Math Strategies and Ideas General Information



*Mathematics is the language of technology. It is used to formulate, comprehend and answer problem in a variety of real world situations.

- 1.) Mathematics is vital to the health and prosperity of the nation
- 2.) Mathematics is vital for industrial and technological leadership
- 3.) Mathematics directly benefits other disciplines and knowledge.
- 4.) Mathematics is essential in the workplace.
- 5.) Mathematics develops our knowledge and technology with new ideas in medicine, economics and physics.

<u>Jobs which require at least two years of High School Mathematics including</u> <u>one year of algebra:</u>

Police officer	Dental assistant	Fire Fighter	Carpenter
Postal Clerk	Office Clerk	Plumber	Machinist
Bookkeeper	Medical Assistant	Data Processor	Electrician

Jobs which require at least three years of High School Mathematics including at least one year of algebra:

Teacher	Dietician	Computer Programmer
Draftsman	Photographer	Computer Technologist
Medical Secretary	Nurse	Mental Health Worker
X-ray Technician	Secretary	Home Economist
Pharmacy Assistant	Horticulturist	Sheet Metal Worker

<u>Jobs which require at least four years of High School Mathematics</u> <u>including one year of geometry and two years of algebra and one year of precalculus:</u>

Physician	Airline Pilot	Engineer	Geologist	
Chemist	Dentist	Forest Ranger	Architect	
Biochemist	Veterinarian	Pharmacist	Graphic Artist	
Computer Scientist		Interior Designer		

Five Questions that can help your child learn Math:

1. How many are there?

To develop an understanding of the meaning of numbers.

2. How many of each kind?

To develop classification and counting skills.

3. How are these the same/different?

To observe, compare, analyze, and reach a conclusion:

These are basic skills of mathematical and scientific exploration.

4. Which has more/fewer?

Comparing quantities is one important to setting the stage for children's later thinking about addition and subtraction.

5. Which is taller/shorter/longer?

Develops understanding of measurement.

Parents be sure to:

- **Talk to your children about the importance of mathematics for future success
- **Encourage students to pursue high-quality mathematics courses
- **Encourage your children to participate in mathematics enrichment programs
- **Have high expectations and check student progress on a regular basis
- **Make sure students attend school regularly
- **Get to know and talk to your child's teachers
- **Attend parent meeting and family nights
- **Encourage children's interest in mathematics
- **Check your child's homework
- **Use real life examples to help children understand problem solving, multiplication, division, addition, subtraction, fractions and percentages

Encourage Excitement for Math with Games and other Activities at Home!

Dominos



The dots are right there in front of them and you can show your child how to match numbers, count the dots, recognize patterns do addition and subtraction questions while playing games.

Colored Marbles, spinners, dice and number wheels can be used for practicing probability.

Examples:

What are the chances of getting a blue marble from the bag? What is the chance of spinning a 1, etc...



Watches and clocks

Children need to know how to tell time. Investing in a analog wrist watch or just making references to the clock on a regular basis will help children with telling time and figuring elapsed time.





Cooking and Baking:

Cooking and Baking are great ways to introduce children to fractions, measuring and science!





Card Games

Regular playing cards can be used to practice Addition, Subtraction, Multiplication and Division. Making up games is a great way to enhance student learning and interact with one another.

**Rummy, Uno, Skippo, and many other card games are great for reinforcing math skills.

Dice are GREAT math tools.



Use dice to write and solve number sentences, practice basic facts of addition, subtraction, division and multiplication.



General Household objects can be used to enhance learning.

Objects like buttons, crayons, dried pasta, M&M's, Skittles, crackers are just a few items that can be used for counting, creating patterns, adding subtracting, making graphs, making fractions and much more.

