MATH MOMENTS

January 2014
Volume 1, Issue 2

Welcome to the second edition of Math Moments! The focus of this newsletter is to provide you with information about the math curriculum in grades 4 and 5, including both the content and the rigor of the math your child(ren) are required to learn in school. It is my hope that this will enable you to feel more comfortable answering the inevitable homework questions, as well as encourage your child to challenge themselves in math. Each edition will have information about what your child is learning as well as how we are explaining it to them in class. It will also contain information about helpful websites for math practice, and some challenges for your child to complete. Thank you for taking the time to work with your child – together we can help them achieve BIG things in math! ~ Coach Brogan

GRADE 4 MATH

Long division is the current challenge in grade 4. Long division is 2, 3, or 4 digit number divided by a 1, 2, or 3 digit number. Long division is helpful when being asked to split a large number into smaller chunks – ie; when splitting a bill at a restaurant or when divvying up a pile of money after an event into different accounts. Students that have not yet memorized their multiplication facts struggle with the division, as well as students who simply have not yet mastered the steps that you need to follow in order to solve the long division problem. How can you help? Quiz your child daily on their multiplication facts. This doesn't have to be difficult or long, just a few problems a day as you prepare dinner, walk to the bus stop, or drive to the store can really help your child master their facts. See the "Math Help" section of this newsletter for a detailed sample of a long division problem. You could also give your child a pile of play money on a snow day and ask them to split it evenly among 4 friends….how much longer does it take to go through the pile and say 1 for me, one for you, one for you, one for you… than it does to do the long division???

GRADE 5 MATH

In fifth grade, students are working on multiplying and dividing fractions. While in some ways this is easier than adding and subtracting fractions (no need to find common denominators), it is still challenging when the students are asked to simplify fractions, multiply whole numbers by fractions, and deal with mixed numbers. Picture models help a great deal! If you are working with your child, it may be helpful to remember the following:

If you start with a fraction and add another fraction, the result is always greater than the original fraction.

If you start with a fraction and multiply by another fraction, the result is always less than the original fraction.

When you multiply two whole numbers greater than 1, the result is always greater than either number.

When you multiply two fractions less than 1, the result is always less than either fraction.

More Math Moments…

MATH HELP!

When multiplying fractions, there is no need for a common denominator – just multiply straight across the numerator and the denominator.

$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$ Simplify $= \frac{1}{2}$

When dividing fractions, you need to use the reciprocal of the second fraction (flip it) and then multiply as usual

$\frac{2}{3} \div \frac{3}{4} = \frac{2}{3} \times \frac{4}{3} = \frac{8}{9}$ Can't simplify

The following link is a helpful video on multiplying and dividing fractions.

http://www.schooltube.com/video/e9cf8c6a1ef32f3c60f4/Multiplying%20and%20Dividing%20Fractions

This link will help explain dividing with mixed numbers:

http://www.phschool.com/atschool/academy123/english/academy123_content/wl-book-demo/ph-813s.html

** See attached page for help on long division!

GREAT WEBSITES for Math Practice

For Students:

Mobymax.com

IXL.com

Mathplayground.com

For Parents:

Education.com

Learnzillion.com

Corestandards.org

HOT Topic – MCAS

The math MCAS test that your students will take this year in May will be a rigorous test designed to measure their achievement in several different categories.
Operations and Algebraic Thinking: Using addition, subtraction, multiplication and division to solve problems, understand factors and multiples, and analyze patterns and relationships
Number and Operations in Base 10: Place value understanding and performing operations with decimals
Number and Operations in Fractions: Compare and order fractions and decimals, add, subtract and multiply fractions
Measurement/Data: Solve problems involving measurement and conversions of one measurement unit to another, understand and measure angles, and interpret data from a graph
Geometry: Graph points on a coordinate plane, classify two-dimensional figures and draw and identify lines and angles.

The test asks the students to THINK and APPLY what they have learned in class. This is a challenge for many students as they are asked not to just calculate, but explain, give other examples, and prove their point.
When working with your child, ask them to explain their thinking, and tell you WHY they are doing what they are doing. The more then can vocalize what to do and why, the more they internalize it, and the more successful they will be!

PROBLEM OF THE MONTH!!!

Return this ticket with the correct answer by Feb. 14 and have your name entered into a drawing for a math prize!

The number on Mr. Kay's license plate has three digits. The product of the digits is 216. Their sum is 19. What is the greatest three-digit number that could be on the license plate?

Full Name_____ Grade_____ Answer_____