

## Ways to Help to Organize Your Child

- Provide a study place. If possible, have available materials such as graph paper, notebook paper, a ruler with both metric and standard units, a calculator, (graphing for 7th-12th grade), and a dictionary.
- Help your children develop a system for writing down assignments and keeping track of progress. Check to make sure that your child consistently records assignments and progress.
- Help your children develop a system for taking meaningful notes. Frequently, note taking is taught during class, so it may just be a matter of seeing if your children are taking and using notes.
- Many children need assistance in organizing and maintaining a notebook. Help them develop a system for organizing and maintaining their notebook and notes.
- Encourage and expect children to get work done on time, to stay caught up, to get help in a timely manner, and to correct errors in work. You may want to help children go over incorrect or incomplete work and talk about how the work could be improved.
- Encourage your children to participate in class by trying the mathematical tasks, asking questions, listening to others, reflecting on their own thinking, and taking notes.
- Encourage your children to identify study buddies or another student they can call to work with on assignments, get clarification, or find out about makeup work.
- It is generally expected that middle school students know whole number addition, subtraction, multiplication and division. If your child is not proficient with these skills, help them master the needed skills.



## Helping Your Child Succeed in Middle School Mathematics

The goals of *Connected Mathematics* (CMP) are to help students:

- Develop mathematical knowledge, understanding, and skill;
- Develop the capacity to define and solve problems with reason, insight, inventiveness, and technical proficiency;
- Build-on and make connections among mathematical ideas and concepts;
- See the connections between mathematics and other disciplines.

CMP is a problem-centered mathematics curriculum, which means that students spend a significant amount of class time working on problem solving tasks. CMP lessons are designed around a Launch-Explore-Summarize pattern. Teaching, learning, and assessing are aligned with each other as integral parts of Connected Mathematics.

### For More Information

CMP Families Web Site:

<http://connectedmath.msu.edu/families/>

General CMP Web Site:

<http://connectedmath.msu.edu>

## What are the Strengths of *Connected Mathematics*?

As a complete mathematics curriculum for grades 6–8, *Connected Mathematics*:

- ◆ Is organized around important mathematical ideas and processes.
- ◆ Is a problem-centered curriculum that uses an inquiry-based instructional model.
- ◆ Develops deep understanding of key mathematical ideas, reasoning, and skills.
- ◆ Substantially raises the level of mathematical thinking and reasoning of students.
- ◆ Has high expectations of all students.
- ◆ Promotes long-term retention of mathematical concepts, processes, and skills.
- ◆ Connects mathematical ideas within a unit, across units, and across grade levels.
- ◆ Provides homework that emphasizes practice with skills and problems solving.
- ◆ Incorporates technology throughout the curriculum.
- ◆ Offers multidimensional assessment tasks.
- ◆ Is based on 3 decades of experience and research.

### Authors

Glenda T. Lappan, *Michigan State University*  
Elizabeth Difanis Phillips,

*Michigan State University*

James T. Fey, *University of Maryland*

Susan N. Friel, *University of North Carolina*  
*with...*

Yvonne Grant, *Portland Public Schools,*

*Michigan* Jacqueline Stewart, *Mathematics*  
*Consultant, Mason, Michigan*

## Helping Your Child with Homework

In helping children learn, one goal is to assist children in figuring out as much as they can for themselves. You can ask questions to guide their thinking. Good questions and good listening help children make sense of mathematics, build self-confidence, and encourage mathematical thinking and communication. A good question opens up a problem and supports different ways of thinking about the problem. Here are some questions you might try:

### Getting Started

What do you know?

What do you need to find out?

How could you begin?

Are there words you do not understand?

Have you solved similar problems that would help? Let's look at your notebook.

### While Working

How can you organize the information?

Can you make a drawing (model) to explain your thinking?

Do you see any patterns or relationships that will help solve this?

Can you describe an approach (strategy) you can use to solve this?

How were you thinking about the problem when you did this...?

What would happen if...?

### Reflecting About the Solution

Has the question been answered?

How do you know your solution is reasonable?

How can you convince me your answer makes sense?

What did you try that did not work?

What mathematical skills and ideas did you use to solve the problem?

### Clarifying and Extending Thinking

Help me understand this part...

Can you explain it in a different way?

Is there another possibility or strategy that would work?

How is this connected to other ideas that you have learned?

Are there any questions you want to ask your teacher?