

**Pennsylvania Governor's Institute
for Mathematics Educators
2004**

Names of Group Members: James Godlewski Ed.D. , Mrs. Peggy Wilson, Mrs. Janet Ward

Topic/Theme: Numbers and Operations

Level: Grade 2

Time Element: 3 class periods

NCTM Standards Addressed: Understand numbers, ways of representing numbers, relationships among numbers, and number systems.

PA Math Standards Addressed: 2.1-- Numbers, number systems, number relationships

Math Assessment Anchors Addressed:
M3.A—Numbers and operations.

Reading Assessment Anchors Addressed:
R3.A ---Comprehension and Reading Skills.

Objectives:

- Identify penny, nickel, dime, and quarter.
- Identify value of the coins.
- Count and compare using a collection of coins to one dollar.

Instructional Strategies and Plan (include strategies used to help different types of learners, i.e. auditory, visual, etc.):

STRATEGIES

- K-W-L (What I know –Want to learn-Learned)
- Coin Concentration Activity and Game

INSTRUCTIONAL PLAN

Use KWL chart to gain background knowledge of the students.

1. Name the coins.
2. Give the value of the coins.

Use overhead projector to match coins to their value.

Ex. Show a penny and write its value

Using index cards stamp images of coins and make matching cards with their value. Partners will play a matching game.

Activity – What’s in the Purse?

Put a quarter, a dime, a nickel, and a penny in each coin purse and give each pair of students a purse. Ask children to take out the coins and identify them. Ask children to state values of coins.

Play concentration coin game. The students will be using cards that have been prepared with pictures of coins and their matching value.

Demonstrate how to count by touching each coin and skip counting. Repeat with different combinations.

On overhead projector show, identify and count coins. Ask for ways to show same amount in a different way.

Cut out advertisements from newspapers that show cost and have the students match the amount with their coins.

On overhead projector display two groups of coins and have students count them. Identifying the greater amount.

Read Alexander, Who Used to Be Rich Last Sunday.

Students will subtract from a dollar’s worth of coins as indicated in the story.

Materials/Resources:

Alexander, Who Used to Be Rich Last Sunday by Judith Viorst

Houghton Mifflin Mathematics Grade Two

KWL chart

Overhead projector

Coins & coin purses

Concentration cards

Compass Learning – software

Plato Learning – software

Computer

Newspapers

Interdisciplinary Connections:

- **Reading**

Read Alexander, Who Used to Be Rich Last Sunday

- a fictional story R.3.A.1.1 R.3.A.1.3

- **Technology**

Compass Learning – software

Plato Learning – software

Houghton Mifflin web site

Overhead projector

Computer

- **Other**

Field Trip to a local bank

Have a bank officer/teller to visit the classroom

Assessment Strategies:

- **Formative Evaluation (checking student understanding during the lesson):**

Examples: Teacher says, “Show me a quarter, nickel, dime, penny.”

Teacher says, “You have a quarter, penny, nickel and a dime. Put them in order from least to greatest value.”

Teacher says, "How would you show \$.50.?"

- **Summative Evaluation (how will it be determined that the objectives were achieved?):**

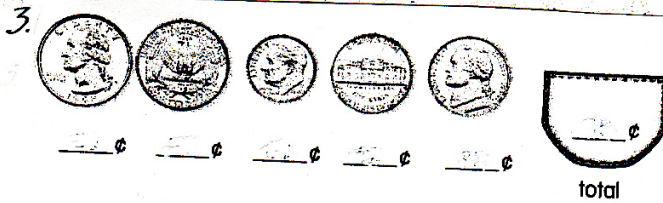
Students can identify, match, count and tell the value of a group of coins on a formal test. (Student assessment on next page.)

Name _____

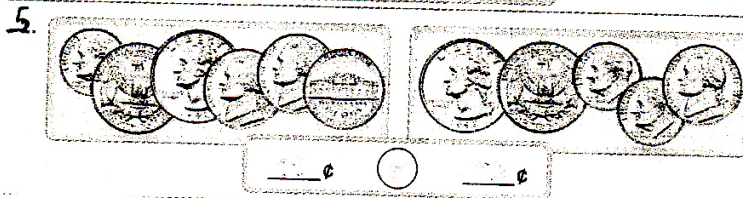
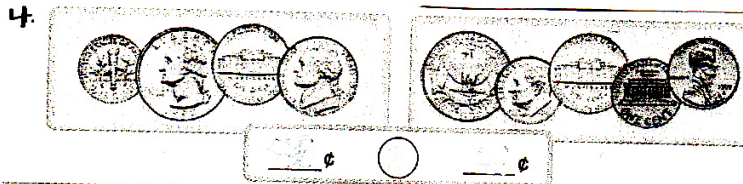
Remember:
Start with the coins of
the greatest value.



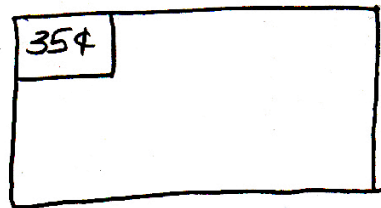
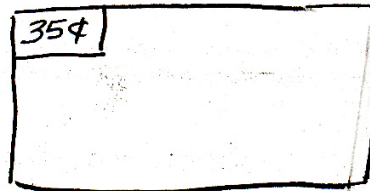
Write the total value of the coins.



Compare. Write $>$, $<$, or $=$ in the \bigcirc .



6. Show 35¢ two ways.
Draw the coins.



7. Match the coin to its name
and value.

- | | | |
|-----|--|---------|
| 5¢ | | dime |
| 10¢ | | penny |
| 25¢ | | quarter |
| 1¢ | | nickel |

Correctives/Remediation:

Provide coin sets for repeated practice in counting the values of coins.
Have student practice skip counting.
Individual use of Compass Learning & Plato Learning software.

Extensions/Enrichment:

Individual use of Compass Learning & Plato Learning software.

Have bags with different amounts of coins. Students will guess the amount and then match it with the answer card.

Special Accommodations (special needs students)**• Description of the Special Needs Student Selected:**

Student has been identified as an emotional support student in a part time learning and emotional support classroom. Student is argumentative, talks out in class, and destroys learning materials. His I.E.P. includes annual goals to develop behavior and social skills, reading skills to build reading fluency and comprehension, to develop math skills in the four basic processes.

• Accommodations to Use with this Student:

Behavior strategies

- Rules –Consequences-Rewards posted in room and all student desks.
- Action Plan for Teacher and Student
- Behavior Contract and chart
- Wrap Around Aide (TSS)
- Cueing of Stop Sign for inappropriate behavior
- Positive reinforcement-read to kindergarten
- Caught being good letter sent to both student and parents

Academic Strategies

- Use mental pictures of math processes
- Flowcharts to demonstrate step by step approach
- Short exercises and problems with multiple choice
- Help child to estimate
- Use cueing words such as return, sell, give, buy, to give hints to problem solving operations
- Create math vocabulary notebook
- Preview word problems
- Short problems that do not ask questions
- Hands-on activities
- Highlight key words and phrases
- Present simple visual problems
- List steps before or after to solve a problem
- Use pictures to dramatize the basic patterns of a problem
- Prepare a comparison chart that shows coins and their values
- Manipulate real coins for focusing on differences in size, weight, and patterns