

Children's Literature and Math Assignment

Sam Johnson and the Blue Ribbon Quilt

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Children's Literature and Math Assignment
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P/J 2

Book Summary:

Sam Johnson and the Blue Ribbon Quilt

ISBN 0-688-01516-6

Ernst, Lisa. C. (1983). *Sam Johnson and the Blue Ribbon Quilt*. New York, New York: Lee & Shepard Books.

The Children's book that we decided to do our children's literature and Mathematics assignment on is called Sam Johnson and the Blue Ribbon Quilt. This story is about two quilting clubs who were pitted against one another in a contest to create a quilt with the most vivid colours and a creative design which included various patterns using shapes and colours.

The story all began one day when Sam Johnson noticed a tear over the pig's awning. With Sam's wife out of town, he decided to fix the tear himself using pieces of cloth to patch the tear. Sam chose elaborate shapes and colours to create a unique design. As Sam's hard work progressed into the night, Sam began to enjoy patching up his awning. With the finished product in his hands, Sam was impressed with his design and eagerly awaited the approval of his wife. However, upon Mrs. Johnson arrival, Sam received very little praise and approval on his unique patching design. Sam declared to his wife that he enjoyed his patch work so much that he decided to join her quilting club. Mrs. Johnson and her quilting club, merely snickered and told Sam that he did not belong in the quilting club with the women for he would only destroy their hard work. Sam was outraged that the women felt this way. Therefore, he decided to gather all the local men to form a quilting club of their own. Sam's quilting club challenged Mrs. Johnson's quilting club to enter the quilt contest at the county fair. The day of the quilting contest at the country fair an unfortunate event occurred and both quilts were ruined. The men's and women's quilting club realized how beautiful their opponent's quilts were and decided to merge the unsoiled pieces together. Their finished product was a beautiful quilt made of vibrant colours, patterns and shapes.

Book Critique:**Based on Hellwig, Monroe, and Jacob's five categories:**

Accuracy: 5 – It is difficult to describe the accuracy of concepts with this book as the mathematic concepts are hard to identify. Unless specifically pointed out, the average reader would not be able to identify the mathematics within the book. If using the book to describe patterning, the patterns represented on the quilts are appealing and are accurately depicted. The shapes used on the quilts are accurate to those tangram shapes used by classroom students and teachers.

Visual and Verbal Appeal: 9- The illustrations of this book are beautiful and really enhance the book's appeal. Rather than distracting from the story, the illustrations engage the reader and compliment the storyline. The book is not overly predictable and touches on important topics of gender, acceptance, and cooperation with others. This book is both visually and verbally appealing.

Connections: 4- Although this book does not overtly describe mathematic concepts, there is still room for the reader to make connections to real life situations. The quilts used in the book may make the reader think of their own or their grandparents' quilts, and begin to realize the use of geometric patterns within them.

Audience: 6- Students grade levels ranging from 3 to 6 would find this book appealing. Although the book could be read to younger grades, the younger students may not understand the complex underlying morals of gender equality. Both males and females would enjoy this book, for they could relate to the issues of gender equality and gender stereotyping. As well, although the topics of the book could be meant for older readers, the book is still appropriate for a younger audience because of the simple language and beautiful illustrations.

WOW Factor: 8- This book does present a “wow factor” because of the issues of gender equality and teamwork that it presents. The storyline is not predictable from the title or cover. The idea of males entering a perceived females’ world of quilting would be something new to younger students, which could in turn create possible discussion questions. The concept of farm men creating their own quilting club in order to enter a quilting contest is appealing to both young and older readers. The storyline is unexpected and presents a lesson without being too moralistic.

