

Pennies and Nickels

Procedural Lesson

Grade 2 · Unit 7 · Lesson 2

MC: 2.MD.8



MPs

✓ Applied MP
* Embedded MP

1	2	3	4	5	6	7	8
*		*	*		*	✓	✓*

Student Journal Pages

145-150

Problem of the Day

Objective: Today, I will count pennies and nickels.

Vocabulary

Cent (¢): a unit used to measure money in the United States (U.S. Currency); represents a part of a whole dollar

All cents are in the form of coins. Coins are different in size, color, and denomination (value).

Penny – value 1¢



Nickel – value 5¢



Teacher Resources

Considerations:

Review skip counting to help with counting coins. Allow students to use coin manipulatives to show the values, and to help count the money, if needed. Encourage students to use mental math when ready.

Students have already learned that a number can be decomposed and have the same value (e.g. 24 is the same as 2 tens and 4 ones). In the same way, coin values can be decomposed, represented in different ways, and still have the same value (e.g. 8¢ can be represented with 8 pennies, or with 1 nickel and 3 pennies).

Spend time finding multiple ways to represent amounts, and help students develop the concept of equivalent worth (e.g. a quarter has the same spending power as 5 nickels). SGP #2, SP #5, and HW #4 will offer opportunities to further this study.

Represent coins with these models:



Second grade students do not use decimals to write money amounts.

Be sure to show both sides of the coin and explain the need to identify coins by BOTH heads and tails.

Additionally, discuss how the size of a coin has no relation to its value.

Steps:

1. Count the nickels by skip-counting by 5.
2. Continue counting the pennies by counting on by 1.

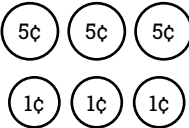
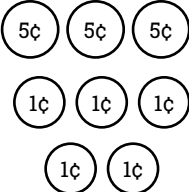
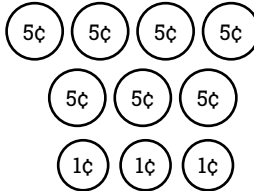
Application of MPs:

- ✓ **MP7:** *How can you arrange the coins to count them correctly?*
To count coins correctly I arrange them _____.
- ✓ **MP8:** *As you are counting the coins, what do you notice about the quantity?*
As I count coins one thing I notice is _____.

Answer Key



Answer Key:

I/M	SGP	FCU	SP	CH	HW
1. 26¢	1. 25¢	1. 21¢	1. 11¢	1. 20 nickels	1. 12¢
2. Answers will vary. Possible answer: 	2. Answers will vary. Possible answer: 	2. 22¢	2. 28¢	2. Answers will vary. Possible answer: 10 nickels, 8 pennies	2. 28¢
			3. 29¢	EXT: Answers will vary.	3. 15¢
			4. 32¢		4. Answers will vary. Possible answer: 4 nickels, 2 pennies
			5. Answers will vary. Possible answer: 		5. 11¢
			6. Benny is incorrect. Benny counted each coin as 1¢. The nickels are 5¢ and the penny is 1¢ totaling 46¢.		6. Yes, Kelly is correct because 3 nickels is equal to 15¢ and 2 more pennies makes 17¢.

Sample Response to MP questions:

✓ **MP7:** *How will you arrange the coins to count them correctly?*

To count coins correctly I arrange them in order from greatest to least.

✓ **MP8:** *As you are counting the coins, what do you notice about the quantity?*

As I count coins one thing I notice is the quantity tells me how many times I will skip-count by the value.

Input / Model (Teacher Presents)



**MP1: Make sense of the problem and persevere in solving it!*

**MP8: Find a strategy to help solve the problem.*

Directions: Find the value of the coins.

1. How much money is shown?



2. Timmy has 18¢. Draw nickels and pennies to show how much money he has.

✓ *MP7: How can you arrange the coins to count them correctly?*

✓ *MP8: As you are counting the coins, what do you notice about the quantity?*

Structured Guided Practice

(A/B Partners Practice)



Directions: Find the value of the coins.

1. How much money is shown?



2. Silvia has 20¢. Draw nickels and pennies to show how much money she has.

✓ **MP7:** How can you arrange the coins to count them correctly?

✓ **MP8:** As you are counting the coins, what do you notice about the quantity?

Final Check for Understanding

(Teacher Checks Work)



Directions: Find the value of the coins.

1. How much money is shown?



2. Angelo has the money you see below. How much money does he have?



Student Practice

Unit 7 Lesson 2: Pennies and Nickels



Name: _____

Date: _____

Directions: Find the value of the coins.

1. How much money is shown?



2. Sean has the money you see below. How much money does he have?



3. How much money is shown?



4. How much money does Alejandra have?



5. Show 38¢ with nickels and pennies.

6. Benny has counted the money below as 10¢. Did Benny count the money correctly? If not, explain his mistake.



Challenge Problems



Directions: Read and answer each question.

1. How many nickels are in a dollar?

2. Julia has a group of nickels and pennies in her pocket that make 58¢. How many nickels and pennies could she have in her pocket?

Extension

**MP4: Apply mathematics in everyday life.*

- Choose an amount of money less than \$1.00. Draw nickels and pennies to show that amount of money.



Reaching Consensus

**MP3: Do you agree/disagree with what _____ said?*

Student Presentations

**MP6: How do you know your answers are correct/reasonable?*

Closure



Recap today's lesson with one or more of the following questions:

- ✓*MP7: How can you arrange the coins to count them correctly?*
- ✓*MP8: As you are counting the coins, what do you notice about the quantity?*

Homework

Unit 7 Lesson 2: Pennies and Nickels

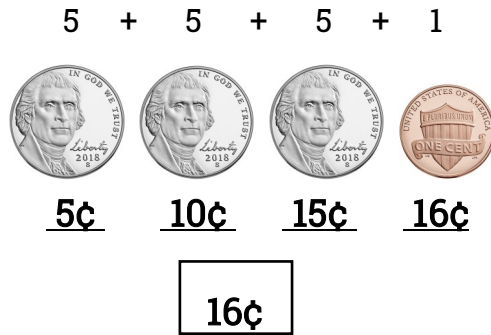


Name: _____

Date: _____

Directions: Find the value of the coins.

Example: How much money is shown?



1. Sean has the money you see below. How much money does he have?



2. How much money is shown?



Homework

Unit 7 Lesson 2: Pennies and Nickels



3. How much money does Tim have?



4. Show 22¢

5. How much money does Evan have?



6. Kelly has the money you see below. She thinks she has a total of 17¢. Is Kelly correct? Why or why not?