Pennies and Nickels
Conceptual Lesson
Grade 2 · Unit 7 · Lesson 1
MC: 2.MD.8

Problem of the Day

Objective: *Today, I will count <u>pennies</u> and <u>nickels</u>.*

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 (Unit 2) to assist with counting coins. Allow students to use coin manipulatives to show the value in each problem, and to help them count the money.

Explore coin variations by looking up coin images online. Explain to students that the appearances of coins have changed over time, but there are some characteristics of coins that remain the same.

Represent coins with these models 5¢ 1¢
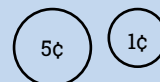
Be sure to show both sides of the coin and explain the need to identify coins by BOTH heads and tails.

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

Steps:

1. Show or draw the coins.
2. Count the nickels by skip-counting by 5.
3. Continue counting the pennies by counting on by 1.

Application of MPs:

✓ *MP7: How will 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 _____.

SWUN MATH
DEVELOPING MATH MINDS FOR TOMORROW

Answer Key:

I/M	SGP	FCU	HW
1. 35¢	1. 15¢ 5¢ 5¢ 1¢ 1¢ 1¢ 1¢ 1¢	1. 21¢ 5¢ 5¢ 5¢ 1¢ 1¢ 1¢ 1¢ 1¢ 1¢	1. <
2. 23¢	2. 17¢ 5¢ 5¢ 5¢ 1¢ 1¢	2. 14¢ 5¢ 5¢ 1¢ 1¢ 1¢ 1¢	2. >
			3. =
			4. False. 400 + 8 is equal to 408, not 480. So, 408 < 480.

Sample Response to MP questions:

✓ *MP7:* *How will you arrange the coins to count them correctly?*
   To count coins correctly I arrange them <u>*in order from greatest to least*</u>.

✓ *MP8:* *As you are counting the coins, what do you notice about the quantity?*
   As I count coins one thing I notice is <u>*the quantity tells me how many times I will skip-count by the value*</u>.

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

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

Directions: Draw or show the coins. Find their value.

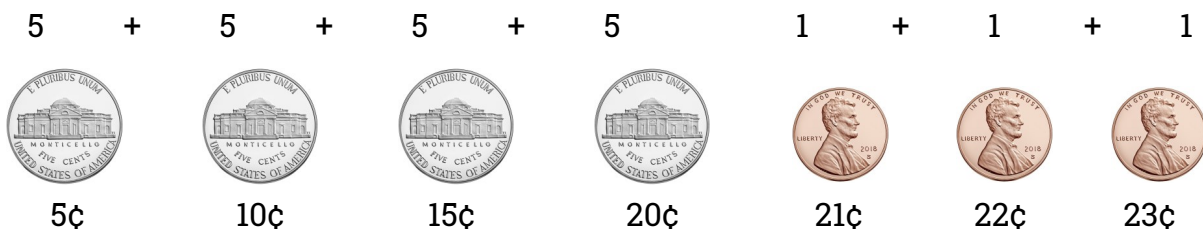1. **What is the value of 7 nickels? Draw a picture to prove your answer.**

- Review the pattern of counting by fives taught during Unit 2: The ones digit alternates by 0 and 5 when skip counting by 5s.

- Show a group of 7 nickels and explain that the value of each nickel is 5¢. Therefore, when counting nickels, we can skip count by fives. The value of 1 nickel is 5¢, the value of 2 nickels is 10¢, the value of 3 nickels is 15¢, etc.

$$5 \quad + \quad 5 \quad + \quad 5 \quad + \quad 5 \quad + \quad 5 \quad + \quad 5 \quad + \quad 5$$

| 5¢ | 10¢ | 15¢ | 20¢ | 25¢ | 30¢ | 35¢ |
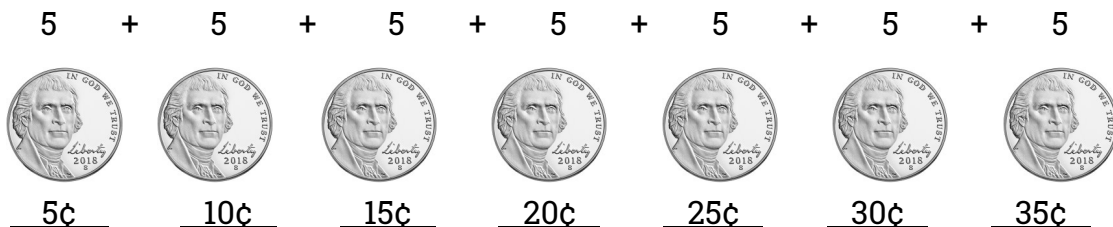
Total = 35¢

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2. **What is the value of 4 nickels and 3 pennies? Draw a picture to prove your answer.**

- Show a group of 4 nickels and 3 pennies. Explain that the value of each nickel is 5¢ and the value of each penny is 1¢.

- Explain that when counting money, you can mix coins like nickels and pennies. When counting change, it is important to sort the coins by their value beginning with the largest value.

- Model how to count the value of the coins by counting all the nickels and skip counting by fives. Then add on the pennies by counting on by one.

$$5 \quad + \quad 5 \quad + \quad 5 \quad + \quad 5 \qquad 1 \quad + \quad 1 \quad + \quad 1$$

| 5¢ | 10¢ | 15¢ | 20¢ | 21¢ | 22¢ | 23¢ |

Total = 23¢

Directions: Draw or show the coins. Find their value.

1. What is the value of 2 nickels and 5 pennies? Draw a picture to prove your answer.

2. What is the value of 3 nickels and 2 pennies? Draw a picture to prove your answer.

Directions: Draw or show the coins. Find their value.

1. What is the value of 3 nickels and 6 pennies? Draw a picture to prove your answer.

2. Draw or show 2 nickels and 4 pennies. Find the value of the coins.

Closure

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

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

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

Directions: Review comparing values. Write the symbol (<, >, or =) to make each number sentence true.

1.

$$200 + 30 + 8 \;\square\; 283$$

2.

$$876 \;\square\; 800 + 60 + 7$$

3.

$$678 \;\square\; 600 + 70 + 8$$

4. True or False?

$$400 + 8 = 480$$

True   False

Explain:

_____

_____

_____

_____

_____