

Math Trailblazers: A Parent Guide

Grade 3



Issaquah School District
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Math Trailblazers is...

based on the belief that mathematics is best learned in real-world contexts that make sense to children. Lessons are grounded in everyday situations. A fundamental principle is that mathematical ideas are internalized through active involvement in solving real problems.

New mathematical content is included but traditional topics are not neglected. Topics including number sense, estimation, geometry, measurement, algebraic sense (patterns and relationships) and statistics (using data) are investigated at each grade. Students using Math Trailblazers will have the opportunity to become proficient problem solvers, know when and how to apply the mathematics they have learned, and communicate clearly their mathematical knowledge. They will recognize connections between the mathematics learned in school and the mathematics used in everyday life.

For more information
about the program -
contact the website for
Kendall-Hunt Publishing
<http://www.kendallhunt.com/elhi>



A **Parent Letter** will be sent home at the beginning of each unit during the school year. This will introduce and explain the important ideas and skills that will be covered in the unit. If you feel you need more help, please check with your child's classroom teacher.

Strategies for assisting your child at home...

- Review the Unit Parent letter.
- Ask your child questions to promote thinking and understanding:
 - ✓ *Tell me how you did this.*
 - ✓ *Could you explain it another way?*
 - ✓ *Show me what you did in class today*
 - ✓ *How else could you do this?*
 - ✓ *What would happen if...?*
- Have your child work homework problems as far as possible. If your child gets stuck and does not know where to go beyond that point, have him or her explain in writing what the difficulty is so that the teacher can determine the next best steps.
- Establish a homework routine.
- Encourage independence.

Ongoing Practice with Skills...

- Help your child practice math facts as suggested by the teacher with flash cards, games, (mastery of addition and subtraction and a beginning understanding of multiplication is expected.)
- Provide opportunities for estimation, mental arithmetic, and checking the reasonableness of results.
- Play board, card or dice games that involve computation, logic or spatial reasoning.

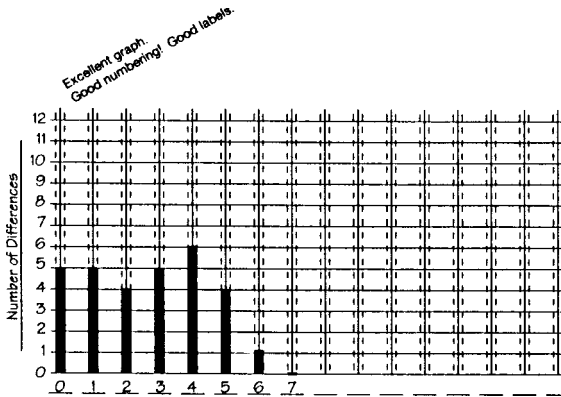
Why we encourage writing about math...

Writing can assist math instruction in two ways, by helping children make sense of mathematics and by helping teachers understand what children are learning and how they are reasoning.

Writing calls for clear thinking and allows one to find out what a child knows and doesn't know. Writing about mathematical ideas is an important part of the journey of learning.

Example:

Using Two Spinner Numbers



Differences of the Spinner Numbers

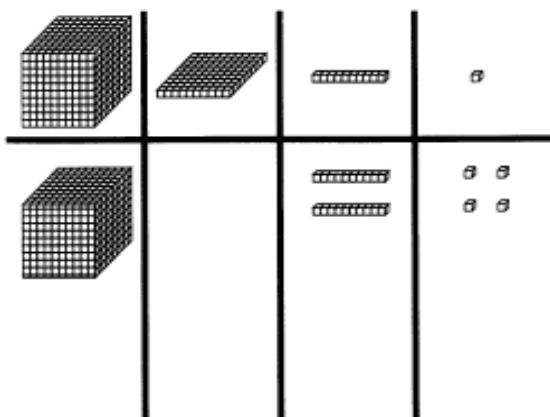
"This is what our groups graph looks like. We got numbers from a spinner. When we subtracted, the number we got the most was four. Four is the most common. The least common was seven.

We decided four was the biggest because it was the biggest bar. Seven was the smallest.

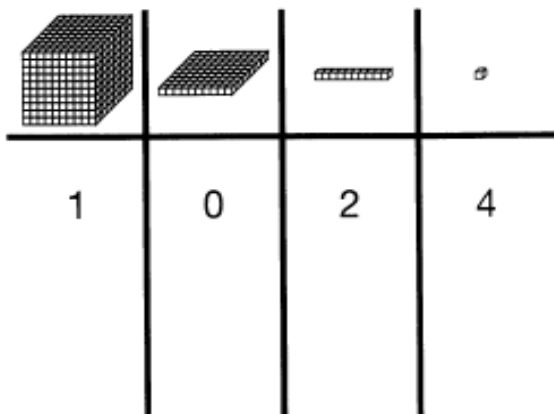
It looks like a roller coaster."

What are Skinnies, Bits and Flats?

"Base 10 pieces" are introduced in third grade Math Trailblazers. These pieces are used to show a concrete representation of a number's place value in our number system. Bits are ones, skinnies are tens, flats are hundreds, and packs are thousands. Students can use a base-ten shorthand to solve problems and to better understand computational procedures.



Concrete model
of the number
1,024



Symbolic
representation
of the value

Additional Resources and References:

Books

Math to Know: A Mathematics Handbook
Great Source Publishers
1-800-289-4490

Software

Math Blasters
Davidson and Associates (1-800-521-6263)

**Fraction Munchers and
Tesselmania**
MECC (1-619-569-1500)

Web-sites for Parents

**Eisenhower National Clearinghouse:
Family Involvement in Education**
<http://www.enc.org/topics/famcomm/home/>

Helping Your Child Learn Math
<http://www.ed.gov/pubs/parents/Math>

Eduplace: Math and Your Child
<http://www.eduplace.com/math/mathsteps/3/>

Discovery School
<http://school.discovery.com/parents/>

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