

Building Math Skills

We know from research that children are more likely to be successful learners of any subject when parents actively support their learning.¹ Building math skills and number sense begins at home. Unfortunately negative feelings and fear of math also can begin at home.

HOW TO HELP

Even if you didn't like math, had a hard time in math, or still don't like math, keep those feelings to yourself. Math can be challenging. Encourage your child to stick with an assignment and persevere despite the challenge. Praise effort and hard work. Don't punish your child for making mistakes in math. Asking them to explain how they worked out an answer; or invite them to show you an example of what they are working on this week. Your interest will help them process what they've learned, and keep you aware of what they are learning so you can seek additional help when you feel the topic is one you are less confident in. Knowing what topics they're studying, even if they don't need help, provides you with information to find everyday life examples to extend your child's learning.

MAKE MATH PRACTICAL

There are many ways to show your child that math is useful. Having fun with math can help build a positive attitude toward it. When you are writing a check, have your child help you turn the number into words. Help your child figure out area and perimeter to buy carpet or paint a wall if you are remodeling, or just for pretend. Even painting the lines for baseball, football, or basket ball requires measurement. Count things with young children. Cooking together will help your child practice measuring skills and basic fractions, especially if you double or halve the recipe. When you are shopping, have your child help count the change or even pay for the items. Find great everyday math ideas in the free booklet from the US Department of Education at www2.ed.gov/parents/academic/help/math/index.html.

HOMEWORK HELP

It is a good idea to check your young child's math papers to see how they are doing and to make sure they are finishing

their homework. You don't need to check every problem. If your older child is having trouble completing their work it may be helpful to verify that they have completed it. Avoid doing your child's homework for them or sitting with them for each problem. Such help teaches children to be dependent instead of independent learners.² Math problems can be solved in different ways. Sometimes a teacher will ask for a child to use a certain method that may be different from what you learned as a child. Use the method introduced at school to help them practice that skill at first. If they get stuck with one method for more than a day or two, talk to your child's teacher about other methods for solving the problem that your child may find more helpful. If there is a way you would like to try, talk to the teacher before introducing it. This will help your child see that you and their teacher are working together for their success. Here are some excellent questions from the National Council of Teachers of Mathematics to help you support your child without doing their math for them:

- Are there instructions or directions? What do they say?
- Can you find help in your textbook or notes?
- Do you have other problems like this one?
Can we look at one of those together?
- What is your teacher asking you to do?
Can you explain it to me?
- Can you tell me where you are stuck?
- Can you discuss the problem with a classmate?
- See the complete list of questions at www.nctm.org/resources/content.aspx?id=2876

1. www2.ed.gov/parents/academic/help/math/part_pg2.html#p2

2. www2.ed.gov/parents/academic/help/math/part_pg11.html#p11



This newsletter was created by CIRCLE, a service linking Seventh-day Adventist educators and resources globally. Read archived issues of parent newsletters at circle.adventist.org/browse/?browse_node=756

A BIBLICAL PERSPECTIVE ON MATH

Studying mathematics helps us understand God's creation and serve as better stewards of it. Look beyond the numbers to the concepts of order and design in the Bible. Thinking through core concepts in Math and how they relate to God's character and creation add a depth to Biblical themes. The concept equality is core to math learning AND to evaluating what is (=) good, noble, and true. Grappling with the concept of infinity helps us understand heaven. At the heart of the plan of salvation is God's character, summed up by an equation: God = love (1 John 4:8). Explore core concepts in mathematics from a biblical perspective with resources listed below.

LEARN MORE ONLINE

- Explore Math Lessons from a Biblical Perspective
www.calvin.edu/kuyers/math/lessons.html
- Help Your Child Learn Math – NCTM Family Resources
<http://www.nctm.org/resources/families.aspx>
- Help Your Child Succeed in Math
www.nctm.org/resources/content.aspx?id=2147483781
- Helping your Child Learn Mathematics, PreK-5
www2.ed.gov/parents/academic/help/math/index.html
- Integration of Faith in Mathematics
circle.adventist.org/files/nadspiritual/IFLMath.pdf
- Khan Academy – short videos on all math topics, all levels
www.khanacademy.org
- Math Approaches for Children
<http://circle.adventist.org/files/download/TBMathApproaches.pdf>
- Rookie Read-About Math series by Children's Press, PreK-3
www.enasco.com/product/1503936L or through Amazon.com

IN NATURE

- Nature is full of patterns! It is also full of objects to count, things to measure, animals and plants to compare, shapes and colors, and things to sort. Check out these resources to get started:
 - Search youtube.com for keywords such as 'numbers in nature', 'fibonacci' or 'golden ratio' to view short videos such as Numbers in Nature, at youtube.com/kkGeOWYOFoA
 - Read an illustrated book together, *Growing Patterns* by Sarah Campbell, ISBN 978-1590787526
 - Use ideas on teaching basic maths with nature at homeschoolblogger.com/melissal89/538778/

Produced by Circle

Winter 2012
circle.adventist.org

Issue Author

Rosemary Bailey
rjbailey@andrews.edu

Editor

Glynis Bradfield
glynisb@andrews.edu

Graphic Designer

Robert Mason
masondesign@me.com