**TRADITIONAL TRANSPORTATION: SUGPIAQ PADDLES GR 3-5 (LESSON 7, 8)**

**Elder Quote/Belief:** “….no weapons of any kind were noted with their kayaks, the single-bladed paddles were made from light spruce wood….” From the log of P.K. Zaikov (1793)

**Grade Level:** 3-5

**Overview:** Paddles were hand carved from driftwood, spruce or cedar. Each paddle was painted and adorned with traditional designs and colors from natural paints. Paddles were built for specifically for the owner based on height and hand size. The single blade paddle was designed for efficiency and for sound reduction while hunting.

**Standards:**

<table>
<thead>
<tr>
<th>AK Cultural:</th>
<th>AK Content Science:</th>
<th>CRCC:</th>
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<tbody>
<tr>
<td><strong>D5:</strong> Culturally-knowledgeable students are able to engage effectively in learning activities that are based on traditional ways of knowing and learning.</td>
<td><strong>F1:</strong> A student should understand the dynamic relationships among scientific, cultural, social and personal perspectives.</td>
<td><strong>S7:</strong> Students should know how to make tools from natural resources in the outdoor environment.</td>
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**Lesson Goal:** Learn how paddles were measured and carved for each individual owner.

**Lesson Objective(s):** Students will
- Learn the parts of a paddle in English and Sugt’stun.
- Learn about the specific design of the Sugpiaq paddle.
- Sand and paint a pre-cut mini paddle

**Vocabulary Words:**

<table>
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<th>Sught’stun Dialects</th>
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<tr>
<td><strong>English:</strong></td>
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<td>Paddle</td>
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<td>Driftwood</td>
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**Materials/Resources Needed:**
- If possible, invite an Elder or Recognized Expert from the Region to share their traditional ecological knowledge (TEK) and expertise to enrich the lesson(s).
- Pre-Cut Mini Paddle
- Sand Paper 120 and 220 Grits
- Acrylic Paints
- Paint Brushes (small to large: classroom set)
- Tape Measures (set of 10)
- Book: *The Chugach Eskimo pg. 45-51*
• Book: *Kayaks of Alaska*
  o Reference pages 460-466 (Sugpiaq Paddle #16-27)
  o Reference Paddle Plate XI-XII(for traditional designs and colors) #16-26

• Video: Sven Haakanson; [www.vimeo/184085247](https://www.vimeo.com/184085247)
  o Minutes 16-18:15

**Teacher Preparation:**

• Contact your Local Education Coordinator for a list of Elders that could share their expertise on the lesson content.

• Before the Elder or Recognized Expert arrives, please review with all of the students, ways to show respect for the Elder during their visit.

• Pre-order a classroom set of pre-cut mini wooden paddles from the Chugachmiut Heritage Preservation program (If available- if not, perhaps locate someone in community to provide.)

• View video with Sven Haakanson, Alutiiq Museum; [https://vimeo.com/184085247](https://vimeo.com/184085247)
  o Minutes 16-18:15

• Prepare the chart to measure students for paddle height and blade width.

• Make each student a copy of My Sugpiaq Paddle Dimensions worksheet.

• Organize sand paper by grit and cut into small squares.

• Organize painting supplies.

**Opening:**

The Sugpiaq and Eyak of the Chugach Region used (primarily) single bladed paddles to navigate their qayaq, anyaq and dugout canoe. The paddles were carved from single pieces of driftwood, spruce or cedar. The length of the paddle is determined by: type of boat, paddler’s height and hand width. These paddles look similar but vary in length. The qayaq paddle is the shortest of the three. Each paddle was carved and/or painted using traditional colors. In the book *Kayaks of Alaska*, Sugpiaq paddle color plates VI-VII are referenced as #16-26 (located in the middle of the book). The paddles are decorated with various designs.

Today, we will be measure ourselves with a tape measure to see how tall an actual sized paddle would be based on traditional measuring methods. We will then make a mini paddle from a pre-cut template. This will require sanding with various grit sandpapers and then paint a design based on traditional designs from the referenced book, *Kayaks of Alaska*.

**Activities:**

**Class I:**

1. Gather students to view paddle examples and learn the parts of a paddle in Sug't' stun.
2. Measuring student height and hand width.
   a. Have students work in small groups to measure and record information.
      • For paddle height: students lay on floor with arms at sides. Using a tape measure, students in the group will measure their height from feet to top of head.
      • Blade width: Students will measure hand by holding out their hand flat. Students will measure from side of thumb to side of pinky.
      • Blade length: With arms out stretched; measure from tip of fingers to center of chest.
• **Shaft length**: Paddle Height minus (−) Blade Length = Shaft Length.


4. Record class findings on attached; Classroom Chart.
   a. The classroom chart can be used for further scientific inquires such as;
      • Student’s height determines blade size?
      • What is the relationship between shaft length and blade length?

**Class II:**

1. **Making the Paddle**
   a. From the kit, show and pass around the full length paddle to show the shape, and taper of the blade. Keep this paddle available for students to reference during the sanding and shaping process.
   b. Each student will receive one pre-cut paddle, sand paper (grits 120-220).
   c. Students will sand and shape the paddle with a taper and pointed end.

2. **Painting the Paddle**
   a. Students will develop a design on a blank sheet of paper to re-create on their paddle. Reference the colors and designs in the book: *Kayaks of Alaska*.
   b. Paint paddle with designs using the provided acrylic paints.
   c. Kids present and explain their designs, and color choices to class.
   d. Display or take pictures

**Assessment:**

- Students will understand and demonstrate how to traditionally measure the blade width, blade length and over all paddle size and successfully complete the *My Sugpiaq Paddle Dimensions* worksheet.
- Students will successfully sand the paddle with a taper blade simular to the paddle provided in the kit. When painting the mini wooden paddle with traditional designs student need to use two elements of traditional Chugach designs from the examples in *Kayak of Alaska*.
- Students can successfully know and say the Sugt’stun word for parts of the paddle.
Classroom Chart:

<table>
<thead>
<tr>
<th>NAME</th>
<th>Height</th>
<th>Blade Width</th>
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English and Sug’tstun vocabulary (Eyak to come)

- **Paddle**
  - Pakiutaq
  - Paqun
- **Handle**
  - Pakiutem Ikua
- **Shaft**
  - Uklucinampi
- **Shoulder**
  - Tuik
- **Blade**
  - Uklucinamp
Shaft length: __________

*Paddle Height minus (-) Blade Length = Shaft Length.*

Blade Width: __________

*Measure hand by holding out their hand flat. Students will measure from side of thumb to side of pinky.*

Paddle Height: __________

*Students lay on floor with arms at sides. Using a tape measure, students in the group will help measure student’s height from feet to top of head.*

Blade Length: __________

*With arms out stretched; measure from tip of fingers to center of chest.*

*My Sugpiaq/Eyak Paddle Dimensions*

*Paddle made by Jerry Laktonen Whale Dream Studios*
Sugpiaq Paddles from the Cordova, Alaska Museum

Photos taken by Nicholas Jordan

\[1\] Alutiit/Sugpiat: A Catalog of the Collections of the Kunstkamera; page 323