

A Bag Full of Money

Summary

Students will be able to: Demonstrate a positive learning attitude; Understand and use basic concepts and skills; Communicate clearly in oral, artistic, written, and nonverbal form.

Main Core Tie

Mathematics Grade 2

[Strand: MEASUREMENT AND DATA \(2.MD\) Standard 2.MD.8](#)

Materials

- *The Story of Money*
- *The Coin Counting Book*
- *If You Made a Million*
- *Coin Samples*
 - . Coin images found on website: <http://usmint.gov/kids>
 - Enlarged, cutout cardstock copies of the [Coin Samples page](#) -- copied at 200%
- [Coin Samples 64%](#)
- Math journals
- Scissors
- Glue stick or tape
- Pencils
- Cloth bags big enough for students in which to put their hands
- Bucket of coin manipulatives -- at least 75 pennies, 75 nickels, 75 dimes, 60 quarters, 30 half dollars
- A variety of trinkets (small toys, school supplies, etc.) of your choice for a storelike setting. Items can be donated by parents, bought from outlet or discount stores or websites, or donated by students. Make sure items are clean and appropriate. You may want to set guidelines.
- Small labels with purchase prices listed for store items above.
- Store Clerk and Banker signs tied with yarn to place over head
- ["Profession" labels](#)
 - for students
 - White board markers
 - Document camera, optional
 - Digital projection camera and accompanying computer, optional

Books:

- *The Story of Money*
, by Betsy Maestro, ISBN: 9780688133047
- *The Coin Counting Book*
, by Rozanne Lanczak Williams, ISBN: 9780881063264
- *If You Made a Million*
, by David M. Schwartz, ISBN: 9780688136345
- *All About Money*
, by Erin Roberson, ISBN: 0516246720
- *Pennies*
, by Mary Hill, ISBN: 0516251724

- *Nickels*
 , by Mary Hill, ISBN: 0516251716
- *Dimes*
 , by Mary Hill, ISBN: 0516251694
- *Quarters*
 , by Mary Hill, ISBN: 0516251732
- *Dollars*
 , by Mary Hill, ISBN: 0516251708
- *Spending and Saving*
 , by Mary Hill, ISBN: 0516251740
- *Alexander Who Used to Be Rich Last Sunday*
 , by Antheum Viorst, ISBN: 06899306024
- *Arthur's Funny Money*
 , by Loreen Leedy, ISBN: 0064440486
- *Do you Wanna Bet?*
 , by Jean Cushman, ISBN: 0618829996
- *Follow the Money*
 , by Loreen Leedy, ISBN: 0823417948
- *Monster Money*
 , by Grace MacCarone, ISBN: 0590120077
- *My Rows and Piles of Coins*
 , by Tololwa M. Mollel, ISBN: 0395751862
- *The GoAround Dollar*
 , by Barbara Adams, ISBN: 0027000311
- *The Penny Pot*
 , by Stuart J. Murphy, ISBN: 0064467179
- *26 Letters and 99 Cents*
 , by Tana Hoban, ISBN: 068814389X
- *How Much Is That Guinea Pig in the Window?*
 , by Joanne Rocklin, ISBN: 0590227165
- *Where the Sidewalk Ends*
 , by Shel Silverstein, ISBN: 0439812321

Background for Teachers

Brain research shows students will better understand, remember, and connect lesson activities to situations outside of the school environment when they use manipulatives, real-life situations, and active learning in an educational setting (Cain & Cain, *Making Connections: Teaching and the Human Brain*, AddisonWesley, 1994). According to Marzano (*Building Academic Vocabulary*, ASCD, 2005), games are one of the most underused instructional tools in education. They help students keep concepts forefront in their thinking and capitalize on that information in situations outside of the classroom.

In Utah, second graders need to determine the value of five coins totaling a dollar or less. This lesson will help children understand pennies, nickels, dimes, quarters, and half dollars.

Understanding money and the use of it is a critical life skill for students. However, money is one of the harder standards for second graders to grasp. Hence, lots of practice using coins in various ways will help students understand the concept. This lesson will use practice and assorted games to engage students' understanding and use of money within the scope of life activities.

Intended Learning Outcomes

Students will be able to:

- Demonstrate a positive learning attitude
- Understand and use basic concepts and skills
- Communicate clearly in oral, artistic, written, and nonverbal form.

Instructional Procedures

Invitation to Learn

Have about 50 assorted coins sitting on a table easily accessible to all students. Ask them to file by the table and pick a coin. When all students have picked a coin, ask students to identify their coin by silently walking to and standing near an enlarged cardstock coin attached to the walls in various areas of the classroom (see section in *Coin Samples*, make a paper copy, cut coins apart, then make a cardstock copy at 200% and cut out). When all students have moved to a coin location, ask students to look closely at their coin and assess if they have chosen correctly by matching their coin to the enlarged coin on the wall. Ask students to look at both sides of the coin, as each side shows a different image.

