

Simple Tips for Making Summer Math Fun!



Barrington Public Schools is proud of everyone's efforts to learn both online and offline.

Each of our Elementary Library Sites have **Math Links** for students to explore this summer. **ZEARN** and **FRECKLE** will also be available to families for extra math practice and can be accessed through the [Clever](#) portal or with students' Google username and password.

Families can also create free accounts for their child at Khan [Academy](#). This online site offers opportunities for review and practice of math concepts, as well as opportunities for extension work.



[Bedtime Math](#) is another fun site to join to add math into your family's nightly routine. It explores a cool math idea with a question that takes 5-10 minutes to chat about.

Or, [PBS Adventures in Learning - Math](#), a site filled with exploration of numeracy around our world. Providing a real life context to math helps build understanding.

Don't forget to check out books from the library related to math. Books are a great way to spark a love for math in children of all ages!

Additionally, check out these quick and easy ways to work math into your summer routine and help your child develop number sense.

Note Numbers

Increase your child's awareness of numbers by looking around the house to find examples: the kitchen clock, the calendar, a cereal box, a TV dial, a stamp, or inside her shoe. Have

your child write down the numbers he or she sees, or give him or her a number and ask him or her to look around the house for examples of the number. Boost your older child's awareness of how numbers are used by pointing out the movie times, weather forecasts and sports statistics in your daily newspaper.

Flashcards

This is a quick and easy way to maintain basic math facts. Have your child provide the answer to the flash card within 5 seconds and make two piles, right and wrong. They continue answering the questions in the wrong pile until all the cards end up in the pile of correct answers. Fun alternatives to this are playing Memory, Go Fish or VWar with your flash cards! Techie alternatives are [XtraMath](#), [aplusmath](#) or [fact monster](#).

Strategy Games

Many games involve critical thinking skills or strategy play. Any one of these games would be a great addition to Pizza and Game Night.

- Checkers, Chinese checkers, or chess
- Connect Four
- Working on family jigsaw puzzles
- Yahtzee
- Jenga: as an added feature, you can write math facts or word problems on the bottom of the Jenga pieces, and answering correctly can earn the student extra points.



Two, four, six, eight, now it's time to estimate!

Estimation is one way to increase a child's number sense. Before you put a stack of folded towels on a shelf or fill a bowl with peaches, ask your child to estimate how many will fit. Then count afterward to compare the actual number to the estimate. Helping your child learn to make appropriate predictions will help her see how numbers are used in everyday life.

Older children may enjoy estimating how long it will take them to clean their room (to your satisfaction, of course) and having family races. The winner is the one who comes closest to their estimation and they get to pick the Friday night movie. A little sibling rivalry is always a great motivator! Learning to ask, "Is my answer reasonable?" will help your child tackle difficult math problems in the classroom.

What does a hundred look like?

Understanding the concept of 100 is difficult for young children, even if they can count that far. Suggest that your child start making collections of 100 things – rubber bands, watermelon seeds, pebbles or buttons. You can divide the objects in groups of 10 or 2 or 5 to see how these smaller groups add up to 100 in different ways. Glue the objects onto a piece of colored construction paper for a math collage. Seeing 100 will help her conceptualize it. Once your child can conceptualize 100 extend their thinking by asking them to think about how large the collection would be if you had 1000, 10,000 or even 1,000,000 objects. This place value understanding is especially important for students in the older grades!

Unlock the code

Help your child recognize numbers and think critically by appealing to his love of mystery. Write out all the letters in the alphabet on a sheet of paper, leaving room underneath each letter for a number. Under each letter, write the numbers from 1 to 26. In other words, a=1, b=2, etc. Practice writing coded messages using numbers rather than letters. You can use the code to leave simple messages from one another.



Geometry in our World

Encourage your child to notice the geometry all around us by naming the two dimensional and three dimensional shapes they see in nature or while driving in the car. Tangrams, puzzles and origami are great ways to give your child hands on experiences with geometric shapes! Q-Bitz and Quirkle are also games to increase visualization and patterning skills with shapes.

How tall are you?

Many families record the height of their child on a door or wall chart. If you do the same for everyone in the family, your child can join in the measuring and see how the heights compare. Measurement and understanding relationships between numbers are crucial to the development of mathematical thinking.

Play grocery store math

The supermarket is an ideal place to use math skills, particularly for older children. Point out that yogurt is \$2.59 a six-pack. Ask how much it would cost to buy 3? Your child can

round up to \$2.60 or \$3.00 and figure this out. Talk about how he or she arrived at that number, and point out how the estimate differs from the true cost. Or get the latest advertisement announcing sales from the grocery store. Have him or her look at the specials on fruit and determine how to spend \$10.00. Supply her with paper and pencil, and maybe a calculator, as well, so she can practice using calculators the way adults use them every day.

What's on the menu?

The next time you go to a restaurant, hang on to the menu while you are waiting for your meal and play some math games with your child. Ask him to find the least expensive item on the menu, then all the items that cost between \$5 and \$10 or three items whose total cost is between \$9 and \$20. This will not only fill the time while you're waiting to eat, it will show your child how math is used every day.



Cook up a math game

The kitchen is a great place to practice math, as long as there's an adult home to supervise. How many tomatoes will you need to double the recipe for sauce? If you put 10 slices of mushroom on the pizza, ask your child to put twice as many olive slices. How many is that? If there are three people in your family and 15 strawberries to divide equally among them, how many strawberries will each person get?

Measure the distance

You don't have to leave home for this game, although it's ideal for vacations. Get out a map that indicates the distance in miles between cities. Measure the distance between Los Angeles and San Francisco, and between Phoenix and San Francisco. Which is greater? How does that compare to the distance between New York City and Chicago?

Change up

Give your child an assortment of quarters, dimes, nickels and pennies. Put a piece of fruit on the table and tell him it costs 45 cents. Tell him he needs to find five coin combinations that equal 45 cents. Change the item, raise the price and find five more. Keep a tally of all the ways to pay for each item. Older children may enjoy extending this understanding by including various whole dollar amounts. Understanding the relationship between fractional mixed numbers and decimals is essential in grades 4 and 5.

Learning the Value of a Dollar

While running a lemonade stand, students will learn how to determine profit, the art of splitting profits based on participation, multiplication skills, and practice making change. Neighborhood chores such as mowing lawns or pet sitting help them budget their time and decide how much they should charge as an hourly rate, which are essential skills for Financial Literacy..

Adapted from Math Fun All Summer Long by Dreambox Math and 10 Ways to Build Summer Math Skills by GreatSchools.org