

NAME: Jessica Moreno
SUBJECT: Mathematics
GRADE LEVEL: 1 st
TIME FRAME: 60 minutes
TITLE OF LESSON 1: Greedy Shapes

RATIONALE: The ability for students to recognize shapes is important for life, home, school, work, and social skills. Exploring shapes helps students develop geometry skills for later grades. Students must be able to identify and distinguish different attributes of 2D and 3D shapes. As well as distinguishing non-defining attributes of a shape. Students will be building their knowledge about shapes as well as building and drawing those defining attributes. This lesson focuses on the knowledge of defining attributes to build and draw different 2D shapes. Students will also need to be able to create a composite shape to form new composite shapes that are 2D or 3D in later lessons.

COMMON CORE STANDARDS TO BE ADDRESSED:

CCSS.Math.Content.1.G.A.1.Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

OBJECTIVES:

Students will be able to define attributes of different shapes.

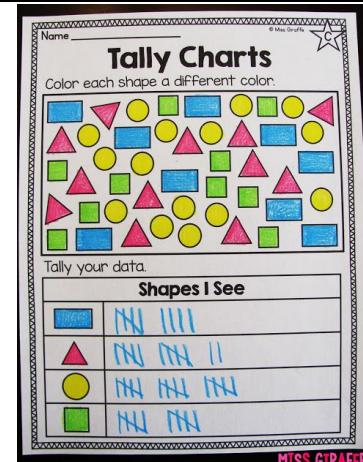
ASSESSMENT:

Formative- Students will have an exit ticket: What 2D shapes where in the story? **Performance Goal:** 80% of all students.

DIFFERENTIATION/ACCOMMODATIONS:

Struggling Learners:	<ul style="list-style-type: none"> Provide additional resource links on Google Classroom for: Different attributes of specific shapes (circle, oval, square, rectangle, parallelogram, trapezoid, rhombus, hexagon, octagon, pentagon, triangle). Provide scaffolding sentence starters when discussing Anchor chart: Examples: <ul style="list-style-type: none"> “Since we know that a square almost looks like a rectangle, they will have the same amount of..?” “Since we know that a circle has no sides or faces we know that the oval will..?” “Octa means 8 so how many sides do you think it has..?”
-----------------------------	---

	<ul style="list-style-type: none"> Provide a Geometry Vocabulary Word Wall with the words: circle, oval, square, rectangle, parallelogram, trapezoid, rhombus, hexagon, octagon, pentagon, triangle
ELL Learners:	<ul style="list-style-type: none"> Give vocab terms and definitions before lesson with visuals circle, oval, square, rectangle, parallelogram, trapezoid, rhombus, hexagon, octagon, pentagon, triangle Provide translations in students native language of shapes: circle, oval, square, rectangle, parallelogram, trapezoid, rhombus, hexagon, octagon, pentagon, triangle, and Attributes: Slide, Corner, Vertices If possible, provide videos in their language of different shapes Ex: https://www.youtube.com/watch?v=gGBeyG1BKUY&list=PLhnf5h4R5AXjevAauRVM517r7hJsv8ern
Highly Proficient Learners:	<ul style="list-style-type: none"> Have students draw shapes in different sizes on a blank piece of paper Allow students to do time extra activities if done early Ex: Tally Chart Worksheet Provide online links to games and songs in Google Classroom if finished early with project: https://www.education.com/games/geometry/ https://www.turtlediary.com/games/geometry.html
ADHD:	<ul style="list-style-type: none"> Provide comfort item when listening to story Provide flexible seating during independent work time Provide calm music during independent work time Establish teacher and student signal for specific task, Ex: Thumbs Up = Student understand information/question



PROCEDURES FOR THE INTRODUCTION OF THE LESSON:

Time:	Teacher:	Student:
5-10 minutes	<ul style="list-style-type: none"> • Have students meet at the family rug • Introduce our new unit: • Ask: “Where do we see shapes? Are they only found in school, at home, or at the zoo?” • Listen to the song about 2D shapes: https://www.youtube.com/watch?v=24Uv8Cl5hvl • Have students get up move, dance, or make shapes with arms 	<ul style="list-style-type: none"> • Sit at the family rug • Answer questions • Listen to the song https://www.youtube.com/watch?v=24Uv8Cl5hvl • Get up and dance!

INSTRUCTIONAL ACTIVITIES: Guided Practice

Time:	Teacher:	Student:																																																
25-30 minutes	<ul style="list-style-type: none"> • Have students grab a clipboard and pencil • Have students come back to the rug • Pass out copy of Anchor Chart for students to fill out • While sitting at the rug fill out Anchor chart and have discussion on 2-D Shapes with students • Discuss definition of each shapes and their attributes: Circle, Oval, Triangle, Square, Rectangle, Parallelogram, Rhombus, Trapezoid, Pentagon, Hexagon, Octagon • When discussing each shape draw a picture of the shape next to the word when discussing the attributes of each shape • When discussing each shape point to the sides and vertices on shape drawing 	<ul style="list-style-type: none"> • Listen to teacher directions: Grab clipboard and pencil • Come back and sit on the rug and wait for teachers next directions • Place copy of a graphic organizer in clipboard <p>Ex: Student Anchor Chart</p> <table border="1"> <thead> <tr> <th>Shape</th> <th>Sides</th> <th>Vertices</th> <th>Looks Like</th> </tr> </thead> <tbody> <tr> <td>Circle</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Oval</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Triangle</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Square</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rectangle</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Parallelogram</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rhombus</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Trapezoid</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pentagon</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Hexagon</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Octagon</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Shape	Sides	Vertices	Looks Like	Circle				Oval				Triangle				Square				Rectangle				Parallelogram				Rhombus				Trapezoid				Pentagon				Hexagon				Octagon			
Shape	Sides	Vertices	Looks Like																																															
Circle																																																		
Oval																																																		
Triangle																																																		
Square																																																		
Rectangle																																																		
Parallelogram																																																		
Rhombus																																																		
Trapezoid																																																		
Pentagon																																																		
Hexagon																																																		
Octagon																																																		

- Example of 2D Anchor Chart

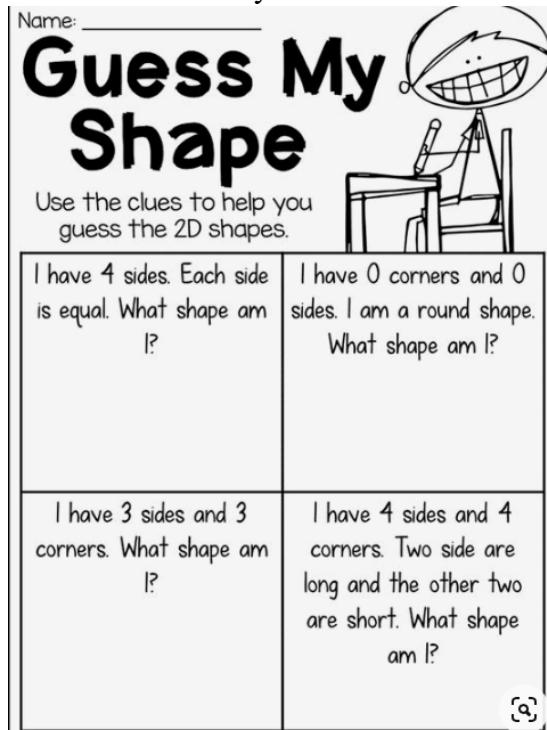
SHAPE	SIDES	VERTICES	LOOKS LIKE
circle	0	0	clock pizza
oval	0	0	egg ring
triangle	3	3	yellow sign envelope cheese
square	4	4	flag frame dollar bill
rectangle	4	4	eraser book
parallelogram	4	4	kite
rhombus	4	4	purse basket
trapezoid	4	4	soccer ball sign
pentagon	5	5	honeycomb end of 4 pencils
hexagon	6	6	stop sign
octagon	8	8	

- Fill Anchor Chart with Teacher
- Fill in the number of sides for each shape
- Fill in the number of vertices for each shape
- Draw an example of each shape

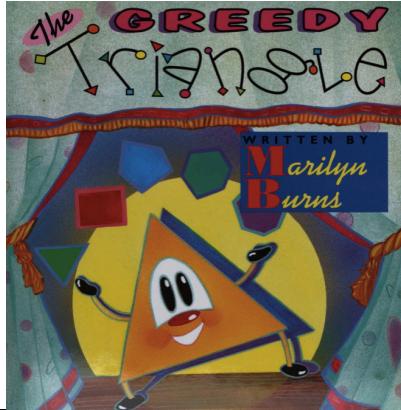
INDEPENDENT WORK:

Time:	Teacher:	Student:
15-25 minutes	<ul style="list-style-type: none"> Have students sit back at their desk and fill out real life example column for each shape Give examples to start off students: Ex: Stop signs for octagon Write directions on board: <ol style="list-style-type: none"> Please fill out the last Column in your chart that says <u>Look Like</u> Make sure to add some color! Stay on Task and If you have a question Raise Your Hand! Play music while students work 	<ul style="list-style-type: none"> Go back to my desk Work on shape examples in <u>Look Like</u> Column Turn in to teacher when finished If I have extra time work on “extra time activities”: Guess the Shape or Google Classroom

- If students are stuck pull up some examples on Smart Board
- If students finish early they can work on Google Classroom or “Extra Time” activities:
- Ex: Extra Time Activity



PROCEDURES FOR THE CLOSING OF THE LESSON:

Time:	Teacher:	Student:
10-15 minutes	<ul style="list-style-type: none"> • Read the story: The Greedy Triangle by Marilyn Burns • Ask students to complete Exit ticket question: “What 2D shapes where in the story?” 	<ul style="list-style-type: none"> • Listen to the teacher read the story “Greedy Triangle” by Marilyn Burns • Answer Exit ticket question “What 2D shapes where in the story?” • Turn in when I am done

INSTRUCTIONAL RESOURCES AND MATERIALS:

- **Self-Created:** Student Anchor Chart

Shape	Sides	Vertices	Example
Circle			
Oval			
Triangle			
Square			
Rectangle			
Parallelogram			
Rhombus			
Trapezoid			

Pentagon			
Hexagon			
Octagon			

• **Answer Key:**

Shape	Sides	Vertices	Looks Like
Circle	0	0	Pizza
Oval	0	0	Egg
Triangle	3	3	Cheese
Square	4	4	Picture Frame
Rectangle	4	4	Window
Parallelogram	4	4	Roof
Rhombus	4	4	Kite
Trapezoid	4	4	Purse
Pentagon	5	5	Soccer Ball Pattern
Hexagon	6	6	Honey Comb
Octagon	8	8	Stop Sign