Instructional Procedures

The Money Story

Preread the book, *The Story of Money*. Predetermine the pages you will read or tell about in your own words from this book.

Bring students to the rug area or other area where students can be close to the teacher.

Read or tell in your own words about the pages you have selected from *The Story of Money*.

Show pictures in the book to the students.

Briefly discuss with students why we have money. Encourage students to ask questions and explore the money concept.

At their desks, have students write in their math journals what they know about money, including how their families use money to get what they need to live (i.e. food, clothing, shelter, etc).

Have students share their "money knowledge" with a partner or their table group.

Bring out in a class discussion the following concepts:

Money helps our families get the necessities or "needs" of life, like food, clothing, a house or an apartment, a car, etc.

Money can buy us things we "want", like books, games, toys, furniture, recreational activities, etc.

When people get a job, they get paid for their work, which in turn helps them to buy their "needs" and "wants." Be careful; this is not an absolute concept, but it is general enough to show students how money usually comes to family units.

Invite students to share what they want to do for a job when they grow up which could earn them money. Do not expect all children to contribute, and be sensitive to children's answers.

Five Coins in a Bag

Introduce the five coins using their names only (no monetary values at this time): penny, nickel, dime, quarter, and half dollar. Show enlarged cardstock coins to the students; show both sides of each coin (see *Coin Samples* page -- make a copy, cut coins apart, then copy at 200/300% and cut out again). Ask children to describe the pictures and words on each coin. Compare the relative size of each coin to the others. Make several copies of the enlarged coins as needed so all students can get a closer look at them. Students can be in groups for this part of the activity. Have students repeat the names of each coin as you hold it up for all to see.

Write the names of the coins on the white board next to the appropriate coin.

Hand out a set of coins pictures from the *Coin Samples* 64% page to each student and have them cut out the coins. The page has three sets of coins which can be cut and used for three

students.

Students should glue cutout coins into their math journals, then write the correct name next to the coin.

Play a game by holding an enlarged coin up and have students quickly say its name. Switch up the responses by having girls say a coin, then boys say the next one. Or have one side of the room, then the other give the names, etc. Do this more and more quickly until you have shown each coin about five times.

With students in groups of two, give each group a bag of coins containing the following: 5 pennies, 5 nickels, 5 dimes, 2 quarters, 2 half dollars.

Post the cardstock coins on the wall, including the reverse side of each coin.

Ask students to reach into the bag and pull out a coin.

Have the students tell their partner what coin they have pulled out.

Students can check their answers by looking at the posted cardstock coins on the wall.

If the students are correct, they get to keep that coin. If they are wrong, they put the coin back into the bag.

Now the other person takes a coin from the bag and repeats the process of naming and checking the coin. The winner is the person with the most coins.

Students should repeat this game with a different partner. Repeat the game as often as needed to learn the names of the coins. This game can be used as a math center activity.

A Bag of Cents

Using the enlarged cardstock coins, introduce the values of the five coins: penny = 1¢, nickel = 5¢, dime = 10¢, quarter = 25¢ and half dollar = 50¢. Write this on the board using the word "cents" and the cent sign, ¢.

Have the students write the names and values of the coins in their math journals.

Group students into pairs or have students pick a partner.

Give each group a bag of coins containing the following: 5 pennies, 5 nickels, 5 dimes, 4 quarters, 2 half dollars.

Play the bag game from the previous activity using the coin values instead of their names.

Students should repeat this game with a different partner. Repeat the game as often as needed to learn the values of the coins. This game can be used as a math center activity.

Counting a Bag of Coins

At the rug, read the book, *The Coin Counting Book*.

Divide students into groups and give each group a bag of various coins.

As you reread *The Coin Counting Book*, have students place coins on their desks to match the pictures in the book. Stop before the first set of blue pages labeled "How about a dollar?" For an extended lesson or for challenging higher ability students, have students do the same for the next set of yellow pages, stopping at the second blue pages.

Have all groups recreate the coin addition problems on the last two pages which are solid orange. In their math journals, have each student make three coin addition problems using two to five coins equaling no more than a \$1.00.

For struggling students, work with them in a small group, while the rest of the class is writing and adding coin problems in their math journals.

Buy a Bag of Treasures

Ahead of time, organize a variety of trinkets, small toys, school supplies, etc. of your choice into a storelike setting. Determine the price of each item with a label. Items can be donated by parents, or students, bought from outlet or discount stores or websites. Make sure items are clean and appropriate. You may want to set guidelines.

