



Centennial Bridge

GRADE: 4 and up

TIME: 1 Session



Developed by Jenifer Cameron, Art Specialist

<p>KIT INCLUDES:</p> <ul style="list-style-type: none"> • lesson plan • overheads (12) • vocabulary board • biography board (1) • procedure boards (2) 	<p>MATERIALS:</p> <ul style="list-style-type: none"> • construction paper strips 1" x 18" various colors 1/2" x 18" various colors 6" x 18" black • glue (white) • scissors • overhead projector • work mats (copy 1 per student from lesson plan)
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LESSON DESCRIPTION:

Students learn about the artist Ron Senungetuk who is an Alaskan Native Artist. He designed a landmark bridge in Fairbanks. Students design and create a 2-D abstract bridge from construction paper.

<p>VOCABULARY:</p> <p>shape architecture rhythm centennial balance symbolism unity</p>	<p>ART ELEMENTS:</p> <p><input type="checkbox"/> Line <input checked="" type="checkbox"/> Shape/Form <input type="checkbox"/> Color <input type="checkbox"/> Value <input type="checkbox"/> Texture <input checked="" type="checkbox"/> Space/Perspective</p>	<p>ART PRINCIPLES:</p> <p><input checked="" type="checkbox"/> Pattern <input checked="" type="checkbox"/> Rhythm/movement <input type="checkbox"/> Proportion/Scale <input checked="" type="checkbox"/> Balance <input checked="" type="checkbox"/> Unity <input type="checkbox"/> Emphasis</p>	<p>CONTENT CONNECTIONS:</p> <p>social studies Alaska studies</p> <p>THEMES:</p> <p>celebration</p>
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OBJECTIVES AND ASSESSMENT CRITERIA: Students will:

- learn about the history of the city of Fairbanks.
- create visual rhythm, balance and unity in a work of art.
- learn about an important work of architecture by an Alaska Native artist.
- discuss symbolism in a work of art.

PREPARE:

Read through lesson plan and make a sample, if time allows, to ensure student success.
Collect and prepare materials. Xerox "work mat" at back of lesson plan, 1 per student.
Cut construction paper strips.
Place strips on trays or in folders and place in a central area.

ENGAGE AND EXPLORE:

This lesson highlights the city of Fairbanks, which recently celebrated its 100th anniversary. It also is about bridges, numbers and patterns. If there is a bridge or work of art celebrating an anniversary in your area, you can adapt or extend this lesson to include local relevant information. **(Read or tell the following story to students for background information)**

"Fairbanks was founded on the banks of the water, grew on the banks of the water..... Fairbanks was --and is-- a river town."

"Steamboats on the Chena" by Basil Hedrick and Susan Savage.

The late afternoon sun slanted through the spruce trees along the riverbank. As the crew tied the huge sternwheeler to the stoutest of the trees, clouds of mosquitoes descended, hungry for victims. Ignoring the swarming pests, the crew, protected by oil of citronella, began felling trees. The logs would be used to build a cabin and a warehouse. The new clearing would provide space to unload the cargo.

Merchant E.T. Barnette had on board the steamboat Lavelle Young, \$20,000 worth of goods with which he had hoped to establish a trading post on the Tanana River. Barnette's crew of four men, along with the ship's crew of another half dozen or so, unloaded crates and barrels containing everything Barnette envisioned he would need to get into business. The cargo, weighing 130 tons, included general supplies, one horse, a team of dogs, windows and doors, a sled, a steam launch, tools, prospecting equipment, hardware and basic food, including butter preserved in brine.

The date was August 26, 1901. It was to go down in history as the founding of Fairbanks, and the spot was just downstream from the site of the Golden Heart Plaza, located in the heart of Fairbanks.

Barnette's plans had not gone smoothly. He was heading for Tanana Crossing (Tanacross), the point at which a trail and proposed railroad from the coastal town of Valdez was to cross the Tanana River on its way to Fort Egbert at Eagle on the Yukon River. Barnette planned to steam upriver in his own steamboat, the Arctic Boy. He would then head up the Yukon River from Saint Michael, then up the Tanana River to the crossing. His trading post would be accessible in the summer by river and year-round by the railroad. The Arctic Boy never made the journey. In the harbor at St. Michael, it hit submerged rocks that tore out the bottom.

