Lesson Title: Counting Coins

Content Area and Grade Level: math - second grade

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Brief Description of the Lesson/Unit:
In this lesson students will determine the value of a collection of coins with a value up to $1.00. Struggling students will learn to use dotted coins to give them a concrete representation as they touch each dot and count by fives. Quarters have five dots (applied with a small amount of nail polish), dimes have two dots and nickels have one dot.

South Dakota Content Standards:

- **Standard numbers and exact wording**
  2.M.1.3  Students are able to determine the value of a collection of like and unlike coins with a value up to $1.00.

- **Unpacked standards (in student-friendly wording)**
  I can count coins that are the same up to $1.00.
  I can count coins that are different up to $1.00.
Stage 1: Identify Desired Results

1. What enduring understandings are desired?

   Students will be able to count any combination of like and unlike coins with a value of up to $1.00.

2. What essential questions will guide this unit and focus both the teaching and the learning?

   How does a person use coins in everyday life?
   Why is it important to know the value of money?

3. What key knowledge and skills will students acquire as a result of this unit?

   Students will be able to identify each coin and its corresponding value.
   Students will be able to determine the value of a collection of coins with a value of up to $1.00.

4. What prior learning, interests, misconceptions, and conceptual difficulties might be brought to this unit by the students?

   There is a high interest level when we work with money. Many students will already know the names and values of quarters, dimes, nickels and pennies. Some will also know half dollars and silver dollars. Most can easily count by fives and tens.

   Some of the difficulties students bring will come from a lack of experience with money. These students may not know the coins and their values. It is also likely that some students will confuse nickels and quarters. While counting by tens is not a problem for most students, counting by tens from 25 can be tricky. This can make it difficult to count on from a quarter.
Stage 2: Determine Acceptable Evidence

What evidence will show that students understand?

1. **Pre-Assessment (pre-tests, concept maps, KWL, surveys, etc.):**

   Pretest - Chapter 14, Houghton Mifflin Math, 2nd grade
   specifically questions 1-8

2. **Performance Tasks:**
   - counting coins
   - problem solving involving money

3. **Summative Assessment (Quizzes, Tests, Prompts, Projects, etc.):**
   - daily assignments
   - end of chapter tests

4. **Formative Assessment (Dialogues, Observations, Work Samples, etc.):**
   - small group work
   - work samples from individual and partner work

   **Briefly explain HOW you will use formative assessment and feedback to redirect and focus your instruction for improving student achievement. Provide at least one example.**

   To identify which students are successful and could become part of a different, more advanced group in subsequent lessons.

5. **Student Self-Assessment:**

   Students will record in journals. "Today I learned…"
   Examples: learned how to tell the difference between a nickel and a quarter; learned how to use dotted coins to count money; learned how knowing how to count by fives allows me to count any combination of coins.

6. **Attach or include specific rubrics being used for this lesson/unit:**
Stage 3 : Learning Experiences and Instruction

What sequence of teaching and learning experiences will equip students to develop and demonstrate the desired understandings?

1. Major Learning Activities:
   a. Whole group instruction using overhead and transparent coins.
   b. Teaching students how to use dotted coins
   c. Peer tutoring within partnerships

2. Materials, Supplies, & Resources (technology & print):
   Houghton Mifflin Math - Chapter 14, pp. 387 and 388 and Problem Solving 14.3
   Overhead projector and coins
   Coins for student use - some with dots, some without

3. Classroom Management:
   There could possibly be three groups:
   Problem solving group - this group will be the students who are easily counting and using money independently. They will be working in pairs to apply that knowledge in a problem solving activity.
   Independent group - These students will be using coins at their desks to help them complete the assignment at their desks.
   Dotted coin group - This group will be working with me at the back table. They will be the students who have had little experience or are struggling with the concept of determining the value of coins. We will be using dotted coins (quarters-5 dots, dimes-2 dots, nickels-1 dot) to learn how to count collections of coins by counting by fives.

4. Support Services and Special Teacher Notes:
Stage 4: Differentiated Instruction Strategies

What specific differentiated instruction strategies will be used in the lesson/unit? Fill in each section that applies.

1. Differentiated Process:

   Results of the pretest will show which students need to learn to use the dotted coins to determine the value of a collection of coins, which students can use regular coins, and which students are working abstractly and need no help from manipulatives to determine the value.

2. Differentiated Content:

   The students who are struggling will learn to use what they know about counting on by fives to count dotted coins. They will learn to touch each dot (made with nail polish dotted on the coins) and count on by fives until all coins have been counted and the value is determined. If the collection of coins is a quarter, a dime, and two nickels, the students would learn to touch each dot as they count from the quarter (5, 10, 15, 20, 25) to the dime (30, 35) to a nickel (40) to the final nickel (45).

   Other students will be successful with the support of regular coins; still others will not need to use coins at all. In addition, students working on the problem solving activity will have half dollars included in their work.

3. Differentiated Product:

   The problem solving group will be using paper and pencil only to complete their problem solving activity. (abstract)

   The independent group will be completing their assignment at their desks, using regular coins as necessary. (semi-concrete)

   The group working with me will complete the same assignment as the independent group, but with my guidance and the use of the dotted coins. (concrete)