

AUTHOR

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Mr. and Mrs. Comfort invited 32 guests over for spaghetti and meatballs. Each new guest shows up with their own seating arrangement in mind. Will everyone find a seat?

Ages: 5 to 10 years

Interest Level:
Kindergarten to 5th Grade

ATOS Reading Level:
4.3

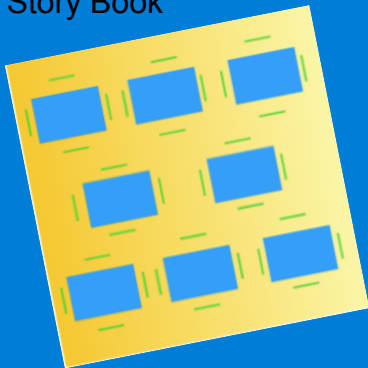
Lexile: 530L

ISBN: 9780590944595

Copyright: 1997

Genre: Fiction

Classification: Picture Story Book



Spaghetti and Meatballs for All!

How would you arrange the tables in the Comfort family's home?

Topics: area, perimeter, multiplication, division, arrangement, size, addition, units

Math Connections: Use *Spaghetti and Meatballs for All!* to introduce area and perimeter. Before reading, talk about the meaning of area and perimeter with your child and provide several examples. The area of an object refers to its surface measurements. For rectangles, the area is measured by multiplying the length and width. For example, a rectangle whose length is 5 inches and width is 3 inches, has an area of 15 square inches. The perimeter is the total distance around the edges of the object. For example, the perimeter of the same rectangle is $5 + 3 + 5 + 3 = 16$ inches.

Children often confuse area and perimeter. Talk about different situations when you would use a perimeter measurement such as measuring the length of a fence or the amount of wood you would need to frame a picture. Talk about situations when you would use an area measurement such as the area of a wall and the amount of paint you would need to cover that wall.

You can help your child understand these concepts with some concrete examples. Measure some everyday square or rectangular objects. For example, find the area and perimeter of a story book or a paper towel.

After reading, talk to your child about the table arrangements throughout the book. Ask if they can explain why rearranging the tables did not work. When rearranging the tables did the total area and perimeter change each time or stay the same? Explore whether or not the area can stay the same if the perimeter changes? Can the perimeter stay the same if the area changes?

Have your child calculate the perimeter and area of a rectangular table. Each chair is 1 unit in length. For example, if a table with three chairs on one side, it is 3 units long. After they find the area and perimeter, have them draw a diagram of how many tables and chairs they would need for 24 people to have a place to sit. Have them design the layout using their measurements as the model. Encourage them to find the smallest number of tables it would take to seat everyone. How many ways can you find so everyone has a seat? How does pushing the tables together change how many tables there needs to be? Explore different layouts together!

Extension Questions:

1. In the book, why was Mrs. Comfort worried about the tables being rearranged?
2. Mr. Comfort made 96 meatballs, how many meatballs did each person get at dinner?
3. If you have four family members, 2 adults and 2 children (each adult will eat 5 meatballs and each child will eat 3 meatballs), how many meatballs do you need to make?
4. How many children came to the family reunion? How many sets of twins were there? How many sets of triplets?
5. What is the smallest number of tables Mrs. Comfort needed in order to fit 32 people?
6. If you have a garden that is 5 feet wide and 4 feet long, what is the area of your garden? What is the perimeter of the garden? Identify what the area measurement could be used for. What could the perimeter measurement be used for?

Vocabulary for Building Math Concepts	8, 16, 32, 96, altogether, divide, four, long, one, pounds, quarts, several, short, three, time, two
Vocabulary for Extending Math Concepts	area, division, multiplication, perimeter
Vocabulary for Reading Comprehension	banquet, boomed, budge, fret, rearranged, simmer, tending

Early Math Project Resources:

Table for Forty: <https://bit.ly/2Jhcl3m> (English)

Mesa Para 40: <https://bit.ly/3o0TBnt> (Spanish)

Online Resources:

Area and Perimeter Activity from Better Lesson: <https://bit.ly/3qc8oOm>

Spanish Title: Not available

Also available in: Arabic and Braille

Related Books: *A Remainder of One* by Elinor J. Pinczes; *Vincent Paints his House* by Tedd Arnold

Find this book at your local library: <https://www.worldcat.org/title/spaghetti-and-meatballs-for-all/oclc/863611837?referer=di&ht=edition>



EARLY MATH PROJECT LITERATURE REVIEW

Age Level	Related Preschool Foundations and CA State Standards
Grades K-3	California Common Core State Math Standards https://bit.ly/31No7bP
Grade 1	Operation and Algebraic Thinking 1.OA.1 Represent and solve problems involving addition and subtraction. Geometry 1.G.1 Reason with shapes and their attributes.
Grade 2	Operation and Algebraic Thinking 2.OA.1 Represent and solve problems involving addition and subtraction. 2.OA.3 Work with equal groups of objects to gain foundations for multiplication. Measurement and Data 2.MD.5 Relate addition and subtraction to length. Geometry 2.G.1 Reason with shapes and their attributes.
Grade 3	Measurement and Data 3.MD.1 Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. 3.MD.5 Geometric measurement: understand concepts of area and relate area to multiplication and to addition. 3.MD.8 recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. Geometry 3.G.1 Reason with shapes and their attributes.

