Fluency Section: Reading and Math

Reading fluency is defined as the ability to read with speed, accuracy, and proper expression. In order to understand what they read, children must be able to *read fluently* whether they are reading aloud or silently. When reading aloud, fluent readers read in phrases and add intonation appropriately. Their reading is smooth and has expression. (Readingrockets.org)

This year we will be working on building student's reading fluency; we will be learning phonics to sound out words phonetically and learning to read high frequency words "in a snap." I will be using songs, poems and reader's theater to help increase reading fluency. This section will be filled with the songs, poems and reader's theater pieces we will be learning. We will be "performing" these readings in class, but I would like you to be a part of our fluency work, as well. This section will be a resource for you and your child. I will encourage students to refer to this section in class when they have completed their work to revisit pieces we have learned. At home if your child is bored or looking for something to do, this can be a resource for you as well.

Feel free to help your child with these readings by:

- Modeling how to read the piece with fluency.
- Having your child follow along and point to the words as you read.
- Choral read~ read the piece aloud together.
- Do an "I read, you read" ~ You read a line and then your child repeats.
- Ask your child to perform a piece for you as if they were on stage or in a coffee house having a poetry reading.
- Have fun with these readings! Encourage your child and if your child is having difficulty reading these independently, read aloud to your child.

Math Fluency

This information is excerpted from the Scholastic Research Foundation Paper *Research Foundation & Evidence of Effectiveness for FASTT Math* (PDF)

"Educators and cognitive scientists agree that the ability to recall basic math facts fluently is necessary for students to attain higher-order math skills. Grover Whitehurst, the Director of the Institute for Educational Sciences (IES), noted this research during the launch of the federal Math Summit in 2003: "Cognitive psychologists have discovered that humans have fixed limits on the attention and memory that can be used to solve problems. One way around these limits is to have certain components of a task become so routine and over-learned that they become automatic." Whitehurst, 2003)... Indeed, studies have found that lack of math fact retrieval can impede participation in math class discussions, successful mathematics problem-solving, and even the development of everyday life skills. And rapid math-fact retrieval has been shown to be a strong predictor of performance on mathematics achievement tests."

Common Core State Standards and Fluency in Mathematics

- Fluency is not meant to come at the expense of understanding but is an outcome of a progression of learning and sufficient thoughtful practice.
- Wherever the word fluently appears in a content standard, the word means quickly and accurately. It means more or less the same as when someone is said to be fluent in a foreign language. To be fluent is to flow: Fluent isn't halting, stumbling, or reversing oneself. A key aspect of fluency in this sense is that it is not something that happens all at once in a single grade but requires attention to student understanding along the way. It is important to ensure that sufficient practice and extra support are provided at each grade to allow all students to meet the standards that call explicitly for fluency. (PARCC MCF, v3.0, p. 9)

What does this mean for first grade?

Students will be expected to be fluent with addition and subtraction facts to 10 **by the end of first grade.** Students will be taught math strategies: count on/count back, doubles, doubles plus/minus one, making 10 and using 10 in an effort to increase their math fluency. By the end of first grade students are expected to complete 18 math fluency check-ups. Each check-up addresses a taught math strategy and includes 10 problems which are expected to be completed in 30 seconds and students will write the answers. Here are the 18 tested areas of fluency:

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Doubles +	Doubles -	Count On 0	Count Back 0	Count On 1	Count Back 1	Count On 2	Count Back 2	Count On 3	Count Back 3	Count On 1, 2, 3	Count Back 1, 2, 3	Doubles +1	Doubles +1 Subtraction

O	P	Q	R
Make a 10 +	Make a Ten -	Mixed Addition	Mixed Subtraction