Quilting Pattern

<u>Sunshine State Standards</u>

MA.D.1.2.1

<u>Materials</u>

35 paper squares marked with one color (or shaded) for each child
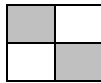
<u>Notes to the Teacher</u>

Using a set of demonstration squares, show each quilt pattern as you read the following:
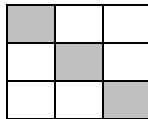
This quilt uses one shaded square:

This quilt uses four squares including 2 shaded squares and 2 empty squares:

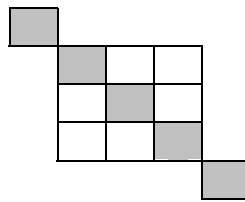This quilt uses nine squares including 3 shaded squares and 6 empty squares:

Instruct the students to complete the following tasks.

Name _____

Quilting Patterns

Think carefully about the following question. Write a complete answer. You may use drawings, words, and numbers to explain your answer. Be sure to show all of your work.

1. Complete the quilt below using the same pattern. How many empty squares total would you need? How many total squares are in your quilt pattern?

2. Draw a picture of the next size larger quilt using the same pattern. How many shaded squares do you need? Find the number of empty squares and the total number of squares in your quilt.

3. If you were to make a quilt with 100 squares, using the same pattern as above, how many total shaded squares would you need? How many empty squares total do you need?

4. Complete the following chart showing the number of shaded squares and the total squares for each quilt pattern.

	Empty	Total
1	0	1
2	2	
3		
4		
5		
---	---	---
		100

5. Graph the relationship between the number of shaded squares and the number of empty squares.

6. Graph the number of shaded squares and the number of total squares.

7. Write a description or rule that describes each of the graphs in #5 and #6.