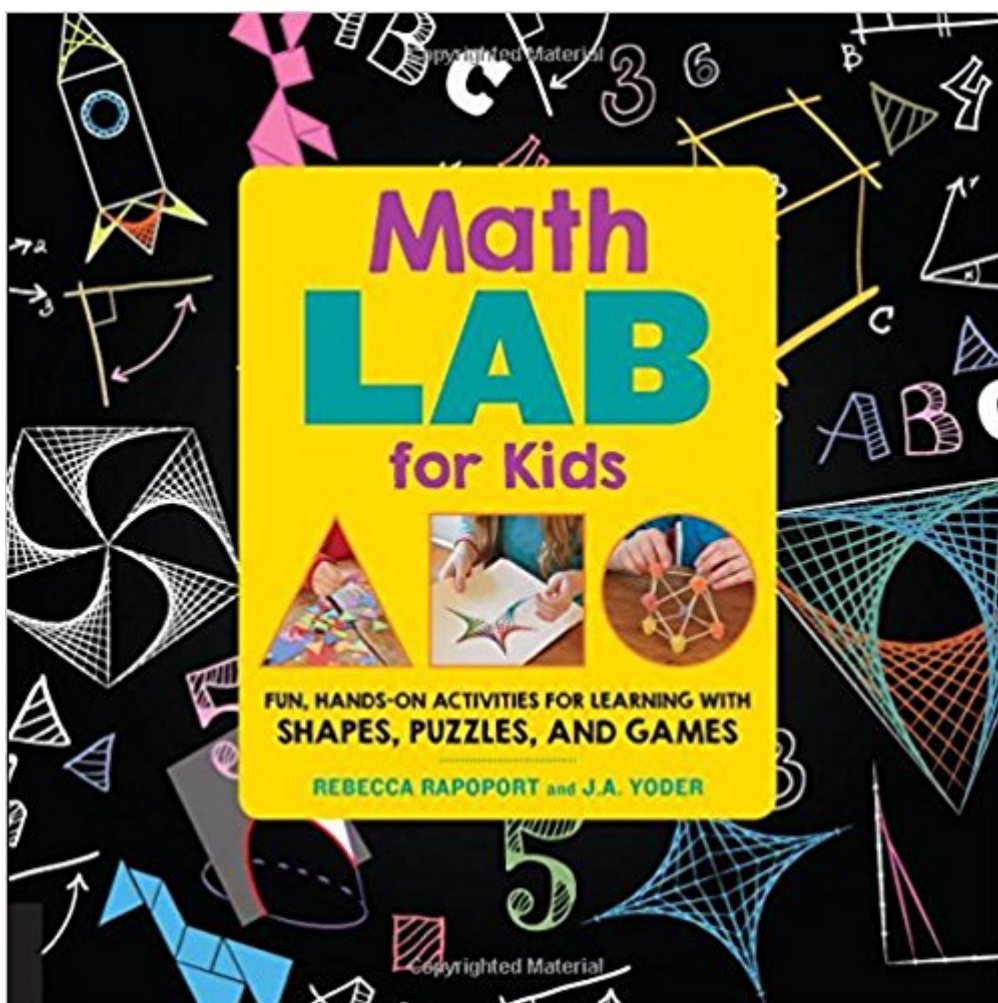


The book was found

# Math Lab For Kids: Fun, Hands-On Activities For Learning With Shapes, Puzzles, And Games (Lab Series)



## Synopsis

Make learning math fun by sharing these hands-on labs with your child. Math Lab for Kids presents more than 50 activities that incorporate coloring, drawing, games, and items like prisms to make math more than just numbers. With Math Lab for Kids, kids can:- Explore geometry and topology with hands-on examples like prisms, antiprisms, Platonic solids, and Möbius strips.- Build logic skills by playing and strategizing through tangrams, toothpick puzzles, and the game of Nim.- Draw graphs to learn the language of connections.- Discover how to color maps like a mathematician by using the fewest colors possible.- Create mind bending fractals with straight lines and repeat shapes. And don't worry about running to the store for expensive supplies! Everything needed to complete the activities can be found in the book or around the house. Math is more important in schools than ever. Give your children a great experience and solid foundation.

## Book Information

Lexile Measure: 840 (What's this?)

