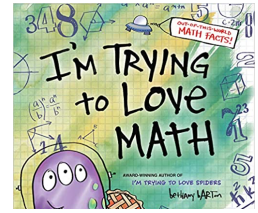


Math Activities for Families

As your children learn about numbers, space, and different operations, help make math a part of our everyday lives! Bethany Barton points out in ['m Trying to Love Math](#) that making cookies, telling time and figuring things out is about “a bunch of math!” and a recipe is “basically a word problem!”



So, how can we make math more fun for everyone? Here are some activities that make math playful. Even Tic Tac Toe is about math - it takes decision making and critical thinking to win!

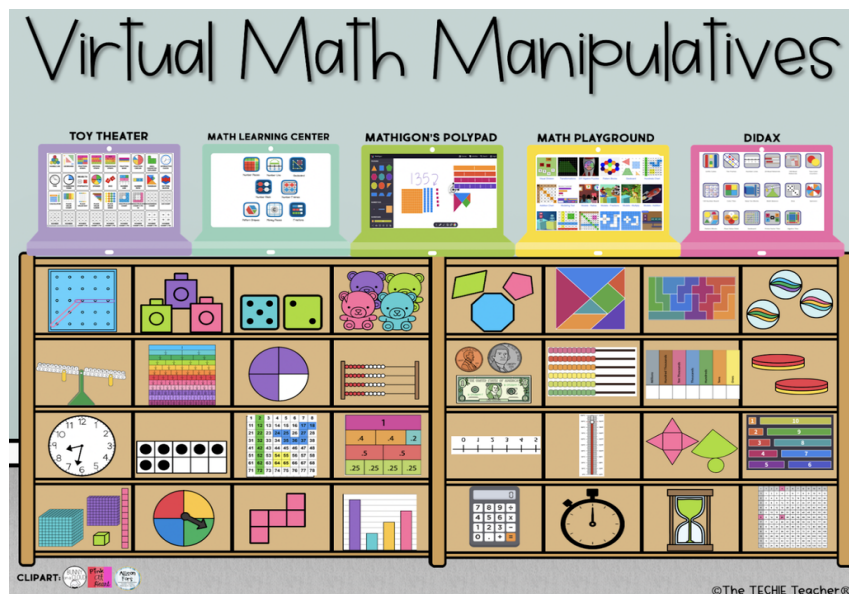
Virtual Math Games and Manipulatives

Click on this great website for fun games for all! - [Virtual Math Manipulatives](#)

This site gives you free and easy-to-use puzzles and games! The site is amazing and fun to use.

The geoboards let you move colored rubber bands to make many kinds of shapes. Dice let you roll numbers for different tasks, fraction bars let you compare fractions, and much, much more.

Give it a try, use your imagination, and we promise you that your children will discover endless ways to solve problems without even realizing it!



Created by Julie Smith, ©The TECHIE Teacher®

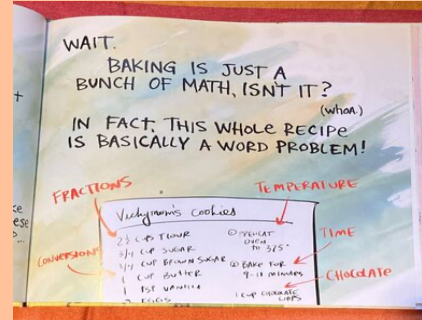
Math in Your Kitchen!

Math skills grow when you and your child use different measuring tools, covering pots with the right lids, and following simple recipes. Being hands-on builds basic skills in math!

Math and What We Eat!

As you tour the kitchen, math is everywhere! Set the temperature in the oven, press in the power and time on the microwave, and guess the right size storage bowl for storing leftovers.

Check out the kitchen cabinet for cans – these are cylinders! Before opening the doors, ask your child to guess how many cans (cylinders) are in the cabinet. Then ask your child to count and sort them by sizes and shapes.



A page from "I'm Trying to Love Math," by Bethany Barton.

Recycle Math

Let's play Recycle Math!

- Collect 10 empty plastic bottles that are the same size and have caps
- Remove the labels and write the numbers 1 to 10 on the bottles.
- Arrange the bottles in a triangle like a set of bowling pins, with the point facing the "bowlers."
- Your child will be the "bowler" who rolls balls toward the bottles, call out the numbers of the fallen bottles, then add them.
- Change it up by using different sized balls or different distances to the bottles.

Grocery Store Math

The grocery store is a great math adventure where kids can learn about money, quantities, and the costs of different foods!

- Before you go to the store, make a few stacks of coins and have your child learn to explain their values.
- Add bills so your child learns even more about how much money he or she has and what they can buy with it.
- This is a good time to ask a few word problems for them to think about adding, subtracting or multiplying. For example, if it takes 10 dimes to make one dollar, how many dimes will it take to make three dollars? Ten dimes \times 3 = 30 dimes.

