

Math 3-Day Unit Lesson Plan
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ACEI Standards Met:

- **ACEI 2.3 Mathematics - Candidates know, understand, and use the major concepts, procedures, and reasoning processes of mathematics that define number systems and number sense, geometry, measurement, statistics and probability, and algebra in order to foster student understanding and use of patterns, quantities, and spatial relationships that can represent phenomena, solve problems, and manage data:**
 - This math three-day unit was planned as an assignment in one of my classes during summer 2016 with one of my classmates. In this unit, we incorporated many different activities to first give students a base knowledge of coins and then extend on that knowledge. One of the first activities students would participate in would be an exploration of each coin where students would use inquiry to discover aspects of each coin and how much they are each worth. This activity would be completed on day one and on the following day students would expand their understanding through activities that encourage them to understand the value of multiple coins together and have them compare the coins. Finally, students would finish the unit by using coins to purchase objects. This activity shows students that the concepts they have been learning can relate to their everyday life.

- **ACEI 2.7 Physical Education - Candidates know, understand, and use--as appropriate to their own understanding and skills--human movement and physical activity as central elements to foster active, healthy life styles and enhanced quality of life for elementary students:**
 - I planned this math three-day unit plan with one of my classmates as an assignment during summer 2016. The main focus during this lesson is coins, but during day three of the lesson we incorporated an activity that would allow students to become engaged with movement in the classroom context. In this activity we planned to play a YouTube video with a song about coins. While watching this video, students would be asked to stand and move along with the beat of the song and hold up their fingers to show how much each coin is worth. In this activity, students meet one of the first grade physical education SOLs by moving to the rhythm of the song and using non-locomotor skills while participating in holding up their fingers to show the amount each coin was worth.

- **ACEI 3.1 Integrating and Applying Knowledge for Instruction - Candidates plan and implement instruction based on knowledge of students, learning theory, subject matter, curricular goals, and community:**
 - Many different Virginia Standards of Learning and subject areas were integrated in this math three-day unit plan, which was planned with one of my classmates during one of my summer 2016 classes. The main focus of this lesson is coin exploration and there are many different activities planned to ensure that all types of learners are able to meet expectations. There are discussions for auditory learners, worksheets and visuals for visual learners, and hands-on activities for kinesthetic/tactile learners. Throughout these activities, both language arts and

physical education aspects were incorporated. For example, *The Coin Counting Book* was used to incorporate reading into the lesson and moving to the rhythm of the Coin Song was used to integrate physical education. By integrating multiple subjects into one lesson, it allows students to make connections and create deeper understandings.

Subject Area and Grade Level

1st Grade Mathematics

Day 1:

Objectives

- The student will be able to recognize the characteristics of a penny, a nickel, a dime, and a quarter.
- The student will be able to determine the value of a nickel, a dime, and a quarter, using a collection of pennies.

Learning Targets

- I can explain the difference between pennies, nickels, dimes, and quarters.
- I will be able to find out how much a penny, a nickel, a dime, and a quarter are worth.

SOL: Math

- 1.7 The student will:
 - a) Identify the number of pennies equivalent to a nickel, a dime, and a quarter

SOL: English

- 1.10 The student will read and demonstrate comprehension of a variety of nonfiction texts.
 - e) Make and confirm predictions.

Materials

- Money (Pennies, Nickels, Dimes, Quarters)
- YouTube - coin song.wmv - <https://www.youtube.com/watch?v=3ARNqyQ0CuY>
- *The Coin Counting Book* by Rozanne Lanczak Williams
- Online Game - http://www.abcya.com/learning_coins.htm

Pre-Assessment

Before beginning the lesson, the students will be assessed on their previous knowledge of money through a discussion. The students will be asked as a class to identify verbally what each coin is as the teacher shows the coin. If the students are able to identify the coin, the teacher can move on to asking the students what they know about the coin or what distinguishes that coin

from other coins. When presenting each coin to the class, the teacher should also ask the students if they know how much each coin is worth. When doing this task, the teacher can have the students give a thumbs up if they know the value of the coin. After everyone has given the teacher a thumbs up, the teacher should ask for the answers that students thought were correct. The teacher should obtain all different answers from the class, to see what each student thinks. To do this the teacher can allow the students to raise their hands and tell what they think the coin is worth. Once there are no more different answers being said, the teacher can have the students raise their hand for which answer they agree with, if there are multiple answers. This discussion will help the teacher gauge the students' understanding of coins and help the teacher determine what the main focus of the lesson should be.

Narrative Description

Introduction (15 minutes total)

A. Pre-video Discussion (2 minutes)

Introduce the video by explaining to the class the topic of our lesson and video. Explain to the class that the video will discuss pennies, nickels, dimes, and quarters. Tell the students to pay attention to what each coin looks like and how much each coin is worth.

B. Showing of Video (3 minutes)

The introduction to this topic will begin with the teacher showing the YouTube video *Coin Song.wmv*. The video should be stopped at 2:06, so that the only the information the students will be learning is included. This video includes how much a penny, a nickel, a dime, and a quarter are all worth.

C. Post-video Discussion (10 minutes)

After the video is over the teacher should foster a conversation about what the children learned from the video. If the students do not incorporate what each coin is worth into their feedback, the teacher can ask questions such as: does anyone remember how much a penny/nickel/dime/quarter is worth?