- 2D Song: https://www.youtube.com/watch?v=6bMf9Lx_rpQ
- ELL Resource: <https://www.youtube.com/watch?v=gGBeyG1BKUY&list=PLhnf5h4R5AXjevAauRVM517r7hJsv8ern>
- Anchor Chart: <https://luckylittlelearners.com/activities-for-teaching-geometry/>
- Book: The Greedy Triangle by Marilyn Burns
- High Proficient Student Resource: <https://www.pinterest.com/pin/457959855841934378/>

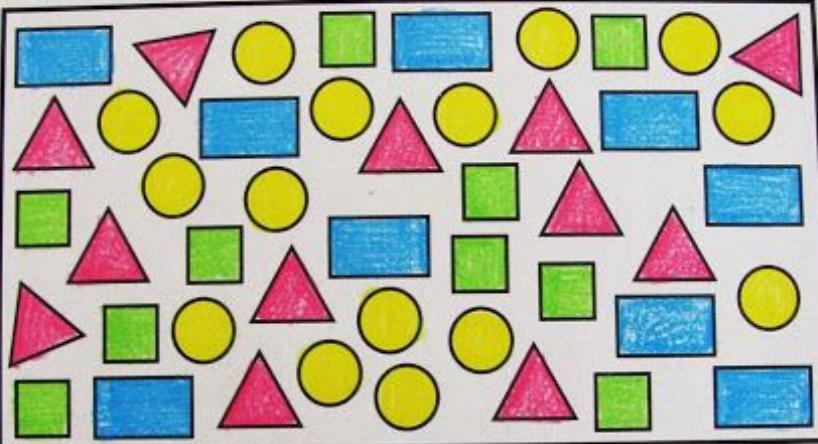
Name _____

© Miss Giraffe



Tally Charts

Color each shape a different color.



Tally your data.

Shapes I See

- Extra time Resource: <https://www.pinterest.com/pin/305681893451453259/>

Name: _____

Guess My Shape



Use the clues to help you guess the 2D shapes.

I have 4 sides. Each side is equal. What shape am I?	I have 0 corners and 0 sides. I am a round shape. What shape am I?
I have 3 sides and 3 corners. What shape am I?	I have 4 sides and 4 corners. Two side are long and the other two are short. What shape am I?

[Answer box for the last question]

- **Answer Key:**

Name: _____

Guess My Shape

Use the clues to help you guess the 2D shapes.



I have 4 sides. Each side is equal. What shape am I?



I have 0 corners and 0 sides. I am a round shape. What shape am I?



I have 3 sides and 3 corners. What shape am I?



I have 4 sides and 4 corners. Two sides are long and the other two are short. What shape am I?



REFLECTION:

Where do you anticipate students will have difficulty?

- Name of shapes: circle, oval, square, rectangle, parallelogram, trapezoid, rhombus, hexagon, octagon, pentagon, triangle,
- Number of vertices for each shape: circle, oval, square, rectangle, parallelogram, trapezoid, rhombus, hexagon, octagon, pentagon, triangle
- Number of sides for each shape: circle, oval, square, rectangle, parallelogram, trapezoid, rhombus, hexagon, octagon, pentagon, triangle

What are some questions students might ask?

- Why are polygons important?
- How are shapes made?
- What are 2D or 3D shapes?

What comes next in the following lesson?

- Continue: CCSS.Math. Content.1. G.A.1.Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.
- Further learning on 2D shapes: circle, oval, square, rectangle, parallelogram, trapezoid, rhombus, hexagon, octagon, pentagon, triangle
- CCSS.Math. Content.1.2 G.A. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.

NAME: Jessica Moreno
SUBJECT: Geometry
GRADE LEVEL: 1 st
TIME FRAME: 60 minutes
TITLE OF LESSON 2: Marshmallow Shapes!

RATIONALE: The ability for students to recognize shapes is important for life, home, school, work, and social skills. Exploring shapes helps students develop geometry skills for later grades. In later grades, students will be exploring about finding area, perimeter, and subconference for shapes. Students must be able to identify and distinguish different attributes of 2D and 3D shapes in current grade. As well as distinguishing non-defining attributes of a shape. Students will be building their knowledge about shapes as well as building and drawing those defining attributes. This lesson focuses on the knowledge of defining attributes to build and draw different 2D shapes. Students will also need to be able to create a composite shape to form new composite shapes that are 2D or 3D in later lessons.

COMMON CORE STANDARDS TO BE ADDRESSED:

CCSS.Math.Content.1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

CCSS.Math.Content.1.G.A.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.

OBJECTIVES:

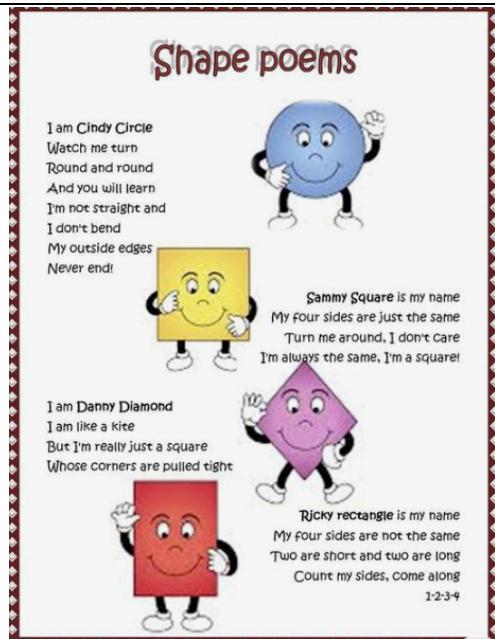
Students will be able to build 2D shapes to possess defining attributes.

ASSESSMENT:

Formative- Marshmallow project- **Performance Goal:** 80% of all student

DIFFERENTIATION/ACCOMMODATIONS:

Struggling Learner:	<ul style="list-style-type: none">• Have directions on Smart Board for Marshmallow Project <p>Directions:</p> <ol style="list-style-type: none">1.Pick 6 shapes2.Write each of your shape's name on your worksheet in the box where it says “Shape: _____”3. Raise your hand once your table has finished writing all of the shapes their going to build (Once each table has selected their shapes, teacher will pass out materials).4. Fill out the number of sides and vertices your shape has on your worksheet4.Raise your hand for teacher to come check work5.Make sure your name is on the project6.Put shapes in zip lock bag to take home <ul style="list-style-type: none">• Model how to do Marshmallow Project• If student is struggling and getting frustrated, allow them to make three shapes not six shapes
ELL:	<ul style="list-style-type: none">• Provide directions for Marshmallow Project in native language• Demonstrate how to construct shape with the marshmallows and pretzels one on one the day before• Allow students to work at back table with teacher for one on one help
Highly Proficient:	<ul style="list-style-type: none">• Allow students to help others if done early• Allow extra resources on Google Classroom• If done early read Shape poem and create your own:



Visual Impairment:	<ul style="list-style-type: none"> • Have Marshmallow Project directions printed in large text • If needed have student, make one shape instead of six for Marshmallow Project • Allow bigger marshmallows instead of mini marshmallows and as well as bigger pretzels instead of mini
---------------------------	---

PROCEDURES FOR THE INTRODUCTION OF THE LESSON:

Time:	Teacher:	Student:
10-15 minutes	<ul style="list-style-type: none"> • Have a sticky note (Post-it Note) discussion about what they learned last lesson: Students will answer the question on two different colored sticky notes and post them on the white board • Ask students to answer on a Pink sticky note “How we define a shape” • Ask students to answer on a Blue sticky note: “Name attributes that are not important when defining a shape” • After all students have submitted their answers on the white board • Read different answers to both questions and have a class discussion 	<ul style="list-style-type: none"> • Answer first question on Pink sticky note and post on it on board • Possible Answers: Sides and Vertices • Answer second question on Blue sticky note and post it on the board • Have a class discussion about the two questions • Ask any questions about the two questions

	<ul style="list-style-type: none"> If students have not mastered important and non-important attributes review concept on important attributes vs non important attributes 	
--	--	--

INSTRUCTIONAL ACTIVITIES: GUIDED PRACTICE:

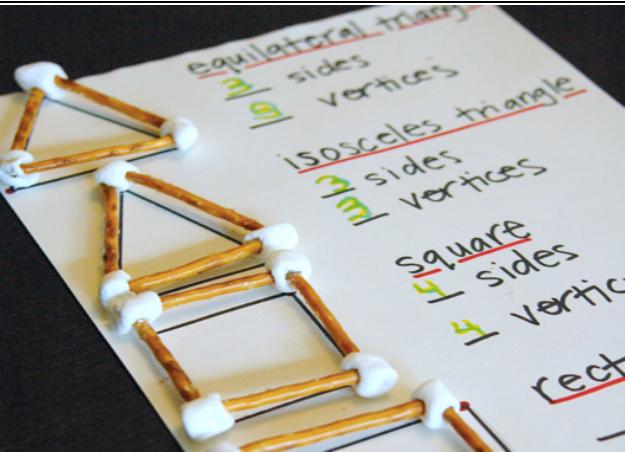
Time	Teacher:	Student:
20-25 minutes	<ul style="list-style-type: none"> Show students real examples of shapes through objects and pictures  <ul style="list-style-type: none"> Ex: triangle Hold up a picture/object of a Triangle Ask: "What is the name of this shape?" Ask students while pointing at the sides: "How many sides does this shape have?" Ask while pointing to the corners: "How many corners does this shape have?" Ask: "What is another name for corners?" Explain that corners can also be called Vertices Hold up an object/picture of a square Ask: "What is this shape?" Ask students while pointing at the sides: "How many sides does this shape have?" Hold up an object/picture of a rectangle Ask: "What shape is this?" Ask a volunteer to point to the sides and vertices 	<ul style="list-style-type: none"> Think and look at the shape in teacher's hand Look at the sides and there are 3 sides if I count Look at the corners and count there are 3 vertices too Look at object and see it is a square Look at the sides and count there are 4 sides and vertices Look at the object and see it is a rectangle Point to the sides and vertices Other students (not the volunteer) watching volunteer point to sides and vertices Look at the object and see it is a pentagon Volunteer will point to 5 sides and vertices Other students will watch and count sides and vertices

	<ul style="list-style-type: none"> • Hold up an object/picture of a pentagon • Ask: "What shape is this?" • Ask a volunteer to point to sides and vertices • Tell students Penta means 5 • Repeat the same steps for: Circle, Oval, Octagon, Rhombus, Trapezoid, Parallelogram, Hexagon 	
--	---	--

