. The Chugach and Eyak people didn’t have stores available to buy boots, mittens, hats, or rain gear. Did you know that the Chugach and Eyak people used every part of the seal and salmon? Did you know that the Chugach and Eyak used seal intestine for waterproof jackets, like you use your rain gear to keep you dry in the wet weather. Did you know that the Chugach and Eyak used salmon skin for their waterproof boots, like you use rubber rain boots to keep your feet dry?

**Activities:**

Class Day 1: All about Seals. Hold up the stuffed seal from kit. The seal fur was used for clothing, hats, boots, parkas, mittens. The seal fat was used for food. The fat was rendered down and Chugach and Eyak dipped their fish in the seal fat to give them energy. The seal fat was like their vitamin every morning to keep them healthy. Seal meat was used as a food source. The meat around the ribs was also a food source, and cleaned seal ribs were used as a scraper tool. The inside of the seal (*Note: teacher displays stuffed seal and pretends to cut open the belly-
seal stomach and lungs were blown up and dried to be used for a baking bag or a holding bag for food. As a baking bag, stomach or lungs were stuffed with seal meat, baked and eaten. As a holding bag, the stomach and lungs were blown up and dried and this was used as a storage container for dried fish or berries, even used to carry water. The intestines were blown up (show how they blew up the intestine like a huge balloon) dried out and then cut into strips, making waterproof parkas and waterproof bags. Pass around the seal intestine. Let the kids touch and talk about how it feels. Discuss the waterproof stitch and how it helped keep water out.

Discussion on how important it is to stay dry in this wet climate of the Chugach region. Explain to the students that the Chugach region is considered a rainforest. It was very important for the Chugach and the Eyak people to find a material that would keep them dry in this wet and cold climate. Pass around samples of the seal intestine so they can feel how strong these materials are.

Isn’t it amazing how this inner membrane became an outer skin, tough and protective, despite its fragile appearance? (Blumenstein) Talk with the students on how the Chugach processed the intestine so that they would be able to sew with it and use a waterproof stitch to keep them dry when out in the weather. Tell how they used this material for rain gear.

Show the students seal intestine parka in the shadow box. Let the students come around and look at it very closely. Students can practice waterproof stitch with the imitation seal intestine fabric made out of rip stop fabric. Finish the lesson with a picture of the Chugach man in a waterproof seal intestine parka and show the students the Chugach puppet in the imitation seal intestine parka.

Class Day 2: All about salmon skin. Teacher holds up the stuffed salmon. Ask the students what they know about salmon and what it is used. Following is a description of salmon skin and its traditional uses:

“In respect for the fish and the seal, you use every bit of it-the head, the insides, the bones, and the skin of the fish. And then whatever we don’t eat goes to the dogs. The bones go back to the river or the lake, wherever you caught it from. If they’re from the ocean, you take them there. That will ensure more fish in the next years. If it’s a seal, same way. The bladder goes back to sea. The seals will come back. You bury the bones near the sea so you won’t find them floating all over the beach. I appreciate very much the respect for things when I was growing up. So you use every bit of it-the insides for clothing, eat the kidneys and liver and the meat. Use the seal oil also. The stomach is used for storing the seal oil and for when you gather salmon berries. The skin you use for parkas, mittens or mukluks. The bones you use for scrapers, runners for sleds and for tanning. The whiskers are used for toothpicks, and the faces are used for ornaments. The bladder goes back to the sea.

Fish skins were used for mukluks, mittens, and raincoats. They skinned the fish, opened the stomach all the way down to the tail, skinned it out, and cut off the fin in the back. They patched it the same way with the esophagus. The fish skin mittens are trimmed with the esophagus of the seal, and the palms are made of harbor seal flippers.” (Blumenstein)

The skin, the bones, the brain, the meat? Talk to them about how the Chugach people let nothing go to waste with the salmon. Help them understand how the Chugach people used salmon skin for rain clothing and boots. Show the students the Chugach puppet and the fish skin mittens.
Today invite a traditional expert to come into the classroom and show how salmon skin is tanned. Ask the expert if they can bring the tanned salmon in at different stages of the tanning process to show the students how the skin turns from its raw form to a tanned skin for sewing boots, bags, and clothing.

