

Lesson 18: Lots of Fractions to Add

Standards Alignments

Building On 3.NBT.A.2
Addressing 4.NF.B.4.c, 4.NF.C.5

Teacher-facing Learning Goals

- Find the sum of three or more tenths and hundredths, using the commutative and associative properties strategically.

Student-facing Learning Goals

- Let's add tenths and hundredths again, more than two at a time.

Lesson Purpose

The purpose of this lesson is for students to find the sum of three or more tenths and hundredths.

Previously, students learned to find sums of fractions with the same denominator and sums of tenths and hundredths. They added two or more tenths and hundredths, applying the commutative and associative properties along the way. This lesson prompts students to apply their understanding and skills to solve problems in context, and to practice finding sums of three or more tenths and hundredths (including mixed numbers).

This lesson has a Student Section Summary.

Access for:

Students with Disabilities

- Representation (Activity 1)

English Learners

- MLR8 (Activity 1)

Instructional Routines

Number Talk (Warm-up)

Materials to Gather

- Chart paper: Activity 2
- Coins: Activity 1

Materials to Copy

- More Than Two Fractions (groups of 15): Activity 2

Lesson Timeline

Warm-up	10 min
Activity 1	25 min
Activity 2	10 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

As you finish up this unit, reflect on the norms and activities that have supported each student in learning math. List the ways you have seen each student grow as a young mathematician throughout this work. List the ways you have seen yourself grow as a teacher. What will you continue to do and what will you improve upon in Unit 4?

Cool-down (to be completed at the end of the lesson)

 5 min

U.S. Coins

Standards Alignments

Addressing 4.NF.C.5

Student-facing Task Statement

The table shows the thicknesses of U.S. coins.

coin	thickness (cm)
penny	$\frac{15}{100}$
nickel	$\frac{2}{10}$
dime	$\frac{14}{100}$
quarter	$\frac{18}{100}$
half dollar	$\frac{22}{100}$
dollar	$\frac{2}{10}$

Find the combined thickness of:

1. a penny, a nickel, a quarter
2. a dollar, a half dollar, a quarter, and a dime

Student Responses

1. $\frac{53}{100}$. Sample reasoning: $\frac{15}{100} + \frac{2}{10} + \frac{18}{100} = \frac{33}{100} + \frac{20}{100} = \frac{53}{100}$
2. $\frac{74}{100}$. Sample reasoning: $\frac{2}{10} + \frac{22}{100} + \frac{18}{100} + \frac{14}{100} = \frac{20}{100} + \frac{54}{100} = \frac{74}{100}$