Instruction and Analysis (60 minutes total)

A. Money Exploration (15 minutes)

The teacher will pass out money to students (penny, nickel, dime, quarter). After each student receives their money the teacher will talk about each coin one by one. When discussing each of these coins the teacher should pose the following questions about each coin to lead the discussion. Throughout the discussion, the teacher will use talk moves such as rephrasing, revoicing, reasoning, and waiting to keep students engaged throughout the discussion. The students will also be asked to turn and talk with a partner to discuss each coin.

- Penny:

- Show the penny, does anyone know what this coin is?
- How much is a penny worth?
- What are some characteristics of a penny?
- Nickel
 - Which coin is a nickel? (Have the students hold up the coin they think is a nickel)
 - How do we know this is a nickel? (characteristics)
 - If the students do not point this out without a question the teacher should ask, are the edges smooth or rough?
 - How much is a nickel worth?
 - How many pennies is that?
- Dime
 - Which coin is a dime? (Have students hold up the coin they think is a dime)
 - Who can tell me how they know this coin is a dime?
 - What size is it?
 - What color is it?
 - How much is a dime worth?
 - How many pennies is that?
- Quarter
 - Which coin is a quarter? (Have students hold up the coin they think is a quarter)
 - How can we tell this is a quarter?
 - Are the edges smooth or rough?
 - How much is a quarter worth?
 - How many pennies is that?

B. Website: Learning Coins (10 minutes)

The teacher will pull up the website: http://www.abcya.com/learning_coins.htm on the computer and project it so that the entire class can view it. The class will go through the tutorial online together and play one round of the sorting game. The teacher will allow all students to come to the front of the room to drag a coin to the correct treasure chest. The teacher will be able to assess the students based on if they are putting the coins into the correct treasure chests. The teacher will also be able to pick up on common mistakes in order to inform future instruction. Once all of the students have had the chance to sort at least one coin, the teacher will move on to the next section. However, the teacher will allow students to play this game at centers later or anytime they finish their work ahead of time.

C. Book (20 minutes)

The Coin Counting Book written by Rozanne Lanczak Williams can be used as a good wrap-up after the money exploration, before the students will need to do an individual assignment. With this book, we will not read the entire book. Ask students to make predictions about what they think the book will be about.

- “One penny, two pennies, three pennies, four. What will we get if we add just one more?” Have the class count along and someone showing this on the Elmo as you read it again. Then ask students what they think the answer is based on the previous discussion. If students say 5 pennies, continue to ask what 5 pennies equals. Students should come to the conclusion that if they add one more, they will get 5 pennies, which is the same as a nickel. Ask students how they know 5 pennies is equal to 1 nickel.
- The next page shows the math of adding up the pennies (1 cent at a time) to get to a nickel. Have students count along with the pennies and explain again why having five pennies is the same as having one nickel. Ask students to make a prediction about what the book is going to ask next.
- “Let’s count our five pennies just one more time. If we add five more pennies, we’ll have...” Have the students count the pennies aloud, while a student shows this on the Elmo. Then have students “think-pair-share” about what coin or coins could be equal to the number of pennies. Ask students to share what coin or coins they got and have students explain how they got their answer. All students should be able to come up with the conclusion that 10 pennies are equal to one dime. Some of the students might suggest that these 10 pennies are equal to 2 nickels. This is great if students can reach this conclusion, however the main focus should be that 10 pennies is equal to a dime.
- The next page shows the math of adding up the pennies (1 cent at a time) to get to a dime. Have students count along with the pennies and explain again why having 10 pennies is the same as having a dime.
- If any students made the connections between 10 pennies being anything other than a dime, such as 5 pennies and a nickel or 2 nickels. The teacher would continue reading the book, as written. On the next page, it discusses another way of getting a dime: five pennies and one nickel. Have students “think-pair-share” and discuss whether or not this is true and why or why not. Have students share their reasoning with the class. The same process will be used for the next page: 2 nickels = 1 dime.
- However, if none of the students make the connections, the teacher would leave these pages to discuss the next day after more discussions about coins.
- Next, there is a page with 25 pennies. Have students count aloud and think of what coin could equal 25 pennies. Have students share what they think the answer could be.
- On the next page, it shows 25 pennies, in 5 groups of 5 pennies, equals one quarter. Have the students count each penny aloud, then have students count by five. Have students explain how they know that 25 pennies equals a quarter. Ask students why they grouped the pennies by fives.
- Finish reading the book at the end of this page.

During this activity, the teacher will be making observations to make sure that students are counting correctly and showing the correct amounts on the Elmo. This will allow the teacher to assess the progress the class is making with their understanding of counting coins.

D. Activity (15 minutes)

Part one of the activity that is planned for this lesson, is a worksheet that asks students to work individually to match combinations of pennies with the corresponding coin. On the worksheet there are three different piggy banks: one with 5 pennies, one with 10 pennies, and one with 25 pennies. The students will be asked to draw a line to match the piggy bank with the correct coin.

Part two of the activity that is planned for this lesson, is a worksheet what asks students to work individually to circle characteristics that go with each coin. For example: for penny a student would circle the answers: brown, round, small, and smooth edges.

Closure (15 minutes total)

The closure for this lesson will be a discussion about what the students have learned that day. The teacher should foster an open environment for the students to discuss what they have learned. For this activity all of the students should come to sit on the rug. To begin the conversation the teacher can start by asking “What have you learned about coins today?” If the students get sidetracked with this conversation the teacher can ask more specific questions, such as: “Can anyone tell me something they learned about a Quarter?” or “What is one thing you learned about a penny today?” By having this discussion, the students will be able to recall what they have learned while also hearing their peers’ thoughts on the day as well. Aside from this being helpful to the class, it also gives the teacher a chance to gauge how much the students have taken away from the lesson.

