First Grade Equality Parent Letter

Dear First Grade Family,

We will be starting a new math unit with a focus on equality, understanding the use of the equal sign, and applying this understanding to equations that include addition and subtraction. The purpose of this letter is to give you some background information about our new unit and strategies you can expect to see your child using.

Focus of the Unit

Your first grader is becoming more familiar with numbers and the quantities they represent. Students are also becoming more fluent with addition and subtraction and solving equations involving both operations. Within this unit, students will combine both those mathematical skills to determine if situations involving the equal sign are correct, or true. Students need to understand the meaning of the equal sign and translate that to mean "the same as". They will then analyze equations to determine if the quantities on each side of the equal sign are the same. If so, students will determine the equation is true.

Building Off Past Mathematics

Last year, students had a lot of experience joining or putting groups together to add and separating or taking from a group to subtract. They may have also used the corresponding symbols (+, -, =) to show the operations, but students were not expected to master the use of equations to represent their work or their thinking.

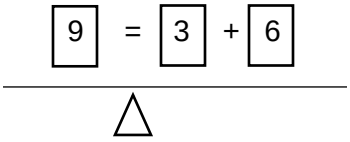
As students move through first grade they become increasingly familiar with equations and are expected to accurately use equations to represent problems and situations. The work in this unit will help students build conceptual understanding of this more abstract representation and will also strengthen their understanding of basic number operations.

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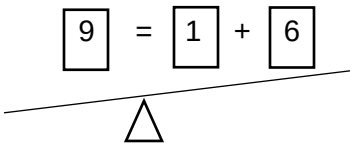
Strategies that Students Will Learn

To understand the meaning of the equal sign, students will use the idea of a balance. The equal sign serves as the mid-point with a quantity on each side. Students will apply the understanding of the equal sign as "same" to compare the two quantities. If the equation is balanced, meaning there is the same value on each side, then the equation is true or accurate. If the equation is not balanced, or not true, the quantity on one side will be more or less than the quantity on the other side of the equal sign.

Equation is true (balanced)



Equation is not true (unbalanced)



The work in this unit will help students understand that the placement of the equal sign in an equation does not matter or make a difference in the mathematics. For example, an equation written as 8 = 4 + 4 is no different mathematically from the equation 4 + 4 = 8. The equal sign can be used in any position as long as what is to the left of the equal sign is the same value as what is located to the right of the sign, or as long as the equation is balanced on both sides.

One other aspect of the work in this unit is for students to find missing numbers in equations involving addition and subtraction and then determine if they found the correct missing number by using their understanding of the equal sign. If given an equation such as 8 = 5 +☆ students determine the number to put in place of the star to complete the equation. They will know if they used the correct number if the equation is true, meaning the same value on both sides of the equal sign.

Ideas for Home Support

Encourage your child to explain how he or she is thinking of addition and subtraction. When writing equations, ask your child to tell what the numbers and symbols represent and to tell how he or she knows the equation is correct or true. When working with your child on any mathematical concepts that include equations, remember to use equations with the equal sign in different locations so your child does not come to think the equal sign needs to come near the end of the equation, before the total.

Thank you for serving as partners in your child's success as a mathematician!

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