



You ask your child to read over the summer... have them practice math skills, too! Can you imagine how far behind his/her peers your child would be if he/she stopped attending math class at the end of March? If a student doesn't practice his or her math skills during the summer, it has the same effect on math achievement. Researchers have found that the lack of math skill practice over the long summer months results in an average loss of 2.6 months of study when measured from year to year.

We encourage students to continue to practice math skills over the summer. If your child spends just 9 minutes a day, he/she will have completed 10 hours of math! Practice can include playing games online to keep fluent with math facts, or can incorporate real-life use of math such as helping to plan parts of a family vacation or estimating costs of back-to-school supplies and clothes while looking at newspaper sales circulars.



How to get started? It's as easy as π !

Check out the links below to find some fun websites and activities.

- Addition or Multiplication War: Use playing cards. Throw down two cards. The person who finds the sum or product of the two cards first keeps the pair.
- Keep those math facts fluent with fun on-line practice!
- Multiplication.com has some great games to play by alone or against other kids online
- You can print out Mad Minutes to see how much you know at Super Teacher Worksheets, and you can find worksheets covering fractions, decimals, and more at Education.com.
- Other Online Games:
- **Arcademic Skill Builders** is a great resource to refresh all math operation areas. Play arcade games to review basic operations, fractions, decimals, and working with money!
- Go to the **Math Playground** to practice skills like measuring angles, working with fractions, and creating congruent or similar shapes using transformations.
- For fun logic games, try out **Math Maven's Mysteries!**
- **Math Hunt**: fun with math in science, social studies, and finance.

- **Board Games:** There are great games you can play to pass a rainy day... and practice your math, too! You probably already have many of them at home. Here are just a few that we like. **Basic Operations:** • Monopoly • Life • Payday • S'Math • Tripoly
Patterns and Geometry: • Sequence • Blokus • Geoshapes • Quirkle
Coordinate Graphing: • Battleship Logical Reasoning: • Clue • Stratego • SuDoKu
Strategy Games: • Mancala • Othello • Connect 4 • Chess and Checkers
Math with Cards and Dice: Almost everyone has a deck of cards in their house, and there are so many ways a deck of cards can be used to practice math skills! Check out the activities to reinforce math concepts found on this fantastic website: Educational Card Games to Teach Math. Add some dice – and have more fun! Here's a great website with 4 great games you have probably already played in school: *Marilyn Burns' Favorite Dice Games*

Other real-life math activities:

1. **Take a Vacation!** Before you take off on that family trip, help your parents and get in on the planning! Here are a few examples of where math can be used when taking that family trip:
 - Use an atlas and figure out how many miles you'll be driving – the scale of miles is a great example of proportion and measurement used in real life!
 - What's your car's fuel efficiency? Add to find out the total cost to fill up the tank throughout your trip; divide to calculate the miles driven per gallon of gas; multiply to determine the cost of a fill-up based on your expected travel distance... is it time to purchase a hybrid vehicle?
2. **Gardens of Eating... and Math!** Besides providing a great source of delicious summer vegetables and fresh flowers, gardens grow great opportunities to show practical applications for math.
 - How big is that garden? How much fencing is needed to keep out the deer? How much fertilizer do you need to keep the garden (or yard) growing?
 - How much mulch do you need to order if you want to put it down 3" thick in your flower beds?
 - What is the weight of that prize-winning tomato or pumpkin? How many peppers are on the pepper plant? If you need to keep your bean plants 3 inches apart, how many plants will grow on a 12 foot row? How many seeds should you plant?
 - Go to the supermarket or farmer's market and find out the cost of fresh vegetables you can grow at home. How much money will you save if you grow it yourself?

3. **Take me out to the ballgame!** Take in a summer baseball game – either at the ballpark or on TV. Baseball’s a natural place to see math in action – from a pitcher’s ERA to a hitter’s on-base percentage. Record the events of the game using a scorecard. To find out all about how to keep score, go to Patrick McGovern’s fantastic website: The Baseball Scorecard. Then, calculate some statistics about your favorite players!)
4. **Take a trip to the grocery store!**
 - Estimate the total bill based on prices of what you are purchasing.
 - How much does that bunch of bananas weigh? How much will it cost?
5. **And since you’re going to read, how about combining reading with math!** Check out these great titles: The I Hate Mathematics! Book by Marilyn Burns, The Phantom Tollbooth by Norton Juster, Janice Van Cleave’s Math for Every Kid: Easy Activities That Make Learning Math Fun, G Is for Googol: A Math Alphabet Book by Schwartz, David, Math Curse by Jon Scieszka, and Brown Paper School Book: Math for Smarty Pants by Marilyn Burns.

There are many other ways to use math in real life over the summer. These are just a few suggestions. Feel free to make up your own ideas! Just remember to keep track of what you do.

There’s a chart on the next page to help you. Have a great summer... and don’t forget – ***math is everywhere!*** So practice, and turn in your log – you’ll be recognized on the Math Wall of Fame in the Bedwell Cafeteria!

