## Mathematics - Modified from Unit \#5-Geometry and measurement: We Believe in Angles

## Targeted Goals from Stage 1: Desired Results

Content Knowledge: This week, students will extend their work with angles and explore attributes of polygons.

Vocabulary: line, parallel, perpendicular, line of symmetry, equilateral triangle, isosceles triangle, rectangle, rhombus, right angle, scalene triangle, square, symmetry, line segment, parallelogram, polygon, quadrilateral, trapezoid, congruent
line: a set of connected points that continues in both directions without end (if it has two endpoints it is a line segment, and if it has one endpoint and continues in one direction without end, it is a ray)
parallel: always the same distance apart
perpendicular: intersecting at right angles
line of symmetry: a real or imaginary line that divides a shape into two mirror images
equilateral triangle: a triangle with all sides the same length
isosceles triangle: a triangle with exactly 2 congruent sides
rectangle: a two-dimensional (flat) shape with two pairs of parallel sides ( 4 sides total) and 4 right angles
rhombus: a two-dimensional (flat) shape with 4 congruent sides
right angle: an angle with a measure of exactly $90^{\circ}$
scalene triangle: a triangle whose sides are all of different lengths
square: a two-dimensional (flat) shape with 4 congruent sides and 4 right angles
line segment: the set of all points between two endpoints
parallelogram: a two-dimensional (flat) shape with 4 sides, with both pairs of opposite sides parallel
polygon: a closed two-dimensional (flat) shape with 3 or more sides
quadrilateral: a two-dimensional (flat) shape with 4 sides
trapezoid: a two-dimensional (flat) shape with 4 sides, exactly 1 pair of which are parallel
congruent: of the same shape and size
Skills:

- Analyze and identify angles based on their properties.
- Analyze and identify parallel and perpendicular lines based on their properties.
- Analyze and identify polygons based on their properties.


## Expectation:

| Description of Task (s): | Resources and Materials: | Daily Checks <br> (Return to Google Classroom or snapshots from a cell phone) |
| :---: | :---: | :---: |
| Monday: Triangles <br> Today your mission is to identify types of triangles by focusing on their angles and sides. <br> You will be successful if you can name each type of triangle and each type of angle (acute, right and obtuse angles) inside. <br> Practice Multiplication or Division Facts | 1. Watch this Video about triangles. <br> 2. Read SB 187 - Focus on Triangle section <br> 3. Complete the Triangle Worksheet and then check your answers. You do not need to turn this in. <br> 4. Complete the problems on the Google Form about triangles. <br> 5. You may want to listen to this Triangle song <br> Choose a game or activity to practice facts for 5-10 minutes. See District website or Fact Fluency Practice Options for ideas. | Complete the problems on the Google Form and hit submit. Your answers will go straight to me. |
| Tuesday: Quadrilaterals | 1. Watch this video on quadrilaterals. <br> 2. Read SB 187 - Focus on the | Complete the problems on the Google Form and hit submit. Your answers will go straight |


| Description of Task (s): | Resources and Materials: | Daily Checks <br> (Return to Google Classroom or snapshots from a cell phone) |
| :---: | :---: | :---: |
| Today your mission is to identify types of quadrilaterals by focusing on their angles and sides. <br> Practice Multiplication or Division Facts | quadrilateral section <br> 3. Complete the problems on the Google Form about quadrilaterals. <br> Choose a game or activity to practice facts for 5-10 minutes. See District website or Fact Fluency Practice Options for ideas. | to me. |
| Wednesday: Quadrilaterals, Pentagons and Hexagons <br> Today your mission is to identify types of quadrilaterals, pentagons and hexagons by focusing on their angles and sides. <br> Practice Multiplication or Division Facts | 1. Watch this video about quadrilaterals. <br> 2. Using the MLC Pattern Block App, create a design that uses: <br> - 1 hexagon <br> - 2 trapezoids <br> - 3 equilateral triangles <br> - 4 rhombuses <br> - 3 squares <br> Take a picture or screenshot of your design and share with me on Google Classroom. <br> Choose a game or activity to practice facts for 5-10 minutes. See District website or Fact Fluency Practice Options for ideas. | Take a picture or screenshot of your pattern block design and share it with me on Google Classroom. |
| Thursday: Polygon Identification <br> Today your mission is to identify types of triangles, quadrilaterals, pentagons and hexagons by focusing on their angles and sides. <br> Practice Multiplication or Division Facts | 1. Label the shape names on these Polygon Cards. Check your answers here. <br> 2. Watch this video. <br> 3. Now, sort some of the polygon cards into this venn diagram by creating two different categories of your own. <br> Choose a game or activity to practice facts for 5-10 minutes. See District website or Fact | Share a picture of how you sorted the shapes or fill out this Google Form regarding how you created your venn diagram shape sort. |


| Description of Task (s): | Resources and Materials: | Daily Checks <br> (Return to Google Classroom or snapshots from a cell phone) |
| :---: | :---: | :---: |
|  | Fluency Practice Options for ideas. |  |
| Friday: <br> Today your mission is to show what you know about polygons and their specific attributes. <br> Practice Multiplication or Division Facts | 1. Complete the Geometry Checkpoint. <br> 2. OPTIONAL when finished, play one of these games: <br> Triangle Splat - Geometry: Math Games <br> Quadrilateral Shapes - Geometry: Math Games <br> Line Splat - Geometry: Math Games <br> Choose a game or activity to practice facts for 5-10 minutes. See District website or Fact Fluency Practice Options for ideas. | Complete the Geometry Checkpoint You can do your work on notebook paper or print out the student book sheets, take a picture or scan, and send it to your teacher via Google Classroom. |

Week criteria for success (attach student checklists or rubrics):

- I can define a polygon.
- I can identify triangles by their side lengths and angle types.
- I can identify specific quadrilaterals (square, rectangle, parallelogram, rhombus, trapezoid).
- I can define and identify specific polygons based on their attributes.


## Enrichment activities:

A True Matherpiece: In this activity, you will view a variety of art work. Choose one where you can identify a variety of the geometric terms and concepts that you have been learning. You will be successful if you can analyze and identify at least 5 geometry words - including lines, angles and shapes.

Polygon Riddles: Use the Polygon Cards from Thursday to solve these polygon riddles. When you are finished, here's the answer key.
Home Connections page 97

## Supportive resources and tutorials for the week (plans for re-teaching):

Polygon Bingo
The Polygon Song

The Greedy Triangle by Marilyn Burns

Triangle Sorting Activity
Polygon Sorting Activity
Quadrilateral Properties
Identifying Quadrilaterals
Student Book page 183

