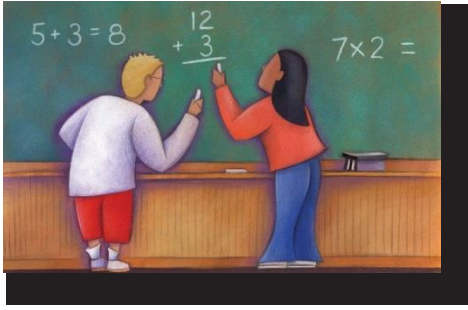


# Math



## Summer Tips for Sixth Grade

### Dear Parents/Guardians

Often parents and students ask what can be done over the summer to maintain skills and develop mathematical thinking. This package contains some ideas and opportunities for you and your child to enjoy math over the vacation months. Below are some websites that you can use with your child to assist the development of good math skills.

On the reverse are example activities that you can do every day with your child. These games and activities will help strengthen your child's mathematical foundation, that which will be further developed within the math classroom.

### Fact Fluency Review from Fifth Grade

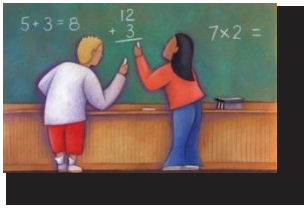
Most important for your child's success is their continued work on number fluency. Connecticut's new state standards require students to be fluent with their basic facts by the end of third grade and fluent with all computation by the end of fifth grade. This means that your child should be able to independently, with speed and accuracy:

- add and subtract mentally within 100 and within 1,000,000 on paper; and
- multiply and divide mentally within 100 and multiply multi-digit numbers on paper.

In order to build and maintain these skills, it is important for your child to practice his/her math facts. You can find fun games that specifically target fluency by searching "Parent Portal Educational Resources" at [www.crecschools.org](http://www.crecschools.org). The only materials you'll need to play the games are cards and dice.

### Recommended Math Websites

1. [www.ixl.com](http://www.ixl.com) If your child has an account through school, you can use it during the summer!
2. <http://www.sheppardsoftware.com/math.htm> Games for all math operations
3. [www.abcya.com](http://www.abcya.com) Practice math and language arts, while sharpening computer skills
4. [www.mathplayground.com](http://www.mathplayground.com) Challenging games
5. [www.fun4thebrain.com](http://www.fun4thebrain.com) Games for all math operations
6. [www.xtramath.com](http://www.xtramath.com) Your child can use their account from school or you can create an account for free and track your child's progress with fact mastery.
7. [bedtimemath.org](http://bedtimemath.org) Daily math problems at various levels, typically with a theme
8. [gregtangmath.com](http://gregtangmath.com) Games as well as electronic versions of all of Greg Tang's books. Take Greg Tang's Summer Math Challenge!
9. [www.prodigygame.com/play](http://www.prodigygame.com/play) Story-based, interactive math game
10. <http://www.ct.gov/sde/summermathchallenge> The Governor's Math Challenge



## A Dozen Tips for Summer Math Learning

1. **Grocery Store Math** – Counting, estimating, and making change are good math exercises. Using the latest advertisement announcing sales at the grocery store, ask what can we get for \$10.00? At the store, point out that yogurt is \$2.59 a six-pack. Ask how much it would cost to buy 3? At the register, ask your child to count the change.
2. **Menu Math** – Next time you are at a restaurant, hang on to the menu while you are waiting for your meal. Ask your child 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. Have them “order” meals for the family for a total of \$40 or less.
3. **Kitchen Math** – Practice fractions by using recipes or reading cookbooks. Measuring ingredients is a perfect math lesson. Have your child tell you how much of an ingredient you will need if you double the recipe. Have your child determine how to share items. If there are 5 people in your family and 15 strawberries to divide equally, how many strawberries will each person get?
4. **Map Math** – You don’t need to leave the house, although this activity is ideal for vacations. Get out a map that indicates miles between cities. What’s the distance from home to our destination? How long will that take us if we travel the speed limit?
5. **On-the-Road Math** – Numbers are all around roads if you look for them. Have your child add the numbers on license plates. To practice multiplying, assign letters on license plates a number (such as 5), and have your child find the total. For example, TEM334 would be  $5+5+5+3+3+4=25$ .
6. **Money Math** – Have your child pay and then count the change at the grocery store. Ask them to figure out other ways to make the same amount. Count the money in a piggy bank. Talk about the advantages of saving for a big purchase or for a rainy day.
7. **Reading and Writing Math** – Read books about math. Some suggestions:
  - Any of the books by authors Greg Tang or David Schwartz
  - *Math Curse* by Jon Scieszka
  - *Anno’s Mysterious Multiplying Jar* or *Anno’s Magic Seeds* by Masaichiro and Mitsumasa Anno
  - *If the World was a Village* by David Smith
  - *Grandfather Tang’s Story* by Ann Tombert
8. **Calendar Math** – Count down the days until special events, like the first day of school, birthdays, holidays, and vacations.
9. **Game Math** – Play games that encourage math skills. Some examples: Battleship, Simon, Cribbage, Concentration, Checkers, Connect Four, Krypto, Mankalah, Monopoly, Yahtzee.
10. **Computer Math** – There is no shortage of valuable game and instructional websites. Check out the list of recommended links on the front and these iPhone apps:
  - Math Concentration from NCTM
  - Divisibility Dash, Baseball Multiplication, Beat the Computer, Name that Number from Everyday Mathematics
  - Math Drills Lite and Rocket Math
11. **Mail Math** – Keep junk mail to make out “pretend” orders of clothes, books, groceries, etc. Add up the orders. Compare and contrast prices.
12. **Growth Math** – Measure everyone in the family. Compare heights. Measure growth over time.