MA.2.M.2.2

Overarching Standard: MA.2.M.2 *Tell time and solve problems involving money.*

Benchmark of Focus

MA.2.M.2.2: Solve one- and two-step addition and subtraction real-world problems involving either dollar bills within $100 or coins within 100¢ using $ and ¢ symbols appropriately.

Benchmark Clarifications

Clarification 1: Within this benchmark, the expectation is not to use decimal values.

Clarification 2: Addition and subtraction problems are limited to sums within 100 and related differences. Refer to Situations Involving Operations with Numbers (Appendix A).

Related Benchmark/Horizontal Alignment
- MA.2.NSO.2.3
- MA.2.AR.1.1

Vertical Alignment

Previous Benchmarks	**Next Benchmarks**
MA.1.M.2.3	MA.4.NSO.2.7

Purpose and Instructional Strategies

The purpose of this benchmark is to include the use of dollars and cents to add or subtract in real-world problems. (MTR.7.1)

- It is not the expectation of this benchmark to include combining cents with dollars. Students will explore that concept in grade 4 with the introduction of decimals.
- Instruction includes the use of drawing, manipulatives, and number lines to solve addition or subtraction situations.
- Instruction includes the idea that making change is the same as finding a difference.
- Instruction uses the format 45¢ not $0.45.

Common Misconceptions or Errors

Students may believe the value of a coin is directly related to its size.
- For example, a student may think that since a nickel is bigger than a dime then it is worth more, or since a penny is bigger than a dime then it must also be worth more.

Strategies to Support Tiered Instruction
- Instruction includes providing a way to organize information about coin values that can later be used to reference for finding the values of coin collections prior to counting. Students use images, drawings, words, sentences, phrases, numbers, and symbols to describe the equal values.
  - For example, a chart can be used to include ways in which students can relate the equal values with other coins and dollar combinations so that students can begin to form connections to help them remember the values. Students use informal language to describe equal values such as, *"is worth the same as."*

Coin	Value	"Worth the Same As"
nickel	5 cents	5 pennies are **worth the same** as 1 nickel.
dime	10 cents	10 pennies are **worth the same as** 1 dime. 2 nickels are **worth the same** as 1 dime.
quarter	25 cents	5 nickels are **worth the same as** 1 quarter.

Questions to ask students:

- Ask: Raj counted the coins in his pockets. He pulled 34¢ from his right pocket. Then, he pulled 40¢ from his left pocket. How much money does Raj have in all? Explain your thinking.
    - Sample answer that would indicate understanding: Raj has 74¢ because starting with 40¢ and counting on by 10¢ three times, equals a total of 70¢. Then adding 4¢ more equals 74¢.
    - Sample answer that indicates an incomplete understanding or a misconception: Raj has 38¢ because that is what he has from his pockets.
- Ask: I have 75¢ in my wallet. I buy a balloon that costs 29¢. How much money do I have left after buying the balloon? Explain your thinking.
    - Sample answer that would indicate understanding: You have 46¢. Beginning with 75¢, you take away, or use 20¢, so you have 55¢. Then you take away, or use 9¢ more, and are left with 46¢ change.
    - Sample answer that indicates an incomplete understanding or a misconception: You have 75¢. You can take away 5 from 9 so you just take away 2 from 7 and that leaves you 55¢.

Instructional Tasks
Instructional Task 1

Marco wants to buy three items from the school shop. The images below provide different items the school shop has in stock and its price.

Part A. If Marco has $10 to spend, list all of the combinations of items he can purchase. Discuss your strategy to determine possible combinations.

Part B. Which combination put them under/over budget?

Instructional Items
Instructional Item 1

Whitney has 93¢ in her piggy bank. She empties her piggy bank for a trip to the store. She gives her brother three dimes, and her sister one quarter, the rest of the money is hers to spend. How much money does Whitney have left to spend at the store?

Instructional Item 2

Maya and Tanya earned $47 dollars from their bake sale. Each of the girls wants to buy a sweatshirt that costs $15 dollars. Once the sweatshirts are purchased, do the girls have enough money to buy one bag of candy that costs $4? Explain why or why not.

Additional Resources:
CPALMS Resources

Resources/Tasks to Support Your Child at Home:
- Using shopping ads, give your child story problems involving the money in the ad. Have them draw quick pictures or use actual money to model the problem and solve.
- Have your child match coins to other combinations of coins that make that same value. Encourage them to find all possible combinations for a given coin amount.
- Khan Academy: Counting Coins
- Khan Academy: Counting Dollars