Geometry Lesson Plan Day 1

Presentation link for all three lessons: https://onlinelessonplans.weebly.com/math.html

Name: Maya Moltzen

Date: April 20th, 2020

Discipline: Math

Grade Level: 2nd grade

Topic: Geometry

Lesson Focus: Identifying 2-D shapes

Standard:
- 2.G.1 Identify trapezoids, rhombuses, pentagons, hexagons, octagons, parallelograms, quadrilaterals, cubes, spheres, cylinders, cones, triangular prisms, rectangular prisms. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.

Objectives:
- The student will identify 2 dimensional shapes such as trapezoids, rhombuses, pentagons, hexagons, octagons, parallelograms, and quadrilaterals.

Assessment:
- The student will complete a shape scavenger hunt in their home and share their results with a family member or friend.
- Graphic organizer as a formative assessment
- Proficiency Scale (see materials attached below)

Materials:
- Google Slides
- Video links
  - https://www.youtube.com/watch?v=24Uv8Cl5hVl
• 2D shape graphic organizer (see materials attached below)

Procedure:

• ALL INFORMATION AND MATERIALS NEEDED FOR THIS LESSON ARE INCLUDED IN THE GOOGLE SLIDES.
  o  https://docs.google.com/presentation/d/1GvWdCxbrjkS35VHOYY1syHmv9-sDLGFMBsKeAYv8a0/edit?usp=sharing

• To start, the topic of 2D shapes is introduced to students and the proficiency scale for the lesson is shown. Students will get a preview of what they will be learning and know what is being expected of them.

• Anticipatory Set: Students will watch two videos about 2-D shapes.

• Then, students will be introduced to the vocabulary for the lesson
  o  Attribute, side, vertices, angle, parallel sides

• After learning the vocabulary, they will learn about the attributes for each shape. Each slide covers how many sides, vertices, angles, parallel sides, etc. each shape has. For each shape, there is also a real-world example.
  o  Shapes covered are circle, triangle, quadrilaterals, square, rectangle, rhombus, trapezoid, pentagon, hexagon, and octagon. Each shape has its own slide.

• Then, students will complete a shape scavenger hunt in their home. They will look for examples of each shape in their house and share their findings with a family member or friend.

• Finally, students will fill out the 2D shapes graphic organizer as a formative assessment to check their understanding. The graphic organizer lists and shows the shape, and student fill in how many sides and vertices it has. Once students have finished the graphic organizer, they can check their work on the next slide.

Differentiation:
• Screencasting with closed captioning on Google Slides.
I can also:
compare and contrast shapes, and identify 2D shapes that make up 3D shapes.

I can:
identify, describe, and draw 2D and 3D shapes having specific attributes.

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>triangle, square</td>
<td>*Identify shapes</td>
</tr>
<tr>
<td>rectangle, rhombus</td>
<td>*Identify attributes like:</td>
</tr>
<tr>
<td>trapezoid, cube</td>
<td>*sides</td>
</tr>
<tr>
<td>cone</td>
<td>*vertices</td>
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<tr>
<td></td>
<td>*faces</td>
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<tr>
<td></td>
<td>*edge</td>
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</tbody>
</table>

With Help!
<table>
<thead>
<tr>
<th>2D Shape</th>
<th>Number of Sides</th>
<th>Number of Vertices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triangle</td>
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<tr>
<td>Quadrilateral</td>
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<td>Square</td>
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<tr>
<td>Rectangle</td>
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<tr>
<td>Pentagon</td>
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<tr>
<td>Hexagon</td>
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Geometry Lesson Plan Day 2

Name: Maya Moltzen

Date: April 20th, 2020

Discipline: Math

Grade Level: 2nd grade

Topic: Geometry

Lesson Focus: Identifying 3-D shapes

Standard:

- 2.G.1 Identify trapezoids, rhombuses, pentagons, hexagons, octagons, parallelograms, quadrilaterals, cubes, spheres, cylinders, cones, triangular prisms, rectangular prisms. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.

Objective:

- The student will identify 3 dimensional shapes such as cubes, spheres, cylinders, cones, triangular prisms, and rectangular prisms.