Accommodations and Differentiation

- Students who have difficulty hearing will be seated close to the teacher during all discussions and while the book is being read.
- Students who are gifted will be challenged to think of other coins and combinations of coins that would match the coin being discussed throughout the book lesson. Also, students that finish their work faster than others will have time to color their piggy banks on the worksheet or play with the money and practice counting. They will also be allowed to play the coin game on the computers.
- For ELL students, there will be a larger focus on the vocabulary used throughout the lesson. The teacher will ensure that the students can determine which coins are pennies, nickels, dimes, and quarters.
- Students who are Special Education Learners can be scaffolded in a way that allows them to understand the main points of the lesson. Many manipulatives have been incorporated into the lesson to give these students multiple opportunities to learn what each coin is and how much it is worth. During individual work, such as the activity, the teacher will spend more time with these students to ensure that they understand the concepts.

Assessment

For this part of the lesson the teacher will be actively involved in the discussion to ensure that each student is grasping the concepts that are being taught. This will mostly be done through monitoring and observing the conversations. During the conversations throughout the book, the teacher will also be using the observation strategy of assessment to check for the students' understanding. Through students' answers to questions the teacher should be able to gauge each student's understanding of what they are being taught. The worksheet will also be a helpful tool in evaluating the students' knowledge of each coin's value and characteristics.

Day 2:

Objectives

- The students will be able to determine the value of a collection of pennies, a collection of nickels, and a collection of dimes.
- The student will be able to count by fives and tens and relate this to counting nickels and dimes.

Learning Targets

- I can count groups of pennies, groups of nickels, and groups of dimes.
- I will be able to compare counting by fives and tens to counting nickels and dimes.

SOL: Math

- 1.2 The student will count forward by ones, twos, fives, and tens to 100 and backward by ones from 30
- 1.7 The student will
 - a. Identify the number of pennies equivalent to a nickel, a dime, and a quarter
 - b. Determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less.

SOL: English

- 1.3 The student will adapt or change oral language to fit the situation.
 - c) Ask and respond to questions.

Materials

- Money Manipulatives
- White Boards
- YouTube - coin song.wmv - <https://www.youtube.com/watch?v=3ARNqyQ0CuY>

Narrative Description

Introduction

Review and Video (10 minutes)

Have students explain and review what the characteristics of each coin are and how much each coin is worth. As further review, the class will watch the youtube video Coin Song.wmv again. The video should be stopped at 2:06, so that the only the information the students learned the previous day. This video includes how much a penny, a nickel, a dime, and a quarter are all worth.

Instruction and Analysis

A. Counting by 5s and 10s (10 minutes)

Have students practice counting by 5s until they reach 100, writing it out on their whiteboards. Have multiple students read their answers aloud, and then have the class count aloud. Then have students count by 10s to 100, using their white boards. Have a few students count aloud, then have the class count aloud. Ask students how this relates to what we learned about money? Students will hopefully reply with counting by 5s is like counting nickels and counting by 10s is like counting dimes. Then use talk moves; rephrasing and revoicing to ensure that all students are engaged and understanding. However, if none of the students are able to see this relationship, ask the students questions to guide their thinking, such as: “How much is a nickel/dime worth?” “So, if a nickel/dime is worth five/ten cent, then what do we count by to count nickels/dimes?”

B. Number Talk (10 minutes)

Students will be instructed to use the hand signals they use every time they do number talks, which is thumbs up when you think you have the answer and add on multiple fingers if you find extra solutions. The students will be posed with the following questions, one at a time: “How many nickels do we need to make 45 cents?” and “How many dimes do we need to make 70 cents?” For each of these problems the teacher will follow this process:

- After allowing adequate wait time and seeing that each student had a thumbs up, the teacher will ask “Does anyone want to share their answer?”
- Write each of these answers on the board.
- Then, ask who would like to defend the answers.
- As students share their strategies, have another student rephrase what was done so that the explanation is done from different perspectives.
- After everyone has a chance to a share a strategy if they want, allow the students to turn-and-talk with their partner about which strategies they liked the most and thought they might use in the future.

C. Money Exploration and Discussion (45 minutes total)

Discussion (10 minutes)

Have students practice counting by nickels and dimes using money manipulatives. Have multiple different sets of nickels and sets of dimes for students to work on and then use the Elmo to allow students to count in front of the class.

- 2 Nickels, 5 Nickels, 10 Nickels, 15 Nickels, 19 Nickels, 2 Dimes, 4 Dimes, 6 Dimes, 8 Dimes, 10 Dimes
 - For each different set of coins, have students use money manipulatives to count out and write the answer on their white boards. Have a student come up to the Elmo to count the coins aloud and share their answer. Have someone revoice their answer using their own words. Continue the same process for each set of coins. Using wait time to give students plenty of time to count each set.

Game - “I have... Who has?” (20 minutes - game: 15 min. & windshield check: 5 min.)

