Program: Lyndale Education Program
Course/Setting: AM Beginner ESL class, Wells Fargo bank
Lesson Title: ***Grouping w/5s; Describing and Distinguishing Shapes***
Unit Title (Optional): n/a

NRS Level(s): 0-1 **Content Area(s):** ESL **Length of Lesson (e.g., hours, days):** 75 minutes

Lesson Objective(s):
-Practice forming groups of five and grouping other numbers with 5
-Acquire vocab used to describe flat shapes (shape, side, corner, curve, point, round)
-Distinguish and describe flat triangles, squares, rectangles, hexagons and circle using informal language without naming; correlate them to real-life objects

Coherence:
Prerequisite or foundational content students need to succeed in the lesson:
-naming numbers in English
-counting

Description of how the content of the lesson is related to other content taught at the lesson's level:
-builds on students' use of number names and counting in English; sorting by type
-prepares students to differentiate shapes by names; once names are added, correlate them to real-life objects
-prepares students' foundation for abstract arithmetic

Components of Rigor:
_x_ Conceptual Understanding
_x_ Procedural Skill and Fluency
_x_ Application

CCR Standard(s):*Primary Standard(s) (1-2 per lesson):*

K.G.4 - Analyze, compare, and create compose shapes. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/ "corners") and other attributes (e.g., having sides of equal length).

Supporting Standard(s): n/a

ACES TIF Skill(s):
EC.2.a; LS.1.a, LS.2.a/b; CT.1.b; SM.1.c/e

Northstar Digital Literacy Standard(s): n/a

Common Career and Technical Core Standards: n/a

Standards for Mathematical Practice: *Only select the 2-4 practices that are central to the lesson*

__MP 1: *Make sense of problems and persevere in solving them*
__MP 2: *Reason abstractly and quantitatively*
__MP 3: *Construct viable arguments and critique the reasoning of others*
__MP 4: *Model with mathematics*
__MP 5: *Use appropriate tools strategically*
_x_MP 6: *Attend to precision*
_x_MP 7: *Look for and make use of structure*
__MP 8: *Look for and express regularity in repeated reasoning*

Level(s) of Knowing:

_x_Intuitive: *Linking to what students already know*
_x_Concrete: *Moving manipulatives*
_x_Pictorial: *Drawing pictures*
_x_Abstract: *Writing with symbols and numbers*
_x_Application: *Applying to different situations*
_x_Communication: *Explaining concepts, process and/or solutions to others*

Materials:

-beans, 5-count strips
-draw 5 worksheets
-large teacher dot-cutouts to demonstrate 5-groups
-baggies with shapes, T-charts, glue sticks
-application worksheet
-teacher large shapes

Potential Barriers to Student Learning: (Process, Product, Content, Environment, Misconceptions)

-ss will be learning and using new vocabulary to describe shapes, this can be a challenge

Adaptations and/or Accommodations:

-ESL instruction using visuals and worksheet re: shape vocab
-arranging activities so less mobile ss can stay in seats
-worksheet/demo applies shapes to real adult contexts rather than abstract shapes
-beans (can't afford fancy counters!)
-changed shape application worksheet to include images relevant to real life, added drawing assessment

Key Math Terms:

-Shape, side, curve, point, corner, round, flat
-count

Academic Vocabulary and Additional Language Demands:

-match, glue, sort, chart, draw

Teacher Reflection

Notes for next time:

Lesson Objective(s):	At the end of this lesson, students will be able to: add to groups of five, describe and differentiate abstract flat shapes and compare them to shapes seen in their lives (without naming them)
Assessing Mastery of the Objective(s): *(Indicate <u>when</u> and <u>how</u> assessment will occur during the lesson)*	By the end of this lesson, the students will be able to add other numbers to equal and in addition to 5 as evidenced by *<u>showing the groups with fingers and telling me the sum and drawing numbers missing from a group to make 5</u>*. They will be able to <u>look at a shape and say how many sides, corners and points it has or whether it's curved</u> as evidenced by <u>saying it verbally, sorting it by category or drawing it when prompted.</u>
Student Learning Target(s):	"I can add numbers to make 5. I can add 5 to other numbers." "I can talk about what different shapes look like and how they are the same or different."
Introduction: (6 minutes)	We're going to talk today about counting numbers and different shapes. **Making 5 with 5-Group Strips [*hand out strips and beans*]** T: Touch and count your beans. S: 1, 2, 3, 4, 5. T: Touch and count the dots on your paper. S: 1, 2, 3, 4, 5.
Explanation & Modeling:	T: Our job is to make 5. Put 4 beans on the dots of your paper. *(Check to see that students place the beans from left to right without skipping any dots.)* Tell me when you know how many more you need to make 5. S: 1. T: We can tell how to make 5 like this: 4 and 1 make 5. Can you please repeat? S: 4 and 1 make 5. *Continue working through the decompositions of 5 in a systematic way. As students begin to demonstrate mastery, scale back the amount of guidance: "Show me X beans; what should we say?"* ***[Gather beans]***
Guided Practice: (8 minutes)	**Draw More to Make 5** Model how to add different numbers to make five by drawing circles. ***[hand out worksheet]*** Complete the first few problems together. Allow students time to work independently.

