

The Importance of Mathematics

Greater understanding of mathematics will be essential for today's school children. Success in tomorrow's job market will require more than computational competence. It will require the ability to apply mathematical knowledge to solve problems. If today's students are to compete successfully in the world of tomorrow, they must be able to learn new concepts and skills. They need to view mathematics as a tool they can use every day. They need to have the mathematical sophistication that will enable them to take full advantage of the information and communication technologies that permeate our homes and workplaces. Students with poor understanding of mathematics will have fewer opportunities to pursue higher levels of education and to compete for good jobs.

Just as parents can help their children be ready to learn to read, they can give children a good start in learning math by helping them develop proficiency with informal math concepts and skills.

Before Children Enter School

- Play games such as dominoes and board games.
- Find natural opportunities to count, to sort objects, to match collections of objects, to identify shapes (while reading bedtime stories, going up stairs, setting the table, etc.).
- Count a collection of objects and use number words to identify very small collections.
- Talk with your child about simple math problems and ideas. (How many spoons do we need to set the table? Give me the cup with two flowers on it.)

After Children Enter School

- Have high expectations. Children's math achievement is shaped-and limited-by what is expected of them.
- Expect some confusion to be part of the learning process but emphasize that effort, not ability, is what counts. Math is understandable and can be figured out.
- Avoid conveying negative attitudes toward math. Never tell children to not worry about a certain kind of math because it will never be used.
- Ask your child what he or she did in math class today. Ask him or her to give details and to explain.
- Expect your child's homework to include more than simple computation worksheets.
- Give your child meaningful problems that use numbers or shapes while you are going about everyday life. Ask the child to explain what he or she did.

Citation

National Research Council. (2002). *Helping Children Learn Mathematics*. Mathematics Learning Study Committee, J. Kilpatrick and J. Swafford, Editors. Center for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.