

WE'RE ALL IN QUIRE FORM SPIRE

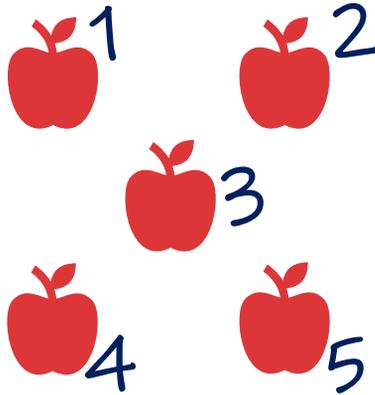
Parent Math Newsletter

We are so excited for a new school year! The purpose of this newsletter is to keep you updated with important information related to math and provide an overview of what your child is learning each month. Thank you for continuously supporting your child's success in mathematics.

Kindergarten

We are learning how to count to 5 and how to count a group of items 1 at a time without skipping or double counting any of the items.

Games such as Uno, Go Fish, and Memory are great activities to reinforce these skills.



Second Grade

We are learning about numbers to 1000 including breaking apart numbers by place value and identifying numbers 10 or 100 more/less.

Play "I'm Thinking of a Number" by giving clues such as

- The number in the hundreds place is 5.
- 10 more than my number is 573.

Practice skip counting by 10s or 100s from numbers. For example, count 123, 223, 323, 423, etc. It may be helpful to have your child write these numbers in a column and ask what patterns they notice.

First Grade

We are learning how to count to 120 and how to skip count by 2s, 5s, and 10s to 100.

Practice skip counting by 2s by counting pairs of items like socks, shoes, or eggs in a carton. Practice skip counting by 5s using nickels and by 10s using dimes.



School District of Osceola County
August 2022

Third Grade

We are learning strategies for multiplication to 12×12 including building arrays and patterns on a 120 chart.

Look for arrays in everyday life. Ask your child how many and how they see it. For example, 12 eggs in an egg carton is 2×6 .

Fourth Grade & Fifth Grade

We are learning strategies for multiplying multi-digit numbers including partial products, halve and double, compensation, and the US Standard Algorithm. The last page of this newsletter has an overview of the strategies. We are also learning to use different tools such as area models to represent our strategies.

Ask your child how they solve a multiplication problem and have them teach you their strategies.

Sixth Grade & Seventh Grade

We are learning about ratios and proportions. Ratios show up in everyday life including cooking, buying gas, and much, much more. A ratio is a comparison of two quantities. For example, the ratio of weekdays to days in a weekend is 5 to 2. Ratios can be used to solve proportions. For example, given the information above, we can find the ratio of weekdays to weekend days in 3 weeks (15 to 6). When using a recipe, have your child figure out how much of each ingredient they would need if they doubled or tripled the recipe.

Seventh Grade Accelerated & Pre-Algebra

We are learning about geometric transformations on a coordinate plane. Geometric transformations include translation (slide), reflection (flip), rotation (turn), and dilation (enlarge or shrink). Transformations are used in graphic design, video game development, and animation to move images.

Look for transformations in logos such as the reflection in Under Armor or rotation in the M in Animal Planet.



Reflect - Flip



Rotate - Turn

Translation -
Slide



Dilation -
Enlarge/Shrink



Algebra 1 & Geometry

We will be using Aleks, an online adaptive program, to target the individual needs of students. While Aleks will be incorporated into the math block, students can also work on this program at home.

Other High School Courses

We will be using Khan Academy, an online adaptive program, to target the individual needs of students to support their preparation for SAT and ACT. While Khan Academy will be incorporated into the math block, students can also work on this program at home.

Upcoming High School

Assessments

Algebra 1, Geometry, and Math For College Algebra will be taking the NWEA assessment **between August 17 and September 21**. Data from this assessment will be used by teachers to identify and address individual student needs in math.

Strategies for Multiplication

Compensation

In compensation, one of the factors (a number in a multiplication problem) is changed to a friendly number. The product is found and then you compensate for the change.

$$22 \times 43$$

$$(20 + 2) \times 43$$

$$20 \times 43 = 860$$

$$860 + 43 = 903$$

$$903 + 43 = 946$$

Partial Products

In partial products, one, or both of the factors (numbers in a multiplication problem) are broken up into smaller chunks that are easier to multiply. For, example, 27 might be broken into 25 and 2 or 20 and 7. These smaller chunks are multiplied together. These are the partial products which are then added together to find the final answer. Partial products can be represented as a list of multiplication problems (left) or using an area model (right).

$$\begin{array}{c} 27 \times 32 \\ \swarrow \quad \searrow \\ (25 + 2) \quad (30 + 2) \end{array}$$

$$\begin{array}{r} 25 \times 30 = 750 \\ 25 \times 2 = 50 \\ 2 \times 30 = 60 \\ 2 \times 2 = 4 \end{array}$$

Product = 864

$$\begin{array}{c} 25 + 2 \\ 30 \\ + \\ 2 \end{array} \begin{array}{|c|c|} \hline 750 & 60 \\ \hline 50 & 4 \\ \hline \end{array}$$

$$\begin{array}{r} 750 \\ 60 \\ 50 \\ + 4 \\ \hline 864 \end{array}$$

Halve and Double

In halve and double, one of the factors (numbers in a multiplication problem) is halved and the other factor is doubled. Usually, this strategy is used to make one of the factors into a friendly number to multiply or to change the problem into a known multiplication fact. This strategy can also be used as third and triple.

$$\text{Halve} \left(\begin{array}{c} 16 \times 25 \\ 8 \times 50 \end{array} \right) \text{Double}$$

$$8 \times 50 = 400$$

US Standard Algorithm

This is the traditional method for multi-digit multiplication in the US. While this is a reliable strategy, the other strategies on this page are also useful strategies. Therefore, this strategy is taught to students with the other strategies and students engage in learning that asks them to choose a strategy for a given problem and justify their reasoning.

$$\begin{array}{r} 1 \\ 52 \\ \times 19 \\ \hline 468 \\ 520 \\ \hline 988 \end{array}$$

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FORM
SPIRE

OSCEOLA MATH