INDEPENDENT WORK:

Time	Teacher	Student
25-30 minutes	<p>Introduce/Explain the Marshmallow Project and Rubric:</p> <p>Marshmallow Project Directions:</p> <ol style="list-style-type: none"> 1. Pick 6 out of the 11 shapes to build 2. Write each shape name in box before you build on your worksheet 3. While you build each shape fill out the number of sides and vertices your shape has 4. When your finished raise your hand for teacher to come check work 5. Make sure your name is on the project worksheet 6. Put shapes in zip lock bag to take home 	<ul style="list-style-type: none"> • Listen to instructions • Ask any questions about directions on project • Begin project once I have my materials • Raise my hand have teacher check work before I turn it in

- Example of Project:



- Rubric:

Graphing : Marshmallow Project

Teacher Name: **Mrs. Moreno**

Student Name: _____

CATEGORY	4	3	2	1
Name of Shapes	Student names all 6 different shapes correctly.	Students name 4 or 5 out of the 6 shapes correctly.	Students name 3 or 2 out of the 6 shapes correctly.	Student names 1 or none of the shapes correctly.
Vertices	Student names all 6 different shapes vertices correctly.	Student names all 4 or 5 different shapes vertices correctly.	Student names all 3 or 2 different shapes vertices correctly.	Student names 1 or none of the different shapes vertices correctly.
Sides	Student names the correct amount of sides of all 6 different shapes a correctly.	Student names the correct amount of sides of all 4 or 5 different shapes a correctly.	Student names the correct amount of sides of all 3 or 2 different shapes a correctly.	Student names the correct amount of sides of 1 or none of the different shapes a correctly.

- (Modify project to not include equal lateral, isosceles, and scalene attributes.)
- Worksheet will be on construction paper:

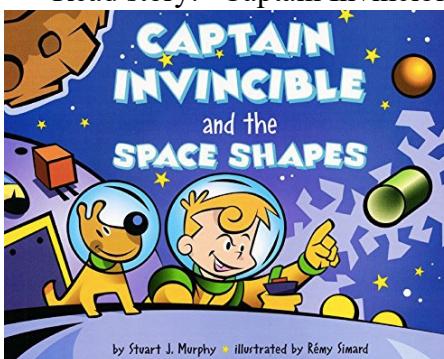
1. Shape:	Name of Shape: Number of Sides: Number of Vertices:
2. Shape:	Name of Shape: Number of Sides: Number of Vertices:
3. Shape:	Name of Shape: Number of Sides: Number of Vertices:
4. Shape:	Name of Shape: Number of Sides: Number of Vertices:
5. Shape:	Name of Shape: Number of Sides: Number of Vertices:
6. Shape:	Name of Shape: Number of Sides: Number of Vertices:

- Pass out Project worksheet

- Teacher will distribute materials to each table once everyone in their team has written which shapes, they are building
- Sit in the back tables with students who need extra help
- Walk around room to make sure everyone is on task
- Check work and give zip lock bags to students who are finished to put shapes in.
- If students finish early, they may work on building shapes with popsicle sticks:



PROCEDURES FOR THE CLOSING OF THE LESSON:

Time:	Teacher:	Student:
5 -10 minutes	<ul style="list-style-type: none">• Read story: "Captain Invincible and the Space Shapes" by Stuart J. Murphy• Have a class discussion: "Do you notice something different about these shapes?"	<ul style="list-style-type: none">• Answer question about the book Captain Invincible and the Space Shapes by Stuart J. Murphy: "Do you notice something different about these shapes?"• Possible answers: They look bigger, they are realistic,

INSTRUCTIONAL RESOURCES AND MATERIALS:

- Real Shape Examples: <https://youclevermonkeyshop.com/collections/math/products/2d-shape-posters-with-real-life-photos>
- Activity: https://www.playdoughtoplatoto.com/learning-shapes-marshmallow-geometry/#_a5y_p=1933617
- Mini Marshmallows
- Stick Pretzels
- Zip Lock Bags
- Extra Activity: <https://planningplaytime.com/product/kindergarten-math-shapes>
- Popsicle sticks
- Task Cards
- Shape Poem: <https://www.pinterest.com/pin/460774605625213631/>
- Captain Invincible and the Space Shapes By Stuart J. Murphy
- Rubric: <http://rubistar.4teachers.org/index.php?ts=1583259554>
- Self-Created Project Outline-

1. Shape:	Name of Shape: Number of Sides: Number of Vertices:
2. Shape:	Name of Shape: Number of Sides: Number of Vertices:
3. Shape:	Name of Shape: Number of Sides: Number of Vertices:
4. Shape:	Name of Shape: Number of Sides: Number of Vertices:
5. Shape:	Name of Shape: Number of Sides: Number of Vertices:
6. Shape:	Name of Shape: Number of Sides: Number of Vertices:

REFLECTION:

Where do you anticipate students will have difficulty?

- Some students may have difficulty building shapes with the pretzels and marshmallows
- Have trouble remembering all of the shape attributes: Vertices and Sides

What are some questions students might ask?

- Why are shapes important?
- Are there other types of shapes?

What comes next in the following lesson?

CCSS.Math.Content.1.2 G.A. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.

- 3D shapes: Cone, Cylinder, Pyramid, Rectangle Prism, Cube, Sphere, Triangular Prism

NAME: Jessica Moreno
SUBJECT: Mathematics
GRADE LEVEL: 1 st
TIME FRAME: 60 minutes
TITLE OF LESSON 3: 3D World

RATIONALE: The ability for students to recognize shapes is important for life, home, school, work, and social skills. Exploring shapes helps students develop geometry skills for later grades. In later grades, students will be exploring about finding area, perimeter, and subconference for shapes. Students must be able to identify and distinguish different attributes of 2D and 3D shapes in current grade. As well as distinguishing non-defining attributes of a shape. Students will be building their knowledge about shapes as well as building and drawing those defining attributes. This lesson focuses on the knowledge of defining attributes to build and draw different 2D shapes. Students will also need to be able to create a composite shape to form new composite shapes that are 2D or 3D in later lessons. This skill is important to understand how to compose different shapes which we will be doing in this lesson with 3D shapes specifically.

COMMON CORE STANDARDS TO BE ADDRESSED:

CCSS.Math.Content.1.G.A. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.

OBJECTIVES:

Students will be able to define 3D shapes.
Students will be able to create a 3D shape.

ASSESSMENT:

Formative- My 3D Shapes: Cone, Cylinder, Pyramid, Rectangle Prism, Cube, Sphere, Triangular Prism

Performance Goal: 90% of all students.

DIFFERENTIATION/ACCOMMODATIONS:

Struggling:	<ul style="list-style-type: none">Provide real life examples of shape in Google Classroom for students to reference: Cone, Cylinder, Pyramid, Rectangle Prism, Cube, Sphere, Triangular PrismProvide Videos & Songs on Google Classroom Ex: https://www.youtube.com/watch?v=ZnZYK83utu0&t=6sWhen doing turn and talk exercise have student pair up with High Proficient student
ELL:	<ul style="list-style-type: none">Have word wall with all geometry vocabulary: Cone, Cylinder, Pyramid, Rectangle Prism, Cube, Sphere, Triangular PrismProvide online resources and videos on Google Classroom about each shape in native language: Cone, Cylinder, Pyramid, Rectangle Prism, Cube, Sphere, Triangular PrismTranslate shapes in native language: Cone, Cylinder, Pyramid, Rectangle Prism, Cube, Sphere, Triangular Prism into native language
Highly Proficient:	<ul style="list-style-type: none">Provide online games on Google Classroom if they finish early: http://www.mathgames.com/skill/1.1-identify-shapes-iProvide books for students to read about 3D shapes if finished earlyAsk students to create a list of 3D shapes in the classroom
Anxiety:	<ul style="list-style-type: none">Provide additional time for assignmentPreview activity day before

- | | |
|--|--|
| | <ul style="list-style-type: none"> • Flexible Seating- Allow student to sit in preferred area during lesson • Provide Signal student hand signal to take a break |
|--|--|

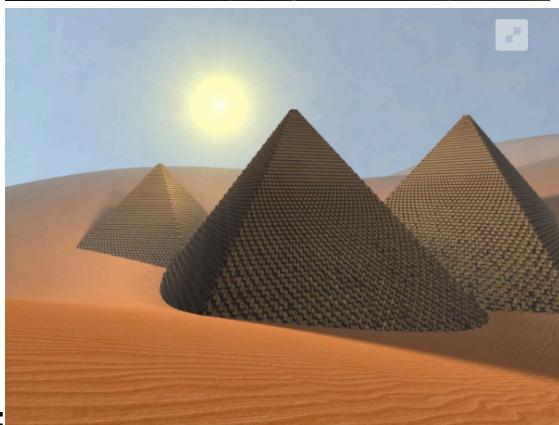
PROCEDURES FOR THE INTRODUCTION OF THE LESSON:

Time:	Teacher:	Student:
5-10 minutes	<p>Teacher:</p> <ul style="list-style-type: none"> • Start by showing real life 3D examples to students: • Directions to students: “After looking at each picture turn and talk to your buddy and think about the shapes in the picture, and then we will discuss as a class what we came up with”  <ul style="list-style-type: none"> • Picture #1 <ul style="list-style-type: none"> - Show a picture of this ice cream cone - Ask students to turn and talk with a buddy about the ice cream cone and what shape it looks like? - Discuss what students can come up with and what they think and why • Repeat Previous steps for picture 2 and 3 	<p>Student:</p> <ul style="list-style-type: none"> • Listen to directions • Talk to a buddy and discuss each picture with buddy and then class • Possible answers: Triangle, Circle, oval

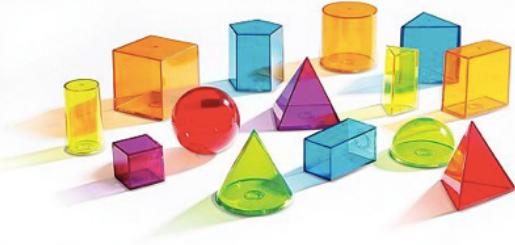
- Picture #2:



- Picture #3:



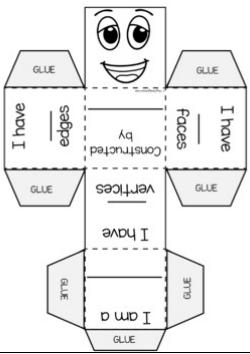
INSTRUCTIONAL ACTIVITIES: GUIDED PRACTICE:

