

Adding Pennies, Nickels, and Dimes

Subject: Math

Grade Level: K-1st grade

Summary: Students will add pennies, nickels, and dimes and will organize the coins to display a

variety of price values from real life examples.

BIG QUESTIONS

How are important people, places, and events honored through coins?

TIMING

0 to 45 minutes

LEARNING OBJECTIVES

- Students will add pennies, nickels, and dimes and will organize the coins to display a variety of price values.
- Students will discuss the importance of money in daily life.

MATERIALS

- Several full and empty containers for grocery store products
- Pocket chart and large paper coins
- Number chart (1 to 100)
- Mint tins or other small containers (one for each student) with 10 pennies, 5 nickels, and 5 dimes (real or plastic) in each tin
- Price sheets (sheets of paper with a picture of a grocery item, a price, and an area for the student to trace coins adding up to that price)
- Pencils

PROCEDURE

Introduce Buying Items and Coins (15 minutes)

- 1. Fill a student's hands with several grocery store products and ask your class:
 - If I went to the store and wanted to buy all these items, what would I need to know about them before I can pay? (price of each item)
 - Why would I need to know that? (So that you know how much money you'll need)
 - What would I do with the money? (Pay the cashier for the items)
- 2. Explain to the students that they will be adding pennies, nickels, and dimes so that they can buy things they need.
- 3. Start a discussion about the uses of money by asking what people use money for in daily life, what kind of things money can buy, and what money can buy besides things. Answers can include arcade games, movies, and riding public transportation.
- 4. Explain that the students will be learning how to use coins to buy certain items.
- 5. Review coin names and values with class. Which coin is worth the most in value? The least?

Introduce Activity and Start as a Class (10 minutes)

- 6. Hold up one of the grocery items and tell the class that at the grocery store this item might cost 47 cents. Ask what coins we could use to make 47 cents (using only pennies, nickels, and dimes). Ask what coin we might start with to get to the price of this product. (a dime.) Ask why a dime is the best choice. (It's worth the most of these three coins, and it's best to start counting with the highest-value coin.) Ask what number we will be counting by if we start with a dime. (10s)
- 7. Start counting together by placing the large paper coins in the pocket chart for all the students to see.
 - If I put in one dime, how much money do I have? (10 cents) If I add another dime, how much money do I have now? (20 cents) If I add another one? (30 cents) And another? (40 cents)
 - Should I add another dime? Use the number chart to show the students your goal (47) and how much money you currently have. Why should or shouldn't we add another dime? How much would another dime add up to?
 - How much more change do we need to get to 47 cents? (7 cents) What coins do we have that are less than 7 cents? Which is the larger of the 2 coins that are less than 7 cents? If I add a nickel to the 40 cents that we already have how much money will I have? Add the nickel to the pocket.
 - If I add another nickel is that too much or too little money? (too much.) So, what coin should we use next? How many pennies should we add to get from 45 cents to 47 cents? Add 2 pennies to the pocket.
- 8. As a class count the value of all the coins. (10, 20, 30, 40, 45, 46, 47 cents)
- 9. Gauge the class's comprehension and ask some volunteers to demonstrate how to add coins to find the value of a second product.
- 10. Review the rules for using the coin tins. Distribute the tins. Have the students work independently to figure out the prices of 2 more items using the change in their tins.

Allow Students to Work in Pairs (10 minutes)

U.S. Mint Coin Classroom Lesson Plan: Adding Pennies, Nickels, and Dimes

- 11. Divide the class into pairs. Give each pair 2 price sheets (a piece of paper with a picture of a grocery item, a corresponding price, and an area for the student to trace coins). One student will count and lay out the coins on the sheet and their partner will check their work. After the check, go around to verify the pair's work.
- 12. Once the work has been verified, the first partner will trace the coins onto the sheet and write the value of the coin inside each circle.
- 13. While the tracing is going on, the second partner can begin to count out the coins for the second product.
- 14. Repeat the verification and tracing process for this second sheet.
- 15. Allow some of the students to share their work with the class.
- 16. Review with the class what they worked on today.

ASSESSMENT

- Assess whether the students met the lesson objectives by noting whether they were able to
 organize the coins from the information they learned and to create correct coin
 combinations using dimes, nickels and pennies.
- You could use a rubric to evaluate the students' problem-solving process.

DIFFERENTIATE

Begin a discussion of "greater than" and "less than" as an extension of this activity.

RELATED

- U.S. Mint Coin Classroom coin programs:
- <u>Coin Program pages</u> on U.S. Mint website
- Design Your Own Coin activity
- Making Change online game

STANDARDS

Common Core Standards

CCSS.Math.Content.1.OA.A.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.¹

CCSS.Math.Content.1.OA.A.2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.