After the students have gotten a chance to explore collections of pennies, collections of dimes, and collections of nickels, the teacher will pass out one “I have... Who has?” game card to each student. If there are extra cards the teacher will give the higher level students a second card. On each card there will be two statements. The first will be I have... followed by the number cents the student has (for example 20 cents). Then the second statement will be “Who has...” followed by a collection of either pennies, nickels, or dimes (for example, 3 nickels). One student will start the game with their “Who has...” question. Then the student that has the amount that equals the number of coins will respond with “I have...” then they will ask their “Who has...” question. This will continue until all students have read off both of their statements and the student who started gets to read their “I have...” statement. Throughout this activity the teacher should be observing how quickly the students are able to find out if their card matches the one that was read out. After the activity the students will also be given a windshield check assessment so that the teacher is able to understand how comfortable each student feels about this topic.

Debate Journal (15 minutes)

The teacher will hand students a debate journal with the prompt: “Mario has two dimes and says that he has 20 cents. Louise has 4 nickles and she says that she has 20 cents. Who do you agree with? Explain why.” The teacher will read the prompt aloud and then explain the instructions. The students are familiar with this type of prompt as they have had numerous experience working with them throughout this course. The teacher will just review the instructions by telling the students to describe who they agree with and to explain their thinking thoroughly. The teacher should collect them as students finish to be used as an assessment.

Closure (15 minutes)

As closure, have one student come to the Elmo and make their own set of either pennies, nickels, or dimes. Have students answer on their white boards, then have the student that posed

the question answer on the Elmo. Allow multiple students to pose questions and give time for students to answer. After, have a short discussion asking students what they learned today. If students get side tracked, the teacher should pose questions: “How do we count nickels?” or “How do we count dimes?” This discussion will serve as a review of what the students learned during the lesson and help the teacher understand what the students actually learned from the lesson.

Accommodations and Differentiation

- Students who have difficulty hearing will be seated close to the teacher during all class discussions.
- Students who are gifted will be challenged to think of other coins and combinations of coins when given the opportunity to show on the Elmo.
- Students that finish their individual work faster than others will be given time to play the coin game on the computer.
- For ELL students, there will be a larger focus on the vocabulary used throughout the lesson. The teacher will ensure that the students can determine which coins are pennies, nickels, dimes, and quarters. The lesson will also have a large focus on the pictures of coins and the coin manipulatives to help with understanding.
- Students who are Special Education Learners can be scaffolded in a way that allows them to understand the main points of the lesson. Many manipulatives have been incorporated into the lesson to give these students multiple opportunities to learn what each coin is and how much it is worth. During individual work, the teacher will spend more time with these students to ensure that they understand the concepts.

Assessment

The assessment of this lesson will be focused mainly on what the teacher hears throughout the discussions. The student responses the teacher receives from questions during group time will help her gauge understanding of the concepts.

The students will also be given the windshield check assessment after they play the “I have... Who has” game. This assessment will be a half a sheet of paper with the questions “How many bugs do you have on your windshield?” and “What is making it hard to see clearly?” The students will be able to select “My windshield is crystal clear,” meaning they completely understand, “My windshield has a few bugs,” meaning they mostly understand, but don’t feel completely comfortable, or “My windshield is covered in bugs.” meaning they do not understand the topic. The second question gives the student the opportunity to share with the teacher what they might not understand about the topic. The teacher will collect these and review them to make sure that every student has a grasp on the topic and if they do not the teacher will know that this topic needs to be reviewed.

Another part of the assessment for this lesson is the debate journal. The teacher will be able to assess students based on their reasoning and explanations. If students have included clear reasoning and explained why they agreed with both Mario and Louise, the teacher will know that they are understanding the topics, however if students provide little reasoning or only agree with either Mario or Louise the teacher will be able to see the student is lacking understanding. Using the debate journal as an assessment strategy allows the students to really show what they know by allowing them to thoroughly explain their reasoning.

Day 3:

Objectives

- The students will be able to determine the value of a collection of pennies, nickels, and dimes.
- The students will be able to use their understanding of coins to play store and purchase classroom object using pennies, nickels, and dimes.

Learning Targets

- I can count groups of pennies, nickels, and dimes.
- I will be able to play store and purchase objects in my classroom using groups of pennies, nickels, and dimes.

SOL: Math

- 1.7 The student will
 - c. Identify the number of pennies equivalent to a nickel, a dime, and a quarter
 - d. Determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less.

SOL: Physical Education

- 1.1 The student will demonstrate the correct critical elements (small, isolated parts of the whole skill or movement) of locomotor, non-locomotor, and manipulative skills.
 - f) Demonstrate moving to a rhythm by keeping time to a simple beat, using a variety of locomotor and non-locomotor skills

Materials

- YouTube - coin song.wmv - <https://www.youtube.com/watch?v=3ARNqyQ0CuY>
- Website - Fruit Splat Coin Game
http://www.sheppardsoftware.com/mathgames/earlymath/Fruit_Shoot_coins.htm
- Money Manipulatives
- White Boards
- Candy: Dum Dums, Reese's, Swedish fish, Hershey Kisses

- Bowls

Narrative Description

Introduction (5 minutes)

For the introduction to the lesson, the teacher will show the “coin song.wmv” YouTube video. This time the teacher will allow the video to play all the way through so that the students have an introduction into adding different coins. Have the students stand and dance along to the song using their fingers to show how much each coin is worth. The students will also be allowed to quietly sing along in a whisper voice. After the video, discuss what we heard today that we have not talked about in previous days. The students will hopefully respond that the song talked about adding different coins together. If none of the students mention this, ask students “Have we added a penny and a nickel before?” in order to get the conversation started. Continue to discuss how in the video they added other coins together to get a total amount.

