

Making Reading Count!

Performing well in math depends on far more than a knowledge of numbers. Your child's math success will be limited unless she is also a strong reader.

Fortunately for your child, she has her teachers to help her, and she has you, too. As your child's parent, you're just the right person to help her sharpen the reading skills that will give her a boost the next time she tackles her math homework. You can use the pointers in this guide to get you started.

Begin with the basics

Know the language of math

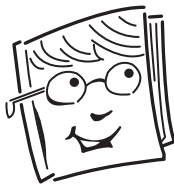
Good readers have good vocabularies. This is true for math reading as well. Your child will need to know and apply many words as he learns new math concepts. Here are some of the words she will need to know:

- **Positional words.** These include:
 - *Above*
 - *Below*
 - *Beside*
 - *Inside*
 - *Outside*
 - *Between*

Your child won't be able to set up an addition problem if he doesn't understand that the plus sign (+) sits *between* the two addends (numbers being added).

- **Words that stand for numbers.** This is one of the trickiest areas of math language. Your child must understand that the word *each* in a math problem is another way to say *one*. *Many* is a counting word, and *much* refers to amounts.
- **Words that refer to different amounts.** Most common are words such as *more*, *less* and *fewer*. Your child should know that *more* means a greater amount, while *less* and *fewer* refer to smaller amounts. For example, "Sarah had 12 marbles and Ryan had three. Sarah had more. Ryan had fewer."

The best way to help your child is to use words like these in your daily conversation and to point out



examples whenever you see them. Make flashcards of math words and symbols and work them into your child's weekly vocabulary lists.

Suggest a strategy for word problems

To solve word problems, your child will need to read carefully. She should:

- **Start** by reading the whole problem.
- **Identify** all numbers in the problem. Look for words (such as *dozen*) that stand for numbers!
- **Read** the problem again, out loud. Draw a picture of it.
- **Think about** what she needs to do. How should she set up the problem? Which operations does she need to use? Some hints: *Words like in all or all together* mean you need to add or multiply. *How many are left* or *how many more than* means you need to subtract. *How many or how much* when used with the word *each* means you need to divide.
- **Think** about the answer. Will it be a larger number than the numbers in the problem, or will it be smaller?
- **Act out** the problem. Try using manipulatives, which are simply objects that represent numbers. If you set out two groups of two apples, then count them up to see that they total four, you have just used manipulatives to solve $2 \times 2 = 4$.
- **Work** out the problem with pencil and paper. Double-check it. Be sure the answer makes sense.



Your child may not need every step in this process, but it helps to be familiar with all of them.

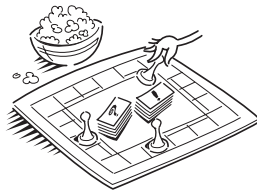
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Keep it real

Another critical link between reading and math is the “real-world” link. When children don’t like math, it’s often because they don’t see the use for it. Remembering the strong relationship between reading and math can help with this. Math teaches recognition of patterns, reasoning and planning. These same skills are necessary to be a good reader. In turn, doing more reading helps with math, especially with following directions and word problems. It’s all connected!

A few fun “real world” ways to use reading and math together are:

- **Playing board games.** Have your child read the directions and count out the moves.
- **Traveling.** Your child can read the map for you. Then he can figure out how many miles before you reach your destination. If you tell him how fast you are going, he can figure out how long it will take to get there.
- **Schedules.** Tell your child he can watch his favorite show if he looks it up in the television guide, reads the show description, tells you the start time, and how many hours or minutes that is from now.



Help your child get through a math textbook

Reading a math textbook is a lot different from reading a regular book. There are graphs, letters, numbers and symbols all on one page! Here are some tips to help your child read a math assignment:

- **Take it slow.** Math books use words that your child is probably still learning and getting used to.
- **Read every word.** Missing even one little word could mean missing the entire problem on a test!
- **Make sure** your child understands what she just read. Can she explain it to you in her own words?
- **Don’t skip the diagrams.**
- **Be sure your child** understands the appropriate symbols.
- **Write down any questions or notes** your child may have about what she is reading.

- **Review all important words and symbols** with flash cards.
- **Recite the key points.** See if she can do this without looking at her notes.

Have reading fun with newspaper math

You’ve got a great resource for combining reading and math right in your own home—the newspaper! Here are some ways you can have your child use newspaper reading to build math skills:

- **Add it up.** Ask your child to locate the temperature for your city. Then have him find the temperature for four other cities in your part of the country. Then have him calculate the average temperature for your region.
- **Cash in coupons.** Give your child the job of cutting out grocery coupons. Then have him help you find items on sale in weekly grocery store ads. Have him see how much he can save using coupons for items on sale.
- **Monitor the moon.** Check the newspaper each day to find out which phase of the moon is present. Help your child learn how long each phase lasts and how long it takes from full moon to full moon.
- **Track stocks.** Ask your child to track the stocks in the newspaper for one week. Help him make a graph that shows the changes in one stock.
- **Add up the ads.** Have your child find five ads for a car of the same style and make. Then ask him to calculate the average price of that car. Have him write an ad. Then have him calculate how much it would cost to put his ad in the paper.

Recommended reading

Here are some titles that will show your child the connection between reading and math.

- **Anno’s Magic Seeds** by Mitsumasa Anno
- **Cherries and Cherry Pits** by Vera Williams
- **Sir Cumference and the First Round Table** by Cindy Newswander
- **What’s Smaller Than a Pygmy Shrew?** by Robert Wells