Time:	Teacher:	Student:																																																																								
20-30 minutes	<ul style="list-style-type: none"> Introduce 3D shapes: Have shapes displayed on table were students can see visibly As a class we will be making an Anchor Chart for 3D shapes:  <p>3-D SHAPES</p> <table border="1"> <thead> <tr> <th></th> <th>EDGES</th> <th>VERTICES</th> <th>FACES</th> <th>LOOKS LIKE</th> </tr> </thead> <tbody> <tr> <td>cone</td> <td>0</td> <td>1</td> <td>1</td> <td>traffic cone</td> </tr> <tr> <td>cylinder</td> <td>0</td> <td>0</td> <td>2</td> <td>can of soda</td> </tr> <tr> <td>pyramid</td> <td>5</td> <td>8</td> <td>5</td> <td>pyramids in Egypt</td> </tr> <tr> <td>rectangular prism</td> <td>12</td> <td>8</td> <td>6</td> <td>box of tissues</td> </tr> <tr> <td>cube</td> <td>12</td> <td>8</td> <td>6</td> <td>wood block</td> </tr> <tr> <td>sphere</td> <td>0</td> <td>0</td> <td>0</td> <td>baseball</td> </tr> <tr> <td>triangular prism</td> <td>9</td> <td>6</td> <td>5</td> <td>top of house</td> </tr> </tbody> </table> <ul style="list-style-type: none"> Students will be following along with their own Anchor Chart while we discuss each shape and that shapes edges, vertices, and faces As we fill in each shape a volunteer will be asked to bring me the shape, we discuss from the table 		EDGES	VERTICES	FACES	LOOKS LIKE	cone	0	1	1	traffic cone	cylinder	0	0	2	can of soda	pyramid	5	8	5	pyramids in Egypt	rectangular prism	12	8	6	box of tissues	cube	12	8	6	wood block	sphere	0	0	0	baseball	triangular prism	9	6	5	top of house	<p>Student:</p> <ul style="list-style-type: none"> Students will be following along while we fill out the chart together Ex: 3D Student Anchor Chart <table border="1"> <thead> <tr> <th></th> <th>Edges:</th> <th>Vertices:</th> <th>Faces:</th> </tr> </thead> <tbody> <tr> <td>Cone</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Cylinder</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pyramid</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Rectangle Prism</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Cube</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sphere</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Triangular Prism</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <ul style="list-style-type: none"> A volunteer will bring up a shape to teacher when discussing the attributes 		Edges:	Vertices:	Faces:	Cone				Cylinder				Pyramid				Rectangle Prism				Cube				Sphere				Triangular Prism			
	EDGES	VERTICES	FACES	LOOKS LIKE																																																																						
cone	0	1	1	traffic cone																																																																						
cylinder	0	0	2	can of soda																																																																						
pyramid	5	8	5	pyramids in Egypt																																																																						
rectangular prism	12	8	6	box of tissues																																																																						
cube	12	8	6	wood block																																																																						
sphere	0	0	0	baseball																																																																						
triangular prism	9	6	5	top of house																																																																						
	Edges:	Vertices:	Faces:																																																																							
Cone																																																																										
Cylinder																																																																										
Pyramid																																																																										
Rectangle Prism																																																																										
Cube																																																																										
Sphere																																																																										
Triangular Prism																																																																										

	<ul style="list-style-type: none"> • We will say if he/she selected the correct 3D shape and why! (Ex: Good job Johnny! You selected the cone shape.) • We will not be making the last column (Looks Like) we will do something instead! 	
--	--	--

INDEPENDENT WORK:

Time:	Teacher:	Student:
25-30 minutes	<ul style="list-style-type: none"> • Introduce/Model My 3D Shapes • Each student will be making 7 of the 3D shapes • Explain Directions: <ol style="list-style-type: none"> 1. Send one person to grab material bins for each team 2. Teacher will pass out the first cut out shape 3. Once you are done with your first shape grab your next shape from the back table. 4. Repeat step 2 and 3 until you have made all 7 shapes 5. Make sure all your shapes have your name on them! 6. Put away in your backpack <ul style="list-style-type: none"> • Each student will be making 7 Shapes • Each student must cut out the shape • Fill out the number of faces, vertices, and edges • Tape the shape together • Color shapes if students are done constructing all 7 shapes 	<ul style="list-style-type: none"> • Listen to directions • Have one-person grab material bins • Wait until teacher has passed out the first shape • Cut out each shape • Fill out the number of faces, vertices, and edges for each shape • Tape or Glue the shape together • Repeat each step for (7) shapes • Put away in backpack once finished



PROCEDURES FOR THE CLOSING OF THE LESSON:

Time:	Teacher:	Student:
5- 10 minutes	<ul style="list-style-type: none"> Listen to the song: https://www.youtube.com/watch?v=ZnZYK83utu0 Suggest students to get up and make the shapes with their arms! 	<ul style="list-style-type: none"> Listen to song and dance!

INSTRUCTIONAL RESOURCES AND MATERIALS:

- Shape Examples: <https://free3d.com/3d-model/pyramid-820.html>
- Struggling Learner Resource: <https://www.youtube.com/watch?v=ZnZYK83utu0&t=6s>
- ELL Resource: <https://www.pinterest.com/pin/643803709217885560/>

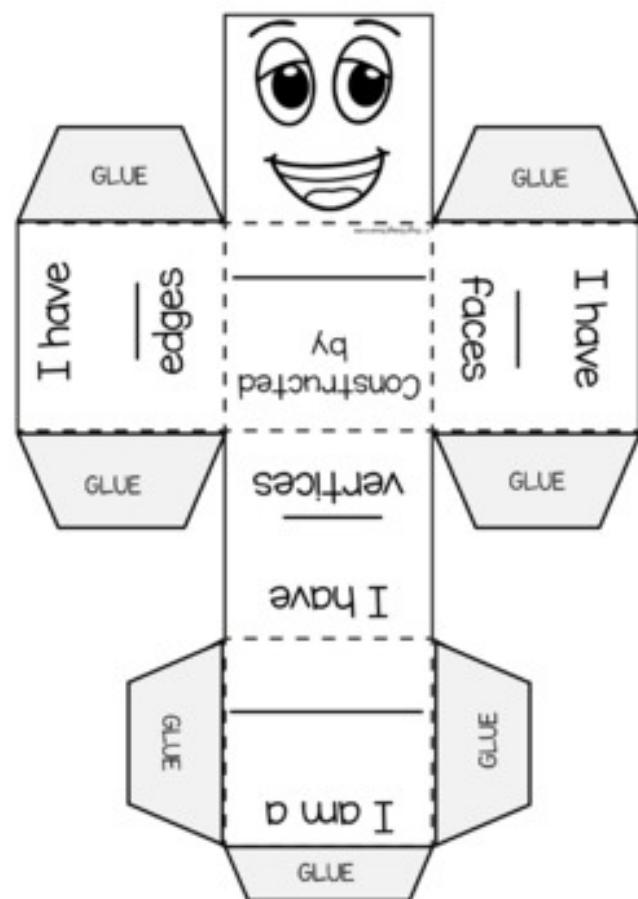


- Anchor Chart: <https://luckylittlelearners.com/activities-for-teaching-geometry/>
- Answer Key:

	Edges:	Vertices:	Faces:
Cone	0	1	1
Cylinder	0	0	2

Pyramid	5	8	5
Rectangle Prism	12	8	6
Cube	12	8	6
Sphere	0	0	0
Triangular Prism	9	6	5

- 3D Shapes Cut-Outs: <https://www.teacherspayteachers.com/Product/3D-Shape-Nets-Cute-Buddies-1767589>



- 3D shape Song: <https://www.youtube.com/watch?v=ZnZYK83utu0>
- Online Games: <http://www.mathgames.com/skill/1.1-identify-shapes-i>
- 3D Shapes: <https://www.macys.com/shop/product/learning-resources-view-thru-geometric-solids-set-of-14?ID=7938818>
- Scissors
- Glue
- Tape

REFLECTION:

Where do you anticipate students will have difficulty?

- Constructing 3D shapes
- Remembering how many faces, vertices, edges

What are some questions students might ask?

- How are real 3D shapes made of?
- Are there 4D shapes?

What comes next in the following lesson?

- Review of the last two lessons on: defining attributes, composing 2D shapes, and composing 3D shapes

NAME: Jessica Moreno
SUBJECT: Mathematics
GRADE LEVEL: 1 st
TIME FRAME: 60 minutes
TITLE OF LESSON 4: Shape Stations

RATIONALE: The ability for students to recognize shapes is important for life, home, school, work, and social skills. Exploring shapes helps students develop geometry skills for later grades. In later grades, students will be exploring about finding area, perimeter, and subconference for shapes. Students must be able to identify and distinguish different attributes of 2D and 3D shapes in current grade. As well as distinguishing non-defining attributes of a shape. Students will be building their knowledge about shapes as well as building and drawing those defining attributes. This lesson focuses on the knowledge of defining attributes to build and draw different 2D shapes. Students will also need to be able to create a composite shape to form new composite shapes that are 2D or 3D in later lessons. This skill is important to understand how to compose different shapes which we will be doing in this lesson with 3D shapes specifically.

COMMON CORE STANDARDS TO BE ADDRESSED:

CCSS.Math.Content.1.G.A.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

CCSS.Math.Content.1.G.A.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.

OBJECTIVES:

Students will be able to define attributes of shapes.

Students will be able to build and draw shapes to possess defining attributes.

Students will be able to compose 2D and 3D shapes.

ASSESSMENT:

Formative- Observations walking around to each station which stations are too hard or too easy for students.

A checklist will be made for students who have not shown mastery of standards.