**Assessment:**
- Students can explain how every part of the salmon and seal caught were used by the Chugach people and that nothing was wasted.
- Students can explain how the salmon skin and seal intestines were harvested to make clothing.
- Students can correctly say and point to the different Sug’t stun/Eyak vocabulary words.
Salmon Skin Tanning by Raven Madison

Your Non-Traditional Tanning Kit

- Salmon Skins
- Water
- Two large metal or glass bowls
- Quart mason jar with a lid
- 99% rubbing alcohol
- Metal spoon
- Latex gloves
- Dish soap
- Clean plywood
- Staples or thumbtacks

Preparing the skins-
Cut the salmon skin off of the fresh salmon. Try to cut as close to the skin as possible without cutting through the skin. If you are not using the skins right away freeze in a freezer bag. Next take a metal spoon and scrape the flesh off the skin.

Tanning process-
Rinse salmon skins in cold water. After let soak in soapy water for the whole day. Take a quart mason jar and fill ¼ liquid vegetable glycerin and 1/4 -99% rubbing alcohol. Then put fish skins in this solution (make sure that all skin are covered) for at least 48 hours.

Drying the skins-
Rinse with cold water, wring the salmon skin out. Put dime size amount of soap on flesh side and stretch out, hold with staples or tacks, leave for one day. Flip skin over and dry completely.

Raven would like to give credit to June (Simeonoff) Pardue, a Kodiak Alutiiq artist. She was born in Old Harbor, Kodiak Island. She has been practicing traditional Alaska Native art since an early age. It took her 5 years to develop a tanning solution before she could design and hand sew salmon skin bags, slippers and a jacket trimmed in sea otter. This jacket can be viewed at the Alutiiq Museum in Kodiak, Alaska. June has taught a variety of Alutiiq crafts in over 20 locations in Alaska and has been carrying on the teaching of traditional Alutiiq beadwork, skin sewing, and grass weaving since 1964.
Chugach people mastered the art of Alaskan coastal living. With houses insulated with earth, flexible skin covered boats, ingenious tools for ocean harvesting, and warm, waterproof clothing, the Chugach thrived in one of the world’s stormiest regions for over 7,000 years. Clothing was perhaps their most critical tool. Long, robe-like parkas of animal and bird skins provided warmth and a canvas for spiritual connection with a volatile natural world. Jackets stitched from the translucent intestines of sea mammals and bears provided lightweight, flexible protection from the rain. This clothing impressed the merciless Russian traders that colonized Alaska. Commanders commissioned Native seamstresses to produce Russian-style garments, capes and captain hats, with waterproof stitching techniques and materials.

Due to the wet maritime climate, it was crucial to have waterproof clothing. Therefore, the garments made of fish skin and seal or bear gut were sewn with incredible precision making them very effective against the wet weather. Clothing was decorated with colorful natural dyes, feathers and puffin beaks, and in some cases elaborately carved ivory, bone or wooden figurines. Chugach people also fashioned special clothing for hunting and traveling. Every kayaker wore a gut skin jacket cut to his unique proportions and designed to fit snugly over his boat hatch. Also known by the Russian term *kalmia*, these garments were so valued by western colonists that they commissioned Native people to produce them in European styles like cloaks. Gut rain jackets were popular gifts and souvenirs in the historic era. Chugach sewed these garments from the intestines of bears or sea mammals. Strips of gut skin were sewn together with sinew and special waterproof stitches. Chugach skin sewers rolled a piece of dried beach grass into every seam, and then made careful stitches through the grass. When water seeped into the needle holes, it was absorbed by the underlying grass, which swelled and prohibited more water from entering. This ingenious stitching kept the hunter dry and protected him from hypothermia. The typical garment was knee length, although longer jackets were created for kayakers. This outdoor clothing is essential in the Chugach region, where cold wet weather or sea spray can easily cause hypothermia. These garments were tied around the boat’s cockpit to keep rain and sea spray out.
Elder Quote/Belief:
"Blow, just like a balloon, that bear gut...let sun dry it, like clothes outside...Cut it about so wide...Then sew it together for a rain jacket."
-Nida Chya, Kodiak Island Elder, 1986 (Aron Crowell, 2001)

Grade Level: PreK - 2

Overview:
Intestines of bears, seals, sea lions, and whales were used to make waterproof jackets and bags. To prepare intestines for sewing, they were cleaned, inflated, and hung out to dry.

