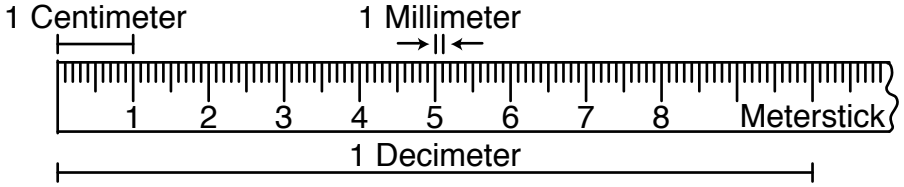
LETTER HOME

Using Decimals

Dear Family Member:

In this unit the class will work with decimals. Our activities will focus on developing a better understanding of the meaning of decimals and on being able to translate between decimals and their fractional equivalents.

We will use decimals by measuring length in meters, decimeters, centimeters, and millimeters. These measurement units are illustrated in the picture below. Linking our study of decimals with measurements and modeling them with base-ten pieces, fraction circle pieces, and number lines will help your child visualize the relative size of decimal numbers. These models will also help your child understand simple computations with decimals.



1 Meter is 10 Decimeters
1 Decimeter is 10 Centimeters
1 Centimeter is 10 Millimeters

Meters, decimeters, centimeters, and millimeters

We will conduct an experiment, *Downhill Racer,* in which students roll toy cars or skates down ramps and measure how far the cars roll as we raise the ramp to different heights. For this experiment, have your child bring a toy car, roller skate, or other "rolling toy" to school. Toys that roll straight and far work best. Please label your child's toy with his or her name so that there is no confusion when returning the toy.

You can help your child by providing additional mathematics opportunities at home. For example:

- **Measure.** Help your child measure objects around the house in meters, decimeters, and centimeters.
- **Search.** Talk about decimals in everyday life. Car odometers, labels on packages, and statistics in newspapers offer opportunities for discussing the meaning of decimals.
- **Play Show That Decimal Fraction.** Write or show a decimal fraction and have your child show that decimal fraction at least three other ways.

Show That Decimal Fraction

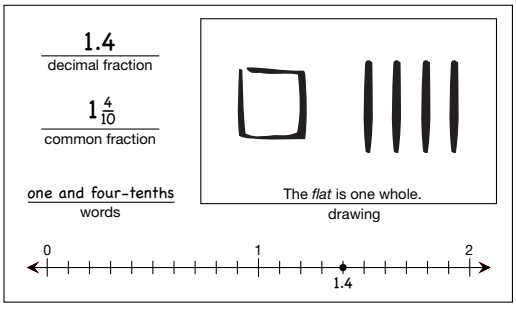


Figure 4: *Playing Show That Decimal Fraction using 1.4*

- **Hundredths, Hundredths, Hundredths.** In this game, the first player makes a number with base-ten pieces (or shorthand) and the second player writes the fraction as a common fraction and a decimal fraction. Game directions are in the *Student Guide*.

Game Board

Base-Ten Shorthand	Common Fraction	Decimal Fraction
	$2\frac{31}{100}$	2.31

- **Play Start, Hop, Stop!** Players use a spinner to determine moves on a number line. Directions, spinners, and game boards are in the *Student Activity Book*.

Math Facts and Mental Math

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

Division Facts. Students review the division facts related to the last six multiplication facts (24 ÷ 4, 24 ÷ 6, 28 ÷ 4, 28 ÷ 7, 32 ÷ 4, 32 ÷ 8, 42 ÷ 6, 42 ÷ 7, 48 ÷ 6, 48 ÷ 8, 56 ÷ 7, 56 ÷ 8) to maintain and increase fluency and to learn to apply multiplication and division 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 the Facts I Need to Learn, work on strategies for figuring them out. Good strategies include:

Start with the multiplication fact. If your child does not know the multiplication fact related to the division fact, start by developing strategies to solve that multiplication fact.

Turn-around facts. To solve 28 ÷ 7: I know 7 × 4 = 28, so 28 ÷ 7 = 4.

Reasoning from known facts. To solve 32 ÷ 4: I know 32 ÷ 2 = 16, so 32 ÷ 4 is half of 16. 32 ÷ 4 = 8.

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: 2400 ÷ 60 = 40; 480 ÷ 6 = 70; 24,000 ÷ 400 = 60.

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

Sincerely,