Curriculum Parent Overview (Grade 1)

MATHEMATICS

UNIT #6: Would You Rather Be An Eagle Or A Whale?
(Modeling with Data)

CONTENT FOCUS:
This unit develops students' ideas about collecting, representing, describing, and interpreting data. It focuses on data in two and three categories, and on conducting data investigations. As students engage in their own surveys, they use data to model real-world problems with mathematics.

UNIT FOCUS:
- Collecting, representing, describing, and interpreting data: In this unit, students work with categorical data - data that can be sorted according to attributes and classified into categories. Students are introduced to several forms of representation, including human graphs, picture graphs, and horizontal and vertical tables.
- Understanding equivalence: Using the equal sign with meaning and understanding is a focus throughout this unit. While most first graders are confident that 5 + 5 and 10 have the same value, their understanding of the equal sign can be uncertain (e.g., 5 + 5 = 10, 10= 5 + 5, or 5 + 5 = 6+4). Asking students to consider whether or not an equation is true or false provides another opportunity to build this strategy.

MATHEMATICAL PRACTICES:
MP1: Make sense of problems and persevere in solving them.
MP4: Model with mathematics.

CONNECTIONS TO PREVIOUS CONTENT:
In Kindergarten, students collected and represented data by counting. They counted and represented the number of people in the classroom and the number of eyes in the classroom. They sorted and counted their favorite lunch foods and carried out simple surveys using, "Do you like…?" questions. Their work focused on counting, sorting into two groups, and collecting and representing data to answer questions about their class.

CONNECTIONS TO FUTURE CONTENT:
Grade 2 students continue working with categorical data, but the primary focus of their work is on collecting, representing, and describing numerical data. Students are encouraged to think through the two ways that numbers are used in describing data: some numbers indicate the value of a piece of data (I have 8 pockets); other numbers indicate how often a particular data value occurs (7 children have 8 pockets).

MATH AT HOME:
- Students can create their own surveys and collect data from family or around the house.
- Students can then:
  - Make a graph
  - Make a chart
  - Which category has the most?
  - Which category has the fewest?
  - How many more? Less?
- Review the Math Words and Ideas videos for this unit on SavvasRealize site.