Standards

<table>
<thead>
<tr>
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<td>F1: Develop an understanding that culture, local knowledge, history and interaction with the environment contribute to the development of scientific knowledge, and local applications provide opportunity for understanding scientific concepts and global issues.</td>
<td>CE2: Students should have knowledge of traditional and contemporary sewing and clothing using skins and furs.</td>
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Lesson Goal:
To understand that intestines from seals, sea lions, bears and whales were used by Chugach and Eyak people for making waterproof clothing. To learn how creative Chugach and Eyak people were with the development of their clothing out of these products.

Lesson Objective(s):
Students will:
- Learn that intestine was harvested to make waterproof clothing.
- Learn about the design of the various gut parkas.
- Learn two Sugt’stun/Eyak words

Vocabulary Words:

<table>
<thead>
<tr>
<th>Sugs’tun Dialects</th>
<th>English:</th>
<th>Prince William Sound:</th>
<th>Lower Cook Inlet:</th>
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<tr>
<td>Waterproof/ rain coat</td>
<td>k’uleh</td>
<td>kAnaa’d</td>
<td></td>
</tr>
<tr>
<td>Gut parka</td>
<td>qitersun</td>
<td>qitersun</td>
<td></td>
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</tbody>
</table>
**Materials/Resources Needed:**
- White or light tan tissue paper/construction paper (one sheet for each student 9” x 12”)
- Scissors
- Glue
- Fine tip markers (red, black, brown, blue)
- Construction paper (one sheet for each student)
- Templates of the gut parka
- Seal intestine sample in case
- Seal intestine stitch sample
- Cecil puppet from kit
- Laminated Chugach Gut Parka description for display
- Imitation seal gut piece (rip stop fabric) for the students to learn and practice the waterproof stitch.

**Reference Books:**
- *Sharing Alaska Native Cultures: A Hands-On Activities Book*
- *Looking Both Ways*
- *Crossroads of the Continent*

**Teacher Preparation:**
- Invite an Elder/ Recognized Expert who can share their knowledge of traditional materials used for clothing.
- Review with the students the proper ways to show respect for the guest speaker.
- Review directions on how to make this project with the students- A gut parka.
- Familiarize yourself with the materials and resources in kit.

**Opening:**

Explain to the students that gut parkas- waterproof, wind-proof, light weight hooded outer coats—were made from intestines of seal, sea lion, whale, and bear. Gut skin strips were sewn together horizontally, starting at the bottom and continuing upward into a spiral. If the fragile gut skin were torn, it was repaired by inserting small, flat wooden discs with a groove around the edge, because sewing would tear the gut. The lower edge of the body and the hand opening are bordered with cotton, and the hood and hand openings are provided with draw strings ending in blue tassels. Today we are going to make a gut parka out of paper and glue onto construction paper. Students will have an opportunity to get creative with their beach scene on the construction paper.