Series: Lab Series

Flexibound: 144 pages

Publisher: Quarry Books (January 1, 2017)

Language: English

ISBN-10: 1631592521

ISBN-13: 978-1631592522

Product Dimensions: 8.8 x 0.5 x 8.8 inches

Shipping Weight: 1.1 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 23 customer reviews

Best Sellers Rank: #113,629 in Books (See Top 100 in Books) #5 in Books > Science & Math > Mathematics > Pure Mathematics > Fractals #194 in Books > Children's Books > Education & Reference > Study Aids > Children's General Study Aids #493 in Books > Children's Books > Education & Reference > Math

Age Range: 8 - 12 years

Grade Level: 2 - 5

## Customer Reviews

With more than 50 activities inside, there's so much to do, whether it's making prisms and pyramids or building your own toothpick puzzles. - How It Works"Required materials are all readily available: in the opening pages, children can use gumdrops and toothpicks

like Tinkertoys to build cubes, pyramids, and other three-dimensional structures; many projects need nothing more than pencil and paper. Removable paper templates are provided for some of the activities. Rapoport and Yoder make the projects accessible to readers of varying skill levels, whether they are learning about basic shapes or developing a more advanced understanding of mathematics." - Publishers Weekly

"A wonderful collection of attractive math topics that will entertain and inform kids (and their parents). A great way to share a stimulating learning activity." - Ronald L. Graham, Professor in Computer Science and Engineering at the University of California, San Diego, former Mathematical Association of America president, former American Mathematical Society president, former Bell Labs Chief Scientist

"Five thematic chapters define broad types of applications, such as curves and fractals, graph theory, and topology. This collection of activities celebrates an inquiry-based approach to learning math, which may be an excellent complement to more traditional classroom curricula, especially for reluctant learners. As such, it's a great resource for parents, teachers, and curious young readers alike."

- Erin Anderson, Booklist Online

"This compilation of fresh, hands-on STEM activities explores a variety of mathematical concepts, from basic geometric shapes to parabolas, fractals, and puzzles...Recommended for libraries and educators seeking a tactile approach to elementary mathematics."

- Doneanne Soult, Westampton Middle School, NJ, for School Library Journal

Rebecca Rapoport holds degrees in mathematics from Harvard University and Michigan State. From her first job out of college, as one of the pioneers of Harvard's Internet education offerings, she has been passionate about encouraging her love of math in others. As an early contributor to both retail giant .com and Akamai Technologies, the number one firm in cloud computing, Rapoport played a key role in several elements of the Internet revolution. Rapoport then returned to her first love, education, as an innovator of new methods to introduce children and adults to the critically important world of STEM education as COO of an enrichment center dedicated to helping kids explore the creative side of science, technology, engineering, art, and math. Currently, Rapoport is developing and teaching innovative math curricula at Boston-area schools. She is also the author of Math Lab for Kids, a book of fun, hands-on math activities designed to introduce elementary and middle-school students to several areas of higher math.

J.A. Yoder is an educator and engineer who has a lifetime love of puzzles and patterns. Her educational philosophy is that hands-on creative work is both the most fun and the most effective way to learn. She developed and taught the original hands-on-math lessons for an after-school program that eventually inspired this book. Some of her happiest memories come from "eureka moments" - either

from learning something that makes a dozen other things suddenly make sense, or the sense of accomplishment that comes from solving a clever puzzle. The only thing better is sharing this joy with others.

Bought it for my 9 year old daughter who enjoys geometry. Easy to follow instructions and creative ways for kids to learn math.

This book is a minor miracle. When I received a review copy from the publisher, I opened the package, flipped through the pages, and then left it out in the living room. Sometime later, my 12-year-old daughter found it, picked it up, and began looking through it. After a few minutes of intense study, she said, "Huh. This is cool." She left it on the dining room table, where my 9-year-old daughter found it the following morning. "Is that interesting?" I asked. No reply, but a few minutes later she said, "Mom. do we have any toothpicks?" Today, I asked them, "Who would like to do some math puzzles with me?" "Sure," said the 12-year-old, while the 9-year-old employed her favorite word: "No," and wandered off. But about five minutes later, after hearing us talking, she wandered back. We started Lab 17: Creative Curves. An hour later, it was time for my 9-year-old to go to bed. Her response: "No! I want to do more!" An hour later, my 12-year-old had proudly hung her first figure on the Christmas tree and was working on her second when bedtime rolled around. "But it's the weekend! Can't I stay up later? Pleeeeease?" That's right. I HAD TO FORCE MY CHILDREN TO STOP DOING MATH AND GO TO BED. Can't wait to try the other labs. This Christmas vacation is going to be so much fun!

This book is amazing! I have taught college math for 35 years, and noticed that many student difficulties arise because of poor visualization skills, a poor "let's just try something and see how it works" ability, and of course, lack of self confidence. Doing the activities in this book can help kids work through all of these shortcomings. I have tried a couple of the activities already with my grandchildren (aged 7 to 12) and they found them fun and challenging. I worked through ALL the activities myself, and found them fun and challenging!! The writing is insightful and crystal clear. Obviously the authors have experience working with children; they know how to present the material at the targeted age levels. They also exhibit a deep understanding of mathematics, as you would expect from graduates of Harvard and Caltech. The labs would be excellent as fun at-home activities, or as supplemental material in classrooms or after school programs. I HIGHLY recommend this book.

