Curriculum Parent Overview (Grade 4)

MATHEMATICS

UNIT #1 ARRAYS, FACTORS AND MULTIPLICATIVE COMPARISON (MULTIPLICATION AND DIVISION 1)

CONTENT FOCUS:
Students model multiplication situations using arrays. They use arrays to find factors and identify prime and composite numbers. Students gain familiarity with factors and multiples by using what they know about factors of 100 to find factors of multiples of 100.   They examine the ideas that factors of a number are also factors of a multiple of that number.

UNIT FOCUS:
- Visualizing Multiplication: Students develop strategies to solve multi digit multiplication and division problems, visualizing important multiplication relationships. Products can be determined by breaking a larger array into smaller arrays (distributive property).
- Reasoning about numbers and their multiples and factors: Students generate factors of 100 and use those factors to solve problems involving larger numbers. Reasoning about numbers and their factors also helps them learn more about the properties of the operation of multiplication. The more fluent and flexible students become in their understanding of the relationships between numbers and their factors , the more knowledge they have to apply in multiplication and division situations.
- Solving multiplicative comparison problems: An example of a multiplicative comparison problem is, "Darlene picked 7 apples. Juan picked 4 times as many apples. How many apples did Juan pick?" or "A tree in helena's yard is 35 feet tall. Helena is 5 feet tall. The three is how many times as tall as Helena?" Students draw out these problems in order to visualize what is happening. Students can think of these problems as multiplication or division problems.

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 in Grade 3 as students developed an understanding of multiplication and division through work with equal-sized groups, arrays, and area models. The work in this unit assumes that students understand the operations of multiplication and division and the relationship between them. It is expected that most students are fluent with multiplication and division facts, are able to multiply a single-digit number by a multiple of 10 (to 90), and can fluently multiply and divide within 100.

CONNECTIONS TO FUTURE CONTENT:
In Unit 3 and Unit 7, students solve all the different types of multiplication and division problems they have seen in Grades 3 and 4. They develop and practice strategies for solving multiplication and division problems with larger numbers. These units emphasize using the properties of, and relationship between, the operations to solve these problems.

MATH AT HOME:
- Play any of the following games with your child on SavvasRealize site after it has been introduced in the classroom:

- - Factor Pairs
  - Multiple Turn Over
- Choose a 3 digit number. See how many equations or expressions you can create to equal that number.
- Review the Math Words and Ideas videos for this unit on SavvasRealize site