

Math Matters

Created by Mrs. Dalka

What's That Word?

PLACE VALUE is the value a digit has because of its place in a number

To **DECOMPOSE** a number is to separate it into 2 or more parts

RELATED FACTS are two facts that can be made from the same part-whole relationship. For example: $3 + 4 = 7$ is related to $7 - 4 = 3$ or $4 \times 3 = 12$ is related to $12 \div 3 = 4$

Real Life Math: Holiday Shopping

Shopping for gifts for the holidays (or any time!)? Take this opportunity to involve your kids in the everyday math you do! Incorporating math into everyday activities such as this can help strengthen your child's conceptual understanding of the math they are learning in school!

Here are some ideas for bringing out the math in your holidays:

- ◆ Talk to your child about what a budget is and help them determine one for buying gifts for friends or relatives.
- ◆ When you go to the store to purchase a gift with your child pay with cash and let your child determine which coins and bills to use. See if they can figure out if you got the correct change.
- ◆ If your child has a specific item they are planning to buy for a friend or relative, teach them how to compare prices or use a coupon! Help them to see that getting a good deal enables them to put money into savings for the future (or get another needed item).
- ◆ If your child receives money as a gift, help them open a bank account so that they can learn the importance of saving money. If they already have one help them learn what interest is and see how much they've earned!



Click It!

Check out these websites:

- ◆ [Parent Support from Eureka!](#)
A variety of resources to help keep parents informed and involved in supporting students.
- ◆ [Greg Tang Math](#)
Books, Games, and More! Challenge yourself to think flexibly with numbers!
- ◆ [Figure This](#)
Family math challenges to try together!

Math Tool of the Month

Tape Diagrams

A tape diagram is a drawing that looks like a segment of tape, used to illustrate number relationships. Also known as strip diagrams, bar model, fraction strip, or length model. Students can draw these models to visualize a problem and the number relationships. The model can be used for the four basic operations and for fractions and ratios which helps build connections for students as they learn!

[Thinking Blocks by Math Playground](#) is a virtual tape diagram activity!

Phoebe had 6 puppies. Each puppy had 4 legs. How many legs did the puppies have all together?

$6 \times 4 = 24$

4, 8, 12, 16, 20, 24

There are 24 legs total. 6 puppies 24 total legs

Susan baked 256 cookies. She sold some of them. 187 were left. How many did she sell?

Sold? 187 left

256 cookies

$$\begin{array}{r} 1416 \\ 256 \\ -187 \\ \hline 69 \end{array}$$

Susan sold 69 cookies



Recommended Reading

Numbers and Counting:

Let's Count Goats

By Mem Fox

Zero

By Kathryn Otoshi

123 Peas

By Keith Baker

Millions, Billions, and Trillions

Understanding Big Numbers

By David A. Adler

Figure It Out Together!

Play It: Board Games

Family Game Night is more than just quality time, it also helps boost your child's learning!

Games that move on a path such as Candy Land or Chutes and Ladders help children develop the skill of counting with 1-1 correspondence and even correlates with using a number line.

Games such as Checkers, Chess, Connect Four, and Othello help children develop strategic thinking and memory skills.

Monopoly, Life, and Pay Day all help students learn to apply money skills in real life situations that involve adding money and making change using mental math.

Games such as Mastermind, Clue, and Guess Who all develop reasoning and critical thinking skills.

To get the most learning out of these game playing experiences don't forget to talk with your child about what they are learning. Compare and discuss strategies, have them explain how or why they made a move, or even challenge them to figure out your strategy!



Math Riddles, Tips, and Tricks!

What is the only number word with all its letters in alphabetical order?

Answer: Forty

Tip 1: If you count to find the answer to an addition fact, you'll have to count every time. If you use strategies such as doubles, near doubles, or the 10 benchmark you'll start to know your facts much faster!

Tip 2: You don't have to memorize multiplication facts! If you know how to count by 2's, 5's, and 10's, can think flexibly with numbers, and understand multiplication, then you can figure them all out! The more you think about them the easier they become!



There's an App for That

Fact Practice Apps:

Sushi Monster - Free

Pet Bingo by Duck Duck Moose- \$1.99

Mathameteer- Free

Motion Math Hungry Fish- \$2.99

Motion Math Match- \$3.99

Mrs. Dalka is the Math Intervention teacher at Black Rock School. Have a great math riddle, tip, trick, website or book to share? Have questions, comments, or concerns? Contact Mrs. Sue Dalka at Black Rock

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