As both a mathematician and a parent of two, I'm really glad to see that a book like this has been written. One of the most common problems I have observed among university students (mostly non-math majors) is a serious lack of understanding of what math actually is -- so many students seem to think of math as a collection of quasi-magical manipulations that leads from a problem to a number. This book takes a step towards introducing some fairly sophisticated (and exciting!) ideas to an audience of youngsters and giving them a taste of the type of thinking in which mathematicians engage. Through a sequence of hands-on activities, it takes various topics in mathematics and makes them both accessible and fun for young children, without compromising content. Activities are drawn from a broad swath of mathematics, including geometry, topology, map coloring, curve stitching, fractals, tangrams, graph theory, and various games. Admittedly, the topics chosen are ones which lend themselves well to visual representation -- so not every branch of mathematics is represented, but this is hardly a fault of the book, since there are many areas (algebra and number theory, for example) which are not as accessible to students in this age range. Children (with adult supervision understood) are guided through each activity by instructions in straightforward language, introducing mathematical terms, "Math Facts", and historical details along the way. Some of the later activities in each section are more loosely phrased, thereby encouraging experimentation and creative thought. (e.g. Can you figure out how to remove two sticks from this picture to form three squares?) In the last section of the book, the author introduces the ideas of proof by contradiction and proof by induction, presenting the methods accurately, but without scaring kids or snowing them with lots of formalism or mathematical notation. I am very much looking forward to introducing my own children to this beautiful, carefully written book!

[Download to continue reading...](#)

Math Lab for Kids: Fun, Hands-On Activities for Learning with Shapes, Puzzles, and Games (Lab Series) Family Games: Fun Games To Play With Family and Friends (Games and Fun Activities For Family Children Friends Adults and Kids To Play Indoors or Outdoors) Travel Games for Adults: Coloring, Games, Puzzles and Trivia: Featuring Over 60 Activities including Group Games, Games for Two, Scavenger Hunts, ... Word Search, Word Scramble and more Lab Values: 82 Must Know Lab Values for Nurses: Easily Pass the NCLEX with Practice Questions & Rationales Included for NCLEX Lab Values Test Success (Lab Values for Nurses, NCLEX Lab Values) 3D Art Lab for Kids: 32 Hands-on Adventures in Sculpture and Mixed Media - Including fun projects using clay, plaster, cardboard, paper, fiber beads and more! (Lab Series) Warriors Word Scramble: Word Scramble Games - Word Search, Word Puzzles And Word Scrambles (Word Games, Brain Games, Word

Search, Word Search Games, Word ... Scramble, Word Scrabble, Unscramble Word) Shapes, Shapes, Shapes The Big Fun Kindergarten Activity Book: Build skills and confidence through puzzles and early learning activities! (HighlightsÂ¢Â¢ Â¢ Big Fun Activity Workbooks) The Big Fun Preschool Activity Book: Build skills and confidence through puzzles and early learning activities! (HighlightsÂ¢Â¢ Â¢ Big Fun Activity Workbooks) Kids' Travel Guide - Washington, DC: The fun way to discover Washington, DC with special activities for kids, coloring pages, fun fact and more! (Kids' Travel Guide series) (Volume 18) Toddler Coloring Book. Numbers Colors Shapes: Baby Activity Book for Kids Age 1-3, Boys or Girls, for Their Fun Early Learning of First Easy Words ... (Preschool Prep Activity Learning) (Volume 1) Astronomy Lab for Kids: 52 Family-Friendly Activities (Lab Series) Bible Brain Teasers for Adults (4 Book Set includes:Bible Crossword Puzzles;Bible Games;Bible Quizzes & Puzzles;Bible Word Search Puzzles) Little Hands Sea Life Art & Activities: Creative Learning Experiences for 3- To 7-Year-Olds (Little Hands Book) Fun-Schooling Math Mysteries - Add, Subtract, Multiply, Divide: Ages 6-10 ~ Create Your Own Number Stories & Master Your Math Facts! (Fun-Schooling Math with Thinking Tree Books) (Volume 1) Cool Paper Folding: Creative Activities That Make Math & Science Fun for Kids! (Cool Art with Math & Science) Good Times! Easy Puzzles & Brain Games: Includes Word Searches, Find the Differences, Shadow Finder, Spot the Odd One Out, Logic Puzzles, Crosswords, Memory Games, Tally Totals and More Shapes: An Adult Coloring Book: Over 40 Fun Stress Relief Shapes and Geometric Patterns for Your Inner Artist Books For Kids: Natalia and the Pink Ballet Shoes (KIDS FANTASY BOOKS #3) (Kids Books, Children's Books, Kids Stories, Kids Fantasy Books, Kids Mystery ... Series Books For Kids Ages 4-6 6-8, 9-12) Animation Lab for Kids: Fun Projects for Visual Storytelling and Making Art Move - From cartooning and flip books to claymation and stop-motion movie making (Lab Series)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)