

Fair Shares, Unit Fractions

Module 3
Session 1

Today's Activities

- Measurement checkpoint
- Work with fractions and fair shares

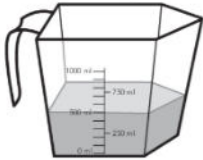
Measurement Checkpoint



Measurement Checkpoint page 1 of 2

1 Use the pictures to help answer each of the questions below. Be sure to label your answers with the correct units.

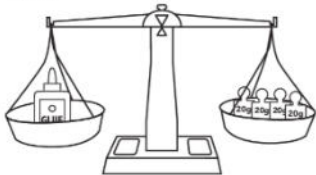
a Mike is measuring water. How much water does he have in the measuring cup?



b Michelle is measuring her big brother's foot in centimeters. How long is her brother's foot?



c Mickey is measuring the mass of a bottle of glue. What is the mass of the bottle of glue?



Measurement Checkpoint page 2 of 2

2 Circle the appropriate words to fill in the blank.

a This pencil is short! I would measure its _____ with _____.

mass length volume

meters grams centimeters

b This cup doesn't hold very much water. I would measure its _____ with _____.

mass length volume

milliliters kilograms liters

c A box of books is heavy! I would measure its _____ with _____.

mass length volume

milliliters kilograms grams

3 Each of Tracy's 3 pet frogs has a mass of 112 grams. Hannah's pet iguana has a mass of 453 grams. How much more mass does the iguana have than all 3 frogs put together? Show your work using numbers, labeled sketches, or words. Label your answer with the correct units.

The iguana has a mass of _____ more than all three frogs put together.

Fair Shares, Unit Fractions

Think of a recent time when you shared something with someone.

What were you sharing?

Were you sharing fairly? Did you each get the same amount?

$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{4}$

$\frac{1}{6}$

$\frac{1}{8}$

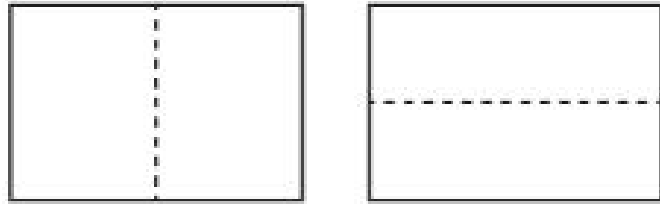
Fair Shares, Unit Fractions

The first rectangle you have represents a cookie.

Fold your cookie into 2 equal pieces.

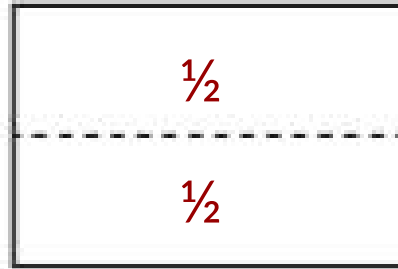
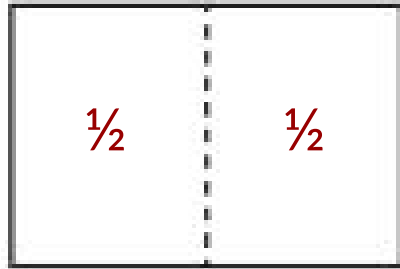
Fair Shares, Unit Fractions

Each piece you have broken your cookie into doesn't need to be *congruent* (exactly the same shape and size) but they do need to be *equivalent* (the same amount).



These halves appear to be different from one another.
Are they actually the same amount (equivalent), even though they're not the same shape and size?

Fair Shares, Unit Fractions



Fair Shares, Unit Fractions

Let's fold and label your other rectangles to represent the following numbers of people sharing a cookie:

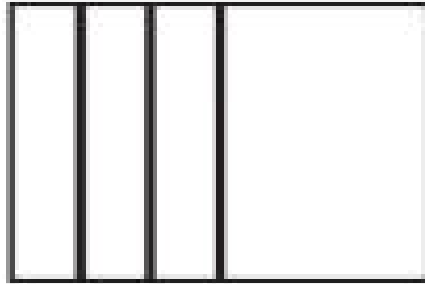
- 3
- 4
- 6
- 8

It's okay to fold your rectangles horizontally, vertically, or in both directions. The goal is to create **fair shares**. Let's label each fair share with the appropriate unit fractions.

Fair Shares, Unit Fractions

- If you like cookies, would you rather be in a group of 2 people sharing a cookie or 8 people sharing the same size cookie? Why?
- Would you rather be in a group of 2 people sharing one cookie or 4 people sharing two cookies? Why?
- Would you rather be in a group of 100 people sharing or 20 people sharing? Why, and under what circumstances?

Fair Shares, Unit Fractions



This paper represents a giant cookie.

What fraction of the cookie does each folded part represent?

Would it be okay to cut off the extra so that the pieces would be equivalent (the same amount)?

Closing

- Each student needs an envelope for their folded rectangles
- What does *fair share* mean?
- What does $\frac{1}{4}$ mean?
- What does $\frac{1}{8}$ mean?

Home Connection

**Sharing Candy Bars & Measuring
pages 71 and 72**

Optional

Complete Choose a Measurement Unit on page 128 in your student book.