



Classifying Triangles: A Mosaic of Sorts

By: Jessica Shaffer

5th grade teacher; M.A. in Administration and Leadership, Georgian Court University, NJ

Math
Grades 6–8



Introduction

An isos-o-what?!? Create a non-traditional mosaic out of different types of triangles in this lesson that combines mathematics, art, and even a little technology!

Learning Objectives

([CCSS.MATH.CONTENT.7.G.A.2](#)) WALT construct triangles from three measures of angles or sides using rulers and protractors and notice when the conditions determine a unique triangle, more than one triangle, or no triangle.

Materials Needed

- [“Classify Triangles: A Mosaic of Sorts” project rubric](#)
- White construction paper
- Colored pencils
- Ruler
- Markers (Sharpies to trace outlines of triangles)
- Chromebook/tablet

Procedure

1. Before beginning this activity, you should make an anchor chart illustrating and describing the different types of classifications of triangles.
 - Length of Sides
 - Scalene: all sides are a different length
 - Isosceles: two sides are the same length
 - Equilateral: all sides are the same length
 - Angles
 - Acute: all angles are less than 90 degrees
 - Right: one right (90 degree) angle
 - Obtuse: one angle is greater than 90 degrees

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2. Draw various examples of different triangles and have the students identify the triangles. Have the students verbally explain their reasoning as to how each triangle is classified.
3. Ask students to draw different types of triangles on whiteboards. Make sure they label the length of the sides with numerical measurements or with tic marks.
 - Equilateral, acute
 - Isosceles, right
 - Scalene, obtuse
4. Create an example to share with students or use student samples from previous years. You can even search online to find samples of projects that the students can create. Students can create objects/animals if they wish, such as the butterfly, or just a design with triangles.
5. Students will create a rough draft of the image that they wish to create.
6. Students will create a key for the triangles they are creating. The triangles should be outlined in a color to represent the side-length measurement. Choose a color for scalene, obtuse, and equilateral. The triangle color should be filled in to represent the angle measurement being acute, obtuse, or right.
7. Students will work on this project by making a choice on how to create it.
 - Option 1: On construction paper, students will create a mosaic using a ruler, Sharpies/markers, and colored pencils.
 - Option 2: Students may create this on an online platform of their choosing. Students can share the project with the teacher either through Google or e-mail.
8. For early finishers, you can have students work on:
 - Existing Math Centers in the classroom
 - Prodigy, Freckle, or any other online platform for individual goals

Evaluation

Use the rubric to score the project.