Instruction and Analysis

A. Number Talk (10 minutes)

Students will be instructed to use the hand signals they use every time they do number talks, which is thumbs up when you think you have the answer and add on multiple fingers if you find extra solutions. The students will be posed with the following questions, one at a time: “What coins could you use to equal 16 cents?” and “What coins could you use to equal 27 cents?” For each of these problems the teacher will follow the usual number talk process:

- After allowing the proper wait time and seeing that all students have at least one solution, the teacher will ask the students if anyone would like to share their answer.
- The teacher will then write each of these answers on the board.
- Then, ask who would like to defend any of the answers.
- As students share their strategies, have another student rephrase what was done so that the explanation is done from different perspectives.
- After everyone has a chance to a share a strategy if they want, allow the students to turn-and-talk with their partner about which solution was the most efficient.
- After allowing wait time, have students share which solution they thought was the most efficient and why.

B. Money Exploration and Discussion (45 minutes)

Discussion (10 minutes)

Have students practice counting different collections of coins (pennies, nickels, and dimes). Have different collections of coins for students to practice counting using the money manipulatives. Then have a student show the coins on the Elmo and count the coins aloud.

- 2 Dimes and 1 Penny

- 2 Dimes, 1 Nickel, and 1 Penny
- 1 Dime, 3 Nickels, and 4 Pennies
- 6 Nickels and 3 Pennies
- 5 Dimes, 3 Nickels, and 7 Pennies
- 7 Dimes, 1 Nickel, and 12 Pennies
- 2 Dimes, 12 Nickels, and 3 Pennies

For each different collections of coins, have students use money manipulatives to count out and write the answer on their white boards. Have a student come up to the Elmo to count the coins aloud and share their answer. Have someone revoice their answer using their own words. Use this process for all of the different collections of coins. Once the students have gone over the amounts the teacher suggests, ask a few students to come up with their own amounts to share with the class on the Elmo. Throughout the discussion the teacher should ask students a few key questions. “What strategy did you use?” “Why is this strategy helpful for you?” “Are you using the same strategy that you used before when there was only one type of coin in each collection?” “Why did you change strategies?” The teacher could also ask students to compare each other's strategies.

Website - Fruit Splat Coins (10 minutes)

After allowing the students to explore the money and have a small discussion. The teacher would use the website: http://www.sheppardsoftware.com/mathgames/earlymath/Fruit_Shoot_coins.htm to engage students in a game that combines pennies, nickels, and dimes. The teacher will allow each student to count a set of coins and choose which fruit to shoot based on the total amount shown. This game will be used to wrap-up the discussion and ensure that the students are comfortable counting coins. The teacher will ask students to count coins aloud before choosing the fruit to shoot, in doing this the teacher will be able to assess each student’s ability to count coins and determine where common mistakes occur in order to inform future instruction. The teacher would only allow each student to go once, then she would move on to the next section of the lesson, however, she would allow students to play this game during centers and anytime they finished their work early.

Cooperative Learning Activity - Simultaneous Roundtable (25 minutes)

After the students have been given the opportunity to discuss collections of coins, they will be put into groups of 4. Each student in the group will be given a worksheet with an amount written at the top, for example one paper might have 67 cent written on it. The students will be instructed to use their money manipulatives to figure out a collection of coins they can use to make 67 cent. Then they will fill out how many of each coin they have used and pass their paper clockwise. When the next student gets the paper, they will be instructed to check the previous group member’s work. Then they will use the money manipulatives to find a different collection of coins that will equal 67 cent and record their findings. This will continue until all four group

members have had each paper. Then the paper will be returned to the original owner who will check the last person's work. By the end of the activity there should be four different collections of coins that can be used to make the amount of money that is given at the top of the paper. After everyone has completed this activity, the teacher should allow students to come up to the Elmo and how they got the amounts. Then, the students should be instructed to check and see if this method works. After the review of the activity, the teacher can ask the students, "*Which round was the hardest?*" Another question the teacher can ask is "*Which amount did you think was the easiest to find and which was the most difficult?*" During this activity the teacher will be walking around to observe how the students are figuring out the problem. After the activity, the teacher will take up the papers so that she can assess each student's work.

C. Whole Class Activity (25 minutes)

For this activity the students will be playing store to "purchase" candy of their choosing. Each student will be given the opportunity to purchase any three types of candy they want. Their options will be: Dum Dums, Reese's, Hershey Kisses, and Swedish fish. The students will be separated into 3 groups. The groupings will be based on their achievement and understanding of the topic throughout the week based on their progress on daily worksheets and closure activities.

- For the highest group, the prices for the candy will be: Dum Dums - 64 cent, Reese's - 89 cent, Hershey Kisses - 73 cent, Swedish fish - 56 cent.
- For the middle group, the prices for the candy will be: Dum Dums - 23 cent, Reese's - 55 cent, Hershey Kisses - 46 cent, Swedish fish - 30 cent.
- For the lowest group, the prices will be: Dum Dums - 15 cent, Reese's - 50 cent, Hershey Kisses 30 cent, Swedish fish - 25 cent.