Barnette was not a man to be discouraged easily. He persuaded Captain C.W. Adams, co-owner of the Lavelle Young, to take him, his wife, his crew and his supplies upriver. Adams would not guarantee he could reach Tanacross. He knew of no one who had taken a steamboat up the Tanana, but he did know of rapids said to be impassable by steamboats.

Adams proved to be right. The Lavelle Young was unable to get past the Bates Rapids in the Tanana River. Adams and Barnette decided to try bypassing the rapids, heading up the Chena Slough which they believed branched from the Tanana River above the region. Their surmise was correct, but not helpful. The Lavelle Young made it 16 or 18 miles up the slough, but the water was too low to go farther. Captain Adams reminded Barnette that their agreement was to unload at the farthest point they could reach. This was it!

Barnette argued to be taken back to the confluence of the Tanana and the Chena. From there, he'd have a better chance for going farther up the Tanana by shallow-draft barge. Adams

preferred to unload before heading back downstream, otherwise the Lavelle Young would be more apt to hit a sandbar and more difficult to float off. Going downstream with a full load was much more hazardous than going upstream. Traveling downstream the boat could be pushed hard and fast on a sandbar and the current could hold it in place like a brace. Since the boat had no steam winches it could take hours to work the Lavelle Young off a sandbar. The two men compromised, and Adams took Barnette to a point eight or ten miles from the mouth of the slough. They settled for a spot on the south bank, where the bank was high and the trees needed for fuel and building material were plentiful.

So began "Barnette's settlement", built in a day at the wrong place and at the wrong time of year. Captain Adams was anxious to leave as soon as Barnette was established. The days were getting shorter, and snow would fall within a month. The way Barnette saw it, he was in a far worse position, stranded on the bank of a shallow stream off the main river, hundreds of miles from where he wanted to be and with no hope of moving for at least a year. As the boat pulled away, Isabelle Barnette was crying and nearly hysterical. Mrs. Barnette always suffered from poor health, and she was not looking forward to spending a winter in the middle of Alaska!

The sun set that August 26, 1901, at 9:30 PM. Before the day was ended, Barnette had his first customers -- miners Felix Pedro and Thomas Gilmore. Before a year was up, Barnette abandoned his plans to move to Tanacross, for in July of 1902, Pedro discovered gold and Fairbanks was on its way to becoming a gold rush town.

Three days after the Lavelle Young tied up on the Chena in 1901, Barnette's men and ship's crew had erected a cabin plus six-foot high walls for a 26- by 54-foot warehouse, unloaded the freight and covered it with tents. The trading post was on a one acre site on the riverbank between what today is Cushman Street and Barnette Street. In July 1902, Pedro discovered gold in the hills just north of the trading post, and the word spread quickly. By 1903, Barnette had plotted a townsite and build a stockade around the property he kept for himself.

Had Barnette known that Pedro would discover gold to the north of Fairbanks, he would have been prudent to have built his trading post on the north bank of the river. But with the settlement to the south and the gold to the north, Fairbanks acquired a problem that plagued it for the first 15 years of its existence - the need to bridge the Chena River.

The first bridge was built at Cushman Street in 1904 or 1905, then a second was built at Wendell Street to the east of Barnette's cache. Ice and debris from spring breakup demolished both bridges and they were replaced by a new bridge at Turner street, one block west of Cushman. The bridge had a span that could be pulled back manually to permit steamboat traffic to pass. Each spring, the span could be pulled back during breakup so that only the pilings would be damaged by the flow of ice. In fact, the span was cumbersome and seldom used except during breakup. The Turner Street Bridge became the head of navigation.

Steamboat traffic was heavy during those early years. On any given day, six or eight of the giant boats may have been tied up along the waterfront.

