Dear Third Grade Families,

In Unit 12, students will work on the following third grade Common Core standards in the Measurement and Data (MD) domain.

3.MD.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.
3.MD.4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.

Unit 12 Concepts:
- Draw a scaled picture graph and a scaled bar graph to represent a given set of data
- Solve one– and two-step problems using information given graphs
- Measure length to whole, half, and quarter inches
- Make a line plot to show length data

Unit 12 Vocabulary:
- Picture graph
- Bar graph: horizontal and vertical
- Scale
- Key
- Line plot
- Measure: whole, half, quarter inch

Create situations like these to help your child become a productive mathematical thinker:

- Let's measure the lengths of these broken spaghetti noodles to the nearest fourth of an inch. Show me how you would represent the data by making a line plot.

- Here's a handful of mixed nuts. How could we categorize them? (nut type, whole/broken, size). Let's represent the data on a picture graph (or on a bar graph).

Ask questions like these:

- How many more/fewer _____ than _____?

- If we ate all the _____ and _____, how many nuts would be left?

- How did you decide which scale to use on the graph? Would a different scale work too?

- What would happen to the graph is we chose to use a scale of 10 instead of 5?

Need a review?
Have your student login to Swun Math to access lesson support videos.

We encourage you to talk with your child daily about what was learned in math class.
Thank you for your support!

Line Plot (3.MD.4) Each X represents 1 item of the fractional length given in the horizontal scale.	A line plot showing X marks above the horizontal scale values: $3\frac{1}{4}$, $3\frac{1}{2}$, $3\frac{3}{4}$, 4, $4\frac{1}{4}$, $4\frac{1}{2}$, $4\frac{3}{4}$, 5 Length of Broken Spaghetti Noodles (inch)
Scaled Picture Graph (3.MD.3) The key says the scale is one ● represents 3 items in the given category.	**Types of Nuts** peanuts: ● ● ● ● ● ● cashews: ● ● ● ● almonds: ● ● hazelnuts: ● ● ● ● ● = 3 nuts
Scaled Bar Graph (3.MD.3) Each line in the scale represents 3 items in the given category.	**Nuts in the Mix** (two bar graphs — vertical and horizontal)