Curriculum Parent Overview (Grade 1)

MATHEMATICS

UNIT #4: Fish Lengths and Fraction Rugs (Measurement and Fractions)

CONTENT FOCUS:
Students indirectly compare the lengths of objects using a third object, a string. They develop accurate measurement techniques as they measure the lengths of various objects using several different units, including inch tiles. Students are also introduced to fractions as equal parts of a whole as they observe and describe shapes (circles, squares, rectangles) that are divided into halves and fourths.

UNIT FOCUS:
- <u>Understanding length</u>: Students directly compare objects to determine which is longer/shorter, and they order sets of objects from shortest to longest. They indirectly compare objects using a third object and learn that, if object A is longer than object B, and object B is longer than object C, than object A is longer than object C.
- <u>Using linear units</u>: Students develop foundational skills for accurate linear measurement using cubes, paper clips, and tiles as units. These skills include knowing which dimension to measure, understanding how units must be lined up so there are no gaps or overlaps, knowing where to start and stop measuring, and measuring a straight line from point to point.
- <u>Understanding, representing, and solving problems involving addition and subtraction</u>: Measuring length provides the context for introducing comparison problems - story problems in which students determine *how much more or how much less* one quantity is than another.
- <u>Understanding time</u>: Understanding and learning to tell time presents several challenges, including: thinking of time as something that can be measured, coordinating multiple units, and making sense of the clock as a measurement tool.
- <u>Understanding halves and fourths</u>: Students have their first encounter with fractions, partitioning circles and rectangles (including squares) into halves and fourths. They learn that *one half of a whole* is the quantity represented by one part when a whole is divided into two equal parts. *One fourth (or one quarter) of a whole* is the quantity represented by one part when a whole is divided into four equal parts.

MATHEMATICAL PRACTICES:
MP4: Model with mathematics.
MP5: Use appropriate tools strategically.

CONNECTIONS TO PREVIOUS CONTENT:
This unit builds on the work students did in Kindergarten describing measurable attributes of objects, directly comparing the length of two or more objects, describing them as longer or shorter than, and developing strategies for measuring. This unit also builds on the understanding of addition and subtraction students have developed in Units 1 and 3, and students' work with 2-D shapes and their attributes in Unit 2.

CONNECTIONS TO FUTURE CONTENT:
In Grade 2, students continue to develop their measurement techniques with greater emphasis on inches, feet, centimeters, and meters. They learn to use rulers, and they return to the idea

that when measuring a single length with different units, the larger unit will yield a smaller count. They also learn to tell time to the nearest five minutes. Finally, students will extend their understanding of fractions as they work with halves, thirds, and fourths.

MATH AT HOME:

- Students can practice telling and writing time to the hour and half-hour.
- Talk about halves and fourth with different items around the house.
- Review the Math Words and Ideas videos for this unit on SavvasRealize site.