

Turn math into family fun

For students in primary and junior grades

The way math is taught in schools has probably changed a great deal from when most parents were students themselves. For many parents, math is about worksheets and multiplication tables. Today, we teach students that math is everywhere. Math is about:

- doing activities and playing games
- working and talking with others
- estimating and number sense
- taking a risk
- solving problems

All children can learn and enjoy math. You can help your child succeed in math by:

- keeping a positive attitude about math and about your child's ability to learn math
- identifying everyday ways to use math
- listening to your children and talking with them about math

You can help your child succeed in math by learning how to enjoy math together as a family. Math is counting, sorting, measuring, patterns, geometry and art. It can be found in your home, in the yard, at the park or at a store. Try some fun family math games and activities you can do at home.

Make math fun for young children

The following activities are suitable for children in kindergarten to grade 2:

- Collect some rocks with your child and ask her to sort them: heavy and light, shiny and dull, big and small, rough and smooth. How many of each does he have? Ask him to create an image using the differently shaped rocks.
- Go on a math walk with your child. Ask her to find things that are wide, tall, different shapes, patterns and so on. Use

your hands to demonstrate the different things. For example, when you ask her to look for wide things, stretch your arms out wide.

- Visit a department store with your child and ask him to find things that have stripes, things that are solid and things that look heavy and light. Come up with some of your own ideas.
- With your child, decide whether you'll place cookies, buttons or something else into a jar. Have the family take turns estimating on how many there are in the jar. Take out a handful of items and count them. Ask family members if they want to revise their estimate. Finally, count the items in the jar. Talk about how well each person did estimating the number of items. Estimating develops a sense of number and is built on through practice and reflection. This also develops risk-taking, problem solving and the idea that there are a range of possible answers when estimating.
- Flip through a magazine with your child and stop at a picture. Ask her to point out the different shapes she can see and identify all the colors on the page. How many faces are in the picture? How many hands?

Show your children how math is part of their everyday activities

The following activities are suitable for children in grades 3 to 6:

- Bake a cake with your child. Ask him to measure out the ingredients.
- Ask your child how math is used in everyday life. Brainstorm the answers together.
- The next time you fill up your car with gas, let your child read the different numbers on the pump. Ask her to estimate the distance between where you

are to where you are going. How much gas will it take?

- When you are waiting in line to pay for your groceries, ask your child to estimate how much the bill will be. This can be done at a restaurant as well.
- Add a dollar value to each letter of the alphabet (e.g. A = \$1, B = \$2, C = \$3, etc.). Ask your child to add the value of the letters together to find how expensive a name or a word is. Who is the most expensive person in the family?
- Ask one family member to stand at one end of the room with his arms spread wide. Take a ball of string and a pair of scissors around to the remaining members of the family. Ask them to cut off a piece of string to estimate how long the distance will be from the tips of one hand to the other hand of the person standing with his arms spread out. Use the ball of string to measure other things, e.g. the distance around a book.
- Discuss why someone who sells fabric would need to be a good estimator of lengths. Who else might be good estimators of lengths?
- Go on a geometry walk with your child—in or outside the house—and look for three-dimensional objects. Look for spheres (e.g. ball), cones (e.g. road pylons), triangular prisms (Toblerone box), cubes (sugar cube) and rectangular prisms (e.g. toothpaste box). Some things are made up of more than one shape. Ask your child to identify the different objects.

Play games to learn more math

As a family, you can play many games to turn math into family fun. Here are a few suggestions:

- Make up games using playing cards to understand numbers. Turn over one card from the pile. Double the number. Play double plus one or double minus one.
- Understand measurements by estimating everything. Ask your child to estimate the number of steps from your door to

the edge of your yard, how many shoes might fit inside your bedroom or how many cups of water will fill up a large pot.

- Playing bingo can be a fun way for young children to practice recognizing numbers. For older children, try addition bingo or multiplication bingo.
- Explore patterns created by numbers. Write the numbers from one to 100 in rows of 10 (one to 10 in the first row, 11 to 20 in the second row, and so on). Ask your child to point out the patterns.

Did you know?

If you counted one number per second, it would take you 31,709 years to count to one trillion.

Read fun math books

Use math as the theme for family storytime. The following books are available at your local public library:

Counting on Frank
by Rod Clement

Math Curse
by Jon Scieszka and Lane Smith

G is for Googol: a math alphabet book
by David Schwartz

How Much Is A Million
by David Schwartz

Grandfather Tang's Story
by Ann Tompert

One Hundred Hungry Ants
by Eleanor J. Pincze

A Remainder of One
by Eleanor J. Pincze

Anno's Counting House
by Mitsumasa Anno

*Alexander Who Used To Be Rich Last
Sunday*
by Judith Viorst

The King's Chessboard
by David Birch

Selena and the Bear Paw Quilt
by Barbara Smucker

Length
by Henry Pluckrose

Capacity
by Henry Pluckrose

The Village of Round and Square Houses
by Ann Grifalconi

100th Day Worries
by Margery Cuyler

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