

MATH *at* HOME



HELPING
YOUR CHILDREN
LEARN AND ENJOY
MATHEMATICS

MAKING MATH PART OF YOUR FAMILY'S LIFE

Every child and adult needs to know and understand mathematics. It's part of our everyday life. We all "do math." We count money, measure things, sort from biggest to smallest, know how many miles it is into town and how long it takes to get there. At work, we may use spreadsheets, a calculator or adding machine, a cash register, or a precision measuring tool. The list goes on and on.

Children are taught mathematics in school, but research shows that families are an essential part of this learning process. In other words, by doing math with your children and supporting math learning at home, you can make a great difference.

There are many ways to make math part of your family's life. As you establish your own traditions for supporting your children's math learning, consider the following checklist of key ideas.

ALWAYS TALK ABOUT MATH IN POSITIVE WAYS

Regardless of your own mathematics background, let your children know that learning math is very important. Communicating a positive, can-do attitude about math is the single most important way for you to ensure that your children are successful in mathematics. Always be positive when you talk about math—never tell your children that math is too hard or that you hated it when you were in school. Let them know how critical math is by pointing out how people use math in everyday life. Encourage them to always do their very best in this subject area.

KNOW WHAT YOUR CHILDREN ARE STUDYING IN MATH

Be aware of the math your children are learning each year and know the standards they're required to meet. Ask them what they're studying in math class, regularly check in with them about math homework, and help them with school projects when it's appropriate. If your children experience difficulties in their math learning, work with them to overcome these trouble spots. (Some strategies for helping with math are provided on page 12.) Don't hesitate to talk with your child's teacher if you need more information or assistance.

□ **HAVE HIGH EXPECTATIONS FOR YOUR CHILDREN**

Research shows that when you believe your children can learn challenging concepts, they will rise to the occasion—so expect a lot from them! Be confident that your children can learn mathematics and then actively support them as they do so. Seek out math-focused programs and activities for them. As they get older, encourage them to study algebra and to take as many advanced mathematics courses in high school as possible.

□ **ENCOURAGE YOUR CHILDREN TO USE TECHNOLOGY IN MATH**

Help your children use calculators, computers, and the Internet to do math at home. Mathematics and technology are great partners. Tasks such as long and complex calculations, charts, tables, graphs, and spreadsheets show the power of using mathematics and technology together. Doing tasks that involve math and technology helps prepare your children for the future.

□ **MAKE MATH AN EVERYDAY PART OF YOUR FAMILY**

Find math at home. (The information on page 6 provides some ideas on how to do that.) Spend time with your children on simple board games, puzzles, and activities that involve math. Involve your children in activities like shopping, cooking, and home fix-it projects to show them that math is practical and useful. Encourage your children to solve problems that involve math. Engage your children in conversations about what they're thinking about when they solve math problems. Find opportunities to explore math together.



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□ **NOTICE MATHEMATICS IN THE WORLD**

You can help your children see the usefulness of mathematics by pointing it out wherever you see it—not just in your home, but *everywhere*. Tell your children about the math you do in your job and why it's important. When you're outside your home, look hard for ways to point out math: What shape does that tree look like? How many more miles before we get there? How does mathematics figure in sports, music, car building, or the design of a Ferris wheel? If you start looking for math in the world, you'll find more and more of it—and so will your children.