Grade Levels for Recommended Use:  3-4

TEKS:

3.6 Geometry and measurement. The student applies mathematical process standards to analyze attributes of two-dimensional geometric figures to develop generalizations about their properties. The student is expected to:

(A) classify and sort two- and three-dimensional figures, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language;

(B) use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories;

4.6 Geometry and measurement. The student applies mathematical process standards to analyze geometric attributes in order to develop generalizations about their properties. The student is expected to:

(A) identify points, lines, line segments, rays, angles, and perpendicular and parallel lines;

(B) identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure;

(C) apply knowledge of right angles to identify acute, right, and obtuse triangles;

(D) classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.

Brief Summary: Sam discovers that he enjoys sewing while mending an awning that covers the pig pen. He attempts to join his wife’s quilting club but is met with ridicule, so he gathers the town’s men and starts his own quilting club. An unfortunate event occurs causing the two quilting clubs to have to work together to mend their quilts.

Materials needed: 6 inch squares of white construction paper (1 per student), 3 inch squares of dark construction paper (2 per student), 3 inch squares of light construction paper (2 per student), scissors (1 per student), glue sticks or liquid glue, notebook paper
Suggested Activity:

1. Read *Sam Johnson and the Blue Ribbon Quilt* by Lisa Campbell Ernst.
2. Pass out the listed construction paper materials and scissors to each student.
3. Instruct students to fold each colored square on the diagonal and cut on the fold to make triangles.
4. Discuss that all of the triangles will be congruent. Ask student what congruent means and discuss student responses.
5. Instruct students to take all of their triangles and fit them together however they would like into the white construction paper square without any of the pieces overlapping. DO NOT glue down. Explain that it’s like a puzzle and that everyone’s solution may look different.
6. Once all students have created a design, group four students together. Ask them to decide who’s design they like the best from their group and then have all members of the group create that same design (each group can have a different design).
7. Pass out the glue sticks or liquid glue. Have each group of students glue down their agreed upon design.
8. Instruct students to take the four completed squares from their group and put them together to form one large square (making a mini quilt). Tape or glue the four pieces together.
9. Ask students to share geometrical observations about the quilts they just made. For example: It has parallel lines. It has right triangles. I see lots of quadrilaterals., It has two lines of symmetry., etc.
10. Instruct each group to work together to make a list of as many geometric observations about their quilt as they can on a sheet of notebook paper.
11. Once students have finished their lists, discuss the features of a riddle. Explain to students that as a group, they will work together to name their quilt design and then write a riddle using the observations they brainstormed.
12. Once all riddles are written, collect all of the quilt patterns and display on the wall. Have each group read their riddle to the class and let students try to match the riddle to the correct quilt.

References: Lesson adapted from:

Adapted by: Kimberly Jones (2018)
Sam johnson and the blue ribbon quilt. by Lisa Campbell Ernst • RELEASE DATE: Aug. 17, 1983. A send-up, in crinoline, on the equal-rights theme—for those who find the idea amusing. As this contrived affair has it, turn-of-century farmer Sam Johnson discovers a torn awning over the pig pen when his wife is away, and discovers a gift for quilting in the course of mending the tear. Mrs. J. can't see Sam in the Women's Quilting Club, however, and neither can the others: "We can't have a man here bungling everything. . . . Why don't you go join the men's horseshow Most can't afford to give, but we hope you can. The average donation is $45. If everyone reading this chips in just $5, we can keep this website going for free, and free of ads. That's right, all we need is the price of a paperback book to sustain a non-profit website the whole world depends on. For 23 years this has been my dream: for a generation of learners who turn to their screens for answers, I want to put the very best information at their fingertips. We stand with Wikipedians, librarians and creators to make sure there is enduring access to the world's most trustworthy knowledge. by Lisa Campbell Ernst Answers to Sam Johnson and the Blue Ribbon Quilt Reading Level 4.2. Page 1: 1. exact 2. expert 3. awning 4. snicker 5. contest 6. success 7. design 8. rousing. 9. mend 10. hastily 11. masterpiece 12. delicately 13. doubts 14. impressed 15. lingering 16. stalked. Page 4: Answers will vary—accept all reasonable answers. 1. Sam tried to join the Rosedale Women's Quilting Club. They did not want him to be a member of their club.