To practice the concept that the students will be able to determine the value of a set of up to five coins that total \$1.00 or less (e.g., three dimes, one nickel, and one penny equals 36¢), do the

following activity.

The morning of this lesson, give each student a "profession" in the classroom, along with a determined wage in coins. Write the "profession" and "wage" on cardstock (see *Profession Cards*) and pass out to students, either by design or random drawing. Students should not be given coins at this time. Examples of "professions" and wages: chair straightener 75¢, trash picker upper 92¢, white board eraser 55¢, door monitor 38¢, desk straightener 81¢, pencil sharpener monitor 47¢, line leader 62, class positivecommentgiver 99¢, helper to another student 96¢, chapter book organizer 53¢, ball retriever 64¢, etc. You may have more than one of each job. For higher ability students, have them create their own jobs and wages, getting approval from the teacher.

Determine a store clerk and a banker, who will receive specified wages. Use yarn to place "store clerk" and "banker" signs over the heads of the selected students. Remember to rotate these two positions. Other ways to differentiate this activity is by giving carefully planned "professions" and amounts of wages to each student.

Let students know you expect them to do their jobs for a specified amount of time during a different subject taught, such as reading, social studies, going to recess or lunch, P.E., etc. When math time comes, briefly assess students' knowledge of coin names and values by quickly showing enlarged cardstock coins (see Coin Samples page) and asking class responses to names and values.

Read the book, *If You Made a Million*, emphasizing the little signs on each page stating how the person earned the money.

Make the connection from the book to the students' professions and wages by discussing with the students how the characters in the book earned their money.

Pay each student with a bag of coins according to his/her wage.

Rotate four to five students at a time to the store where they will "buy" items with the coins they have. Make sure the students can buy several items totaling a dollar or less, and that the prices of items are not the exact amounts of the wages. After students select their treasures, have them count out their money to the store clerk. The store clerk will count the money again as he/she puts it in small containers. The banker will witness the purchase of the treasures and silently count the value of the coins also. The store clerk should deposit money with the banker when coins total over \$2.00. The store clerk should only deposit even dollar amounts with the banker, keeping some change handy for transactions. Both banker and store clerk should count the money together when depositing it into the bank.

While small groups of students are at the store, the rest of the class should be journaling their "professional" experience in their math journals, stating what they had to do and how much money they received as wages. Expect students to include their feelings how they felt about their jobs. Help students to understand there are many real jobs in the world that are not glamorous, yet are very necessary to keep our community functioning clean and safe. Examples: trash collectors, snow removal drivers, plumbers, construction workers, road builders, city sanitation workers, street cleaners, etc. As an extension, you could use these "titles" for the classroom "professions," adding job descriptions that would fit within the classroom frame.

Lesson and Activity Time Schedule

Each lesson is 55 minutes.

Each activity is 30 minutes.

Total lesson and activity time is 85 minutes.

Activity Connected to Lesson

How Many Ways Can You Make that Amount?

Write an amount of money (up to \$1.00) on the white board. Have students use their bags of coins to make the amount. Let students share what coins they used to make the amount with a

partner or group of students. Then have students share with the class; write the various ways on the white board.

Variations of this activity: Have students make the amount and then write/draw it in their math journals; have students use individual white boards and write the corresponding amount of each coin they used. When you give a signal, all students should hold up their white boards. Pick several students to share their method of making the specified amount of money.

What's in the Bag?

Divide the class into groups or partners. Each group should have a bag of coins. Students should place the coins on their desks. Taking turns, students should choose an amount of money to place in the bag and give clues to the other student. The clues can be the number of coins in the bag; a given range of amount in cents in the bag (like 2550¢). The other student will guess what coins are in the bag. A variation on this would be for the student to play the "high/low" game to discover the amount in the bag.

Do You Have Enough?

Students should divide into groups. One person will be the store clerk, one person the "giver," and the others will be the "buyers." The store clerk chooses a few items in the room to pretend to sell (i.e. small books, pencils, recycled paper, etc.). The store clerk labels each item with a price which will be \$1.00 or less. Each buyer will choose an item to buy. The giver will hand out from one to five coins to each of the buyers. The buyers will have to decide if they have enough money to buy the item they chose or if they need more money. If they need more money, how much more do they need? Have students work the problem in their math journals. Switch the jobs around until all students have been the store clerk and giver.