	Independent Practice:	Allow students time to work independently. Have a couple early finishers complete problems on board. Check together as a whole group.
	Guided Practice: (6 minutes)	**5-Group Hands** T: *(Practice holding up cards 1-5, have students tell me how many dots by holding up fingers. Show the 6-dot card.)* Raise your hand when you know how many dots are on top. S: 5. T: Bottom? S: 1. T: We can show this 5-group on our hands. Five on top, 1 on the bottom, like this. *(Demonstrate on hands, one above the other, as shown to the right.)* S: *(Show 5 and 1 on hands, one above the other.)* T: Push your hands out as you count on from 5, like this. 5 *(extend the top hand forward)*, 6 *(extend the bottom hand forward).* Try it with me. S: 5 *(extend the top hand forward)*, 6 *(extend the bottom hand forward).* *Continue with 5, 6, and 7, etc. steadily decreasing guidance from the teacher, until students can show the 5-groups on their hands with ease.*
	Independent Practice: (5 minutes)	*Hand out whiteboard dice numbered 5-10; have students pair up and practice doing 5-groups with their hands. This is an activity helps add more practice.*

	Introduction: (10 minutes)	T: Now we're going to talk about some shapes and do more counting. (Hold up stop sign). What is this? What does it mean? How do we know it's a stop sign? S: (color, word "stop"). (It may help to draw the description out a bit, since students are used to identifying its real-life application.) T: Also, it has many sides. *(Count with students, explain "side").* And how many corners does it have? *(Count with students, remind them about corners. Place with outline of octagon on board, label with "side" and "corner".)* **[Hand out shape outlines worksheet].** *Students copy "side" and "corner" on octagon.* *Repeat with coin/circle (curve and round) and sambusa/triangle (point, side); students copy terms*. T: All of these are called "shapes". Shapes can have 3 sides or 4 sides or 20 sides! They can be curved or round or have points. (We label the worksheet "shapes".) This section helps preview the vocab. Depending on your classroom, you may need to skip the part in the lesson about finding the shapes in 3D objects around the room for time, or if your room is pretty plain.
	Explanation & Modeling: (4 minutes)	*Hold up large shapes and have students identify their traits (number of sides, corners, curves and points)*
	Guided Practice: (8 minutes)	[Hand out baggies with shapes]. T: Put all your shapes out on the table. *(Select large shape.)* Look at my shape. Can you find the one that looks like mine? *(Affix the shape to the board, students find their shape and hold it up)* Tell me about the shape. (Students describe.) T: Look at your shapes. What is the same about all of them? (Responses will vary.) Now, bend down so that you are looking across the edge of the table. Can you see your shapes now? Are any of them standing up? *(talk about how they are all flat shapes.)*
	Independent Practice: (18 minutes)	*Model sorting shapes on board (curve/no curve), ask students to sort.* *Have the students come up to the board and model sorting shapes.* ***[Flip over draw-to-5 worksheet]*** *Monitor and once they master, have them compare with a partner to check. Then give them glue sticks and have them glue them down).*

	Student Reflection on Learning, Closure, Connection (10 minutes)	***[Hand out application/assessment worksheet].*** T: What is this? *(point to first object)* S: Pizza. *(Continue with other objects, have students draw a line matching shape to real-life object-I handed them two more relevant real-life shapes)* ***[Flip over to drawing chart]*** T: Now we're going to draw shapes. *(Model drawing first problem--or have student do it. Students complete rest of chart—see if they get the 1-sided circle? This is an activity I created to bring the activity to a higher level of knowing math).* *-Students may need another scaffolding step before free-hand drawing a shape. If so, have them pick out a shape with the right number of sides and trace it for each category.* Have students use *"I can"* statements to go over and review what was learned. Did students like doing math? Thank and encourage all students for their hard work—have a great day!