Performance Goal: 90% of students

Example of checklist:

Station 1:	Student Name:	Has not mastered yet:	Average mastery:	Mastered:
Jessica		Notes: Gets confused with 2D and 3D	Notes:	Notes:
Jill		Notes:	Note: Understands attributes, gets confused with 3D shapes	Notes:

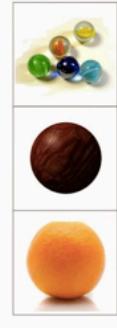
Station 2:	Student Name:	Has not mastered yet:	Average mastery:	Mastered:
Jessica		Notes:	Notes:	Notes: Can construct 2D shapes
Jill		Notes:	Note: Has a little bit of confuse composing shapes, has an idea	Notes:
Station 3:	Student Name:	Has not mastered yet:	Average mastery:	Mastered:
Jessica		Notes:	Notes:	Notes: Can construct 3D shapes
Jill		Notes:	Note: Has a little bit of confuse composing shapes, has an idea	Notes:

DIFFERENTIATION/ACCOMMODATIONS:

Struggling:	<ul style="list-style-type: none">• Pair struggling with High Proficient students in stations• Give time warnings before we have to switch stations• Allow students to use vocab resources in math folders
ELL:	<ul style="list-style-type: none">• Give preview of activities day before• Allow students to use vocab resources in math folder• Group with High Proficient or On level learners
Highly Proficient:	<ul style="list-style-type: none">• Allow students to make rules for station one for 3D shapes• Allow to peer tutor if done early at their station• Provide student with opportunities to build any different shapes we have not learned about Ex: Decagon
Autism:	<ul style="list-style-type: none">• Allow students to stay at one station for the whole time• Allow students to take breaks during activities• Have signal for students if they need to take a break Ex: Two hands up= Need to take a walk

PROCEDURES FOR THE INTRODUCTION OF THE LESSON:

Time:	Teacher:	Student:
5 minutes	<ul style="list-style-type: none">• Each student will have a picture of a 2D or 3D shape on their desk• There will be two buckets in the front of the room• Each student will place their shape in the 2D or 3D bucket• I will have a key of who had which shape and I will go through the bucket and see which students did not place correct shape in the correct bucket• Examples of possible shapes:	<ul style="list-style-type: none">• Decide which shape I have• Put shape into 2D or 3D shape that matches my shape

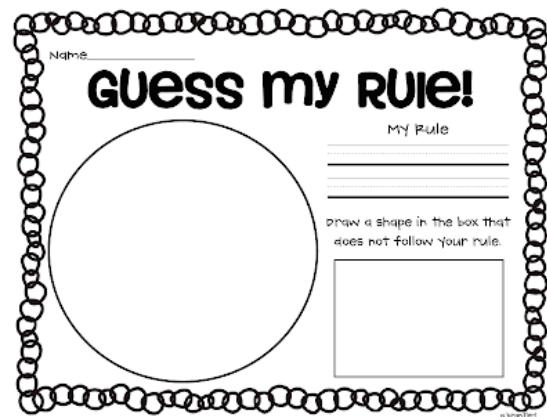


INSTRUCTIONAL ACTIVITIES: GUIDED PRACTICE:

Time:	Teacher:	Student:
5-8 minutes	<ul style="list-style-type: none"> • Review 2D and 3D Anchor Charts with students • Ask students to name different attributes of different shapes with students • Suggest they may want to look at these when there doing station activities 	<ul style="list-style-type: none"> • Look at 2D and 3D Anchor Charts • Name different attributes of different shapes

INDEPENDENT WORK:

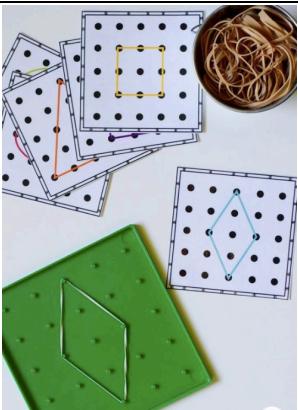
Time:	Teacher:	Student:
40-45 minutes	<ul style="list-style-type: none"> • Explain Shape Stations just like our other stations we do in Reading • Go over station rotation briefly: <ul style="list-style-type: none"> - Each station will be rotating about 15-20 minutes - 4-5 Students per station - Teacher will stop music once it's time to switch to next station • Explain brief directions to each Shape Station and Task <u>Station 1:</u> Define attributes of shapes <u>Directions:</u> <ol style="list-style-type: none"> 1. Pick a shape 2. Write the rule that shape follows ex: My shape has 4 vertices and 4 sides 3. In the box draw the shapes that do not follow your rule 4. Draw the shape or shapes that follow your rule 	<ul style="list-style-type: none"> • Listen to directions to each station activity • Go to first station Station 1: pick a rule shape I want as my rule, write my rule, draw in the box what shape does not follow my rule, draw my rule in my circle • Go to next station Station 2: Get geoboard and a rubber band, create a shape, on a separate sheet of notebook paper list the shapes I made • Go to last station Station 3: decide if I am making a 2D or 3D shape, create shape with straws



Station 2: Students will be able to build and draw shapes to possess defining attributes.

Directions:

1. Grab a geoboard and one rubber band
2. Pick a task card with a shape
3. On a separate sheet of paper write the shapes you compose on the geoboard
4. Make as many as you can until we switch!



Station 3: Students will be able to compose 2D and 3D shapes

Directions:

1. Pick a 2D or 3D shape to build
2. Grab as many straws as your shape calls for
3. Make 2-3 shapes



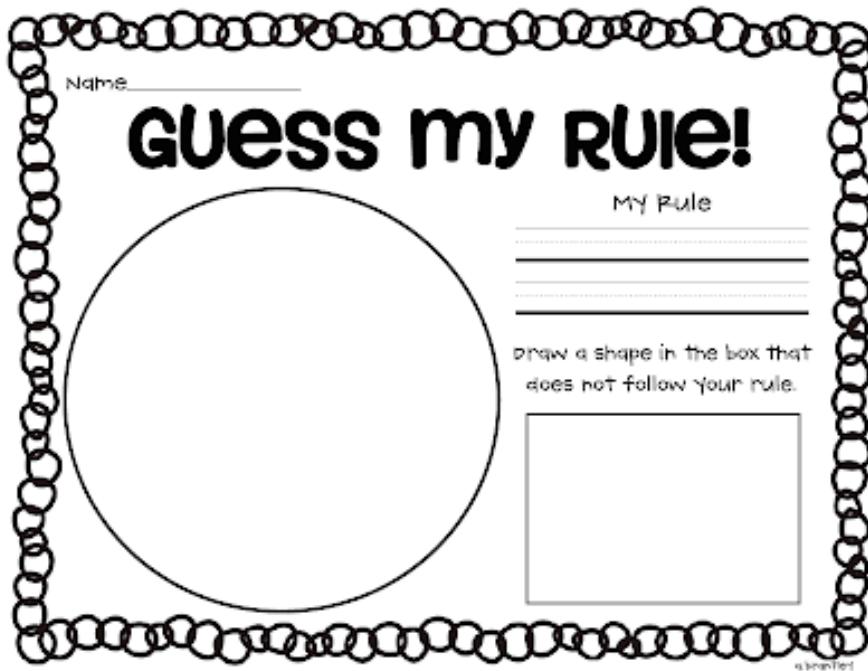
- After explaining directions for each station begin timer for first station on Smart Board

PROCEDURES FOR THE CLOSING OF THE LESSON:

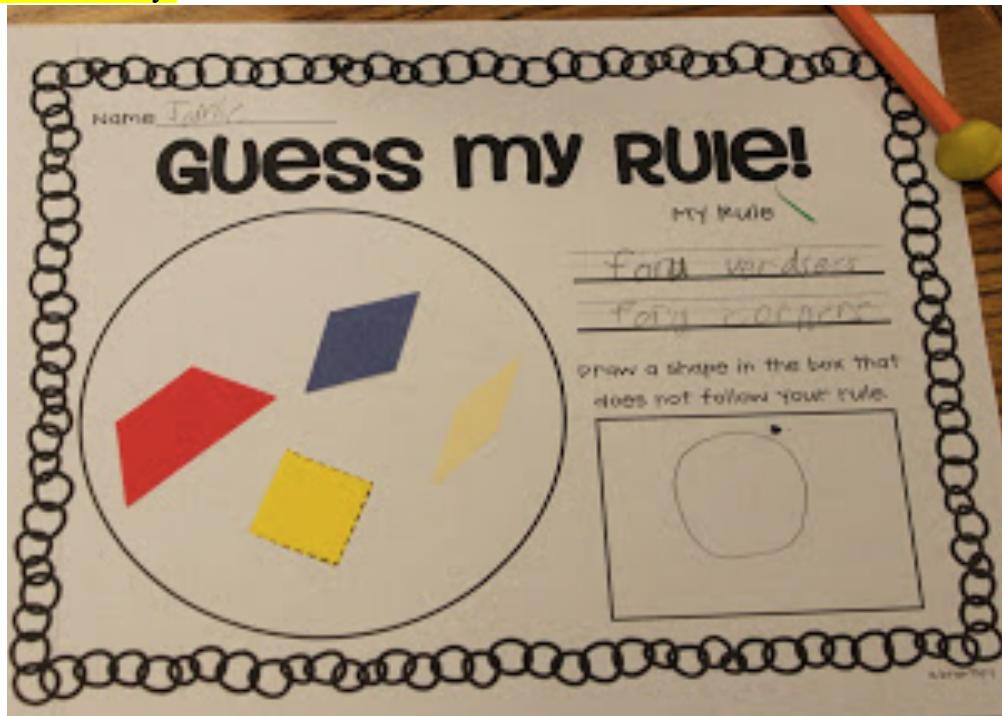
Time:	Teacher:	Student:
5 minutes	<ul style="list-style-type: none">Ask students: Which station was their favorite and why?	<ul style="list-style-type: none">Possible Answers: Station 3 because it was fun making shapes with the straws

INSTRUCTIONAL RESOURCES AND MATERIALS:

- Bucket Shapes: <https://www.everystarisdifferent.com/2015/04/3-dimensional-shapes-activities.html?m=1>
<https://lifeovercs.com/4-free-activities-for-learning-shapes/>
- Station 1: <http://www.crazyforfirstgrade.com/2011/12/attributes-and-sorting-fun.html>



- Answer Key:



- Station 2: <https://www.mrsjonescreationstation.com/free-shape-printables/>, Rubber Bands, Geoboards
- Station 3: <https://naturalmath.com/2014/02/play-power/>, Straws

REFLECTION:

Where do you anticipate students will have difficulty?

Station 1: Determining a shape and turning into a rule, Verbalizing Rule in writing

Station 2: Making shape with rubber band, Motor Skills

Station 3: Making shapes with straws, especially 3D shapes connecting specific places, Motor Skills

What are some questions students might ask?

- Why are building shapes important?
- How are shapes built in real life?
- How can we build shapes with other materials?

What comes next in the following lesson?

