Welcome Back!!!

The hallways are filled with eager students and excited teachers. It is so wonderful to start another school year here at Montpelier Elementary School! Your child will be learning many different things in class, and will embark on new and stimulating lessons in math. The Common Core curriculum will continue to drive our instruction. The math that the students are doing may look different than what you learned in elementary school, but it will be beneficial to them as they get older as they have to learn to solve problems that require many skills and have many different answers.

What is Common Core?

The Common Core curriculum has been adopted by forty-two states, four territories and the Department of Defense Education Activity (DoDEA) in the US. It is is a set of high-quality academic standards in mathematics and English language arts/literacy (ELA). These learning goals outline what a student should know and be able to do at the end of each grade. To find out more about the Maryland Common Core Curriculum, please visit http://mdk12.msde.maryland.gov/instruction/commoncore/.

Standards for Mathematical Practices

Along with the common core curriculum, there is a set of eight Standards for Mathematical Practice that your child should be exhibiting as he or she solves math problems. (Not necessarily using ALL of them in one problem, but definitely more than one) As you go over your child’s math homework with them, please review these practices with them to ensure that he or she has really understood the concept.

The eight Standards for Mathematical Practice are:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.

To read the explanation of each standard, please visit the following website.

http://www.corestandards.org/Math/Practice/
What is my child doing in math class?

**Kindergarten**- At the beginning of the year, Kindergarten students will be working on counting, number names, comparing classifying and identifying shapes.

**Grade 1**- First graders will work on extending the counting sequence, represent and solve addition and subtraction problems, and add and subtract from 1-20. They will go on to understand and apply properties of operations and the relationship between addition and subtraction, and learn about shapes and their attributes.

**Grade 2**- Second graders will start by reviewing addition and subtraction using word problems, understand place value, and work with time and money. They will go on to learn about measurement in standard units, relate addition and subtraction to length and represent and interpret data (graphs.)

**Grade 3**- Third graders will start out using multiplication and division with word problems, understand the properties of multiplication and division and the relationship between, and use multiplication to understand geometric measurement. They will go on to solve problems using the four operations, identify the patterns in math, solve problems involving estimation and intervals of time, represent and interpret data and use place value and understanding to perform multi-digit operations.

**Grade 4**- Fourth graders will begin by using the four operations with whole numbers to solve problems, generalize place value understanding for multi-digit numbers, and to use that understanding to solve multi-digit problems. They then will extend their understanding of fraction equivalence and ordering, and learn the decimal notation for fractions.

**Grade 5**- Fifth graders will initially start with using and understanding the place value system to perform operations with multi-digit whole numbers and decimals to the hundredths, understand concepts of volume as related to addition and multiplication and convert units of measurement within a measurement system.

**Math Series**

This year, grades k-5 will continue using the math series called **Envision 2.0**. Envision Math is **problem-based** and a **visual learning tool** that will teachers to teach rigorous mathematics. The program’s organization promotes focus and coherence. The major work at every grade is the priority for earlier in the year, enabling extensive exposure prior to assessments. Students will be able to access the math book content at home. Please look for a message from your child’s teacher that outlines the directions on how to get to it.
How can I communicate with my child using math language?

Recently, the importance of students communicating mathematically has grown exponentially. In an effort to support the increased rigor in math classes, students are expected to be involved in reading and writing about, listening to, representing, viewing and discussing mathematical ideas. These activities allow students to connect their own ideas and language to the symbols and language of mathematics. In the classroom, we expect our students to communicate mathematically by:

- Using words or mathematical symbols to explain real life
- Talking about how they arrived at an answer
- Listening to other ways of thinking and perhaps altering their own thinking
- Using pictures to explain understanding
- Writing about the math, not simply stating an answer

Please try to incorporate these types of practices when you are going over math with your child. It will definitely help them to achieve at a higher level in math this year!!

Literature and Math

Reading about math makes it fun for your child. Here are a few books for younger students to help support some of the concepts taught here at school.

Lower Elementary

- **10 Black Dots** by Donald Crews
- **Sheep in a Jeep** by Nancy Shaw
- **Rooster's Off to See the World** by Eric Carle
- **Ways to Get to 11** by Eve Merriman
- **Ten Terrible Dinosaurs** by Paul Strickland
- **One More Bunny** by Rick Walton
- **Twenty is Too Many** by Kate Duke
- **Monster Musical Chairs** by Stuart J. Murphy
- **Turtle Splash** by Cathryn Falwell
- **Ready, Set, Hop** by Stuart J. Murphy
- **The Candy Counting Book** by McCourt
- **How Many Snails** by Paul Giganti
- **One Hundred Angry Ants** by Elinor J. Pinczes
- **Remainder of One** by Elinor J. Pinczes
- **Each Orange Had 8 Slices** by Paul Giganti

*For Upper Elementary

- **My Rows and Piles of Coins** by Tololwa M. Mollel
- **Divide and Ride** (MathStart 3) by Stuart J. Murphy
- **2 X 2 = Boo: A Set of Spooky Multiplication Stories** by Loreen Leedy
- **One Grain Of Rice: A Mathematical Folktale** by Demi
- **Anno's Mysterious Multiplying Jar** by Masaichiro Anno
- **Spaghetti and Meatballs For All!** by Marilyn Burns
- **How Big is a Foot** by Rolf Myller
- **Inchworm and a Half** by Elinor J. Pinczes
- **Jim and the Beanstalk** by Raymond Briggs
- **Room For Ripley** by Stuart J. Murphy
- **200 Super Fun, Super Fast Math Story Problems** by Dan Greenberg
- **Can You Count to a Googol?** by Robert Wells
- **The Hundred Penny Box** (making ten) by Sharon Bell Mathis