I Have . . . Who Has? Game

Refer to Core Academy 2007, Second Grade, lesson [Making \\$ents](#) for this activity. Make copies of the I Have Who Has Cards on cardstock and cut out. Make enough sets for the number of student groups you create. A student in each group will shuffle the cards and hand out equal amounts of cards. If the cards do not divide equally, give one more to each student until there are no more to give out. The person who has the smallest amount of cards goes first; if all students have equal amounts of cards, the person with a birthday in August goes first. That student picks any card in his/her, and says, "I have (two quarters and a dime), who has (a dime and a nickel)?" The person who has the specified coins on the top part of a card in his/her hand pulls out that card and lays it on the desk, and says, "I have (a dime and a nickel), who has (. . .)?" The game ends when all cards are set on the desk face up.

Activity Materials

Pencils

Student math journals

Personal whiteboards

Whiteboard markers

Bags of coins

Small items for pretend sale

- [I Have Who Has Cards](#)

, Core Academy, 2007, Second Grade, Making \$ents, pp. 313 to 316.

Extensions

For English Language Learners, have students bring grocery advertisements from home and cut out items which cost a dollar or less. Students can make their own store by pasting the item pictures and the prices onto a large paper. Each student or group of students should name their store and write the name at the top of the paper. Students will use their bags of coins to buy items from each other's stores by paying with the correct coins. Advanced learners can give

receipts to their "customers."

Another adaptation to this grocery activity would have the students make their own prices for the items. Advanced learners can use larger amounts.

For advanced learners, have students use coins and dollar bills found on the <http://usmint.gov/kids/> website to purchase items. There are many possibilities for students to use money within the \$10.00 range which will give advanced learners much practice.

For practice, use coins as a class management system where students earn coins for a wide range of behaviors, academic work, and citizenship, while at school. Students will receive coins and then spend coins at a classroom store periodically. They could spend coins for "privileges" in the classroom also. Students could use an accounting sheet similar to a checkbook register to keep track of their money. When they have over a dollar in coins, students should "deposit" their money with the "Banker of the Week." This management system can be as simple or elaborate as the teacher would like it to be.

Practice using coins to make 25¢. Give each student a die and have him/her pick a partner. Students take turns rolling the die and pulling that many pennies out of the bag. Students should exchange five pennies for a nickel as soon as they can, and then the nickel and five pennies or two nickels for a dime. The first person to get his/her money to 25¢ wins. Advanced students can go to 50¢, \$1.00, or higher depending on abilities.

Movement/P.E. activity: Go to the gym for this movement activity with money. Each student is designated as a penny, nickel, dime or quarter. The teacher names four hula hoops on the gym floor as a penny area, nickel area, etc. A student rolls a large die. Have that many penny students go to the penny area. If they can exchange themselves (five penny students) for a nickel, the five penny students go back to the line or staging area and a nickel student goes to the nickel hula hoop. Another student rolls the die. More "money" is moved in and out of the hula hoops until there is 50¢, 75¢, and \$1.00. Students keep making dollars until all the children have had a turn to move in various hula hoops.

For more practice ideas, the Illuminations website from NCTM, listed under Web Sites, which has six really great lessons on coins, complete with student activity pages.

Family Connections:

Assignments to do with parents

Have students ask their mom or dad to dig out the change that is in their pockets or purse.

Working together, have students count the amount of the coins, making amounts up to \$1.00. If there is more change than \$1.00, make piles of coins that equal \$1.00. Have the students record the amounts on a piece of paper either by writing the coins that make < \$1.00 or by tracing the coins in groups and drawing the amounts inside the circles. Ask students to find how many different ways they can count the change.

As students go to the store(s) with a family member, have them ask to count out the change to either give to a clerk in payment for items or to count the change received from a clerk.

Send home various money activities found on websites such as NCTM Illuminations, the U.S. Mint site, or Vicki Blackwell's site (see Web Sites in this lesson). These are excellent resources to find a wide variety of educational material. Have students work with a family member on a variety of coin activities.

Assessment Plan

Students need a lot of practice using money so they will become familiar with various coins and their values. The important thing is for students to be adding coins together to make values a dollar or less. See the Possible Extensions section for more practice ideas, including assessment ideas, with coins.

Assess student knowledge and correct use, daily, as you walk around the room helping students

with various activities; notice those who are struggling. Group these students into small groups and provide extra support during a time when the rest of the class is working in centers or practicing with money at their seats.

A more formal assessment may be in the form of a worksheet page made from the Coin Samples page. The UTIPS website is a resource for sample questions. You can go to the usmint.gov/kids/ website and make an electronic copy of the coins and dollar bill to create a test sheet of problems. It would work well to have students recreate the worksheet problems using the bags of coins. Research shows that when students handle and manipulate items, assessments are more authentic.

Another assessment: Lay out on a table a few of the trinkets from Buy a Bag of Treasures activity with the price labels. Select a few items and have the students give you the correct coins to pay for them.

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