

Helping at Home with Mathematics Homework

As a parent, you will want to help your children with homework—but you may not feel prepared to help with mathematics, especially as they get older and the mathematics becomes more complex. If that is the case, here is something you will be happy to learn: you do not have to be an expert in mathematics to help with mathematics 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 will 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 is time to stop and provide some extra support. When it is clear that your child could use some assistance, take a deep breath and relax. If you stay calm, it will help your child stay calm.

Many parents worry about not knowing the mathematics 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 mathematics, build confidence, and encourage mathematical thinking and communication. When given the opportunity to talk about mathematics, 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 are as important as the questions you pose.

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

- ◆ Can you tell me what you know now? What 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 did not work.
- ◆ Can you explain the strategy you are 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 is right? Tell me more.
- ◆ Convince me that your solution makes sense. Explain it in a different way.

When questions alone just will not 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 is also a great resource. Here are three web sites that offer homework assistance in mathematics. Explore these sites with your child and see if they provide the kind of support you need.

- ◆ Bigchalk.com: www.bigchalk.com
- ◆ The Math Forum's Ask Dr. Math: mathforum.org/dr.math
- ◆ Tutor.com: www.tutor.com 