CCSS.Math.Content.G.A. 3. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

NAME: Jessica Moreno
SUBJECT: Geometry
GRADE LEVEL: 1 st
TIME FRAME: 60 minutes
TITLE OF LESSON 5: Summary of Our Shapes

RATIONALE: The ability for students to recognize shapes is important for life, home, school, work, and social skills. Exploring shapes helps students develop geometry skills for later grades. In later grades, students will be exploring about finding area, perimeter, and subconference for shapes. Students must be able to identify and distinguish different attributes of 2D and 3D shapes in current grade. As well as distinguishing non-defining attributes of a shape. Students will be building their knowledge about shapes as well as building and drawing those defining attributes. This lesson focuses on the knowledge of defining attributes to build and draw different 2D shapes. Students will also need to be able to create a composite shape to form new composite shapes that are 2D or 3D in later lessons. This skill is important to understand how to compose different shapes which we will be doing in this lesson with 3D shapes specifically.

COMMON CORE STANDARDS TO BE ADDRESSED:

CCSS.Math.Content.1.G.A.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

CCSS.Math.Content.1.G.A.2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.

OBJECTIVES:

Students will be able to define attributes of shapes.

Students will be able to build and draw shapes to possess defining attributes.

Students will be able to compose 2D and 3D shapes.

ASSESSMENT:

Summative- Test

Performance Goal: 95% of all student

DIFFERENTIATION/ACCOMMODATIONS:

Struggling Learner:	<ul style="list-style-type: none"> • Have teacher read test directions out loud • Explain test before students start and Answer any questions • Have a brief review of concepts and answer any questions • Allow extra time if needed for test
ELL:	<ul style="list-style-type: none"> • Have test translated in native language • Provide sentence starter for some questions on the test • Allow extra time if needed to finish test
Highly Proficient:	<ul style="list-style-type: none"> • Have questions on test that are open ended • Have bonus questions on test • Allow students to have alternative test format
Auditory Processing Disability:	<ul style="list-style-type: none"> • Have teacher read test out loud at a separate table • Allow student extra time to finish test • Allow student to take test on computer and have computer read it out loud

PROCEDURES FOR THE INTRODUCTION OF THE LESSON:

Time:	Teacher:	Student:
5 minutes	<ul style="list-style-type: none"> • Tell students that "Today I want to know everything they know about the shapes we have learned about and to do this we must take a test". • Ask students if they have any questions 	<ul style="list-style-type: none"> • Ask any questions

INSTRUCTIONAL ACTIVITIES: GUIDED PRACTICE:

Time:	Teacher:	Student:
5-10 minutes	<ul style="list-style-type: none"> • Have a quick review of 2D & 3D shapes and attributes from our two Anchor Charts we made • Answer any final questions 	<ul style="list-style-type: none"> • Ask any questions about shapes

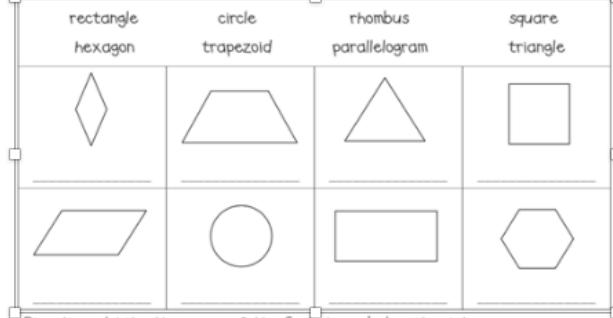
INDEPENDENT WORK:

Time:	Teacher:	Student:
45-55 minutes	<ul style="list-style-type: none">● Pass out test● Read directions for each task● Have students begin test	<ul style="list-style-type: none">● Follow with teacher while she explains the test● Ask any questions about directions● Begin test

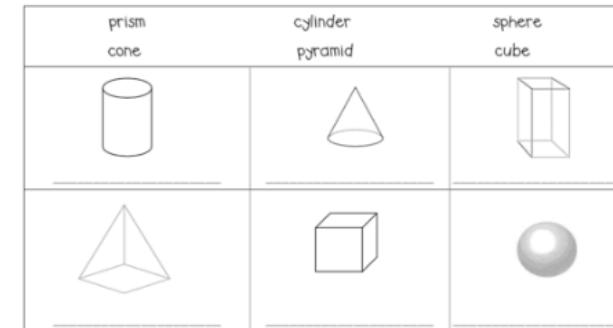
Geometry Assessment

Name: _____

Directions: Write the name of the shape using the word bank.



Directions: Write the name of the 3-d shape below its picture.



Shade all of the large shapes.



Shade the small square.



Shade all of the circles.



Shade the shapes with exactly 4 sides.



Directions: Draw the shape. Then describe it by counting the number of corners and sides it has.

Draw a triangle.

Draw a square.

Draw a circle.

Draw a rectangle.

Corners ____

Corners ____

Corners ____

Corners ____

Sides ____

Sides ____

Sides ____

Sides ____

Answer each question in complete sentences:

9. Jessica makes 3 cubes, how many faces does she have all together?

Sal is holding a soccer ball. He wonders what shape it is.

Sal's soccer ball is a _____,
because _____.
_____.

Kate's teacher asked her to find a rectangular prism at home.

What object could she find?

Draw the object.

Jack is looking for a cone shaped object. What is a cone shaped object he could find?

Draw the object.

Guess the shape: Write the shape name.

I have no corners. I will roll around like a ball. What am I?

I have 2 flat faces that are circles. I can roll. I am the shape of a can of soup. What am I?

I have 6 flat faces. They are all the same size. What am I?

PROCEDURES FOR THE CLOSING OF THE LESSON:

Time:	Teacher:	Student:
5 minutes	<ul style="list-style-type: none">• When finished have students turn in to teacher• If students finish early: Allow them to do Tangram task cards 	<ul style="list-style-type: none">• Turn in test to teacher• If I have extra time do Tangram task cards

INSTRUCTIONAL RESOURCES AND MATERIALS:

- Tangrams Extra Activity: <https://planningplaytime.com/shapes-worksheets>

- Summative Assessment- Self Created and Inspired by <file:///Users/jessicamoreno/Downloads/FirstGradeGeometryassessment.pdf>

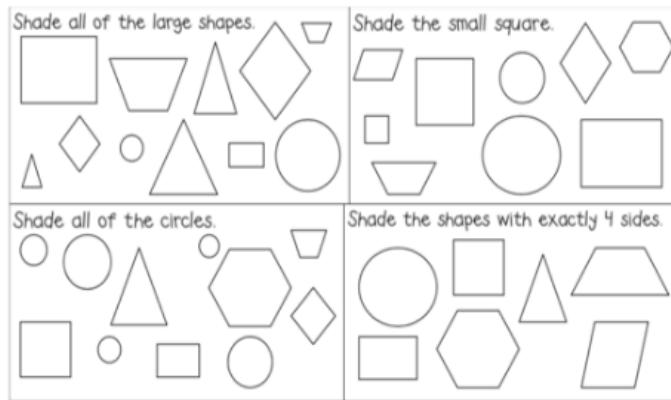
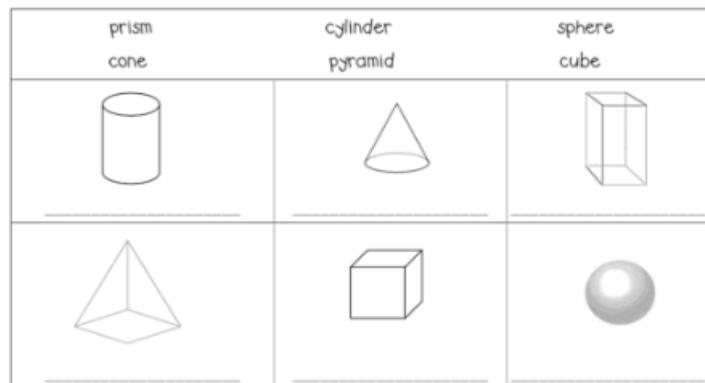
Geometry Assessment

Name: _____

Directions: Write the name of the shape using the word bank.

rectangle	circle	rhombus	square
hexagon	trapezoid	parallelogram	triangle
			
			

Directions: Write the name of the 3-d shape below its picture.



Directions: Draw the shape. Then describe it by counting the number of corners and sides it has.

Draw a triangle.	Draw a square.	Draw a circle.	Draw a rectangle.
Corners _____	Corners _____	Corners _____	Corners _____
Sides _____	Sides _____	Sides _____	Sides _____

Answer each question in complete sentences:

9. Jessica makes 3 cubes, how many faces does she have all together?

Sal is holding a soccer ball. He wonders what shape it is.

Sal's soccer ball is a _____,
because_____

Kate's teacher asked her to find a rectangular prism at home.

What object could she find?

Draw the object.

Jack is looking for a cone shaped object. What is a cone shaped object he could find?

Draw the object.

Guess the shape: Write the shape name.

I have no corners. I will roll around like a ball. What am I?

I have 2 flat faces that are circles. I can roll. I am the shape of a can of soup. What am I?

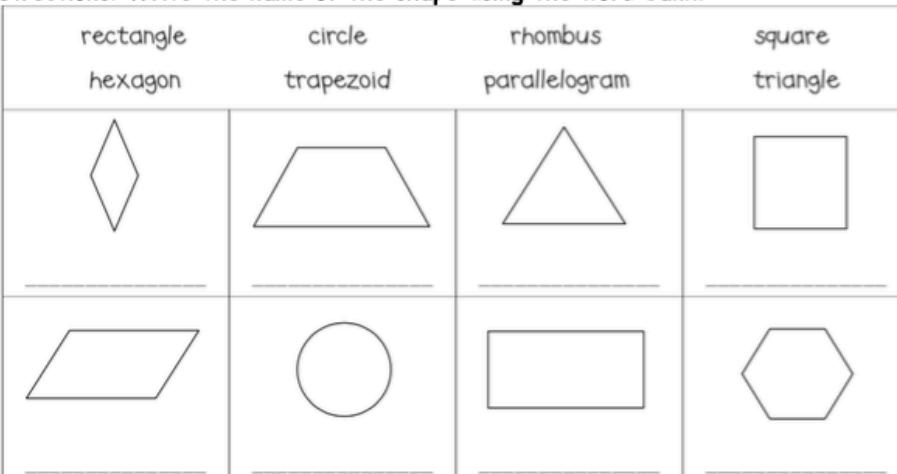
I have 6 flat faces. They are all the same size. What am I?

• **Answer Key:**

**Geometry Assessment
Answer Key**

Name: _____

Directions: Write the name of the shape using the word bank.

