

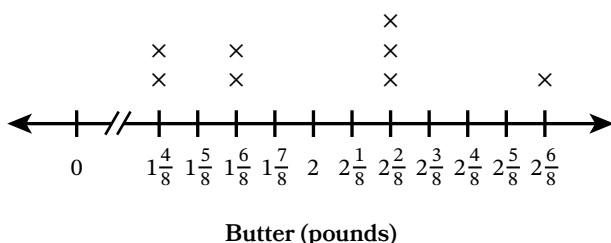
# FAMILY MATH

## Problem Solving and Line Plots with Fractional Measurements

Dear Family,

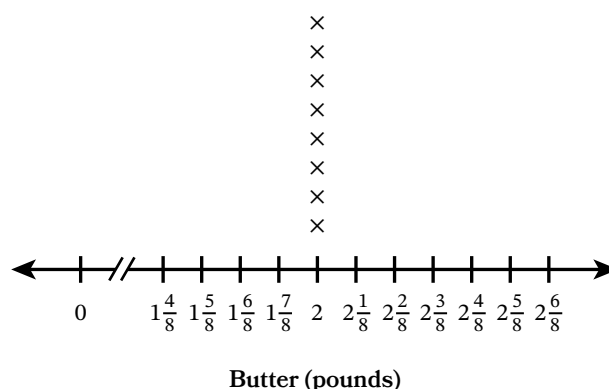
In previous grades, your student learned to create and analyze line plots. Now, your student is using what they have been learning about adding and subtracting fractions to answer more complicated questions about the data shown in a line plot. Your student is starting to think about equally redistributing given data and illustrating the redistribution on a line plot to prepare for analyzing data in later grades.

Measurement Data in a Line Plot  
**Butter in the Bakery**



A baker has 8 different containers of butter in her bakery. The line plot shows the amount of butter in each container.

Redistributed Data  
**Butter in the Bakery**



The baker redistributes the butter so that each container holds the same amount of butter.

## At-Home Activities

### Hands-On Ecological Data

- Find a place outdoors where you can collect leaves, sticks, or rocks with your student. Bring a notebook, pencil, and a ruler. Gather 10 to 15 of these objects. Invite your student to measure each item to the nearest  $\frac{1}{8}$  inch and record the measurements. (You can also trace the objects to measure at home.) Then work with your student to create a line plot that shows the measurements of the objects. Don't forget the labels on the line plots!
- Talk about the line plot with your student, and ask questions such as "What surprises you about the data? What questions can you ask about the data? Do you think that if you gathered more data, the line plot would look similar or different? Why?"

### Where's the Water Line?

Pour different amounts of water into 5 to 8 clear cups of the same size. Then invite your student to predict where the water line would be if the water were distributed evenly across the cups. Work with your student to draw a line or place tape on each cup to mark their prediction. Then redistribute the water between the cups as evenly as possible. Discuss whether your student's prediction was correct. Ask your student how redistributing water was similar to or different from redistributing cubes as they did in class.