

# Making \$ents

## Summary

These activities will give students many opportunities to practice and model strategies that help them count money.

## Main Core Tie

Mathematics Grade 2

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

## Materials

### Counting On

- *Penny Pot*  
Plastic coins

### It Makes \$ents to Trade

- Dice
- [It makes \\$ents to Trade Money Chart](#) (pdf)
- [It makes \\$ents to Trade Recording Sheet](#) (pdf)
- Small scoops

### Passing the Buck

- *The Big Buck Adventure*
- [Money Wallets](#) (pdf)  
filled with coin packets
- [Passing the Buck recording Sheet](#) (pdf)

## Additional Resources

### Books

- *The Money Tree*  
, by Sarah Stewart; ISBN: 0-374-45295-4
- *Money, Money, Honey Bunny!*  
by Marilyn Sadler; ISBN: 0-375-83370-6
- *Round and Round the Money Goes*  
, by Melvin and Gilda Berger; ISBN: 0-8249-5310-X
- *The Case of the Shrunk Allowance*  
, by Joanne Rocklin; ISBN: 0-590-12006-9
- *Alexander, Who Used to be Rich Last Sunday*  
, by Judith Viorst; ISBN: 0-689-71199-9
- *The Coin Counting Book*  
, by Rozanne Lanczak Williams; ISBN: 0-88106-326-6
- *Once Upon a Dime*  
, by Nancy Kelly Ann; ISBN: 1-57091-161-4
- *The Go-Around Dollar*  
, by Barbara Johnston Adams; ISBN: 0-02-700031-1
- *If You Made a Million*  
, by David M. Schwartz; ISBN: 0-590-43608-2
- *Penny Pot*  
, by Stuart J. Murphy; ISBN: 978-0-06-446717-9

- *The Big Buck Adventure*

, by Shelley Gill and Deborah Tobola; ISBN: 0-439-49150-9

Media

- *Carnival Countdown computer game*

; ISBN: 0-15-307966-5

### Background for Teachers

Games are a way to review and practice important mathematical concepts while having fun. Games are real world problem solving. They also teach important life skills. Many students lack the opportunity to develop these skills. Many life skills like learning to get along with others, learning to win/lose gracefully, deciding who will go first (decision making), finding winning strategies (logical thinking), learning to follow the rules, and valuing fair play are what can be learned and gained from playing games.

This lesson is made up of several activities that will give students many opportunities to practice and model strategies that help them count money. It is assumed that students will know the names and values of the penny, nickel, dime, and quarter before participating in these activities.

Note: This activity may take two days.

### Intended Learning Outcomes

5. Understand and use basic concepts and skills.

### Instructional Procedures

#### Invitation to Learn

Ask students if they have ever been shopping with their parents. Have they ever peeked over the counter and looked into the cash drawer that comes open when they are ready to pay for their purchases? What do they see? Then discuss how the money is in cash drawer order.

#### Instructional Procedures

##### Counting On

Read the story, *The Penny Pot*, as you read talk about the coins that are used each time and how much they are worth. Give the students each a mixed bag of plastic coins containing pennies, nickels, dimes, and quarters. Have the students put them into cash drawer order.

Reread the story and have students pull out coins from their cash drawer to match the story and count them up as a class--as they do in the story

Talk about if it is necessary to use money in everyday situations. Ask the students if they think it is important to use money in everyday situations. Talk about how the students in the story counted on to know their total.

Model counting on for the students. Have them help you count on from the coin that is worth the most and count on. Start with a quarter and a dime to show how to count on by tens. Practice with the students as much as necessary until they feel confident at counting on by tens. Next, count a quarter and a nickel to show how to count on by fives. Again, give them additional practice, as you feel necessary. Each student has a bag of coins (each bag has a different collection of coins that are less than one dollar). Have them sort the coins into cash drawer order. Put on the coin chart to organize. Partner the students up and have them take turns and repeat the process of counting on.

#### It Makes \$ents to Trade

##### Part 1

Group students into pairs.

Give each student a die, a money bag (or container of coins), and an *It Makes \$ense to Trade Money Chart*.

The first player rolls the die and takes that many pennies, places them in the pennies column on the money chart, and states how much they have. Players take turns.

On the next turn, before rolling the die, the player must re- state how much money he/she has, roll, take that many more pennies and states the new amount. If he/she can trade up for nickels. Have student recall out loud what amount is being traded and what the amount is being traded for. Make sure the partner checks their work. Play continues trading up when possible until the first player reaches 25 cents. After each pair has met 25 cents, the value to be reached can be changed. The value needed to win can vary up to one dollar depending on the students' ability.

## Part 2

Group students into pairs.

Give each pair of students a container of coins and a small scoop. Each student needs an *It Makes \$ense to Trade Money Chart*. Have each student scoop out some coins and sort them onto their chart, count up their total amount, and record it on their *It Makes \$ense to Trade Recording Sheet* (their blank sheet of paper). *This can also be done individually.* Students' deposit their scoop back in to the container and get another scoop, repeating the process 10 times for practice.