The story of “Sam Johnson and the Blue Ribbon Quilt” is engaging, appealing, and full of possible teaching concepts. If teaching the mathematics concept of patterning or geometric shapes, the quilts in the book could be used to represent such patterns and shapes. Teachers could get students to create their own quilts using geometric shapes or simply identify the given patterns within the book’s illustrations. Teachers could also use this book when dealing with social justice issues of gender equality or acceptance of others. Due to the richness of the morals presented in this book, the story is one which teachers would be able to read over and over again. Since the storyline does not overly rely on one specific issue, the book could be used for a variety of concepts. This allows teachers to adapt this book to their own lesson and concepts within the classroom and for a range of grade levels. An overall impression of Ernst’s book deems it as an engaging and appealing story which will continue to be relevant for many years to come.

Self Assessments

Nicole- I deserve a mark of 20/20 on this assignment because I put forth a great effort to accomplish each task within the assignment. Bryanne and I worked together on multiple occasions. There was never a time when the work load was placed on a single group member. I worked with my partner as a team as well as imputing my own ideas. When it came to the handouts, we both created them equally. I worked in a respectful manner throughout the completion of the project.

Bryanne: I give myself a mark of 20/20. Nicole and I got together several times to work on our assignment. All areas of the assignment were worked on together as a team to eliminate any stressors or unfairness. We worked well together and we both provided valuable input and ideas for the final assignment. We both worked on a handout each and made sure to put forth any additional suggestions that we thought may be needed to improve the overall project. We were very thorough with our assignment and made sure that we had covered all of the expectations given. Therefore I believe that all of our hard work and team work deserves a mark of 20 out of 20.



Direct Instruction Planning Format

2008-2009

1. Lesson Plan Information	
Subject/Course: Math	Name: Bryanne Alexander and Nicole Keogh
Grade Level: 4	Date: 01.21.09
Topic: Geometric Patterning	Time and Length of Period: 50 min
2. Expectation(s) and Learning Skills	
The students will:	
Make predictions related to repeating geometric patterns	

Today, students will: Students will predict and continue a pre-existing pattern using geometric shapes. Students will continue their partner's repeated geometric pattern. Students will then make a quilt using the geometric shapes to create a continual pattern.

3. Pre-assessment

(i) Students

Students have used geometric shapes before
 They can identify the basic geometric shapes
 Students have some knowledge of patterning
 Students will know what an attribute is

(ii) Differentiation of content, process, and/or product (may be accommodations and/or modifications)

S and Z will be given additional teacher assistance when creating their own patterns
 T and R will be able to work with their elbow partners during the activity

Learning Environment

Students will be seated at the carpet during the story
 Students will be working in their assigned seats during lesson and activity

C. Resources/Materials

Overhead
 Geometric shapes – handout
 Geometric Patterns worksheet
 Sam Johnston and the Blue Ribbon Quilt
 Paper
 Markers, pencil crayons, scissors, glue
 Rulers
 Trigram pieces

4. Content (The What)

Teaching/Learning Strategies (The How)

Introduction (motivational steps/hook/activation of students' prior knowledge)
 (10 min)

Have students come to the front carpet to listen to the teacher read: Sam Johnson and the Blue Ribbon Quilt.

Once the students are seated at the carpet the teacher will discuss the book:

Discussion before reading the book:

The teacher will ask the students what they think this book is going to be about based on the title and cover of the book.

Does everyone know what a quilt is?

What are the characteristics of a quilt?

What is the difference between a blanket and a quilt?

Prompt – Turn to page 11. Look at the picture of the quilt. What do you notice on the quilt? How is it different from a blanket?

During reading:

Begin reading the story

After reading page 9: Ask the students what are the different shapes that they notice on Sam's patch.

After reading page 11; ask the students to identify the pattern in the quilt. What shapes do you notice are being used?

After reading page 20 and 21; ask the students to explain the difference they notice between the two quilts.

After reading the rest of the book; ask the students to identify some of the shapes in the final quilt. Identify the pattern in the new quilt.

After Reading:

Ask the students' which quilt they liked better, the men's quilt or the women's? Describe what you liked about the quilt you chose.

