

## The Importance of Number Facts

As many of you know, the instant retrieval of basic math facts is crucial to success in all levels of mathematics. Time and effort spent calculating each simple fact not only slows higher level problem solving, but also impedes students' ability to concentrate on the more complex processes required for the solution. Their working memory is so busy trying to figure out the basic number fact that it is not able to move forward to focus on the problem solving and higher level thinking necessary to be successful in finding the correct solution(s).

It is our goal at Hildreth Elementary School that all students achieve automatic recall of facts appropriate for their grade level. This critical skill known as automaticity is also addressed in our current MA Math Standards as well as the national Common Core Standards which have recently been adopted:

Grade 1 Addition and subtraction facts to 20

Grade 2 Addition and subtraction facts to 20

Grade 3 Multiplication facts to 100

Grade 4 Multiplication facts to  $12 \times 12$  and the related division facts.

Grade 5 Maintain multiplication and related division fact to  $12 \times 12$  (critical to long division, decimals and fractions)

All teachers will be assessing in class their students' progress in the facts appropriate to their grade level. Practice at home is critical to your student's success. Several grade levels have already been assigning home practice through a free website, **XtraMath**. It is an engaging, interactive site which allows for a daily practice for 10 minutes. It begins with the addition facts and moves up through the other operations as the student masters them. There is immediate feedback and a reminder email to parents if their child has not been working on their facts. If the students are registered by the classroom teacher, the teacher first sends home a parent letter. Once the students are working independently on line, the teacher receives a daily report of their activity and progress. Teachers in grades 2, 3, 4 & 5 are gradually assigning this website for practice as homework. Grade 1 plans to do so mid-year. We are pleased that many students have been hard at work already on the **Xtramath** website ([www.xtramath.org](http://www.xtramath.org)); the feedback has been positive and enthusiastic.

Of course, there are many ways you at home can assist in helping your child improve their automaticity with facts through practice in the car or with flash cards, playing dice and card games, as well as other websites. Children respond to the message from parents that mastering their facts is an important skill and vital tool in math. All of the faculty at HES appreciates your support in allowing our students to be successful math learners.