As a group they will be given a bowl of each type of candy, pre-labeled with the prices, and a pile of coins that includes 20 pennies, 10 nickels, and 10 dimes. They will start with all the coins in the middle. The students will take turns purchasing their candy, one piece at a time. The student that is making a purchase will choose the candy they want and then find the amount of coins they need to purchase that piece of candy. They can use any collection of pennies, nickels, dimes, and quarters as long as they obtain the correct total. Their group members will check to ensure that they have separated out the correct amount of change before they can receive their piece of candy. If one of the group members does not think the total is correct, the student should count their coins out loud so that they can determine as a group what they need to change to get the correct total. The students should go around in circle taking turns and following this process until everyone has had the chance to make a purchase 3 times. Throughout this activity the teacher should walk around the room and observe how each group is working together and how well each student is making a collection of coins that is the right amount to purchase their candy. This will help the teacher to assess how capable each student is of using the correct amount of coins. The teacher will have a checklist that will be used while she is making these observations to assess and keep track of how each student has done. The students will also have a chance for

peer review and feedback after each turn since the students are checking behind one another after each turn.

Closure and Introduction of Project (5 minutes)

After allowing students to participate in the whole group activity of “playing store,” the teacher would introduce the project for the unit. This project asks students to find an item from home or a picture online that they would like to “sell” to the class. The students will make a poster, PowerPoint, paper book, or another format that includes the item students are selling, the price the item is being sold for, why they chose that price for the item, and at least three different ways to show the price using the coins we have learned about; pennies, nickels, and dimes. Students will all be given the sheet with the project instructions and the rubric that will be used to grade their project.

For the closure to today’s lesson, the students will be given the opportunity to find an object in the classroom that they want to “sell” to the class. For this activity, the students will remain in the same groups they were in for the store activity. After choosing an object they would like to sell, they will assign a price to the item and share with the class, one group at a time. The teacher should choose one member from each group to point out what they are sharing and another member from the group to tell the class how much they are selling that for. After the class knows how much they need to buy this item, everyone will work individually to find a collection of coins that equals that amount. After finding the collection, they should give the teacher a thumbs up. Once everyone has the answer, they will turn and talk with their neighbor about how they obtained the total. After about a minute of being able to talk with their neighbor, the teacher will choose one student to share the collection of coins they used to “purchase the object.” Each group will follow this same process, until every group has had a turn. This closure activity not only wraps-up the whole group activity, but also prepares students for their project that they will have to complete individually.

Accommodations and Differentiation

- The playing store activity is differentiated for high, moderate, and lower levels to meet the needs of all the students within the classroom. Higher achievers will be in a group where larger numbers are used, lower achievers will be in a group where smaller numbers that are multiples of only 10 and 5 will be used, and moderate achievers will have numbers in the middle of these two groups.
- For students who may have difficulty hearing, they will be seated closer to the teacher for all instruction.
- For ELL students, there will be a larger focus on the vocabulary used throughout the lesson. The teacher will ensure that the students can determine which coins are pennies, nickels, dimes, and quarters and how much each one is worth.
- For gifted students, the teacher can allow the students who may finish faster to complete another round of buying candy.

Assessment

For today's assessment the teacher will use the papers that were collected from the cooperative learning activity. Within each group of four papers, each student completed a total of 4 problems. The teacher can check this to ensure that the students were able to find a correct set of coins that equaled the amount of money at the top of their paper. The teacher will also be able to check to see if the students could determine rather the answer their peer gave was correct or not.

The teacher will also use the information observed throughout the store activity to informally assess each student. By walking around during this activity, the teacher should be able to observe which students can efficiently purchase their candy and which students may have a more difficult time finding the right collection of coins. During her observations, the teacher will also be using a checksheet. The check sheet will include: engagement, right answer, wrong answer, comments. The teacher should try to be around each student for at least one turn so that she can mark if they had a right or wrong answer. If the teacher is around for more than one turn of a particular student, then she can put a second check if needed. For example, if the teacher sees that a student is struggling she may want to observe this student for more than one turn. If the teacher sees that a student is able to self-correct or use peer's advice to find the correct collection of coins then this should be written in the comment section. During this task the students will also be using the peer review assessment strategy to determine whether the collection of coins would be the right amount to purchase the candy.

Post - Assessment

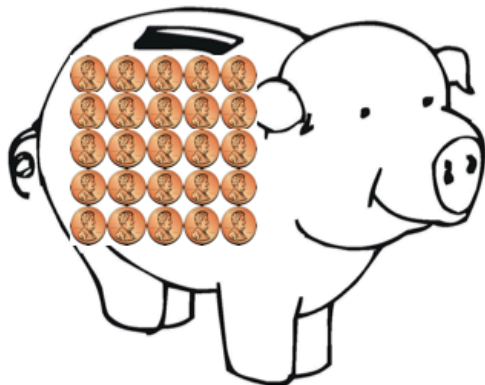
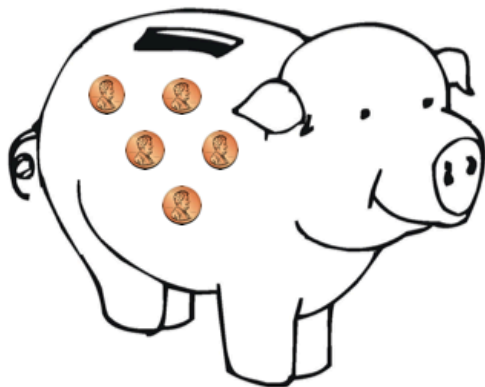
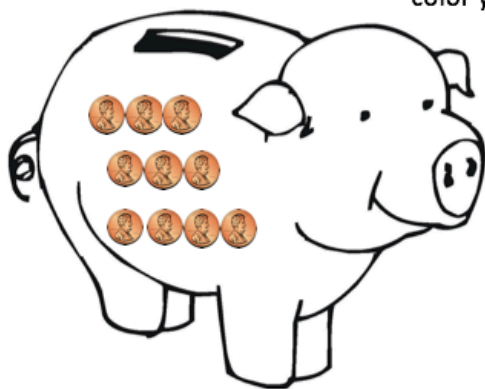
The post-assessment of the unit will be a worksheet that encompasses all of the objectives that have been discussed throughout the unit. The first part of the assessment will have students match the coins to the name of the coins. This will show their knowledge of the characteristics of each coin. The next part of the assessment will ask students to write the value of each coin. Finally, the students will be asked to determine how much collections of coins are worth.