After allowing sufficient time for practice, have students scoop out a specified amount such as 53 cents. Observe what coins students have scooped out and comment on different combinations you observed being used. Encourage students to replace their coins with other coins that would make the same amount. Ask if there are any coins that they could trade.

Option: You could then have students fold a piece of paper in half to make two columns. Have the students scoop out some coins, draw the coins, and write the amount in the first column.

Then have the students' trade to make the fewest coins possible to make the same amount. The students draw the new coins in the second column. *This could be used as an assessment.*

## Passing the Buck

Passing the Buck can be broken into two or more sessions.

Read the story, *The BIG BUCK Adventure*. Ask the students what they would buy with a dollar. Discuss what they would like and if they would have enough money. Make a class list of items to buy. Tell the students that they are going to go shopping and are going to need to see if they have enough in their money wallets to buy the necessary items. Passing the Buck can be broken into two or more sessions. Put students into small groups and give each student a money wallet that contains plastic coin packets adding up to various amounts up to one dollar and a *Passing the Buck Recording Sheet*. Tell the students to count up the money in the wallet and write the total amount on their recording sheet next to the number that is the same as the number written on the money wallets. Have students pass the money wallet to the person on their right. Have them do 10 money wallets.

Variation: Have students compare two wallets and ask questions such as: Which has more? How much more? Can you show that same amount in a different way?

## Extensions

Use a number chart and coins to place on the number chart for students who cannot grasp the concept of counting on. Tell the student the coins to use and teach them to put the coin that is worth the most on that number (i.e., a quarter on 25) then ask them to use a dime and show them how to count on from 25 ten more numbers and put the dime on 35. Do the same with nickels. Practice counting on with dimes and nickels from different amounts. Having the student physically count and put the coin on their chart helps them to make a better connection of the counting on strategy. (Inclusion)

Have the student show and draw different combinations of the same amount. Talk about how they figured it out. Once they understand the way to count on then work with them to draw the

same amount with fewer coins. (Inclusion and Adaptation)

Put students into pairs. Have them sit back to back. One partner takes some coins and tells how much money and how many coins he/she has. The other partner has to guess which coins the first person has. Take turns doing the activity. (Extensions)

In the CORE Academy 2005, the book, *The Name Jar*, was read and then the students were to determine the price of someone's name. Use this same activity to buy items or words of interest to the students or to connect with other content that is being taught at the current time in the classroom.

#### Family Connection

Cut out items out of the newspaper and together put a price on the pictures. Have students use play money or draw what coins they would use to buy the item.

Show your student a certain amount and have them show you the same amount using different coin collections. Start with something simple like a quarter and work up to other amounts.

Have student count the loose change that is in your wallet or pocket or in the laundry room.

#### Assessment Plan

To obtain a formal assessment, use the money clips and the recording sheets to see where the students are and help guide your teaching to the differentiated learning that is taking place in the classroom setting.

Have students draw the money that they scoop out and label it to check for understanding of the coins' individual worth. Then ask them to count it up and write the total amount.

On index cards, write different money amounts up to one dollar. Have students show you the amount with coins, then draw the amount of coins, show the same amount with fewer coins, and then write the amount in words (like 57 cents--with the cent sign). This could be done in a center.

Have containers or cups on the students' desk to collect play money in. Allow students to earn coins for different things all week long. Have a class store where students can "buy" different items (e.g., tootsie rolls, fruit snacks, pencils, books from book orders, any teacher junk that is collected). Students have to count out the exact amount for the items they are purchasing.

Play the game [I Have, Who Has](#) pdf for an observational assessment.

#### Bibliography

##### Research Basis

Caine, R.N., & Caine, G. (1994). *Making Connections: Teaching and the Human Brain*. Menlo Park, CA: Addison-Wesley.

Learning from classroom activities with application to real world situations are the lessons students seem to learn from and appreciate the most. Brain research shows the more senses used in instruction, the better learners will be able to remember, retrieve, and connect the information in their memories. "I hear and I forget; I see and I remember; I do and I understand." Students learn best when doing. By incorporating realistic, integrated, or interdisciplinary activities that build on established knowledge and skills and more than one sense, memory pathways become more accessible and cross-referenced for future use. As teachers discover the most effective strategies for better student achievement, they can adapt their lessons accordingly.

Carpenter, T.P., Frank, M.L., Jacobs, V.R., Fennema, E., & Empson, S.B. (1999). *Children's Mathematics: Cognitively Guided Instruction*, Heinemann, Portsmouth, NH. 28, 41.

Counting strategies follow the mastering of direct modeling strategies and allow the student to develop more into efficient procedures for calculating answers to addition and subtraction problems. Using counting strategies indicates a level of understanding of number concepts and an ability to reflect on numbers as abstract entities, particularly coins. Skip counting is one of the counting strategies that students use when counting coins and locating a sum.

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