

## MANCHESTER COLLEGE- Department of Education

### Unit Lesson Plan #4: Mathematics

**LESSON PLAN by:** Sahara Kipfer

**Source:** Original

**Lesson:** Money Matters

**Length:** 45 minutes- 1 hour

**Age or Grade Intended:** 1<sup>st</sup> grade

#### **Academic Standard(s):**

Mathematics 1.5.7- Identify and give the values of collections of pennies, nickels, and dimes.

Social Studies 1.4.2- Identify services that people do for each other. (Core Standard)

#### **Performance Objectives:**

Using the paper coins that were given, students will pretend to be shoppers, in which they will count out their change when purchasing an item, with 100% accuracy.

Using the paper coins that were given and pretending to be cashiers (one form of service), students will evaluate a shopper's purchase, with 100% accuracy.

Using their paper coins, students will identify the different coins by holding them up in the air when the teacher announces that coin's name, with 100% accuracy.

#### **Assessment:**

The teacher will observe the students as they hold up their coins. If a student is holding up the wrong coin, the teacher will ask the student(s) to look at their coin and make sure they chose the right one.

The teacher will collect the plastic bags that were handed in to the cashiers during the mock store. Due to the teacher's thorough explanation, the students will have known that their goal was to correctly count and evaluate a peer's counting skills during the latter part of the activity.

#### **Advanced Preparation by Teacher:**

The teacher will need to:

- Make a transparency that contains pictures of the "head" side of the following coins: pennies, nickels, and dimes. (attached at end of lesson)
- Make sure the overhead is working properly
- Paper copies, of just the front side, of the three coins mentioned above will need to be made and then cut out and placed into bags. Five of each coin will need to be created per student.
- Bring in real coins- at least 1 of each (penny, nickel, dime)
- Red and black pens.
- Plastic bags- 1 per student (not including the ones above)
- Mock store items (can use list attached or can create another) with price tags placed on them.

- Create a price check answer key. (attached at end of lesson)

### **Procedure:**

**Introduction/Motivation:** The teacher will begin the lesson with a review of the two previous lessons, in which the students will be asked “How would you explain the definition of a good? Can you explain how goods, or materials, get from one place to another?” (Bloom’s Comprehension) Answers such as planes, trains, trucks, boats, etc. are expected. Next the teacher will ask the students, “Once these goods have arrived at their destination, or final stopping place, what is done with them?” (Bloom’s: Evaluation) The teacher can anticipate all types of responses like “they are taken inside the stores” or “they are put on shelves for people to look at.” These replies will help the teacher transition to the main focus of the lesson: how people buy, or get, these goods.

### **Step-by-Step Plan:**

- Step 1: The teacher will display three pictures of coins (pennies, nickels, and dimes) on the overhead, in addition to holding up the real objects. (Gardner: Visual-Spatial) They will then ask the students “what is being shown in the pictures?” (Bloom’s: Knowledge) The first answer the teacher is looking for is “money,” but students might immediately start naming the specific coins.
- Step 2: Next the instructor will confirm that the pictures are indeed of money. The term money will then be explained in the following way: “Money is something that you earn by doing a job. Once you have received this money, you can use it to buy things, such as goods. In order to buy anything you will need to have money, that is why it is important.” (Gardner: Verbal-Linguistic)
- Step 3: The teacher will make sure that the value of the coins has been explained, as well as written on the overhead, that way students can refer to it throughout the lesson.
- Step 4: Copies of the coins, on paper, will then be handed out to each student. They will already be cut out and placed in bags for the students, so that no time is wasted cutting them out. Within each bag should be 5 copies of each type of coin (pennies, nickels, and dimes).
- Step 5: The teacher will then have the students sort out their bags of money, in which all the pennies should be placed into one pile and so on. Before the students set out to complete this task, the teacher will need to provide one more explanation their design and value.
- Step 6: Once students have their piles sorted, the teacher will make sure they can properly identify the coins by calling out a coin, such as “nickel.” When a coin is called out by the teacher, the students are to hold up one of the correct coins being announced. (Gardner: Logical-Mathematical) This will be done several times, in which the teacher should feel confident in moving on to the following steps.
- Step 7: Students’ addition skills are going to be tested here. The teacher will utilize their overhead once again for this step. Simple math problems are to be explored, such as “one penny plus one penny

equals?" Instead of writing that out, the coins and symbols will be used. (Gardner: Visual-Spatial and Logical-Mathematical) Several example and practice problems should be provided. One thing to keep in mind is that no more than 3 coins should be used in an addition problem. The idea is to start out slow and build up to higher level math skills.

