

# Skill-Building Opportunities

## Math

**Question:** My daughter struggles with math at school. What can I do at home to help her?

Repeat after me: math is awesome! And we're here to help. There are several fun ways you can help your child with math by promoting the life skill of Making Connections.

**Making Connections** is at the heart of learning—figuring out what's the same and what's different—and sorting these things into categories. Making unusual connections is at the core of creativity. In a world where people can “Google” information, people who can see connections are able to go beyond knowing information to using this information well.

**1**

### Play board games.

By playing board games, children gain information about numbers, but they're also promoting the skill of Making Connections. They're learning math concepts. For example, that:

- The number on the spinner or dice stands for a rule—whether to advance one or two or more spaces;
- Each space on the board stands for one number—that is, there is one-to-one correspondence between the number name and the number on the board;
- Each number is connected to the next number in a sequence, from low to higher numbers; and
- There is a linear relationship between the numbers from one to ten; that is, each number in the sequence is one higher than the previous number.

**2**

### Let your child explore the arts.

Michael Posner of the University of Oregon found that when children have training in the arts, they learn to pay attention, to stay focused and to resist distraction, noting that these skills lead to improvements in “fluid intelligence and in IQ.”

When the Dana Foundation convened a group to investigate the connections among learning, arts and the brain, their report found:

*“There is growing evidence that learning of the arts—whether it be music, dance, drama, painting—has a positive impact on cognitive life.”*

Specifically, they reported:

- Links between the practice of music and skills in geometry;

For more ways to help your child learn and develop, visit  
[mindinthemaking.org](http://mindinthemaking.org) and [vroom.org](http://vroom.org)

**MIND** in the Making  
The Seven Essential Life Skills Every Child Needs

- Correlations between music training and learning to read, perhaps through an increased ability to differentiate sounds; and
- Connections between training in acting and improvements in memory.

3

### Practice in using mathematical ideas at home and in everyday activities can be fun as well as useful.

Kurt Fischer of Harvard University says:

*When we look at how people build knowledge in the short term, one of the most basic processes we see is that people need to build knowledge over and over and over and over in order to get more stable knowledge.*

There is no end to the things you can count or sort—the number of steps to the front door, the number of times you need to twist the can before it opens, the number of minutes until it is time to leave home, the number of white socks versus blue socks. In addition:

- Ask your child to help keep track of costs at the grocery store, or to plan and budget a meal; and
- Let her help you measure ingredients as you cook together.

4

### Encourage your child to set goals and make a plan to achieve them.

Help your daughter make connections by setting a goal for something she wants to achieve, and creating concrete steps to achieve this goal. By spelling out the steps, math skills are developed. For example:

- If she wants to purchase something, help her set up a savings plan by calculating how much she needs and developing a work plan; or
- If she wants to learn something new, set a timeline and create action steps with her. It is always a good idea to discuss your concerns with your child's teacher.