Paper Quilt Square

2nd Grade Math Project · Art & Design

Grade 2 · Advanced

Name: _____ Date: _____ Class: _____

The Challenge

Our class is making a paper quilt! Each student designs one square with shapes, rows of squares and equal shares.

You will make: Paper Quilt Square

I can…

- I can name and draw shapes by their sides and angles.
- I can partition a rectangle into rows and columns of squares and count them.
- I can make halves, thirds and fourths.

Materials

- Square paper
- Ruler
- Crayons
- Dot paper

Steps

1. Part 1: Shape Patches
2. Part 2: Quilt Grid
3. Part 3: Equal Shares
4. Part 4: Prove It
5. Check your work and share your paper quilt square.

Part 1: Shape Patches

Draw each shape on dot paper.

1. Draw a shape with 5 sides. What is it called?

2. How many angles does a hexagon have?

3. Draw a quadrilateral that is not a square or a rectangle.

Part 2: Quilt Grid

Partition your quilt rectangle into 4 rows and 5 columns of same-size squares.

4. How many squares are there?

5. Write a repeated-addition equation.

Part 3: Equal Shares

Color some squares in halves, thirds and fourths.

6. Cut one square into 4 equal shares. What is each share called?

7. How many thirds make a whole?

8. Which is bigger: one half or one fourth of the same square?

Part 4: Prove It

Explain with drawings.

9. Cut one square into halves with a straight line and another with a diagonal line. Are the halves the same size? Explain.

10. Raj cut a rectangle into 3 parts that are not the same size and called them thirds. What is wrong?

Extension Challenge

The class quilt has 4 rows of 5 quilt squares. How many squares in all?

How your project will be scored

Learning target	4 Exceeds	3 Meets	2 Approaching	1 Beginning
I can name and draw shapes by their sides and angles.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can partition a rectangle into rows and columns of squares and count them.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can make halves, thirds and fourths.	Correct and complete; explains how	Mostly correct	Partly correct	Not yet
I can explain my thinking with pictures, numbers and words.	Clear for every part	Clear for most parts	Some explanation	Little explanation
My paper quilt square is complete and matches my math.	Complete, neat, accurate	Complete	Partly complete	Not complete