

# Eureka Math

## 2nd Grade Module 7 Lesson 10

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.



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# Customize this Slideshow

## Reflecting your Teaching Style and Learning Needs of Your Students

- When the Google Slides presentation is opened, it will look like Screen A.
- Click on the “pop-out” button in the upper right hand corner to change the view.
- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
- Google Slides will open your renamed presentation.
- It is now editable & housed in MY DRIVE.



# Icons



Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



Small Group Time



# Materials Needed:

Materials:

Core Fluency Practice Sets

Decomposition Tree

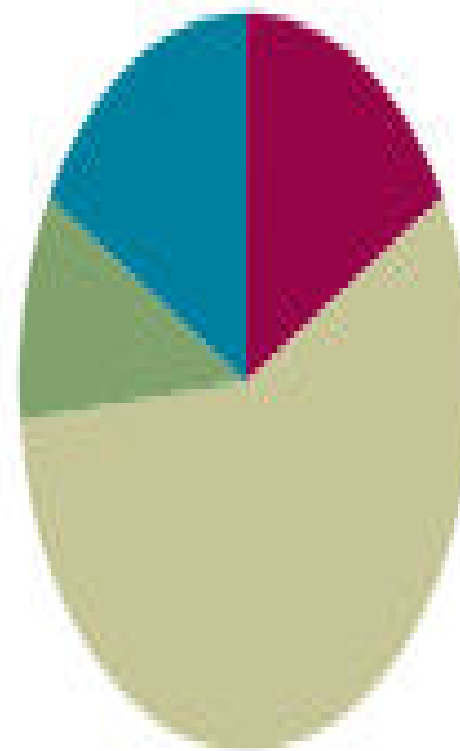
Personal white board, small plastic bag with 4 quarters, 10 dimes, 10 nickels, and 10 pennies

# Lesson 10

Objective: Use the fewest number of coins to make a given value.

## Suggested Lesson Structure

Fluency Practice	(10 minutes)
Application Problem	(6 minutes)
Concept Development	(34 minutes)
Student Debrief	(10 minutes)
<b>Total Time</b>	<b>(60 minutes)</b>





I can use the fewest number of coins to make a given value.



# Sprint

A STORY OF UNITS

Lesson 1 Core Fluency Practice Set A

2•6

A STORY OF UNITS

Lesson 1 Core Fluency Practice Set B

2•6

A STORY OF UNITS

Lesson 1 Core Fluency Practice Set C

2•6

A STORY OF UNITS

Lesson 1 Core Fluency Practice Set D

2•6

Name \_\_\_\_\_

Date \_\_\_\_\_

1.	$19 - 9 =$	21.	$16 - 7 =$
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decomposition tree





# Application Problem

Andrew, Brett, and Jay each have 1 dollar in change in their pockets.

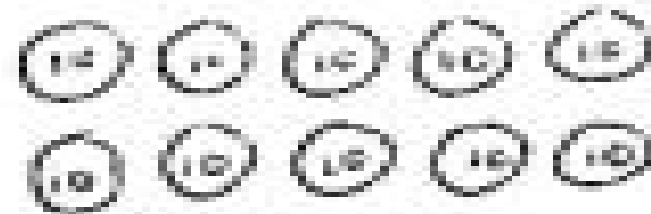
(They each have a different combination of coins.)

**What coins might each boy have in his pocket?**

Andrew



Brett

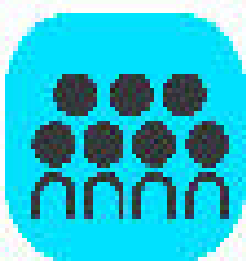


Jay



# Concept Development

Part 1: **Find the fewest number of coins.**



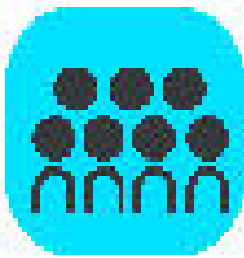
With your partner, show **50 cents** in two ways.

If you were giving someone 50 cents, which combination do you think she would rather have?

With your partner, show **40 cents** with as few coins as possible.

What strategies did you use to determine the fewest number of coins?

# Concept Development



Part 2: **Use the fewest coins by changing coins for higher-value coins.**

Count out 35 cents using 3 dimes and 1 nickel.  
How many coins did you use?

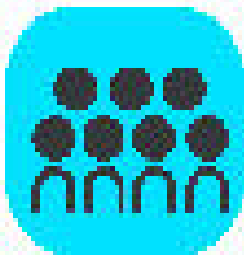
Can we **exchange** to have fewer coins?

Now count out 60 cents using 4 dimes and 4 nickels.  
How many coins do you have?

**Look at your coins. Tell your partner any way you can exchange for a coin with a greater value.**

Goal: We can show the value with the **fewest** coins.

# Concept Development



## Part 3: **Exploring to use the fewest number of coins for a given total.**

How can we make 27 cents using the fewest number of coins possible?

If you used a **quarter**, it is very close to 27. ( $25 + 2$ )


When we decompose the total into parts, we can get fewer number of coins quickly by using the coins with the greatest value.

With a partner, show 60 cents with the fewest number of coins possible by decomposing 60 into as many twenty-fives as you can, then tens, and then fives.

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Kayla showed 30 cents two ways. Circle the way that uses the fewest coins.

<p>a.</p> 	<p>b.</p> 
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What two coins from (a) were changed for one coin in (b)?

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# Debrief

Compare your Problem Set with your partner's.

What coin was used the most when showing an amount with the fewest coins? Why did this happen?

Yesterday, when we showed the same amount in different ways, did you always use the same coins as your partner? (No. There were lots of combinations.) Why did this happen?



# Debrief

When you want to use the fewest possible coins, what is a good strategy to use?

Look at Problem 8 on your Problem Set. Talk to your partner about how you thought about 56 cents to figure out how to make it with the least number of coins possible.

Can you think of why you would want to use the fewest number of coins possible?



# Exit Ticket

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Show 36 cents two ways. Use the fewest possible coins on the right below.

	Fewest coins:
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2. Show 74 cents two ways. Use the fewest possible coins on the right below.

	Fewest coins:
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