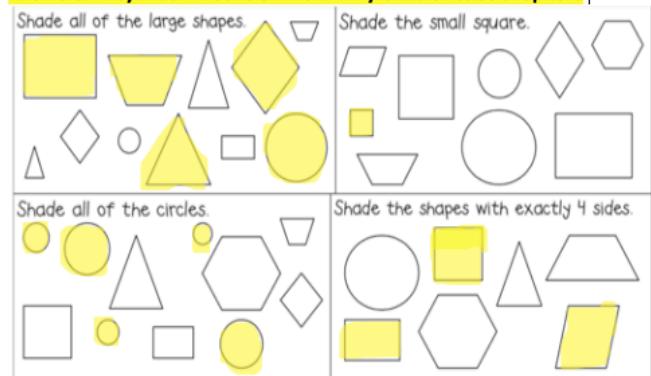


Answers: 1. Trapezoid 2. Rhombus 3. Triangle 4. Square 5. Parallelogram 6. Circle 7. Rectangle 8. Hexagon

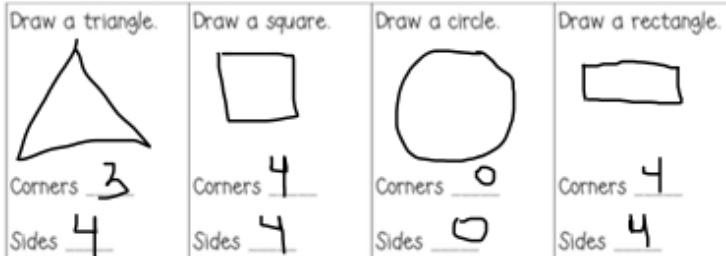
Directions: Write the name of the 3-d shape below its picture.

prism	cylinder	sphere
cone	pyramid	cube
		
		

Answers: 1. Cylinder 2. Cone 3. Prism 4. Pyramid 5. Cube 6. Sphere



Directions: Draw the shape. Then describe it by counting the number of corners and sides it has.



Guess the shape: Write the shape name.

I have no corners. I will roll around like a ball. What am I?
Sphere

I have 2 flat faces that are circles. I can roll. I am the shape of a can of soup. What am I?

Cylinder

I have 6 flat faces. They are all the same size. What am I?

Hexagon

Answer each question in complete sentences:

9. Jessica makes 3 cubes, how many faces does she have all together?
6+6+6=18

Sal is holding a soccer ball. He wonders what shape it is.
Sal's soccer ball is a **sphere**, because **no sides and no corners**.

Kate's teacher asked her to find a rectangular prism at home.
What object could she find? Kleenex Box, Box, Trash Bin
Draw the object.



Jack is looking for a cone shaped object. What is a cone shaped object could he find? Construction Cone, Ice Cream Cone, Toy Cone
Draw the object.



REFLECTION:**Where do you anticipate students will have difficulty?**

- Depending on student mastery of concepts student may struggle with specific areas on test
- Students may not remember attributes of 2D and 3D shapes

What are some questions students might ask?

- Directions of test
- Terms on the test
- Tasks questions ask of them

What comes next in the following lesson?

CCSS.Math.Content.G.A. 3. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller share

Planning Instruction & Assessment

Purpose

The Planning Instruction & Assessment task describes and explains your plans for the learning segment. It demonstrates your ability to organize curriculum, instruction, and assessment to help your students meet the standards for the curriculum content and to develop academic language related to that content. It provides evidence of your ability to select, adapt, or design learning tasks and materials that offer your students equitable access to mathematics curriculum content.

Overview of Task

- Identify the central focus, student academic content standards, English Language Development (ELD) standards (if applicable), and learning objectives for the learning segment. The focus of your learning segment should provide opportunities to develop your students' conceptual understanding, computational/procedural fluency, and mathematical reasoning skills.
- Identify objectives for developing academic language, taking into account students' prior language development and the language demands of the learning tasks and assessments.
- Select/adapt/design and organize instructional strategies, learning tasks, and assessments to promote and monitor your students' learning during the learning segment.

What Do I Need to Do?

Planning Commentary

Write a commentary of **5-8 single-spaced pages** (including prompts) that addresses the following prompts. You can address each prompt separately, through a holistic essay, or a combination of both, as long as all prompts are addressed.

1. What is the central focus of the learning segment? Apart from being present in the school curriculum, student academic content standards, or ELD standards, why is the content of the learning segment important for your particular students to learn?

The ability for students to recognize shapes is important for life, home, school, work, and social skills. Exploring shapes helps students develop geometry skills for later grades. In later grades, students will be exploring about finding area, perimeter, and subconference for shapes. Students must be able to identify and distinguish different attributes of 2D and 3D shapes in current grade. As well as distinguishing non-defining attributes of a shape. Students will be building their knowledge about shapes as well as building and drawing those defining attributes into smaller shapes. This lesson focuses on the knowledge of defining partition circles and rectangles

into two and four equal shares, describing the shares using words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. But also describe the whole as two of, or four of the shares. Similar concepts will be addressed in grades when learning about fractions, time, and division.

2. Briefly describe the theoretical framework/research and child development theories that inform your instructional design for developing your students' knowledge and abilities in both mathematics and academic language during the learning segment. You can use your textbook, other resources from other classes, and/or the Internet for references. Please cite the references using APA format (Author's Last name, year). You must have at least 3 sources, 1 of which is math methods research and 1 of which is child development research.

Theories/ Research	Description	Activities	APA Citations
Topology- Piaget	"A child's view of the world is first topological; that is, the child sees objects as changeable, depending on perspective or position" (Overton 419). "The study of the properties of figures that stay the same even under distortions, except tearing or cutting" (Overton 420).	Lesson 1: Introduction- Questioning where students see shapes in real world. Independent work- students giving real world examples. Closing- Reading "Greedy Triangle" by Marilyn Burns. Lesson 2: Guided Practice with real world pictures. Independent work- Marshmallow Project. Reading "Captain Invincible and the Space Shapes" by Stuart J. Murphy Lesson 3: Introduction- Showing students 3D examples. Guided Practice- 3D Plastic Shapes. Independent work- 3D papercut out shapes. Lesson 4: Introduction- 2D & 3D Shape Sorting. Independent work- geoboards and straw shapes.	Rosenshine, B. (2012). Principles of Instruction. Retrieved 12, 2020, from https://www.aft.org/sites/default/files/periodicals/Rosenshine.pdf Overton, T. (n.d.). Pearson (6th).
Using Visuals and Materials	Accurate depiction or Schema of a given Mathematical quantities or relationship. Using everyday materials to introduce geometric knowledge.	Lesson 1: Introduction- Questioning where students see shapes in real world. Guided Practice- Anchor Chart. Independent work- students giving real world examples. Closing- Reading "Greedy Triangle" by Marilyn Burns. Lesson 2: Guided Practice with real world pictures. Independent work- Marshmallow Project. Reading "Captain Invincible and the Space Shapes" by Stuart J. Murphy	Killian, S. (2019, November 22). 6 High-Impact Teaching Strategies. Retrieved March 12, 2020, from Rosenshine, B. (2012). Principles of Instruction. Retrieved 12, 2020, from

		<p>Lesson 3: Introduction- Showing students 3D examples. Guided Practice- 3D Plastic Shapes and Anchor Chart. Independent work- 3D papercut out shapes.</p> <p>Lesson 4: Introduction- 2D & 3D Shape Sorting. Independent work- Drawing Guess My Rule worksheet, geoboard, and straw shapes.</p> <p>Lesson 5: Summative assessment questions include visual shapes</p>	https://www.aft.org/sites/default/files/periodicals/Rosenshine.pdf Overton, T. (n.d.). Pearson (6th).
Van Hiele Levels of Geometric Thought	<p>Five levels of geometric thinking. Each level describes how children think about geometric concepts.</p> <p>Levels:</p> <ul style="list-style-type: none"> 0-Visualization: Children recognize shapes by their global, holistic appearance. 1-Analysis: Children observe the component parts of figures but are unable to explain the relationships between properties within a shape or among shapes. 2-Informal Deduction: Children deduce properties of figures and express interrelationships both within and between figures. 3-Formal Deduction: Children create formal deductive proofs. 4-Rigor: Children rigorously compare different axiomatic systems. 	<p>0-Visualization: Lesson 1: Introduction- Questioning students where they see shapes in the real world. Guided Practice- Anchor chart to help build higher geometric thinking of 2D shapes. Independent work- To visualize and analyze real world shapes and compare them to geometric vocabulary (Circle, Oval, Triangle, Square, Rectangle, Parallelogram, Rhombus Trapezoid).</p> <p>0-Visualization,1-Analysis, 2-Informal Deduction: Lesson 2: Guided Practice with real world pictures. Independent work- Marshmallow Project. Reading “Captain Invincible and the Space Shapes” by Stuart J. Murphy</p> <p>0-Visualization,1-Analysis, 2-Informal Deduction: Lesson 3: Introduction- Showing students 3D examples. Guided Practice- 3D Plastic Shapes and Anchor Chart. Independent work- 3D papercut out shapes.</p> <p>0-Visualization,1-Analysis, 2-Informal Deduction: Lesson 4: Introduction- 2D & 3D Shape Sorting. Guided Practice- Anchor Chart Review. Independent work- Drawing Guess My Rule worksheet, geoboard, and straw shapes.</p> <p>0-Visualization, 1-Analysis, 2-Informal Deduction, 3-Formal Deduction: Lesson 5: Summative Assessment Questions involve: Visual shape recognition, recognizing attributes, Drawing Shapes, Guessing Real-World examples, Describing shape proofs</p>	Rosenshine, B. (2012). Principles of Instruction. Retrieved 12, 2020, from https://www.aft.org/sites/default/files/periodicals/Rosenshine.pdf Overton , T. (n.d.). Pearson (6th).

3. How do key learning tasks in your plans build on each other to support students' development of conceptual understanding, computational/procedural fluency, mathematical reasoning skills, and related academic language? Describe specific strategies that you will use to build student learning across the learning segment. Reference the instructional materials you have included, as needed.

