Formative Assessment Task

Kindergarten: Operations and Algebraic Thinking

K.G.4. Analyze and compare two-and three- dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g. number of sides and vertices/"corners") and other attributes (e.g. having sides of equal length).

Directions:

- 1. Copy and cut one set of shapes for each group of students (students could be in groups of four).
- 2. The teacher will also need a set. Pull the students up front and display all or some of the shapes, depending on the needs of your students. Ask them what they notice about the shapes. Chart important vocabulary words as they discuss the shapes. Words may include curves, rectangles, triangles, squares, corners, sides, etc... Next, pick just two shapes and discuss how they are different and how they are alike.
- 3. Distribute a set to each group.
- 4. Have each child select two shapes and share with the group one way the two shapes are alike and one way they are different.
- 5. Next, the teacher will sort some shapes under a common rule. For example, pull out of all of the triangles. Ask the students if anyone can discover their secret rule.
- 6. Provide students with a time to discover and then share a common rule with their group and have the members of their group state the rule.

Considerations:

Watch how students discuss and sort the shapes.

- Listen to the type of observations students make about the shapes. For example, do they say rectangle or shapes with four sides? Are they able to identify shapes by the correct name?
- Is there an awareness for when an objects' orientation is changed, it is still the same shape? Additionally, is there an awareness when the two shapes are the same but the size is different?

Collecting Data:

Student performance can be scored with a provided task rubric or a rubric created by the teacher.

Data can be recorded on a scoresheet.

This activity is adapted from Teaching Student Centered Mathematics Grades K-3.













