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Click on Title I - Compensatory  
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# *Math Strategies and Ideas*

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**School Year 2002-2003**

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# Math Strategies and Ideas

## General Information

- Mathematics is the language of technology. It is used to formulate, comprehend, and answer problems in a variety of real world situations.
- 1) It is vital to the health and prosperity of the nation. 2) It is vital for industrial and technological leadership. 3) It directly benefits other disciplines and knowledge of it is essential in the workplace. 4) It develops our knowledge and technology with new ideas in medicine, economics, and physics.
- Just to show you how essential math is in the real world, here is a good example of math use in the job market. The following details how much high school mathematics courses are needed for a job:
  - Two years; including one year of algebra to be a: police officer, dental assistant, fire fighter, carpenter, postal clerk, office clerk, bookkeeper, electrician, medical assistant, machinist, plumber and data processor.
  - Three years; including one year of algebra to be a: teacher, dietician, nurse, draftsman, photographer, horticulturist, mental health worker, medical secretary, home economist, X-ray technician, pharmacy assistant, computer programmer, and computer technologist.
  - Four years; including two years of algebra, one year of geometry and a year of precalculus to be a: physician, airline pilot, engineer, geologist, chemist, dentist, forester, architect, biochemist, veterinarian, interior designer, graphic artist, pharmacist and computer scientist.

## Math Strategies

### 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?**  
Your child develops classification and counting skills.
3. **How are these the same/different?**  
Your child will observe, compare, analyze, and then reach a conclusion - the basic skills of mathematical and scientific exploration.
4. **Which has more/fewer?**  
Comparing quantities is one important key to setting the stage for children's later thinking about subtraction.
5. **Which is taller/longer/shorter?**  
Used for measuring.

### Parent Math Strategies

- Talk to the children about the relevance of mathematics to future success.
- Be sure that the children pursue high-quality mathematics courses.
- Find out about after-school, Saturday, and summer mathematics enrichment programs and encourage the children to participate.
- Encourage the children's interest in mathematics and let them know they can succeed.
- Have high expectations and check on the children's progress.
- Make sure that the children attend school regularly.
- Get to know the children's teachers.
- Attend pertinent workshops - e.g., family math workshops.

## Websites

- **US Dept. of Education's Math and Science Expert Panel**  
[www.enc.org](http://www.enc.org)
- **A+ Math**  
[www.aplusmath.com](http://www.aplusmath.com)
- **Lesson plans, puzzles problems, online board games, ideas & activities**  
[www.csun.edu/~vceed009/math.html](http://www.csun.edu/~vceed009/math.html)
- **Ask Dr. Math!**  
[forum.swarthmore.edu/dr.math](http://forum.swarthmore.edu/dr.math)
- **Centre for Innovation in Mathematics Teaching**  
[www.ex.ac.uk/cimt/welcome.html](http://www.ex.ac.uk/cimt/welcome.html)
- **Helping Your Child Learn Math**  
[www.ed.gov/pubs/parents/Math/index.html](http://www.ed.gov/pubs/parents/Math/index.html)
- **Math Homework Help**  
[users.erols.com/bram](http://users.erols.com/bram)

