Lesson 3: Ways to Look at Quadrilaterals

Standards Alignments

Addressing   4.G.A.1, 4.G.A.2, 4.MD.C

Teacher-facing Learning Goals

- Classify quadrilaterals based on the length of their sides, the size of their angles, and prescence of parallel sides.

Student-facing Learning Goals

- Let's sort and identify quadrilaterals.

Lesson Purpose

The purpose of this lesson is for students to classify quadrilaterals by the size of their angles, the length of their sides, and the presence of parallel and perpendicular sides.

In the previous lesson, students sorted and analyzed triangles by their sides and angles and began to form general statements about the properties of triangles. (Triangles always have three sides and angles, may have a right angle or equal sides, may be foldable into equal halves, never contain more than one obtuse angle, and so on.)

In this lesson, students identify and sort quadrilaterals based on their angles and sides, including whether their sides are parallel. Students are introduced to the term parallelogram to describe quadrilaterals with two pairs of parallel sides, but they are not expected to use this term throughout the unit. In grade 5, students will continue the work of classifying polygons using these categories.

Access for:

♿ Students with Disabilities

- Engagement (Activity 1)

🌐 English Learners

- MLR8 (Activity 2)

Instructional Routines

How Many Do You See? (Warm-up)

Materials to Gather

- Materials from a previous activity: Activity 2
- Materials from a previous lesson: Activity 1
- Patty paper: Activity 1, Activity 2

- Protractors: Activity 1, Activity 2
- Rulers: Activity 1, Activity 2
- Tools for creating a visual display: Activity 2

Required Preparation

Lesson Timeline

Warm-up	10 min
Activity 1	20 min
Activity 2	15 min
Activity 3	10 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

Who participated in math class today? How can you leverage each of your students' ideas to support them in being seen and heard in tomorrow's math class?

Cool-down (to be completed at the end of the lesson) 🕐 5 min

Quadrilaterals Rule

Standards Alignments

Addressing   4.G.A.2

Student-facing Task Statement

Here are four shapes that share some attributes. List two attributes they all share.

Student Responses

Sample responses: All four shapes have:

- four sides
- at least one pair of sides that are the same length
- at least one pair of parallel sides
- two obtuse angles and two acute angles