5 Module 4

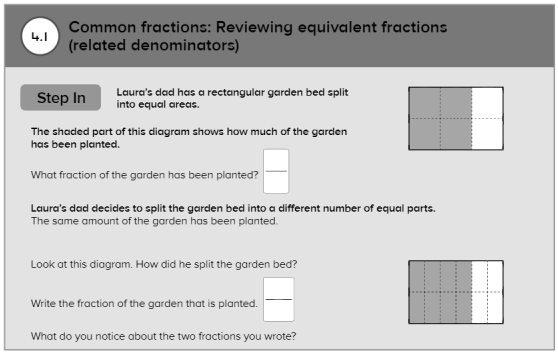
ORIGO STEPPING STONES 2.0

Core Focus

- Common fractions: Reviewing equivalent fractions and mixed numbers, and converting improper to mixed and mixed to improper fractions
- Length: Converting between inches and feet and customary units
- Mass and Capacity: Converting customary units

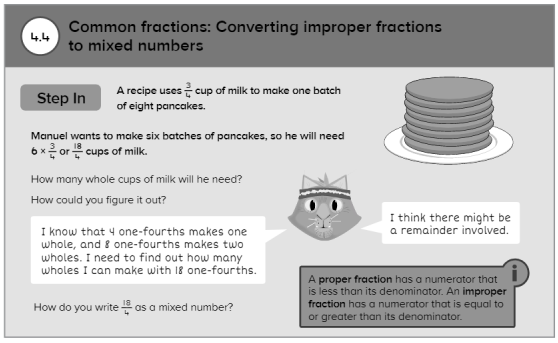
Common fractions

- Students review the relationship between the numerators and denominators of equivalent fractions.



In this lesson, students use area models to help compare fractions with different but related denominators.

- Students rewrite **improper fractions** as **mixed numbers**, and mixed numbers as improper fractions.



In this lesson, students think about how many unit fractions (fractions with a numerator of one) make one whole to convert between improper fractions and mixed numbers.

Ideas for Home

- Cooking offers a great opportunity to talk about and use equivalent fractions. If a recipe requires $1\frac{1}{2}$ cups of flour, ask your child about different ways to measure it. They might suggest using a one-cup measure and half-cup measure once each, or think $\frac{3}{2}$ instead, using a half-cup measure 3 times.
- Fractions are part of meal time, too. Ask, "The pizza is cut into eighths, what fraction would you like?" or, "How can I give one-half to your brother and one-fourth to you? How many slices would that be? How do you know?"

Glossary

- Fractions where the top number (numerator) is greater than the bottom number (denominator), such as $\frac{8}{3}$, are always greater than one, and are known as **improper fractions**.
- **Mixed numbers** have a whole number plus a fraction. $2\frac{2}{3}$ is an example of a mixed number that is equivalent to the improper fraction $\frac{8}{3}$.

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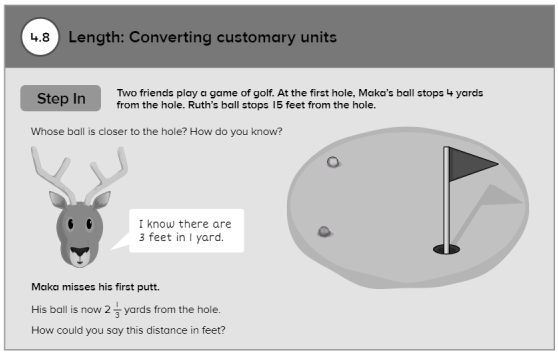
Length

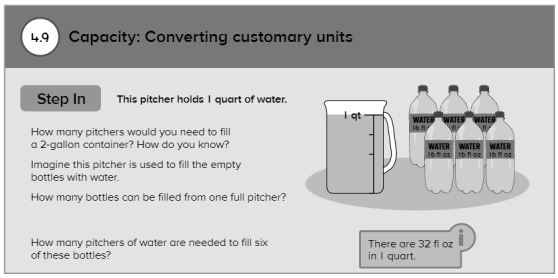
- Students gain a general sense of each customary unit of length, as well as learn the formal relationships among them (for example, that there are 12 inches in 1 foot).
- Students convert lengths that involve fractions. For example, 18 inches is equivalent to $1\frac{1}{2}$ feet. This language matches how measurement is often used in real-world situations.



In this lesson, students convert feet to yards and yards to feet.

Capacity

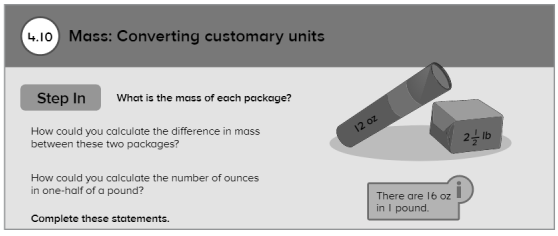
- Students review fluid ounces, quarts, and gallons, and practice converting between the different measures through word problems that encourage them to think of different ways to write equivalent quantities.



In this lesson, students convert quarts to fluid ounces (big to small) and fluid ounces to quarts (small to big).

Mass

- Students convert between ounces and pounds presented in whole number, fraction, or decimal format (e.g. 20 ounces is equivalent to 1.25 pounds, and $1\frac{1}{2}$ pounds is equivalent to 24 ounces).



In this lesson, students convert pounds to ounces (heavy to light) and ounces to pounds (light to heavy).

Ideas for Home

- Talk about which unit of measure would be most appropriate for different situations (e.g. measuring a piece of paper, a length of cloth, the length and width of a room, or the distance from home to school).
- At the grocery store, ask your child to find items other than beverages that are labeled with fluid ounces, like liquid laundry detergent.
- Shopping for produce is a great opportunity for comparing ounces and pounds. Have your child use the scale to weigh different items and tell you the mass in both pounds and ounces: "The apples weigh 36 ounces, which is $2\frac{1}{4}$ pounds."