



HELPING
YOUR CHILDREN
LEARN AND ENJOY
MATHEMATICS

HELPING WITH MATH HOMEWORK

Many parents worry about helping their children with math homework, especially as their children get older and the mathematics becomes more complex. If that's the case, here's something you'll be happy to learn: you don't have to be a mathematics expert to help with math homework.

Providing a well-lit table and comfortable chair is an important place to start. Remember, the best location for homework is not necessarily your son or daughter's bedroom. If your child studies at the kitchen or dining room table instead, you can help without having to sit down the entire time. You can assist when help is needed and still go about your own tasks. At the same time, you'll have the opportunity to keep homework time focused by giving your child support, encouragement, and gentle reminders.

A good strategy is to pass by your child's work area and periodically "check in." A quick glance will often tell you if it's time to stop and provide some extra support. When it's clear that your assistance is needed, sit down and give your child your full attention. Although it's sometimes difficult, maintaining a calm demeanor and being patient can really help your child when he or she is struggling with math.

Many parents worry about not knowing the math their children are studying. In this case, the way to provide homework help is actually quite simple: ask questions and practice careful listening. Simple generic questions can help your child gradually make sense of math, build confidence, and encourage mathematical thinking and communication. When given the opportunity to talk about math, children are often able to remember what they learned in class and see the solution themselves. A good question can open up your child's thinking about the problem at hand.

Here are some useful questions for parents to try. Remember that listening to your child's answers—and providing calm responses—is as important as the questions you ask.

WHEN YOUR CHILD ISN'T SURE HOW TO BEGIN A PROBLEM, ASK:

- Can you tell me what you know now? What math facts do you have?
- What do you need to find out? Can you estimate the answer?
- How might you begin? What can you try first?
- Can you make a drawing or picture to get started?

WHILE YOUR CHILD IS WORKING ON A PROBLEM, ASK:

- How can you organize your information?
Will a list or table help?
- What would happen if ...? Show me what you did that didn't work.
- Can you explain the strategy you're using to solve this? Why did you ...?
- What could you do next?
Do you see any patterns?

WHEN YOUR CHILD FINDS AN ANSWER, ASK:

- Does that answer make sense? Why do you think that?
- How did you get your answer? Do you think it's right?
- Convince me that your solution makes sense. Explain it in a different way.



When questions alone just won't do, another strategy for helping your child is to identify a friend or relative who knows more mathematics than you do. Find out if that person would be willing to answer an occasional phone call from your son or daughter.

The Internet can also be a resource when your child needs homework assistance, although some sites charge a fee for this service. One free website that's worth exploring is Ask Dr. Math, www.mathforum.com/dr.math, which is a project of the Math Forum at Drexel University. This site has a large searchable archive of math questions and answers for students of all ages. It also invites students to submit questions if they aren't able to find the help they need.

PROBLEM-SOLVING STRATEGIES

1. Guess and check
2. Look for a pattern
3. Make a diagram or model
4. Act it out
5. Work backwards
6. Simplify the problem
7. Eliminate possibilities
8. Make a systematic list
9. Get advice or do research
10. Sleep on it