Conceptual Understanding	Computational/Procedural Fluency	Math Reasoning	Academic Language
<ul style="list-style-type: none"> • Real Life Visuals of 2D and 3D Shapes • Stories about Shapes • Songs about Shapes • Hands-On activities: Popsicle Sticks, 3D Straw Building, Geoboards 	<p>Student Practice in:</p> <ul style="list-style-type: none"> - 2D Anchor Chart - 2D/3D Shape Sorting - Marshmallow Project - Popsicle Stick Task Activity - Space Shapes - 3D Picture Recognitions - 3D Shape Anchor Chart - Building 3D Shapes - Guess My Rule Worksheet - Geoboard - 3D Straws 	<ul style="list-style-type: none"> • Verbal discussions about 2D and 3D shapes • Questioning Shape Attributes • Partner Sharing/Discussing • Exit Tickets • Shape Sorting 	<ul style="list-style-type: none"> • Geometry • Attributes of a shape • Two-dimensional shape • Three-dimensional Shapes • Vertices • Side • Pentagon • Hexagon • Octagon • Cone • Cylinder • Pyramid • Rectangle Prism • Cube • Sphere • Triangular Prism • Edge • Face

4. Consider the language demands¹ of the oral and written tasks in which you plan to have students engage as well as the various levels of English language proficiency related to classroom tasks as described in the Context Commentary.
- Identify words and phrases (if appropriate) that you will emphasize in this learning segment. Why are these important for students to understand and use in completing classroom tasks in the learning segment?

¹ Language demands can be related to vocabulary, features of text types such as problem solutions or mathematical notation, or other language demands such as language conventions and structures within mathematical reasoning. For early readers/writers, this will include sound-symbol correspondence and a word or number as a text but might also involve the development of oral skills which are antecedents to reading and writing, oral narratives, and explanations.

- b. Explain how specific features of the learning and assessment tasks in your plan, including your own use of language, support students in learning to understand and use these words, phrases (if appropriate), and academic language. How does this build on what your students are currently able to do and increase their abilities to follow and/or use different types of text and oral formats?

Students will be learning vocabulary through writing, discussions, visual representations, and real-life examples. It is important that students understand the meaning of math vocabulary through multiple ways and definitions. Through multiple ways of expressing vocabulary meaning and definitions students will build understanding of geometry vocabulary. Students will activate prior knowledge of shapes through discussion and questioning from past learning. Also, students will be continuously learning how shapes are all around us in the real world.

Lesson #	Vocab	Definition	Rationale
Lesson 1	Geometry	A branch of mathematics that studies the sizes, shapes, positions angles and dimensions of things.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Attributes of a shape	The attributes of a geometric shape define the characteristics of that shape visually and mathematically.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Two- dimensional shape	A flat plane figure or a shape that has two dimensions – length and width.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Vertices	A point where two or more straight lines meet.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Side	The line segment that joins two vertices in a shape or two-dimensional figure.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
Lesson 2	Build	To construct (especially something)	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.

		complex) by assembling and joining parts or materials.	
	Pentagon	A polygon with five sides.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Hexagon	The two-dimensional shape has 6 sides, 6 vertices and 6 angles.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Octagon	A polygon having eight angles and eight sides.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
Lesson 3	Three- dimensional Shapes	A solid figure or an object or shape that has three dimensions – length, width and height.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Define	To state or set forth the meaning of (a word, phrase, etc.).	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Create	To cause to come into being, as something unique that would not naturally evolve or that is not made by ordinary processes.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Cone	A three-dimensional geometric figure that has a flat surface and a curved surface, pointed towards the top.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.

	Cylinder	A geometric solid with two circular bases and a curved surface.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Pyramid	A solid having a polygonal base, and triangular sides that meet in a point.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Rectangle Prism	A three-dimensional solid shape which has six faces that are rectangles.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Cube	A three-dimensional solid with six square faces.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Sphere	A three-dimensional object that resembles like a ball.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Triangular Prism	A triangular prism is a prism composed of two triangular bases and three rectangular sides	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Edge	A line or border at which a shape or surface terminates.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.

	Face	Flat surface of a three-dimensional object.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
Lesson 4	Define	To state or set forth the meaning of (a word, phrase, etc.).	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Compose	To make or form by combining things, parts, or elements:	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
Lesson 5	Geometry	A branch of mathematics that studies the sizes, shapes, positions angles and dimensions of things.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Attributes of a shape	The attributes of a geometric shape define the characteristics of that shape visually and mathematically.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Two- dimensional shape	A flat plane figure or a shape that has two dimensions – length and width.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Vertices	A point where two or more straight lines meet.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Side	The line segment that joins two vertices in a shape or two-dimensional figure.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.

	Build	To construct (especially something complex) by assembling and joining parts or materials.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Pentagon	A polygon with five sides.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Hexagon	The two-dimensional shape has 6 sides, 6 vertices and 6 angles.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Octagon	A polygon having eight angles and eight sides.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Three- dimensional Shapes	A solid figure or an object or shape that has three dimensions – length, width and height.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Define	To state or set forth the meaning of (a word, phrase, etc.).	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Create	To cause to come into being, as something unique that would not naturally evolve or that is not made by ordinary processes.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Cone	A three-dimensional geometric figure that has a flat surface and a curved surface,	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.

		pointed towards the top.	
	Cylinder	A geometric solid with two circular bases and a curved surface.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Pyramid	A solid having a polygonal base, and triangular sides that meet in a point.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Rectangle Prism	A three-dimensional solid shape which has six faces that are rectangles.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Cube	A three-dimensional solid with six square faces.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Sphere	A three-dimensional object that resembles like a ball.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Triangular Prism	A triangular prism is a prism composed of two triangular bases and three rectangular sides	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Edge	A line or border at which a shape or surface terminates.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.

	Face	Flat surface of a three-dimensional object.	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Define	To state or set forth the meaning of (a word, phrase, etc.).	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.
	Compose	To make or form by combining things, parts, or elements:	Essential component of this mathematics unit. Knowledge and use of using vocabulary to help build foundation for future skills in future grades.

5. Explain how the collection of assessments from your plan allows you to evaluate your students' learning of specific student standards/objectives and provide feedback to students on their learning.

Lesson #	Assessment	Type	Standard(s)	Objective(s)	Feedback
1	Students will have an exit ticket: "What is an example of a 2D shape in found in the story?" Performance Goal: 80% of all students.	Written	CCSS.Math. Content.1. <u>G.A.1.</u> Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes	Students will be able to define attributes of different shapes.	Students will be getting Exit ticket feedback the next day as a whole class. Teacher will determine how to make upcoming unit plan lesson adjustments.
2	Marshmallow Project Performance Goal: 80% of all student	Building/Creating	CCSS.Math. Content.1. <u>G.A.1.</u> Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes. CCSS.Math. Content.1.2 G.A. Compose two-dimensional shapes (rectangles, squares, trapezoids,	Students will be able to build 2D shapes to possess defining attributes.	Students will get graded rubric back with feedback and positive comments. Teacher will determine how to make upcoming unit plan lesson adjustments.

			triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.		
3	My 3D Shapes: Cone, Cylinder, Pyramid, Rectangle Prism, Cube, Sphere, Triangular Prism Performance Goal: 90% of all students.	Hands-On Building/Cre ating	<u>CCSS.Math. Content.1.2 G.A.</u> Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.	Students will be able to define 3D shapes. Students will be able to create a 3D shape.	Students will get verbal feedback by teacher. Teacher will determine how to make upcoming unit plan lesson adjustments.
4	Observations walking around to each station which stations are too hard or too easy for students. A checklist will be made for each student.	Written, Hands-On Building/ Creating	<u>CCSS.Math. Content.1.</u> G.A.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes. <u>CCSS.Math. Content.1.2 G.A.</u> Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular	Students will be able to define attributes of shapes. Students will be able to build and draw shapes to possess defining attributes. Students will be able to	Students will be given verbal feedback after station activities. Teacher will determine how to make upcoming unit plan lesson adjustments.

			cylinders) to create a composite shape and compose new shapes from the composite shape.	compose 2D and 3D shapes.	
5	Summative Assessment: Goal: 90% of all students.	Written, Composing, Describing	<p><u>CCSS.Math. Content.1.</u></p> <p>G.A.1.Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p> <p><u>CCSS.Math. Content.1.2 G.A.</u></p> <p>Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.</p>	<p>Students will be able to define attributes of shapes.</p> <p>Students will be able to build and draw shapes to possess defining attributes.</p> <p>Students will be able to compose 2D and 3D shapes.</p>	Students will be given verbal feedback of test results. Teacher will determine how to make upcoming unit plan lesson adjustments.

6. Describe any teaching strategies you have planned for your students who have identified educational needs (e.g., struggling students, advanced learners, ELL students, students with IEPs, etc.). Explain how these features of your learning and assessment tasks will provide students access to the curriculum and allow them to demonstrate their learning.

Type of Student:	Strategies:	Explanation of how these features help students access the curriculum and allow them to demonstrate their learning:
Struggling:	<ul style="list-style-type: none"> • Allow students to work in small groups at back table with teacher. • Have additional resources on 2D and 3D shapes on Google Classroom. • Have students sitting with High Proficient students in teams • Using different kinds of visuals during instruction 	<ul style="list-style-type: none"> • Allowing students to work one on one with teacher will provide explicit instruction to curriculum. • This will help students get individual resources at school and at home. • Allowing student to sit with High Proficient students will help model learning tasks and expectations of curriculum unit. • Having visual representation of learning concepts.
ELL:	<ul style="list-style-type: none"> • Have vocab term in native language resource for unit along with pictures and videos on Google Classroom • Allow students to sit with buddy with native language in teams. • Allow students to sit with teacher at back table when working on independent practice activities to provide more one- on one instruction. 	<ul style="list-style-type: none"> • Having an individual resource in student's native language of unit vocabulary with definitions and picture/video representation will help student with language gap. • Allowing students to sit next to a buddy with their same native language will help language gap in curriculum terms and social emotional learning. • Allowing students to sit with teacher for explicit instruction in curriculum learning tasks.
Highly Proficient:	<ul style="list-style-type: none"> • Provide online games on Google Classroom if they finish early: http://www.mathgames.com/skill/1.1-identify-shapes-i • Provide a bonus activities • Allow students to help other Struggling students during activities 	<ul style="list-style-type: none"> • Allowing students with online instruction to help deepen curriculum target knowledge. • Allowing bonus activities to have student deepen curriculum knowledge. • Allowing students to peer tutor to help student deepen curriculum reasoning and modeling of learning targets.

Students with IEP's:	<ul style="list-style-type: none">• Use visuals for curriculum terms and concepts• Using manipulatives for solving problems• Using real world examples• Working with Special Education teacher for new research-based strategies	<ul style="list-style-type: none">• Using visuals will help students process information of curriculum.• Having tangible manipulatives will help student learn curriculum in alternative way.• Having real world examples will help students activate prior knowledge to bridge new learning.• Working with Special Educator to facilitate student in specific needs and supports through research-based strategies.
-----------------------------	---	---

