Fun With Shapes

Kaylyn Waki

**Grade Level:** 3rd

**Objectives:**

Students will display knowledge of shapes and their attributes.

Students will be able to form shapes on paper when listening to a description of the shape.

Students will be able to describe a shape to a partner without using the name of the shape.

**Common Core State Standard:** 3.G.1 Understand that shapes in different categories may share different attributes and that shared attributes can define a larger category. Recognize rhombuses, rectangles, and squares as examples of quadrilaterals that do not belong to any of these subcategories.

**Materials:** Construction paper, white board, mason jar, pipe cleaners of different lengths.

**Procedure:**

-We will review how we’ve been talking about “awesome shapes” and their characteristics.

-We will play the “shape describing” game after each student picks a secret shape from the “awesome shapes” jar.

-Each student describes their shape without naming the shape

-Other students guess which shape that student has

-The students will then be given a construction paper and different sized pipe cleaners.

-The students will form the shape I describe on the paper using the pipe cleaners.

**Assessment:** I can informally assess students by listening in on groups and their abilities to describe and guess their shapes. I can also create “exit slips” that assess each student’s understanding by asking them to write after giving them a prompt. The prompt could say, “What did you notice about similar shapes during this activity?” or “How did you know your partner was describing a rectangle and not a square? Vice Versa?” This type of assessment allows me to note on a running record how each student is understanding the geometric concepts we learn during activities. Having this record can help me to communicate students’ levels of learning to parents during parent-teacher conferences.

**Differentiation:** I can differentiate this lesson by offering a challenge round during the pipe cleaner shape game. This challenge may include creating a “quadrilateral that is divided into four equal parts”. I can also differentiate by allowing a student (instead of myself) to describe a shape during the pipe cleaner activity and having the rest of the students form the shape. Another way to differentiate is to have different materials for students to use to create their shapes, or they can draw their shapes. Having lots of options for students during this lesson allows varied stages of learners to achieve the same objectives.

**Integration Activities:** A possible integration activity could be relating this lesson to writing by having students write a creative story involving shapes as characters and somehow involving shape attributes into their stories. Another integration activity could be tying this lesson to science. Students could create hypotheses for shapes (such as “circles are the most common shape on classroom walls”) and test their hypotheses. One last integration activity could be relating this lesson to social studies. Students could choose to explore a historical figure and his or her “attributes,” or students could explore the history behind shapes.

**Lesson Justification:** This lesson would not necessarily be ideal for introducing shape attributes or their connectedness to each other and the shape subcategories. This lesson primarily supports students’ conceptual knowledge of shapes and their attributes through review. This lesson includes two fun activities that students would enjoy while also reviewing shapes and allowing me to assess how familiar they are with shape attributes. The lesson supports precision because students need to be neat and precise with their work and their words in order to communicate the shapes. Thus, communication is very relevant in this lesson because students will need to listen to my geometry vocabulary in order to produce shapes as well as be able to communicate descriptions of shapes accurately in order for their classmates to guess the shapes.