## Curriculum Parent Overview (Grade 2)

## MATHEMATICS

## UNIT \#7: PARTNERS, TEAMS, AND OTHER GROUPS (FOUNDATIONS OF MULTIPLICATION)

## CONTENT FOCUS:

Students will work with odd and even numbers to explore sums of equal groups. They create tables that display the multiplicative relationships and consider why some tables look the same even though they represent different contexts.

## UNIT FOCUS:

- Investigating odd and even numbers: Students will investigate numbers that can and cannot be made into groups of two or two equal groups, understanding that any number that can be divided into groups of two can also be divided into two equal groups, and representing an even number as the sum of two equal addends and an odd number as the sum of two equal addends plus 1.
- Visualizing equal groups in the structure of arrays: Students will be arranging cubes in rectangular arrays, finding the total number of objects within the array, and use an equation to model the total number of cubes.
- Describing and representing equal groups as the foundation of multiplication: Students will be counting by and adding equal groups, using an equation to model adding equal groups, and is able to describe the relationship between a number of equal groups and their total.


## MATHEMATICAL PRACTICES:

MP2: Reason abstractly and quantitatively.
MP3: Construct viable arguments and critique the reasoning of others.

## CONNECTIONS TO PREVIOUS CONTENT:

In prior units of grade 2, students made the shift from working and counting in ones to working with and counting by groups of ones. They worked with doubles and counted by 2,5 , or 10 . In activities that focus on the base-10 structure of numbers, they particularly worked with groups of 10 or 100 (e.g., 58 is made of 5 tens and 8 ones; 243 is made of 2 hundreds, 4 tens, and 3 ones). In Unit 2, students explored the structure of arrays.

## CONNECTIONS TO FUTURE CONTENT:

This unit lays a piece of the foundation for the work students do in Grade 3 and beyond as they build their understanding of the operations of multiplication and division. In Grade 3, students extend and deepen the work with equal groups, developing the idea that many multiplication situations involve some number of equal-sized groups. They examine and identify the three pieces of mathematical information in such multiplication situations - the number of groups, number in each group, and the number in all groups - and represent this with multiplication notation. Work with skip counting, multiples, and arrays supports fluency with the multiplication (and division) facts up to $10 \times 10$ by the end of Grade 3. Students apply their Grade 2 experiences with arrays in Grades 3 and 4 as they study area and as they use the array model to visualize the commutative and distributive properties of multiplication.

## MATH AT HOME:

- Review the Math Words and Ideas videos for this unit on Savvas Site