**Activities:**

1. Look at designs and construction of gut parkas and clothing made by the Chugach and the Eyak people of the Chugach region. Display Cecil-the Chugach boy puppet and talk about his gut parka.
2. Pass around the gut sample from kit. Let them feel it and talk about how fragile it is.
3. Display the gut parka in the shadow box and talk with the students about the strips and the design.
4. Display the imitation seal gut piece (rip stop fabric) and show students how to sew with the waterproof stitch. Now pass “seal gut” piece of fabric around to each student and let each student practice sewing this traditional waterproof stitch.
5. Now students can cut tissue paper or construction paper into thin strips (about 1 inch wide).
6. Glue all strip together by overlapping.
7. Choose the parka design you wish to create and cut it out of tissue or construction paper. You may choose one of the traditional designs or make up a new parka design of your own.
8. Choose a large sheet of construction paper. Cut and glue a picture of a rocky beach environment with mountains all around and the ocean.
9. Glue your gut parka figure onto the construction paper where you have created a beach environment.
10. Complete the person wearing the gut parka with markers, cut paper, and crayons. Add any more details to the picture, sun, rain, anything you like.
11. You may also use found objects, such as real grass, pebbles, moss, etc. on your background.
12. Complete the parka with designs, yarn, feathers, and decorative stitches by using a fine tip marker.
13. Teacher can display these creations for all the children to see. Teacher can also display the real gut parka in the shadow box, with the laminated sheet describing traditional gut parkas from the Chugach region, and the imitation “seal gut” waterproof stitch learning tool for other students to practice on and learn the waterproof stitch.

Assessment:
- Students will know that intestine was harvested to make waterproof clothing.
- Students will know the different designs of the gut parka.
- Students can correctly say and point to the different Sugt’stun/Eyak words for rain coat and gut parka.
Aleut Gut Parka
Gut parka located at the Anchorage Museum in the Alaska section
Ceremonial Gut Parka
Traditional Gut Parka
Dolls wearing gut skin parkas
Chugach people mastered the art of Alaskan coastal living. With houses insulated with earth, flexible skin covered boats, ingenious tools for ocean harvesting, and warm, waterproof clothing, the Chugach thrived in one of the world’s stormiest regions for over 7,000 years. Clothing was perhaps their most critical tool. Long, robe-like parkas of animal and bird skins provided warmth and a canvas for spiritual connection with a volatile natural world. Jackets stitched from the translucent intestines of sea mammals and bears provided lightweight, flexible protection from the rain. This clothing impressed the merciless Russian traders that colonized Alaska. Commanders commissioned Native seamstresses to produce Russian-style garments, capes and captain hats, with waterproof stitching techniques and materials.

Due to the wet maritime climate, it was crucial to have waterproof clothing. Therefore, the garments made of fish skin and seal or bear gut were sewn with incredible precision making them very effective against the wet weather. Clothing was decorated with colorful natural dyes, feathers and puffin beaks, and in some cases elaborately carved ivory, bone or wooden figurines. Chugach people also fashioned special clothing for hunting and traveling. Every kayaker wore a gut skin jacket cut to his unique proportions and designed to fit snugly over his boat hatch. Also known by the Russian term kalmia, these garments were so valued by western colonists that they commissioned Native people to produce them in European styles like cloaks. Gut rain jackets were popular gifts and souvenirs in the historic era.

Chugach sewed these garments from the intestines of bears or sea mammals. Strips of gut skin were sewn together with sinew and special waterproof stitches. Chugach skin sewers rolled a piece of dried beach grass into every seam, and then made careful stitches through the grass. When water seeped into the needle holes, it was absorbed by the underlying grass, which swelled and prohibited more water from entering. This ingenious stitching kept the hunter dry and protected him from hypothermia. The typical garment was knee length, although longer jackets were created for kayakers. This outdoor clothing is essential in the Chugach region, where cold wet weather or sea spray can easily cause hypothermia. These garments were tied around the boat’s cockpit to keep rain and sea spray out.
Clothing: Spruce Root Hats GR: PreK-2 (Lesson 9)

**Elder Quote/Belief:**

“Spruce roots were strong and woven so tightly that it made a basket or a hat waterproof. My ancestors were geniuses! How did they come up with all these ideas?”

- Mary Babic/Cordova

**Grade Level:** PreK-2

**Overview:**

There are many traditional uses for spruce roots. This lesson is designed to teach students the importance of the tightly woven spruce root hats were waterproof and decorated to shown their symbolism.

**Standards:**

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Lesson Goal:
The Chugach people used clothing as a form of expression. One important article of their clothing was spruce root hats. These hats had designs painted, embroidered, and decorated to show their honor and respect to the plants and animals that gave them strength and support.

