



Lesson 1: Shapes & Patterns

* PRE-LESSON- Ask parents/grandparents if they have a traditional parka, photo of a person wearing a parka to share with the students.



Annie Wilson made this parka with Dolly Gust out of wolverine. All were done with measurements and no coping of a pattern (Alaska Digital Archives).

Objectives:

Students learn what a shape is and how to make a perfect square.

Essential Questions:

“What is a shape? What is a square? Where do we see shapes? What is a pattern?”

Alaska Native Values:

See connections-All things are related.
Know who you are- You are a reflection of your family.

Standards:

L21: Demonstrate eye hand coordination in different tasks

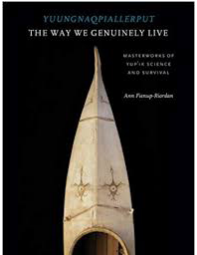
M1. Continues a simple pattern

M2. Knows basic shapes

M3 Describes and compares measurable

Promoting Culture Self Assessment:

I display pictures, posters and other materials that reflect the cultures and ethnic backgrounds of children and families served in my early childhood program or setting.

Whole Group	Community Walk	Music Center
<p>Materials:</p> <ul style="list-style-type: none"> Magnetic shapes (in kit) White board with parka outline Parka photo or a real parka brought from the classroom Scissors Lined paper (or smaller easy to cut paper for students) Text recommended: <i>The Way We Genuinely Live</i> for photo references. 	<p>Materials:</p> <ul style="list-style-type: none"> Camera or notebook to write down what students observe 	<p>Materials:</p> <ul style="list-style-type: none"> Drums or any musical instrument
<p>Activity: See lesson below.</p> 	<p>Activity: Take a walk around the community to look for shapes. Play “I Spy” looking for shapes such as a square, triangle, rectangle or a circle. Take pictures for a display in the classroom, or take notes to remember after your walk where you saw shapes. Encourage students throughout the week to find shapes at home or in the classroom.</p>	<p>Activity: Students practice making a pattern using sound. Example: With drum two beats close together, one apart.-Two beats together, one apart. Have student share their pattern during calendar or circle time and invite the rest of the class to copy their pattern (just drumming on their legs, table or desk).</p>

Activity: Shapes & Patterns



Engage: Whole Group Activity: Shapes, Patterns & How to Make a Square

Show photo of a parka from book, *The Way We Genuinely Live* page 313 or one brought in from the community. Engage: *“This is a parka! Parkas are often made from furs of animals to keep us warm in the winter. Sometimes there are patterns on the bottom or across the sides of the parka. These patterns are made from shapes cut out of different furs. See this pattern is a triangle, square, triangle, square...Its a pattern because it repeats. Lets look around at our clothes. Can anyone see a pattern? It can be a shape pattern or a color pattern.”* (Invite students to share patterns in the classroom).

“Now many of the shapes we are going to make this week are going to start from a square. A square is magical because it can be used to make a lot of different shapes so pay attention and watch because your going to learn how to make this magical shape and then practice making it once I show you.”

Demonstrate: Take a lined sheet of paper. Try making a square first without saying anything. Just have students watch and observe how you make the square. Then go back through together and talk about how you made it.

“I am going to use lined paper and starting from the corner I will fold this down and match the tip along the lines. Now before I fold the paper together I want to make sure that the line looks straight.” Demonstrate with your paper. *“OK now it looks pretty straight I’m going to fold the paper like this so it looks like a triangle then I’m going to cut along the triangle.”* Cut along the triangle. *“Now I’ll open up the shape and look I made a square! A square is a shape that has all the sides the same length. One side is not bigger than the other side it is exactly the same. Let’s count the sides to see how many sides a square has..(Point and count to show the sides) 1, 2, 3, 4..”*



Explore: Touch, Agturu, Agtur, Vandanihit

Activity : Give students a paper to make their own squares. Allow them to struggle or problem solve before correcting them right away. See how many students can make a square. When students make a square test the rules of a square to determine if it is in fact a square.

Sort all the successful squares and non-squares.



Explain: Talking, Niugtuk, Qalarte, Qenax

Explain: *“This is a square because it has four sides (count the sides to demonstrate). AND all the sides are the same or equal in size. Squares can be all different sizes like the ones we made today. But they all have equal sides and they all have 4 sides.”*

Evaluation

Emerging: Students did not participate.	Developing: Student tried making squares but need more practice.	Proficient: Student can correctly identify the properties of a square	Advanced: Students can make a square and they can also properly identify a square.
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