

## Unit 9

# Family Letter

Reveal  
**MATH**

Dear Family,

In this unit, Addition and Subtraction Meanings and Strategies with Fractions, your child will compose and decompose fractions as well as add and subtract fractions in mathematical and real-world contexts.

### STEM Career Kid for this Unit

**Hi, I'm Owen.**

I want to be an entomologist. I will use math in my job when I study insects. Students will see how I can use addition and subtraction of fractions to compare and measure the bodies of insects.



### What math terms will your child use?

| Term              | Student Understanding   |
|-------------------|---|
| compose           | to put parts together<br><br>Fractions with the same denominator can be added to compose a new fraction. For example, $\frac{2}{8} + \frac{3}{8} = \frac{5}{8}$ .                   |
| decompose         | to break something into parts<br><br>A fraction can be decomposed by rewriting it as a sum of fractions. For example, $\frac{7}{12} = \frac{2}{12} + \frac{1}{12} + \frac{4}{12}$ . |
| like denominators | denominators that are the same<br><br>For example, the fractions $\frac{1}{4}$ and $\frac{3}{4}$ have like denominators.  |



### What can your child do at home?

Help your child practice adding and subtracting fractions with like denominators. Write the fractions  $\frac{1}{10}$  to  $\frac{10}{10}$  on index cards, one fraction per card, and place the cards facedown. Have your child pick 2 cards at a time and find the sum and difference of the fractions.

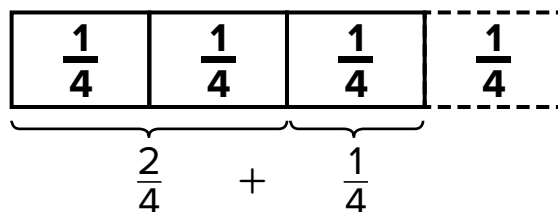
# What Will Students Learn in This Unit?

## Composing Fractions

Your child will practice composing a new fraction by adding fractions with like denominators. To compose a new fraction, the parts that represent each fraction are added together. The number of parts changes, but the size of the parts does not change.

Example:

$$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$



When two  $\frac{1}{4}$  parts and one  $\frac{1}{4}$  part are put together there is a total of three  $\frac{1}{4}$  parts.  
So  $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$ .

## Adding Fractions

Your child will learn how to add fractions with like denominators. It is helpful for students to remember that when adding fractions with like denominators, the number of parts changes but the size of the parts remains the same. So when adding two fractions with like denominators the numerators are added and the denominators stay the same.

For example,  $\frac{3}{7} + \frac{2}{7} = \frac{3+2}{7} = \frac{5}{7}$ .

## Subtracting Fractions

Your child will learn to subtract fractions with like denominators by subtracting the numerators and keeping the denominator the same. Similar to addition with fractions, students will perform the operation on the numerators and leave the denominator unchanged. For example,  $\frac{9}{10} - \frac{3}{10} = \frac{9-3}{10} = \frac{6}{10}$ .