In 1917, the Alaska Road Commission replaced the old wooden piling bridge with an all-steel bridge at Cushman Street. That bridge was in use until 1959 when the present concrete bridge was built. Barnette sold his trading post to the Northern Commercial Company in the spring of 1903, with a provision that he could continue to use it until 1904. The N.C. Company immediately built a two-story, 30 by 60-foot addition along with a 30 by 100 foot warehouse. That addition survived until 1989 and was eventually occupied by the Nordstrom department store. It was demolished in 1991 to make way for the parking lot at the corner of First Avenue and Barnette Street.

Begin the lesson by showing the numbered overheads, which correspond to the notes below:

1. The William Ransom Wood Centennial Bridge, dedicated September 5, 2003
2. Historical photo of the downtown area. The Cushman Bridge is shown, as is the old hospital (which is where the Doyon building is now) and the Catholic Church.
3. The bridge has an elegant design, enables boats, snow machines, dog teams, etc. to pass under it safely. There are no pilings in the water, only along the banks. The artwork for the bridge is at the beginning and end using colored concrete, the railing, and the retaining wall along the Doyon side of the bridge. We will talk about the artist, his artistic style, and then the artwork on the bridge.
4. Ron Senungetuk is the artist who created the artwork on the bridge. He was born in Wales, Alaska and received his art degree from Rochester Institute of Technology in metalsmithing and woodworking. In 1961, he received a Fulbright Scholarship to attend art school in Oslo, Norway. He returned to Alaska in 1965, and became the Director and a Professor of the Alaska Native Arts Center at the University of Alaska Fairbanks. He retired in 1986, and now lives in Homer. He has created many public works of art, including art at Badger Road Elementary, Noel Wien Public Library, FNSBSD Administration Building, and State Courthouse, to name a few. Ron uses his culture to influence his artwork. This shows how he incorporated images from the past into his contemporary work. The top one is from the past, probably 50 years ago. Most of the drawings from this period tell a story. This one tells of a very successful day hunting. In one day, the hunter got a seal, a caribou, and a duck. Ron uses the same symbolism in his contemporary carved wood panels.
5. *Life 2*, carved silver maple, 72"x108", collection of Alaska Native Medical Center. This work of art shows the principles of art you will be learning about today. Ron has used balance, rhythm, and unity in this work. He created rhythm by repeating the same shapes over and over. What shapes did he repeat? He also created balance in this work by having lots of small shapes balance a larger shape. Which sections balance each other? He also created unity by filling in each panel with part of the story. What story do you think he is telling here?
6. Ron used the same approach to design the artwork for the bridge. This shows how Ron's drawing uses symbolism from the past for the Doyon side of bridge. The long arrow shape is representational of hunting and a subsistence lifestyle. What else may the shapes symbolize?
7. The design looks like this on the bridge. The colors are mixed into the concrete.
8. Ron's drawing for the Fairbanks side of the bridge. This symbolism represents the future. Some of the images Ron used for depicting the future are a jet airplane,

gold pan, and sonic booms. Can you find them in this design? What else do you see?

9. The actual artwork.
10. The railing along the bridge is part of the artwork. Ron created a design that was inspired by the hills surrounding Fairbanks, and what they look like reflecting in the water.
11. Close up photo of railing.
12. The retaining wall on the Doyon side of the river and the artwork Ron designed for it. He chose to symbolize one of his favorite places in Fairbanks: Granite Tors. (This is a popular hiking area around Fairbanks.)

CREATE:

Students will be creating an abstract work of art based on the Centennial Bridge. The students will learn about balance, rhythm and unity. (Display vocabulary words on board.) Their artwork will be created from 100 pieces of paper to create a bridge.

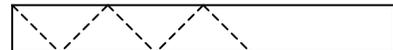
Students need:

Xeroxed copy of work mat
6" x 18" black const. paper
glue (white)
scissors

Have students select 5 paper strips from trays. Have students watch as you demonstrate how to cut strips, one at a time, into 20 shapes. Folding the strips in half first will speed up the process!

