

STEM Made Easy

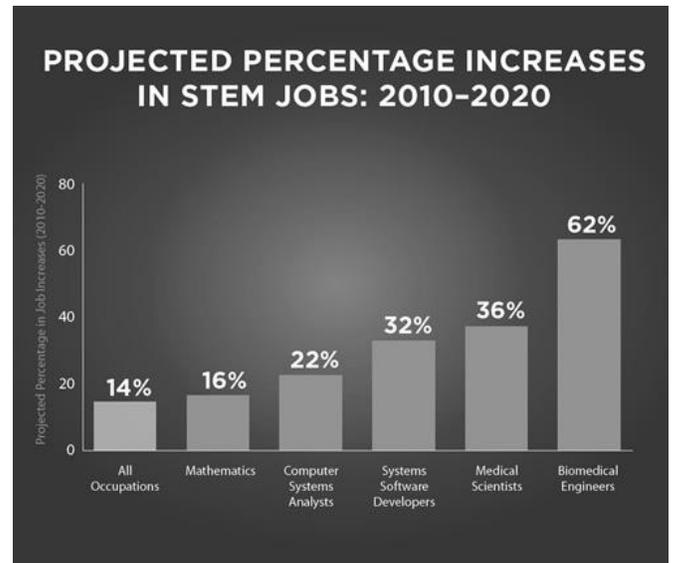
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The United States has become a global leader through the blessings of God and the hard work of its scientists, engineers and innovators. Today, our position as a world leader is at risk. One of the greatest threats to our leadership position is that few American students pursue careers and education in the fields of science, technology, engineering and mathematics (**STEM**). This problem is compounded by an inadequate pipeline of teachers skilled in STEM subjects entering the educational arena.

The Problem

According to the U.S. Department of Education:

Only 16 percent of American high school seniors are proficient in mathematics and interested in a STEM career. Even among those who do go on to pursue a college major in the STEM fields, only about half choose to work in a related career. The United States is falling behind internationally, ranking 25th in mathematics and 17th in science among industrialized nations. In our competitive global economy, this situation is unacceptable.



(Source: Ed.gov/stem)

How Can You Help

1. Involve your children in mathematics every way possible. Be sure it is age, ability, and capability appropriate.
2. Find innovative ways to inspire your children to learn math and science.
3. Locate inspirational sources you can use with your kids starting at the K4 level and keep adding to your collection. Integrate math and science into your program of study.
4. Integrate programs like The Edison Project at Quick Study Labs into your homeschool curriculum.



I found a great resource at www.greatschools.org

by Great Schools staff

Seven secrets to get your child excited about math

When you balance your checkbook, buy shoes, measure distance or check the time, you're using math. Use these tips to help get your child excited about math.

Be an example

Many adults say they hated math in school, according to national polls. If you are one of them, be careful that you don't communicate that attitude to your child. Help him improve his attitude toward math by showing him that you are confident when completing routine tasks like counting money from a school fund-raiser, balancing your checkbook or completing your tax return. You can also point out the importance of math in different professions including architecture, medicine, fashion design, restaurant management and computer programming.

Help your child use math every day

Encourage your child to solve problems involving math outside of school. In the grocery store, ask her to figure out the price of four cans of tuna fish. In the car, ask her how long it will take to travel to your destination based on your speed. In the toy store, ask her to calculate the price of a discounted toy and how long it will take to save her allowance to buy it.

Familiarize yourself with learning standards

It's important to know what math skills your child should learn in his current grade. You can access the learning standards for your child's grade on the Web site for your state department of education or ask your child's teacher to outline them for you. If you know what your child will be learning, it will be easier to complement those skills with activities at home.

Monitor your child's math homework

Do your child's math assignments only call for rote work or does the teacher include a creative "problem of the week" that tests students' understanding of mathematical concepts? Ask your child's teacher which techniques he uses to help students become more comfortable with math.

Pay attention to details

You can help your child with math homework by making sure she shows all her work when solving equations and checks for correct calculations and answers. It's a good idea to limit distractions and set aside the same time every day for homework.

Play math games at home

There are many games your child can play that involve math. Beginning in the elementary years, students can learn to enjoy math by playing games such as chess, dominoes, cribbage, checkers, Yahtzee and backgammon.

Read books that incorporate math

More and more schools are starting to integrate diverse subject areas in the curriculum so that students can make clearer connections. But how do you include math in a history or English class? One way is to read books in which the main characters solve a problem using math or logic. Examples include *One Hundred Angry Ants* by Ellinor J. Pinczes, *The King's Commissioners* by Aileen Friedman and *Socrates and the Three Little Pigs* by Tuyosi Mori.

Source: GreatSchools.org/students/homework-help/62-get-excited-about-math.gs