Lesson Objective(s):
- Students will learn what spruce roots are by seeing them and touching them.
- Students will hear how spruce roots were woven to make hats.
- Students will learn designs and materials used to decorate a spruce root hat and their meaning.

Vocabulary Words:  

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<td>Sea lion whiskers</td>
<td>winam ungai</td>
<td>winam ungai</td>
<td></td>
<td></td>
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<tr>
<td>Spruce root</td>
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<td>Geets’</td>
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Materials/Resources Needed:  
In kit:
- Laminated photos of Chugach spruce root hats
- A spruce root with bark on, a spruce root without the bark, and a split spruce root. They are all tagged for teacher’s information.
- Directions on how to make a conical shaped spruce root hat.
- Pattern for spruce root hat
- Stencils of different designs that were painted on hats with a description
- Instructions on how to make imitation seal whiskers.
- Chugach A to Z poster

Books:
- The Alutiit/Sugpiat - A Catalog of the Collections of the Kunstkamera
- Inartalicirper-Our Weaving Ways from Aluutiq Museum

Need to locate and gather for lesson:
- Heavy poster board (24 x 36). Each piece will make two hats.
- Markers
- Glue
- String
- Scissors
- Beads, shells, heavy fishing line
Teacher Preparation:
- Invite an Elder/ Recognized Expert who has led a traditional lifestyle in your region.
  - Ask him or her to share subsistence values, experiences, and stories.
  - Ask the Elder to share their knowledge of these traditional materials used for weaving hats or baskets.
- Review with the students the proper ways to show respect for the guest speaker.
- Review pages 10 and 11 -Alutiiq Museum’s, Inartalicirpet-Our Weaving Ways before the class begins.
- Review directions on how to make this project with the students- A spruce root hat.
- Familiarize yourself with the materials and resources in kit.
- Make copies of the spruce root pattern for each student.
- Gather enough poster boards for each student to make a hat.
- Soak the weaving roots for fifteen minutes before class.
- Put up the Chugach A to Z poster.

Opening:
If you recall, yesterday, we made our version of a seal gut parka as one form of clothing used in expressing one’s self (point to the seal gut parka on poster).

Today, we will be learning about spruce roots hats, their design elements and why these certain designs were chosen. Point out the spruce root hat on the Chugach A to Z poster. Ask the students:
- Why do you think the Chugach wore these spruce root hats?
- Have any of you seen a spruce root before?
- Did you know that we live in a spruce tree forest?
- Have any of you ever heard of weaving with these roots to make a hat or basket?

Show students the spruce roots in their different stages of harvest. (Each root is tagged with the description of how they have been harvested.) Pass these roots around and allow the students to tug on the soaked roots, so they are able to feel how strong these roots are. It will give them an idea on why these roots were chosen for the hunting hat. Discuss the traditional uses of these roots. So today, we are going to be making a paper version of the spruce root hat and decorate it with one of the traditional designs.

Activities:
1. Show students laminated photographs of the spruce root hats and read to them excerpts out of Inartalicirpet Our Weaving Ways, pages 10 and 11 design elements.
2. Hand out a pattern to each student along with a piece of poster board.
3. Read aloud the instructions on how to make a spruce root hat to the students.

4. Once the hats are cut out, the students will decorate them based on the designs in the instructions. Explain the stencil designs and why the hunter may have chosen these designs. Ask the students, why they thought did some of the hunters choose a particular design and/or color? What do they think the hat says about the person wearing it?

5. If students have time, they can add beads or imitation seal whiskers.

6. Teacher and assistant can help them with closing up the hat and also adding string to tie around their chin.

7. Once everyone has completed the project, tell the students that the hats were originally used to hunt with. Have the students present their hats to the rest of class. Make sure the students discuss why their hat looks the way it does.

8. Put the hats on display so that the rest of the school can see them.

**Assessment:**

- Students able to identify spruce roots in their different stages of harvest.
- Students can explain how roots made a traditional waterproof hat.
- Students can identify plants and animal designs that decorated a spruce root hat.
- Students can correctly say and point to the different Sugt’stun/Eyak words for sea lion whiskers and spruce root.