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| Unit Name: Where Has “Poly Gon” in the Neighborhood? | Unit Length: 1 week |
| **Overview:** A polygon is a plane shape with straight sides. Polygons are two-dimensional shapeswhose edges are all line segments. A regular polygon is one that has equal sides. The most familiar polygons are the triangle, the rectangle, and the square. |
| ***DESIRED RESULTS*** |
| **Pre-Kindergarten Guidelines - Matrices****# 306** - Begins to recognize, describe, and name shapes.**# 312** – Begins to use words that indicate where things are in space.**# 305** – Describes similarities and differences between objects.**# 407** - Begins to make size comparisons between objects.**# 411** – Covers an area with shapes.**# 313** – Begins to recognize when a shape's position or orientation has changed.**NCTM Geometry Standards and Focal Points**1. recognize, name, build, draw, compare, and sort two-and three- dimensional shapes
2. describe attributes and parts of two- and three- dimensional shapes
3. investigate and predict the results of putting together and taking apart two- and three- dimensional shapes
 | **Critical Vocabulary**sideslinesfourcornersstraightanglelongshortequal |
| **Enduring Understandings (Big Ideas)**The environment we live in is a useful tool to help us learn about geometry by finding polygons all around us. | **Essential Questions**How can we recognize and identify polygons in our environment to learn about geometric patterns that exist all around us?How can polygons be used to create patterns in our environment? |
| **Learning Goals and Objectives**Students will understand how polygons relate to and are a part of our surroundings. | **Materials Needed**Our classroom, various types of toys, pictures with rectangles, painter's tape, book, “My Very First Book of Shapes,” a sense of creativity, and an open mind. |
| ***ASSESSMENT PLAN*** |
| **Performance Tasks:**Formative Assessment:What shape has 4 sides?What shape has 4 corners?Is a rectangle the same shape as a triangle? Draw something that looks like a rectangle. | **Other Evidence** |
| ***LEARNING PLAN*** |
| **Engage:** Ask students to name things that look like rectangles; teacher writes down responses.**Explore:** Allow students to work in small cooperative learning groups with geometric shapes – using the following polygons: squares, rectangles, and triangles. Students manipulate shapes to create patterns, pictures, models, etc., exchanging ideas with others and working with their peers. Students will have conversations while naming and recognizing rectangles.**Explain:** Discuss the rectangle shape and vocabulary words related to rectangles, making sure to use vocabulary words - students repeat vocabulary words, students copy vocabulary words in math journals. Define and identify the parts of a rectangle by creating different 3 different sizes of rectangles – small, medium, and large.**Elaborate:** Show students examples of different variations about how they can create and find rectangles using various objects/items . **Evaluate:**  Students will complete an art activity to create a rectangle collage, by cutting out pictures of items/objects that are shaped like rectangles.In addition, students will draw, create, and sort rectangles in a shape book. They will add onto the book as they progress through the rest of the polygon unit, which will also focus on and include triangles and squares.***Extension:*** ***Modifications:*** |  **Time** 5 mins.10 mins. 10 mins.  5 mins.15mins. |
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