## LETTER HOME

## **Measurement and Patterns**

Dear Family Member:

In this unit, students first learn to locate objects on a map and plot points on a graph using coordinates. Then, your child will use a two-pan balance to find the mass of classroom objects. He or she will use the TIMS Laboratory Method to investigate how the mass of a group of identical objects is related to the number of objects. The mass of the objects is recorded in a data table and then graphed. Your child will draw a best-fit line, similar to the one in the illustration. Finally, he or she will use the line to make predictions. For example, using the best-fit line shown in the illustration, your child will be able to predict that the mass of 5 oat bran bars is 90 grams. These tools will be used to solve multiplication problems involving mass.

You can provide additional support at home by doing activities such as the following:



- Weigh Yourselves in Kilograms. Some bathroom scales include kilograms as well as pounds. If you have access to such a scale, find the weight of several family members in kilograms.
- Where Are You in Your Town? Have your child find the approximate location of your home on a local map. When planning a trip in town, use the same map to help your child find where you are going.
- **Play Find the Panda.** In this game students use coordinates to find a panda the other player has hidden on a coordinate grid. Directions and game boards are in the *Student Activity Book*.





## Math Facts and Mental Math

This unit continues the systematic review and assessment of the multiplication facts.

**Multiplication Facts.** Students review the last six multiplication facts ( $4 \times 6$ ,  $4 \times 7$ ,  $4 \times 8$ ,  $6 \times 7$ ,  $6 \times 8$ ,  $7 \times 8$ ) to increase fluency and to learn to apply multiplication strategies to larger numbers.

You can help your child review these facts using the flash cards that are sent home or by making a set of flash cards from index cards or scrap paper. Study facts in small groups each night. As your child goes through the flash cards, put the cards in three stacks: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For Facts I Need to Learn, work on strategies for figuring them out. Good strategies include:

Doubling. To solve  $4 \times 6$ , think  $2 \times 6 + 2 \times 6 = 12 + 12$ , so  $4 \times 6 = 24$ .



<u>Reasoning from known facts.</u> To solve  $6 \times 7$ , I used  $6 \times 6$ .  $6 \times 6 = 36$  and  $6 \times 7$  is 6 more. 36 + 7 = 42, so  $6 \times 7 = 42$ .

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$6 \times 6 + 6 = 42$					

For Facts I Can Figure Out, use the flash cards to practice the facts for fluency.

For Facts I Know Quickly, help your child use mental math strategies to multiply 10s and 100s:  $40 \times 8 = 3200$ ,  $700 \times 8 = 5600$ ,  $6 \times 700 = 4200$ 

Thank you for taking the time to talk with your child about what he or she is doing in math.

Sincerely,