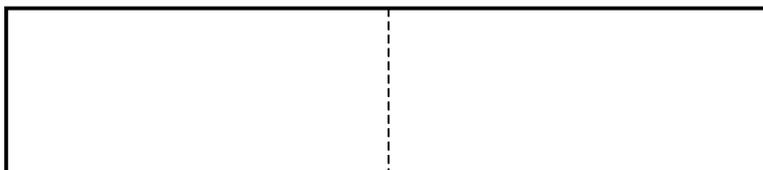
Demonstrate how to cut basic shapes:

- triangles (a diagonal cut across the strip and then alternate)
- squares
- rectangles
- circles (fold strip into smaller sections and cut 5 at a time)
- line segments (longer, thinner rectangles)

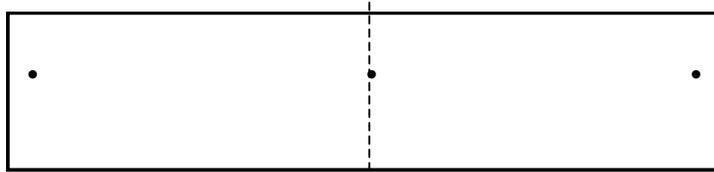


Each time a strip is cut, put the 20 pieces into one of the circles on the work mat. This will help students to stay organized.

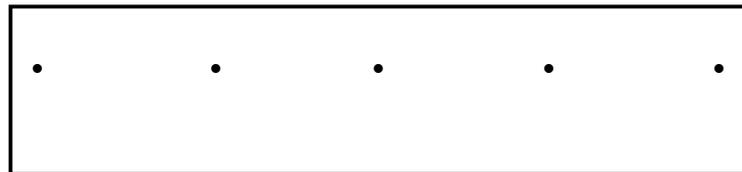
After cutting 100 shapes, students will now glue them across their black construction paper to make a "bridge". Gluing down the shapes so they are evenly spaced is challenging. Have them begin by folding their paper in half the "hamburger" way.



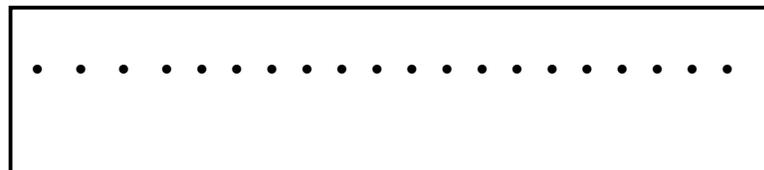
1. Students place a dot of glue at both ends of the paper and in the middle.



2. Place a dot of glue halfway between each of the dots.



3. Now space dots of glue between these to create a total of 20 dots



4. Students may now glue a group of 20 shapes to the row of dots. Once the first group of 20 is placed, the placing of the rest of the groups is easy. You can place shapes between shapes, overlap them, place them above or below to create your bridge. Continue gluing the groups of 20 until you reach 100!

5. Give your work the “shake test.” Shake your artwork gently. Glue on any piece that fall off.

CLOSE:

The finished artwork shows **rhythm** by repeating shapes, **balance** by bridging the two sides, and **unity** by using 100 pieces of paper! Have students complete the reflections worksheet and respond to the prompt at the bottom of the page. This activity can be extended as a more in depth writing exercise.

Teacher administered assessment tool

DN	OK	UP	Lesson_____ Teacher_____
			Grade_____ Date_____ Number of Students_____
			Using the thumbs up, ok, and down technique, ask your students the following questions and record their answers. (K=knowledge, S=skills, C= creativity, A=attitude, E=engagement)
			1. Can you name the artist who created the bridge? (K)
			2. Can you tell 3 things that happened that led to the establishment of Fairbanks? (K)
			3. Did you use 100 pieces of paper in your artwork? (S)
			4. Does your artwork bridge across the paper (S)
			5.. Did you add an imaginative touch to your art? (C)
			6. Did you actively listen and follow directions?(A)
			7. Did you do your best during this lesson?(E)

Teacher self-critique 8. My teaching of this lesson:

1
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9
10

needed improvement
was highly successful

9. What would I do differently next time?

ALIGNMENT:

Alignment of Standards:	
ART: A 1, 3,4, B 5, C 4, D 6	History A,B
Reading R2.3,6,7,10,11	Geography B,C,E,F
Writing W2.3	
Math 4N.6,10 M2.2, M5 2.5, M6.1	
M7 2.2, M8 2.2	

CREDITS:

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