

**Although children are taught mathematics in school, research shows that families are an essential part of the learning process. By doing mathematics with your children, you can make a difference. Here are some ideas for you and your child to do this summer. Have fun doing math!**



### GAMES FOR FOURTH GRADE

#### Salute

After removing the face cards, deal the deck evenly between two players. A third player says, "1, 2, 3 SALUTE!" and the two players pick up a card and place it on their foreheads, facing out, without looking at their own card. Player 3 calls out the sum (or product) of the two cards. The other two players need to determine what digit is on their card by knowing the sum (or product) and the digit the other player is holding.

#### Double Doom

You can play this game on a hundreds chart, or by keeping track on a piece of scrap paper. Each player starts at 0. On your turn, you roll two dice and multiply the numbers together. You move forward that many spaces on the hundreds chart, or add that product to your total. If you roll doubles, you have to go back to zero! You can stop rolling whenever you want; the first person to get to 100 without going over is the winner.

#### Multiplication Top-It

Remove the face cards, and deal the cards evenly between the players. Each player turns over two cards; the person with the highest *product* takes all of the cards. The person with the most cards at the end of the game is the winner!

#### Commercial Games

Did you know lots of games you buy include math? Here are some mathematical games that are good for fourth graders. You may already have them at home. Some suggestions are: Rack-O, 'Smath, Set, Hi-Q, Chess, Checkers, Backgammon, Monopoly, Life.

### WHAT ARE TESSELLATIONS?



A tessellation is created when a shape is repeated over and over again covering a plane without any gaps or overlaps.

Learn more about tessellations and make your own!

<http://www.tessellations.org/tess-what.htm>

<http://www.mathcats.com/explore/tessellationtown.html>

<http://www.tessellations.org/animations1.htm>

<http://www.shodor.org/interactivate/activities/tessellate>

<http://mathforum.org/sum95/suzanne/whattess.html>

### Games & Brain Teasers WEBSITES



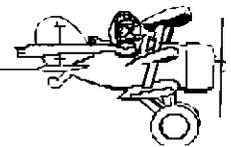
**Here are some websites children will like.**

<http://www.setgame.com> - Set game, online.

<http://www.amathsdictionaryforkids.com> - An animated and interactive website that is enjoyable and educational is A Maths Dictionary for Kids by Jenny Eather

<http://www.harcourtschool.com/thinkmath/> Online games by grade level and topic.

### Traveling Thoughts



Find numbers in your travels. Add, subtract, multiply and divide numbers on license plates. Check the odometer at the start and end of your trip. Estimate and then keep track of your mileage and time traveling. How close were you?



### Books for Parents and Children

These books offer ideas how parents can help their children develop important mathematical literacy skills and offer a rich collection of mathematical games and activities that relate to daily family life.

Mokros, Jan. 1996. *Beyond Facts and Flashcards: Exploring Math With Your Kids*. Portsmouth, NH: Heinemann.

Stenmark, J., Thompson, V., Casey, R. 1986. *Family Math*. Berkeley: Berkeley Press.

**FASTT Math:** Summer is a good time to work on FASTT Math without the pressure of the school year. Play the games to maintain fluency. Get ahead start on the school year by knowing your facts!

# MATH FACTS: How the Home Can Help

Some children learn math facts more easily than others. Given a math fact, a child needs to be able to respond correctly within 3 seconds. Children should be given regular practice, but not so much at any one time that it becomes tedious. Frequent but brief periods of practice is recommended. The following are suggestions for your child:

## FASTT Math

**We expect students to continue to work on FASTT Math during the summer. We would like all fourth graders to have completed multiplication and to start on division by September. When your child finishes an operation email [dgeron@maimonides.org](mailto:dgeron@maimonides.org) so your child can receive a certificate and be moved to the next operation.**

## FLASHCARDS

Using the grid from FasttMath label one envelope *Facts I Know*, label another *Facts I Need to Learn*. Focus on learning two new facts a day. Remove the flashcards from the *Facts I Know* envelope and put the two new facts into the pile of facts that your child already knows. Have your child practice those cards.

## CALCULATORS

Play *Beat the Calculator* game to solve addition, subtraction, multiplication or division problems. One person has a calculator, the other needs to solve the problem in his/her head. Children are surprised that they can beat the calculator on simple facts.

Skip Counting: A calculator with a constant feature allows the (=) key to act as either an “equals” key or as a “repeat” key. The repeat function works whenever an operation has been entered into the calculator. Challenge yourself to see if you can count by 4’s or any other number faster than the calculator can.

## WEBSITES

<http://calculationnation.nctm.org/> offers games and practice with others online.

<http://www.multiplication.com/flashgames/CarWash.htm> offers multiplication practice.

[http://www.multiplication.com/interactive\\_games.htm](http://www.multiplication.com/interactive_games.htm) offers lots of games for practice.

## CELEBRATE

Set reasonable goals and celebrate when your child achieves them.