Egg Carton Math

Egg Carton Math is a great way to practice math skills.

- Write a number in each empty egg compartment and a small round object inside, close the cover, and shake it.
- Then ask your child to open the cover of carton and write down the number on paper, then repeat the process and write down the second number.
- These numbers can be added or multiplied – let your child decide which one to do! Repeat these steps a third time. We hope this “cracks you up!”
- Think about all the other kitchen math opportunities for number recognition, estimation, problem solving and “math talk” with your child!

Check out <https://www.youtube.com/watch?v=kCGXEy4RM2g> for more ideas!



"Whining" Math

Children learn to compare shopping items and make a budget in “Whining Math.”

- Your child often wants you to buy something — candy, a drink or a toy. This is a chance to talk about what it will take to pay for it.
- Or you can share the grocery ads with your children then ask them to plan a dinner for the family that costs \$10.
- These are teachable math moments for comparing prices and making a budget so the child doesn't overbuy.

Music

Let's set math to music by singing with Mr. R.'s songs and videos that include:

- [Counting by 5](#);
- [Double Number Zoo – Teach Addition of Double Numbers](#)
- [Shapes](#);
- [Squares](#); and [Geometry](#).

Mr. R.'s Songs for Teachers

Moving with Numbers

Kick your math activities into high gear with Moving with Numbers!

- Ask your child to flap their arms like birds for 15 seconds, count how many times they moved their arms up and down, and write down the number on a sheet of paper or in a “Math Health Notebook” each day for several days.
- Then have them analyze the numbers — did they go up, down or stay the same? To get more math in, plot these numbers on a bar graph using the [Virtual Math Manipulatives](#) site.
- Tap your child’s energy with math yoga! ..., jumping like a frog, s-t-r-e-t-c-h-i-n-g like a tiger, or swaying like trees. This shows that math is a part of everyday life.

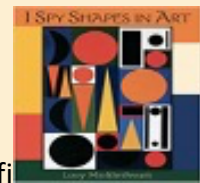
Books

Books take your children on new adventures that weave math into the wonderful story books listed below. These capture your child’s attention either by reading aloud to you or you reading to them!

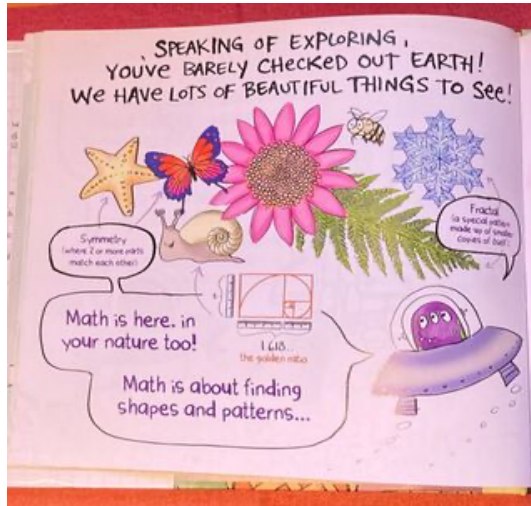
- Read [Clifford, The Small Red Puppy](#) by Norman Bridwell to compare how Clifford grows up — his collars, food bowls, dog houses, and his increasing size.
- [Mission: Addition](#) by Loreen Leedy and [How Many Blue Birds Flew Away](#) by Paul Giganti Jr. take children into the world of addition and subtraction, as does Stuart J. Murphy’s [Elevator Magic](#).
- [The Story of Snow](#) by [Mark Cassino](#) explores the topic of symmetry.
- [The 512 Ants on Sullivan Street](#) by Carol A. Losi is a multiplication read aloud-book that will sure to please.

We can even integrate art into math learning through some of the following books:

- [Tangram Cat](#) by Maranke Rinck and Martijn van der Linden is a fun book that will inspire children to make their own animal shapes
- [The Shape of Things](#) by Dayle Ann Dodds is a rhyming book with bright illustrations of things we see every day.
- [I Spy Shapes in Art](#) by Lucy Micklethwait encourages children to find famous paintings, including those of Georgia O'Keeffe.



Engaging your children in everyday math activities they enjoy and in the world of books with fun characters stimulates their working memories. This approach builds a stronger math foundation that boosts their problem-solving skills as they move up each grade. And lastly, it's built-in entertainment and a win-win for both learning and having fun. Let the mistakes begin!



A page from "I'm Trying to Love Math," by Bethany Barton.

Adapted from Judy Reinhartz PhD, "STEM Get Your Hands on Math!", *Tumbleweeds*, Spring 2021. Retrieved from <https://www.sftumbleweeds.com/articles/stem-get-your-hands-on-mathm>