Day 1 – Worksheet

Name: _____

Piggy Bank Math

Draw a line to match each piggy bank with the coin that has the same value. Then color your piggy banks!



Day 1 – Worksheet

Name: _____

Coin Characteristics

Circle the characteristics that are true for each of the following coins. If you come up with more characteristics, you can add them to the list.

1. Penny

Small Round Big Rough Edges
Brown Silver Smooth Edges

2. Nickel

Small Round Big Rough Edges
Brown Silver Smooth Edges









3. Dime

Small Round Big Rough Edges
Brown Silver Smooth Edges

4. Quarter

Small Round Big Rough Edges
Brown Silver Smooth Edges

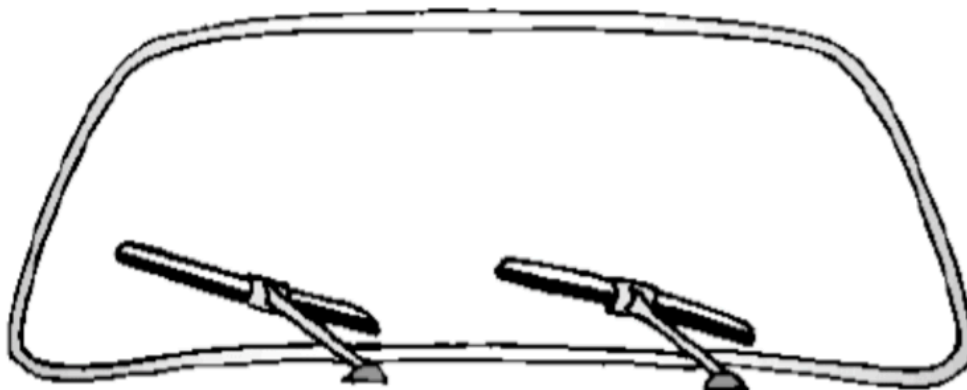
Day 2 – Game “I have... Who has...?”

<p>I have:</p> <p>9 cents</p> <p>Who has:</p> 	<p>I have:</p> <p>40 cents</p> <p>Who has:</p> 
<p>I have:</p> <p>15 cents</p> <p>Who has:</p> 	<p>I have:</p> <p>60 cents</p> <p>Who has:</p> 
<p>I have:</p> <p>10 cents</p> <p>Who has:</p> 	<p>I have:</p> <p>4 cents</p> <p>Who has:</p> 
<p>I have:</p> <p>25 cents</p> <p>Who has:</p> 	<p>I have:</p> <p>50 cents</p> <p>Who has:</p> 

Day 2 – Windshield Check after Game

Windshield Check

How many bugs do you have on your windshield? What is making it hard to see clearly?



My windshield is crystal clear.



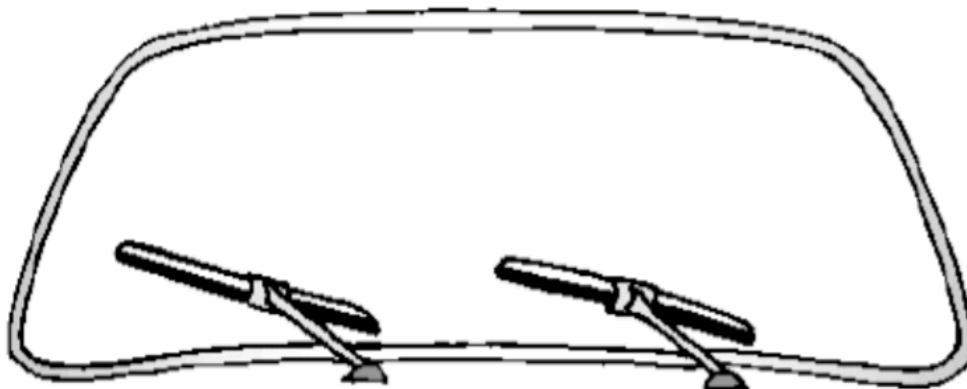
My windshield has a few bugs.



My windshield is covered with bugs.

Windshield Check

How many bugs do you have on your windshield? What is making it hard to see clearly?



My windshield is crystal clear.



My windshield has a few bugs.



My windshield is covered with bugs.

Name: _____

Debate Journal

“Mario has two dimes and says that he has 20 cents. Louise has 4 nickles and she says that she has 20 cents. Who do you agree with? Explain why.”

Debate Journal Sample Expected Response – Strong

I agree with both Mario and Louise because they both have 20 cents. Mario has 20 cents because each dime is worth 10 cents and $10+10=20$. Louise also has 20 cents because each nickel is worth 5 cents and $5+5=10+5=15+5=20$.

