

Math Matters

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What's That Word?

The result of adding two or more sets together is called the **SUM**. It is also the **TOTAL**.

ZERO is a whole number used to represent a set with no objects in it.

The total number of square units needed to cover a two dimensional surface is called the **AREA**.

A step by step procedure for computing that gives the correct result in every case is called an **ALGORITHM**.

Click It!

Check out these websites:

- ◆ Topmarks.co.uk
A variety of safe, fun, and engaging learning activities for kids.
- ◆ Freckle.com
Practice fact fluency and adaptive problems that align directly with the standards. Students at TCS can log in using their teacher's classroom code.

Building Mathematical Thinkers

Habits of Mind for Mathematicians

Doing math means so much more than just "getting the answer". As students are learning about math and working to find solutions their teachers are working to help them develop their mathematical thinking. To be mathematicians students must cultivate habits of mind that support critical thinking and problem solving. Some of the habits of mind students are working on developing are:



- Making sense of a problem before deciding on a strategy to solve it
- Choosing a strategy for solving and monitoring their progress so that they can revise their thinking as needed
- Attempting a difficult task in more than one way before asking for help
- Representing their thinking with objects, drawings, diagrams, equations, or other models
- Providing explanations that make their mathematical thinking clear
- Making connections between mathematical ideas and strategies
- Using appropriate and accurate math words and symbols to describe their thinking
- Providing a solution that is connected to the context of the problem and makes sense

You Can Encourage Mathematical Thinking at Home by Asking Your Child these Questions:

- What is the problem asking you to find out? What information is important?
- What strategy are you using? Why did you choose that strategy?
- How could you represent this problem with a model, picture, or diagram?
- How do you know your solution makes sense?

Did you know?

This summer 48% of students entering 1st through 6th grade participated in the Summer Math Passport program!

Think about the work you did with your child on those problems. How were you helping your child become a mathematical thinker?



Recommended Reading

Number Sense (grades pre-K-1):

Zero is the Leaves on the Trees

by Betsy Franco

Rounding Numbers (grades 3-5):

Rounding Rescue

by Eric Lo Storto

Number Sense (grades pre-K-2):

Zero

by Kathryn Otoshi

Place Value (grades 4-5):

Sir Cumference and All the King's Tens

by Cindy Neuschwander

Math Jokes, Riddles and Facts!

What number can you subtract half from to obtain a result of zero?

Answer: The number 8. It's made up of two zeros, one on top of the other.

Fun Fact: The name of the popular search engine 'Google' came from a misspelling of the word 'googol', which is a very large number (the numeral one followed by one hundred zeros to be exact).

Figure It Out Together!

Play It:

(K-2) One-Die Graph

Materials: 1 die, grid with 6 boxes above the numerals 1-6 (across the bottom), something to use as tokens that fit in the grid (cheerios, pennies, etc.)

Directions: Toss a die to see what numeral will be each players' number. Take turns tossing the die. Mark a box in the column above the number tossed. The player whose number reaches the top of the grid first, is the winner.

Variation: use 2 dice and add to find the sum or subtract to find the difference. If adding you will need a grid for numbers 2-12. If subtracting you will need a grid for 0-5.

(2-6) Roll It Big or Roll It small

Materials: dice, paper and pencil

Directions: Decide whether you are trying to make a larger or a smaller number. Make dashes on the paper to indicate the place value of the number. If you're working on hundreds, you would make 3 dashes, 4 for thousands, and so on. Take turns rolling dice the same number of times as the dashes. Each time a person rolls, he/she must think logically to place the number shown on the dice, on the dashes. Once you have placed a number, it can not be moved. The person with the highest (or lowest, depending upon the game's goal) wins a point. Have the winner describe their strategy!

Variation: Make this a decimal place value game by having the kids draw a decimal before three dashes.



Try These Apps for Math on the Go!

K-1:

Vegetable Maths Masters (free)
Splash Math (\$0.99)

2-6:

Slice Fractions (free)
Splash Math (\$0.99)

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Have a great math riddle, tip, trick, website or book to share? Have questions, comments, or concerns? Contact us by email at:



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