## Chapter 11

## **Understand Measurement Equivalence**

Dear Family,

In this chapter, your student is working with metric and customary measures of length, mass, weight, capacity, and time. He or she is learning how different units in each measurement system compare; making and using line plots; solving word problems involving elapsed time; and adding and subtracting mixed measures. The vocabulary words for this chapter are: millimeter, kilometer, mile, ounce, pound, ton, cup, pint, quart, gallon, and second.

You can help your student practice the skills for this chapter in the kitchen.

- While putting groceries away, have your student tell the mass or capacity of the items in different units. For example, say, "The bag of apples weighs 5 pounds. What is this weight in ounces? The bottle of juice has a capacity of 1 liter. How many milliliters of juice are in the bottle?"
- Encourage your student to make a line plot to record the amounts of ingredients used while cooking. Say, "I am using  $\frac{3}{4}$  cup of tomatoes,  $\frac{1}{2}$  cup of green peppers, and  $\frac{1}{2}$  cup of carrots and so on, in the salad. What scale will you use to make a line plot to display the measurements?" After your student makes the line plot, ask questions such as "What measurement is most common? How many ingredients are greater in measure than this?"
- When baking together, have your student solve problems using time. For example, if a loaf of bread needs to bake for  $1\frac{1}{2}$  hours, have your student tell the number of minutes. Or, explain that a batch of muffins needs to bake for 15 minutes. Ask how many batches you can bake in 1 hour.
- Guide your student to add and subtract mixed measures. Point out the capacity
  of a container and have your student subtract the amount used. For example,
  say, "This pot holds 2 gallons 1 quart of soup. It was full, but we have eaten 1
  gallon 2 quarts. How much soup is left in the pot?"

By the end of this chapter, your student should feel confident with the learning targets and success criteria on the next page. Encourage your student to practice these skills in other situations, such as when traveling. Have your student convert the hours spent in the car to minutes, the miles traveled to yards or feet, or the gallons of gas used to quarts.

Have a great time practicing measurement equivalence!