Day 3 – Cooperative Learning Activity

Name: _____

Cooperative Learning Activity

Find a collection of coins that is equal to...

67 ¢

_____ Pennies _____ Nickels _____ Dimes

Checked

_____ Pennies _____ Nickels _____ Dimes

Checked

_____ Pennies _____ Nickels _____ Dimes

Checked

_____ Pennies _____ Nickels _____ Dimes

Checked

Day 3 – Cooperative Learning Activity Continued

Name: _____

Cooperative Learning Activity

Find a collection of coins that is equal to...		
95 ¢		
_____ Pennies	_____ Nickels	_____ Dimes <u>Checked</u>
_____ Pennies	_____ Nickels	_____ Dimes <u>Checked</u>
_____ Pennies	_____ Nickels	_____ Dimes <u>Checked</u>
_____ Pennies	_____ Nickels	_____ Dimes <u>Checked</u>

Day 3 – Cooperative Learning Activity Continued

Name: _____

Cooperative Learning Activity

Find a collection of coins that is equal to...		
34¢		
_____ Pennies	_____ Nickels	_____ Dimes
		<u> </u> Checked
_____ Pennies	_____ Nickels	_____ Dimes
		<u> </u> Checked
_____ Pennies	_____ Nickels	_____ Dimes
		<u> </u> Checked
_____ Pennies	_____ Nickels	_____ Dimes
		<u> </u> Checked

Day 3 – Cooperative Learning Activity Continued

Name: _____

Cooperative Learning Activity

Find a collection of coins that is equal to...

79 ¢

_____ Pennies _____ Nickels _____ Dimes

Checked

_____ Pennies _____ Nickels _____ Dimes

Checked

_____ Pennies _____ Nickels _____ Dimes

Checked

_____ Pennies _____ Nickels _____ Dimes

Checked

Day 3 – Playing Store Teacher Checksheet

Student	Engaged	Right Answer	Wrong Answer	Comments
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Project Introduction and Rubrics:

FOR SALE:

What is something you have at home or that you have seen on the internet that you could sell to the class? Your task is to find something from home or a picture off the internet of something that you could “sell” to the class. You will bring in the item or picture, with the price of the item already determined. You will need to write a 2-3 sentences explaining why you chose this price. You will also be asked to show at least 3 ways to show this price using the coins we have talked about in class: pennies, nickels, and dimes. The project can be turned in either by PowerPoint, on a poster, or in a paper book.

For Sale – Coin Unit Project Rubric (Student)

	4	3	2	1
Item	I chose an item from home or a picture off the internet and gave it a fair price.	I chose an item from home or a picture off the internet and gave it a price.	I chose an item from home or a picture off the internet and did not give it a price.	I did not choose an item from home or a picture off the internet and did not give it a price.
Explanation	I gave a clear and thorough explanation as to why and how I chose my price.	I gave a clear explanation as to why and how I chose my price.	I somewhat gave an explanation as to why and how I chose my price.	I gave little to no explanation as to why and how I chose my price.
Coin Combination 1	The coins I used add up to my price. I used pennies, nickels, and dimes.	The coins I used add up to my price.	The coins I used almost add up to my price.	The coins I used did not add up to my price.
Coin Combination 2	The coins I used add up to my price. I used pennies, nickels, and dimes.	The coins I used add up to my price.	The coins I used almost add up to my price.	The coins I used did not add up to my price.
Coin Combination 3	The coins I used add up to my price. I used pennies, nickels, and dimes.	The coins I used add up to my price.	The coins I used almost add up to my price.	The coins I used did not add up to my price.
Design and Format	I submitted a clear and colorful design. I used either a PowerPoint, a poster, or a paper book.	I submitted a colorful design. I used either a PowerPoint, a poster, or a paper book.	I used either a PowerPoint, a poster, or a paper book. My design was not clear or colorful.	I did not use a PowerPoint, a poster, or a paper book. My design was not clear or colorful.

For Sale – Coin Unit Project Rubric (Teacher)

	4	3	2	1
Item	The item is chosen from their house or a picture off the internet and is given a fair price.	The item is chosen from their house or a picture off the internet and is given a price.	The item is chosen from their house or a picture off the internet and has no price.	There is no item or price.
Explanation	Gives a thorough and clear explanation as to how the price was chosen.	Gives a clear explanation as to how the price was chosen.	Somewhat gives an explanation as to how the price was chosen.	Gives little to know explanation as to how the price was chosen.
Combination #1	Coins chosen correctly represent the price of the item and uses a variety of pennies, nickels, and dimes.	Coins chosen correctly represent the price of the item.	Coins chosen almost add up to the price of the item.	Coins chosen do not add up to the price of the item.
Combination #2	Coins chosen correctly represent the price of the item and uses a variety of pennies, nickels, and dimes.	Coins chosen correctly represent the price of the item.	Coins chosen almost add up to the price of the item.	Coins chosen do not add up to the price of the item.
Combination #3	Coins chosen correctly represent the price of the item and uses a variety of pennies, nickels, and dimes.	Coins chosen correctly represent the price of the item.	Coins chosen almost add up to the price of the item.	Coins chosen do not add up to the price of the item.
Design	Project is submitted with a clear, colorful design on one of the approved formats.	Project is submitted with a clear design on one of the approved formats.	Project is submitted with one of the approved formats.	Project is submitted not on one of the approved formats.