

Megan Chapman  
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Mrs. Henke-3<sup>rd</sup> grade  
Math Lesson

**STANDARDS:**

Measurement 3.5.3 Find the perimeter of a polygon.

Geometry 3.4.1 Identify quadrilaterals as four-sided shapes.

Geometry 3.4.10 Recognize geometric shapes and their properties in the environment and specify their locations.

**OBJECTIVES:**

1. The students will explore various types of quadrangles.
2. The students will draw, label, and measure the quadrangles.

**ASSESSMENTS:**

1. The teacher will listen to students' conversation and feedback for related information and discoveries.
2. The teacher will check the students' quadrangles for accuracy of details and lengths.

**MATERIALS:**

Math Journal (page 137)

Bag of straws and twist-ties for every 2 people

Ruler

Pre-cut shapes

Paper bag

**DESCRIPTION OF LEARNING ACTIVITY**

Math in a Minute (Timed 1 minute, 30 seconds), then review answers

2 for 2 addition/subtraction problem (collect papers and check together)

Check last night's homework (Home Link 6.4)

Motivational/Visual activity: I will tell the students that today we will be discussing quadrangles. I will ask them what other words they know that begin with the prefix "quad-". Expected answers: quadruplets, quadrant, quadruple, quadrilateral.

**Teach:**

I will draw a quadrangle on the board and label the vertices EFGH. I will ask the students what they know about the quadrangle I've drawn on the board. We will discuss that it is 2-dimensional, has 4 vertices, 4 sides and 4 angles. I will provide them with a list of possible names for my quadrangle, and then I will ask them which name would be impossible. This will lead us to discuss how quadrangles are named by reading the letters clockwise or counterclockwise.

Practice: We will practice as a group. I will ask the students to complete part 1 in their Math Journal on page 137 (The problem in this section is identical to the problem I modeled on the board). I will ask them to name their quadrangle (part 2). For part 3 and 4, the students will work with a partner to construct the quadrangles suggested in part 3. After allowing a few minutes for construction, I will have the students present their quadrangles to the class. I will ask how the quadrangles created are similar and how they are different. I will ask them, "What happens if you tug on this corner? Does the perimeter change?" I will encourage the students to explain their thinking in their response ("I know this because...").

Apply: The students will begin working on their Math Boxes (6.5). They will be completed independently unless individual support is needed.

Closure: To review what was taught today, I will facilitate an activity where one student will come up to the front, reach his or her hand in a paper bag, and try to guess the shape that he feels in the bag. I want him or her to describe to another student what they feel. The other student will interpret what he or she is feeling and will point to that shape (among the 6 shapes lying in front of him or her). If the student is struggling to describe the shape, I will allow another student to come up front to look at the shape he or she is feeling and will describe what he or she sees.

[Assign homework: HB page 283]