

K-4 Math Mewsletter by Dawn Straith

Sprina 2012

Algebra Ready When should my child begin preparing for Algebra?

"Back in the early 1980s, one-quarter of high school graduates never even took algebra," says Daniel Chazen, director of the Center for Mathematics Education at the University of Maryland. Today, many students are exposed to Algebra-1 before entering high school. Why do students need to take algebra? Algebra teaches how to think abstractly, which is an important life skill. Elementary mathematics lays the foundation for this type of reasoning and algebra preparation begins from the first years of school. Children at Hillel are taught from a very early age that learning math is about the process of finding answers and that process moves our learning forward. They are often asked, "Why do you think that is the answer?" or, "How do you know?" Learning to explain ones thinking is essential in higher mathematics. Hillel is preparing students to move out of a world of computation and into a world of abstract thinking. From an early age, students work with variables and changing quantitative relationships, using letters or other characters to represent unknown quantities. Math is embedded in every aspect of life and can promote advancement of our society.

Basic Fact Competition April's Winner/May's Goal

April's winning class was: Mrs. Brown's 4th grade class—Way to go!

May's goal: The grade with the highest average per student will win a Popsicle party. Teamwork is required!

Mrs. Straith's Math Games

(during lunch & recess on Fridays)

Don't forget: During lunch AND recess on Fridays, 3rd and 4th grade students are invited to play math games with Mrs. Straith in room 113. Please bring your lunch and a fun attitude! There are only 5 more Fridays to utilize this opportunity. Come, have fun, practice your math skills, and be with your friends.

Frequently Asked Questions (and the Answers!)

Q: How can parents and teachers help lay the groundwork for Algebra?

A: Here are three ideas that can help strengthen algebraic thinking as suggested in the Harvard Education Letter, The Algebra Problem, May-June 2012:

- Broaden your definition of the equal sign: Children should learn that the equal sign acts as a balance, not as a command to produce an answer.
- Introduce letters: Using letters early on in math can help children grow comfortable with seeing and working with them.
- Talk about math: Children need to learn how to explain their reasoning from an early age. Grade school mathematics can be overly focused on paper-and-pencil calculations rather than the mathematical reasoning. Asking "why" can help students bring words to their understandings. Through talk, students develop mathematical language which can be supported by presenting problems orally and as a continuation of previously learned skills.