

MATH MOMENTS

FEBRUARY 2015

FLUENCY in math instruction has several components which involve flexibility, understanding, efficiency and accuracy and is known as procedural fluency. Being **flexible** in mathematical thinking means that a variety of strategies are at a child's disposal and includes having the ability to transfer, modify and apply these strategies. Providing manipulatives or visual models strengthens a child's conceptual **understanding**. Being **efficient** and **accurate** is knowing which one of these strategies will be the best and will lead to a correct solution. There is a direct connection between having a strong procedural fluency and being fluent in the four operations of addition, subtraction, multiplication and division. This is where parents play a major role!

~Vestal's Elementary Math Support Team – Joan Pokorak, Geri Tastle and Molly Russell

SPOTLIGHT ON PRIMARY

The chart below outlines the expected fluencies at each of the primary grade levels. Notice that fluency does not occur all at once in a specific grade level, but rather over time, and builds from each other, creating a progression of this skill.

Grade	Standard	Expected Fluency
K	K.OA.A.5	Add/Subtract within 5
1	1.OA.C.6	Add/Subtract within 10
2	2.OA.B.2 2.NBT.B.5	Add/Subtract within 20 (Know single digit sums from memory) Add/Subtract within 100

WAYS TO HELP AT HOME

What's Behind My Back? A game to help with learning those addition and subtraction problems.

Take 5-10 objects such as beans, cheerios, etc. and have your child count out the number being used to play the game depending on which number you want them to practice. Ask your child to close their eyes while you divide that number of beans between your hands. For example, if you plan on practicing the nine facts, hide four beans in one hand behind your back and five in the other.

Have them open their eyes and count the number of beans in one hand. Then invite your child to figure how many beans are in the other hand.

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SPOTLIGHT ON INTERMEDIATE

The chart below outlines the expected fluencies at each of the intermediate grade levels. Again, fluency does not occur all at once, but rather over time, creating a progression.

Grade	Standard	Expected Fluency
3	3.OA.C.7 3.NBT.A.2	Multiply/Divide within 100 (Know single digit products from memory) Add/Subtract within 1000
4	4.NBT.B.4	Add/Subtract within 1,000,000
5	5.NBT.B.5	Multi-digit multiplication

WAYS TO HELP AT HOME

Egg Carton Multiplication!

On the bottom of an empty egg carton, write the numbers 1 - 12. Next, place two beans inside and have your children shake the egg carton. After opening the carton, multiply the two numbers printed on the bottom of the cups that each bean landed in. Extension, have your child record the products, then add the products until they reach 100. For partners, have a race to see who reaches 100 first!

This month's puzzler... MATH FACT FIND

How many multiplication and division facts can you find?

Facts are written as 3 numbers in a row forward, backward, up, down and diagonal.

56	42	6	18	48
4	7	3	21	3
42	6	8	2	16
2	12	24	35	12
19	3	8	24	4

GREAT MATH APPS



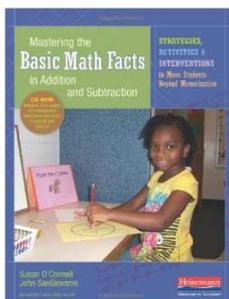
Math Animations



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