Assessment:

- The student will complete a shape scavenger hunt in their home and share their results with a family member or friend.
- 3D shape graphic organizer formative assessment
- Proficiency Scale (see attached materials below)

Materials:

- Google Slides
- Video Link
  - https://www.youtube.com/watch?v=zPZegz690Mg
- Exit Ticket (see attached materials below)
Procedure:

- **ALL INFORMATION AND MATERIALS NEEDED FOR THIS LESSON ARE INCLUDED IN THE GOOGLE SLIDES.**
  - [https://docs.google.com/presentation/d/16DVGMTWon0OrQ-5zPpQSP8UnAxHoCo-ZiTclZhfpQ/edit?usp=sharing](https://docs.google.com/presentation/d/16DVGMTWon0OrQ-5zPpQSP8UnAxHoCo-ZiTclZhfpQ/edit?usp=sharing)
- Students will review what we learned yesterday about 2D shapes, and they will review the proficiency scale so they remember what we will be learning in our lesson.
- **Anticipatory Set:** Students will watch a video about 3D shapes by Jack Hartmann.
- After watching the video, students will be introduced to the vocabulary for this lesson.
  - Face, edge, vertex, and base
- Then, the students will learn about 3 dimensional shapes and their attributes. Each slide will cover a new 3D shape and will discuss all of the shapes attributes. The attributes covered are faces, edges, vertices, and bases. Each shape has a real-world example along with it.
  - 3D shapes discussed are spheres, cubes, cones, cylinders, triangular prisms, and rectangular prisms.
- After learning about 3D shapes, students will complete a shape scavenger hunt in their home. They will look for an example of each 3D shape in their house, and show their findings to a family member or friend.
- Finally, students will complete an exit ticket to check their understanding of the lesson. Once they have completed the exit ticket, they can check their answers on the next slide.

**Differentiation:**

- Screencasting with closed captioning for Google Slides
I can also:
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<td>cube</td>
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With Help!
How Many??

Faces = 
Edges = 
Vertices =

How Many??

Faces = 
Edges = 
Vertices =
Geometry Lesson Plan Day 3

Name: Maya Moltzen

Date: April 20th, 2020

Discipline: Math

Grade Level: 2nd grade

Topic: Geometry

Lesson Focus: Recognize and Draw Shapes

Standard:

• 2.G.1 Identify trapezoids, rhombuses, pentagons, hexagons, octagons, parallelograms, quadrilaterals, cubes, spheres, cylinders, cones, triangular prisms, rectangular prisms. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.

Objective:

• The student will recognize and draw shapes.

Assessment:

• Word sort formative assessment (see attached materials below)

• Building cities using shapes assessment

• Proficiency Scale (see attached materials below)

Materials:

• Google Slides

Procedure:

• ALL INFORMATION AND MATERIALS NEEDED FOR THIS LESSON ARE INCLUDED IN THE GOOGLE SLIDES.

  o https://docs.google.com/presentation/d/1UZYCsCRBPAbXfTSmJ_7fVP6GE9bu7QnrZP70UQyyWcY/edit?usp=sharing

• Students will review what they have learned about 2D and 3D shapes.
• Anticipatory Set: Students will complete a word sort to review what shapes are considered 2D and what shapes are considered 3D.

• After reviewing 2D and 3D shapes, the students will be reminded of the proficiency scale so that they remember what we will be learning in this lesson and know what is expected of them.

• Then, students will complete an activity where they draw out shapes based on the description given. Each slide will have a description of a shape. It will list attributes of the shape and students will think about what shape is being described. Once they figure out which shape it is, they will draw out the shape. After each description slide is the answer slide. It tells the student which shape it is and has a picture of it.

• Finally, students will get to create a city using their new knowledge of 2D and 3D shapes. They will either draw or build 5 different shaped buildings using shapes. Each building must be built using at least two of these shapes:
  o Squares, rectangles, rhombuses, trapezoids, pentagons, hexagons, octagons, spheres, cubes, cones, cylinders, triangular prisms, and rectangular prisms

• Once students are done creating their cities, they will show their city to a family member or friend and tell them about the shapes in their buildings.

Differentiation:

• Screencasting with closed captioning of Google Slides
Shapes to sort:

- Cube, rectangle, cone, trapezoid, pentagon, cylinder, triangular prism, octagon, triangle, square, and sphere
I can also:
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<td>- edge</td>
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