## **Addition Properties and Mass**

Dear Family Member:

We often use the terms "weight" and "mass" interchangeably, but technically, they are not the same. Mass is the amount of matter in an object. Weight is the pull of gravity on an object. Your child will learn about mass and weight in this unit.

We will use a two-pan balance to measure the mass of everyday objects, record findings on a data table, and then graph the data. When we analyze the data as a class, we will see that what an object is made of is important when thinking about its mass.

You can provide additional support at home in the following ways:

• Ordering Masses. Ask your child to arrange several packaged food items in order by mass. The net weight and mass are usually written on the package in ounces and grams. Help your child read the labels to confirm that the packages are placed in the correct order. Does a small item ever have a greater mass than a large item? Is your child surprised by this? Discuss why this happens.



Using a two-pan balance to find the mass of a shoe

• **Addition Properties.** Ask your child to show a quantity different ways and ask if the quantity changed. For example:

Show 56.

50 + 6

10 + 10 + 20 + 10 + 6

6 + 30 + 20

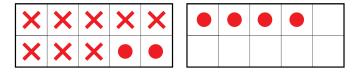
 Play the Make 99 Game. This game provides practice with addition. Players take turns adding digit cards together. The first player to reach or go over 99 wins.

## **Math Facts and Mental Math**

**Addition Facts.** This unit continues the development of the addition facts and related subtraction facts in Group F (8 + 6, 9 + 6, 9 + 7, 10 + 4, 10 + 5, 10 + 6, 10 + 7, 10 + 8, 9 + 8, 9 + 9).

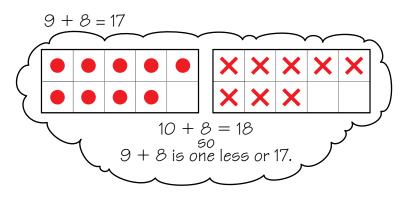
You can help your child re view these facts using the flash cards the teacher sent home or b y making a set of flash cards from index cards or scrap paper . Study the facts in small groups each night. As your child goes through the flash cards, put the cards in three piles: F acts I Know Quickly, Facts I Can F igure Out, and Facts I Need to Lear n.

For Facts I Need to Lear n, work on strategies for figuring them out. Making ten and using ten are good strategies for the facts in Group F .



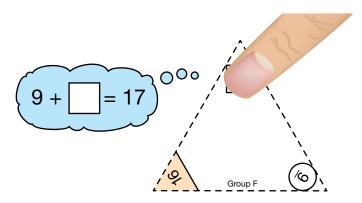
$$8 + 6 = 8 + 2 + 4 = 8 + 2 + 4 = 10 + 4 = 14$$

Making ten to solve 8+6



Using ten to solve 9 + 8

**Related Subtraction Facts.** You can also help your child de velop strategies for the related subtraction facts using the flash cards. Co ver one of the addends (smaller number s) on the flash cards and ask your child to figure out what number you are co vering.



Sincerely,