FAMILY MATH Comparison of Decimal Numbers

Dear Family,

Your student is learning to compare decimal numbers. Familiar models, such as area models and place value disks, help your student understand and reason about the sizes of decimal numbers. These models, as well as writing the decimal numbers in fraction form, are especially useful when comparing numbers with different place value units, such as 0.9 and 0.79. Comparison strategies allow your student to put decimal numbers in order from least to greatest and greatest to least. Reasoning about the sizes of decimal numbers supports your student in later lessons when they decide whether their answers to addition and subtraction problems make sense.



 $0.32 = \frac{32}{100}$ $0.09 = \frac{9}{100}$

 $0.09\ meters$ is less than $0.32\ meters.$

When comparing numbers that have similar digits, students use models to support their understanding of the values of the digits.

Writing decimal numbers in fraction form allows students to use their understanding of fractions to determine the values of the numbers.

ones	ter	ths	hundredths
8		2	
0		4	9
7		2	
8		0	4
0.49	7.2	8.0	4 8.2

Students reason about place value units to order decimal numbers from least to greatest and from greatest to least.

At-Home Activity

Who Has the Larger Decimal?

Practice comparing decimals by playing a card game.

- Make your cards by using 10 index cards or small pieces of paper. Write one decimal number on each card. Make sure to use 10 different decimal numbers and only use a combination of ones, tenths, and hundredths for the place values. Repeat this process for a second set of index cards or small pieces of paper. The decimal numbers in the second set of cards can be the same as the first set or they can be different.
- Shuffle all the cards. Deal the cards equally to you and your student by placing the cards facedown into two piles. You will have one pile of cards and your student will have the other pile of cards.
- Have you and your student each turn over your top card at the same time. Discuss who has the larger number. The player with the larger number takes both cards and places the cards facedown at the bottom of their pile.
- If the decimal numbers are equal, then have both players turn over the next card in their pile. Repeat this step until the numbers are not equal. The player with the largest number wins all the cards that are faceup. The winner then puts all these cards facedown at the bottom of their pile.
- The game ends when one person has all the cards.