MATH MATTERS

Resources and Ideas for Families

WELCOME!

This newsletter is sent home to families every nine weeks. It provides information on what your child is learning in math, activities you can do at home to reinforce the content, and suggestions for books and resources you can use to help your child learn math.

BUILDING A MATHEMATICAL COMMUNITY

Student Collaboration

Collaborative learning gives the responsibility of the learning to the students by using groups and pairs of students to fulfill a task or assignment within the classroom. The Common Core Math Practice Standard 3 calls for students at all grades to listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Within a Collaborative Group:

- Students are invested in their own learning.
- Learners actively participate.
- Teachers become learners at times, and learners sometimes teach.
- Respect is given to every member.
- The project/question should be of interest and challenging to students.
- Diversity is celebrated and all contributions are valued.
- Students learn skills for resolving conflicts when they arise.
- Members draw upon their past experience and knowledge.
- Goals are clearly identified and used as a guide.
- Tools such as manipulatives or calculators are made available.

Check out this great website for generating math word problems!

http://gregtangmath.com/wordproblems

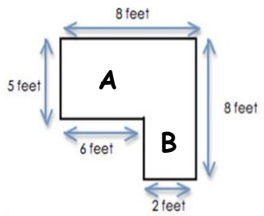
MATH IS FUN!

Check out the **MATH IS FUN** website which contains resources to help children learn math. Here you will find "How to Videos", Online Games, Vocabulary, and APPs related to the content your child is learning.

www.jcpsmath.weebly.com

During the 3rd nine weeks, Third Grade students learn to:

- **Solve two-step word problems using all four operations (+, -, x, ÷).** For example, Marsha had 120 stamps. She gave her sister half of the stamps. Then she used three stamps to mail letters. How many stamps does Marsha have left? (Answer: 120 ÷ 2 = 60; 60 – 3 = 57)
- **Multiply one-digit numbers by multiples of 10.** For example, 9 x 80 or 5 x 60.
- **Apply the distributive property as a strategy to multiply and divide.** For example, find 8 x 7 by multiplying 8 x 5 and 8 x 2.
- **Recognize and write simple equivalent fractions.** Students learn to find equivalent fractions. For example, a child may recognize that 4/8 is equal to 1/2 because four is half of eight. A child may also recognize that 2/8 is equal to 1/4 because two is a fourth of eight.
- **Compare fractions using >, < or =.** Students will learn to compare fractions using greater than, less than, or equal to. Students may use different strategies to compare fractions such as using a visual model (picture) or reasoning about the sizes of the denominators or numerators.
- **Recognize area as additive.** For example, a student would find the areas of part A and part B of the figure to the right and then add the areas together to find the area of the entire figure.



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Activities to Try at Home:

- Make equivalent fractions in the kitchen using measuring spoons or cups. If the 1/2 cup is missing, what other measurements could you use to make 1/2 ? For example, you could use 1/4 twice to make 1/2.
- Look for opportunities to allow your child to practice identifying fractions in your home. For instance, if there are three eggs left in the carton, ask, "What fraction of eggs is left in the carton? What fraction of eggs have we used?"
- Practice finding patterns in the multiplication table below. Use different color highlighters to identify more than one pattern.

x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Check Out These Books!

Below are some suggested books which connect to math content students are learning this cycle.

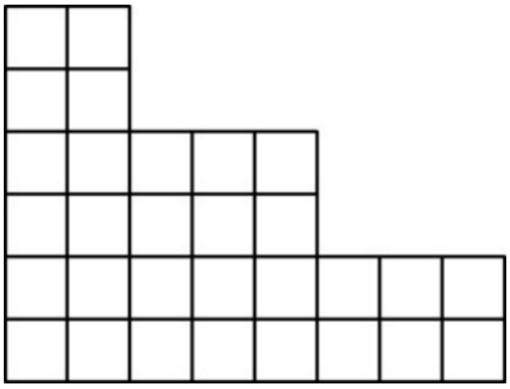
- *Apple Fractions* by Donna Townsend
- *Full House: An Invitation to Fractions* by Dayle Ann Dodds
- *Fraction Action* by Loreen Leedy
- *Fraction Fun* by David Adler
- *Working with Fractions* by David Adler
- *Sir Circumference and the Isle of Immeter* by Cindy Neuschwander
- *The Wishing Club: A Story about Fractions* by Donna Jo Napoli

MATH TASK

Three Hidden Rectangles

From: *Illustrative Mathematics*

There are many ways to find the area of this figure.



A. Try to find as many ways as you can to split this figure into exactly 3 rectangles. Be sure that none of the rectangles overlap and the 3 rectangles cover the entire figure.

B. For every example you found in part a, write an expression that represents the area as the sum of the three rectangles.

C. Find the total area of this figure.

Solution can be found at: https://www.illustrativemathematics.org/content-standards/3/MD/C/7/tasks/1836