A. Content for New Learning

Make predictions in order to continue a geometric repeating pattern

B. Teaching/Learning Strategies for New Learning

Today we will be talking about geometric patterns. Ask the students what an example of a pattern is? Ask the students what they think a geometric pattern may be?

Explain to the students that a geometric pattern is a pattern that involves shapes they are put together to form a continuous pattern. For example: circle, square, circle, square, etc. We will be learning about more complex patterns that include different geometric shapes and colours.

The teacher will use the overhead to begin a pattern using geometric shapes. The explanation will be given to the students about the pattern that is being made.

On the overhead the teacher will show the pattern of all blue geometric shapes. The students will have to continue the pattern by naming the next set of shapes. I will explain to the students that we will be using shape as a single attribute. For example: triangle, triangle, hexagon, triangle, triangle,

_____.

Ask the students: Who can help me to continue this pattern? (hexagon, triangle, triangle, hexagon).

Place a new pattern on the overhead for the students to see. This pattern will include shapes and a variety of colours. I will explain to the students that we will be using two different attributes for this pattern: shape and colour. The pattern will be: Green square, blue triangle, yellow hexagon, red square, green square, blue triangle, yellow hexagon, green square...

Ask the students: Who can help me to continue this pattern? (blue triangle, yellow hexagon, red square, green square, blue triangle, yellow hexagon).

Ask the students if they have any questions? Ask the students if they would like to try another pattern? (This may be completed for students who seem to be having more difficulties and need to be provided with more examples).

5. Consolidation/Recapitulation Questions (Check for understanding/scaffolded practice)

Ask the students if they have any questions?

Ask the students: What different attributes they can use when creating a geometric pattern?

6. Application (Moving from guided, scaffolded practice to increasingly independent practice and understanding / gradual release of responsibility)

The students will be given handouts with a variety of geometric shapes to colour in and cut out. The students will also be given a handout with a pattern that they will have to continue by drawing the correct geometric shapes.

- The students will complete the repeated pattern on their handout.
- The last question on the sheet will ask them to create a different repeated geometric pattern using two attributes for their partner to continue.
- After the students have completed this they will be asked to create their own repeated geometric pattern for a quilt.

At this point the teacher will show the students various examples of quilt patterns. Students will use their cut out geometric shapes to create their own quilt.

Students will have to follow these guidelines:

- The students must use at least two attributes containing different shapes and colours.
- The students will also have to create a repeating pattern.
- The students must try to be creative and not just follow the examples.

For students who have completed early they will be given an additional sheet where they can create different tangram animals and more complex shapes. This additional activity will not be marked and will just be for fun for those who are completed early.

7. Lesson Conclusion

Have the students bring their quilt patterns and their handout to the teacher upon completion. Tomorrow we will be learning how to create geometric and numerical patterns that grow and shrink in size. Does anyone have any questions?

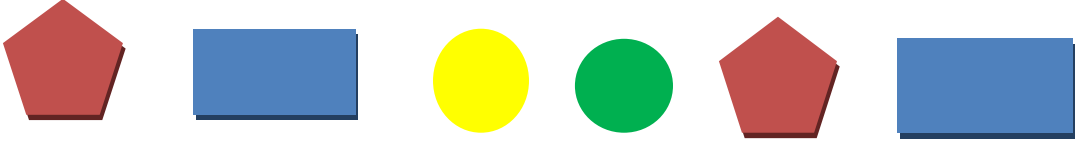
8. Assessment (collection of data) / Evaluation (interpretation of data)

This lesson will be assessed based on a checklist. The student's will be evaluated based on the following criteria:
Follows the geometric pattern, uses two attributes within own geometric pattern, creates a unique quilt with a continual geometric pattern.



Geometric Patterns

1. Continue the geometric pattern by drawing the next 6 geometric shapes.



2. Create your own geometric pattern by drawing 8 shapes with two attributes (colour and shape). Give your pattern to a partner and have them continue your pattern with 8 additional geometric shapes.

S not workGeometric Shapes

