Curriculum Parent Overview - Unit 1 (Grade 3)

MATHEMATICS

UNIT #1: Understanding Equal Groups (MULTIPLICATION AND DIVISION 1)

CONTENT FOCUS:
This unit focuses on understanding the meaning of multiplication, modeling multiplication using arrays, and understanding the inverse relationship between multiplication and division.

UNIT FOCUS:

- Meaning of Multiplication: Students develop the idea that multiplication situations Involve some number of equal-sized groups. As they solve problems in context, students develop their own strategies for multiplication and division. Students will also determine, describe, and compare sets of multiples. It is when students compare sets of multiples that they are delving into important ideas about how multiplication works.
- Working with Array/Area Model of Multiplication: Students are introduced to arrays - rectangular arrangements of objects in rows and columns. The work with arrays lays an important foundation for understanding why the dimensions of a rectangle can be multiplied to find the area. Students use arrays to represent the relationship between a product and its factors: the number of squares in the array represents the product, and the length and the width of the rectangle are one pair of factors of that product.
- Learning Multiplication Facts: It is expected students know the multiplication facts of x1, x2, x5, and x10 by the end of the unit, and all of the facts by unit 5. Through work with skip counting and arrays, they will also learn to use known facts to find the product of other facts quickly.
- Developing Strategies for Division: Students develop their understanding of division as the splitting of a quantity into equal groups. Students will investigate division situations that involve sharing and grouping and learn to recognize what information is given out as they solve problems in context.

MATHEMATICAL PRACTICES:
MP1: Make sense of problems and persevere in solving them.
MP8: Look for and express regularity in repeated reasoning.

CONNECTIONS TO PREVIOUS CONTENT:
This unit builds on the work students did in K-2 as they made the shift from thinking about ones to thinking about groups of ones and equal groups. The work in K-2 is set in contexts that encouraged counting by groups of 2, 5, and 10. In grade 2, students worked with situations about sharing a variety of objects equally and making equal-sized groups.

CONNECTIONS TO FUTURE CONTENT:
Students continue studying the properties and operations of developing strategies for solving multiplication and division in units 5 and 8. In Unit 5, they learn and are assessed on the remaining multiplication facts. They further their understanding of the meaning and structure of multiplication and division, including the relationship between the operations and the use of the distributive property. Students make sense of multiplying multiples of 10 by one-digit number. They also solve multi-step problems that involve multiplication and addition. Students continue this work in unit 8.

MATH AT HOME:

- Play any of the following games with your child on Pearson Site after it has been introduced in the classroom:
    - Factor Pairs
    - Count and Compare
    - Missing Factors
- Review the Math Words and Ideas videos for this unit on Pearson Site