Title of Book: **Perfect Square**
Author: **Michael Hall**
Publisher/Year: **Greenwillow Books/2011**
ISBN: **978-0061915130**

Grade Levels for Recommended Use: 3rd – 4th

TEKS:

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:

(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

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:

(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

Brief Summary: The book discusses how a square can be cut, shredded, poked, and torn to make masterpieces.

Materials needed:

- Scissors
- Glue
- Tape
- Hole Punch
- 5 by 5-inch squares of construction paper
- Sheet of printer paper

Suggested Activity:

Each student will receive one square of construction paper. The teacher will hold a discussion about the different attributes of a square depending on the grade level.

- Number of sides
- Number of vertices (corners)
- Other names for the square
- Number of parallel and perpendicular lines
- Identify the lines of symmetry

The students will then be challenged to create their own design with their own square. Before the students begin to create, they are to plan their design and determine what tools they will use. Once their planning is done, they are to take their square and start designing. The students will have the choice to either glue or tape their picture on a sheet of blank paper. After their design is complete, they are to write a short story or poem that represents their picture.

Reference:

Teach Outside the Box

https://teachoutsidethebox.com/top-10-read-alouds-elementary-stem/#:~:text=The%20Perfect%20Follow-up%20STEM%20Challenge%3A%20Have%20students%20create,challenge%20are%20found%20in%20our%20September%20Storybook%20STEM.

Adapted by: Amanda Gonzalez (2023)