- When first providing sample math problems, the teacher should thoroughly explain at least four or five of them.

- After the teacher's examples, the instructor should provide countless addition problems, using the money, as many as it takes to see that the majority of the class understands the concept. This may mean that only 7 problems need to be given or it may mean that 15 problems need to be offered. As the teacher has the students solve the problems, they can ask "how would you solve 'one penny plus two nickels' using what you've learned about the value of these coins?"

(Bloom's: Application) When providing the equations in this phase, the teacher will have the students independently solve the problems (Gardner: Intrapersonal) and then evaluate how well they did. The teacher will be walking around the classroom during this part, but since they will not have the opportunity to see everyone's answers, they will ask the students to raise their hands if they got the problem right during that try. Emphasizing that it's okay to make mistakes should be done, that way those students who are having difficulty will not feel unintelligent.

Step 8: After numerous coin problems have been explored, the teacher will bring the focus back to goods and how money can be used to purchase them. With this in mind, the teacher will explain that the students are going to have an opportunity to work as cashiers in a grocery store. (Gardner: Interpersonal) This is one job, among many others, that deals with money all day long.

Step 9: Students will be instructed to place their money back into their bags, that way they can carry it with them in a few moments. The teacher will divide the class into two groups, in which the first round one group will be the cashiers and vice versa with the second group. The idea is for the students to buy 1 item within the store (from the designated table). They are to use their bag of coins to purchase this item. Once they have counted out their coins (Gardner: Logical-Mathematical), they will hand them over to the cashier who will put them in another plastic bag with the purchaser's name in black ink, along with the item's name. However, before doing so, the cashier must count the change and write the amount they think was handed over in red ink, along with their name too. This will all be explained to the student, so they know what to expect. (Gardner: Verbal-Linguistic) After all, this is the object of the activity, so the teacher

wants them to succeed and this can only be done if they understand the task at hand. Step 9 will occur in two parts, meaning that half the class will be shoppers for about 5 minutes and then the roles will be reversed for another 5 minutes.

-One important thing to note, that the teacher will not disclose to the students, is that each item's cost only needs to be paid in 3 coins. It was purposely set up this way.

**Closure:** Once the store simulation has been completed, the teacher will review with the students the names and values of the three coins that were included in today's lesson. The teacher will then explain to the students that tomorrow's lesson will involve the teacher reading a book, *Curious George Takes a Job*, to be exact. So tomorrow the students should come with questions and/or predictions.

### **Adaptations/Enrichment:**

A boy with a hearing impairment- The teacher will need to model/illustrate the spoken instructions that are given for the simulation. That way he will be able to fully understand the object. Also, the student may wear a hearing supporting device, in addition to the teacher wearing a lapel type device, that way the teacher's voice can be more audible throughout the lesson.

A boy who is visually impaired- The teacher will need to be sure and enlarge the size of the coins that are given to the student. This will help him to clearly see the coins, so that he can properly identify them as they are being used throughout the lesson.

A girl who is gifted in math- This student could be introduced to the quarter throughout this lesson. The teacher would have to carefully monitor the situation because none of the other students may have this coin. To ensure that the student is using this additional coin, the teacher would have to carefully observe. During the simulation, the teacher would have to work with the evaluating student because most likely that student will not understand the concept of the quarter. Also, the teacher should note that the coins used for the purchased item may not be 3 then, but this would only be the case for this student.

**Self-Reflection:** Did I immediately engage my students' attention in the beginning or should another captivating method been chosen? Did the students take their roles, during the simulation, seriously or should a different activity have been chosen? Were the directions clearly understood throughout the lesson or should the students have received a hard copy? Were students given enough time to absorb the new knowledge before applying it? Did the gifted student understand the concept of the quarter in addition to the other coin values? Were adaptations met with success or should the teacher have conferred with the students prior to the lesson to see if any other needs could have been met?

## Money Matters

Penny:



Nickel:



Dime:



Price Check Answer Key

<i>Item Name</i>	<i>Price</i>
Apple	.15
Small book	.30
Pencil	.07
Notebook	.20
1 Sheet of sticker	.25
Small bag of chips	.30
Ruler	.21
Eraser	.16
Deck of cards	.25
Can of Play-Doh	.30
Beach ball	.12
Magnet	.11
Bouncy ball (quarter-sized)	.25
Bracelet	.15
Pen	.21
Balloon	.07
Mini action car	.16