Lesson 1: Counting Coins

TOPIC: Understanding Currency

OVERVIEW:
Guide students in building the basics of understanding currency while having fun with coins. Through the exploration of children's literature, story problems, and hands-on activities, including identifying, sorting, and counting coins, students begin to develop connections between the literal product of coins and bills and the abstract concepts of using money to make purchases. Extend the exploration of currency throughout the year with a variety of cross-curricular independent and small group activities.

OBJECTIVES:
1. Describe the purpose of money
2. Examine and discuss the history of money
3. Explain ways money can be used
4. Identify, sort, and count coins and bills

HANDOUTS:
- Play Money

TEACHER PRESENTATION SLIDES:
- Timeline: The History of Money
- Mixed Coins
- Story Problems: Counting Coins

ESSENTIAL QUESTIONS:
- What is money?
- What does money look like?
- How long has money been used?
- How does money look different today than in the past?
- Where can I use money?
- Where does money come from?
- How is money different in other places?

ASSESSMENT ACTIVITIES:
Pre-Assessment:
- Activity: Talking About Money
- Activity: The History of Money

Glossary with key vocabulary

Preparation:
- Make copies of student handout
- Set up projector with presentation slides

Supplies:
- Replicas of various coins (pennies, nickels, dimes, quarters). Coin templates are available from the U.S. Mint at www.usmint.gov/learn/educators/coin-program
- One penny
- Chart paper
- Art supplies (crayons, color pencils, markers, scissors, tape, glue)
- Projector (for teacher presentation slides)
- Access to the Internet (optional)
- Suggested books (optional):
  - One Cent, Two Cents, Old Cent, New Cent: All About Money by Bonnie Worth
  - The Penny Pot by Stuart J. Murphy
  - The Coin Counting Book by Rozanne Lanczak Williams
  - If You Made a Million by David M. Schwartz

Time: 65 min
Begin by exploring what students know about money.

Ask students:

What is money?

After inviting students to share their ideas, explain that money is something we use to buy things (such as food, books, and toys) or services (such as haircuts, doctor visits, and movies).

Show the students a dollar and ask them what that dollar can buy. For instance, what can $10 buy, what can $100 buy? Ask students what things and services they would buy, and what each item cost. Create a brainstorm list documenting students’ answers, such as games and food (ask for specific examples).

MONEY SMART TIP!

Many young learners are seeing money spent digitally. They frequently see adults use debit or ATM cards as well as watch as items are purchased online. They also tend to correlate the value of a coin to its size. Identifying coins by look, size, name, and value provides students with the opportunity to develop connections between physical objects and represented numbers and value. This connection will support a deeper understanding of numbers and value associated with digital currency and digital spending.

Optional introductory game: Pass out one sticker or crayon to each student, using a variety of styles or colors. Share that they will have two minutes to keep or trade their item with classmates. Ask students: How many of you traded your item? How did you decide what you wanted to trade for? If you traded, do you value your new item more?
Display the first teacher presentation *Timeline: The History of Money* slide, which illustrates how currency has changed over time. Explain that people initially traded goods and services directly by bartering or negotiating the value. Provide students with an example showing how bartering works. For example, in the past people might trade fish for rabbits or baskets for blankets. Bartering allows people to trade for what they want or need. Each person must decide if the items being traded are of equal value.

**Ask students:** *Is there a time you have bartered with a friend to trade items?*

Explain that money has changed over time. Bartering can take a lot of time, and if someone did not want the things you had to trade it would become difficult to get things you needed. Trading common items that everyone agreed had value such as beads, shells, metals or gems made bartering easier. Money used to be all different sizes, shapes, and items. Explain that if you were trading precious metals or gems in the past it had to be weighed and measured. Today we don’t have to do that, everyone uses the same kind of money. In the U.S., dollar bills are paper and coins are made from metal. The paper money has pictures of past presidents and other historical figures. Banks keep money safe for us so we don’t need to carry around large amounts of cash. People can access their money from their bank account using debit and ATM cards and can purchase things online.

**Grade Level Modifications:**

**Pre-K–K:** Sort real-world items from the *History of Money* slide by similarities and differences (shells, coins, play money). Students may discuss reasoning for sorting, such as all items of the same color or material. This topic can also extend to comparing how things in the classroom or community change over time.

**Grades 1–2:** Create a student timeline for history of money using items depicted in the slide. For an extra challenge students may explore the Story of Money from the Federal Reserve Bank of Atlanta for additional examples of money over the course of history to add to their timeline. [www.frbatlanta.org/about/tours/story-of-money.aspx](http://www.frbatlanta.org/about/tours/story-of-money.aspx)
Next, display the Mixed Coins slide for students to observe and identify details about the modern coins pictured. Ask them to describe the differences in size and imagery on coins.

**Grade Level Modifications:**

**Pre-K–K:** Identify and name the coins pictured on the slide as a class (pennies, nickels, dimes, and so on). Students can also use bags of change and hold up a match to the coin pointed to.

**Grades 1–2:** Select and circle or highlight two or more coins pictured and have students calculate the value. Students may also explore different currencies from around the world and compare them to the U.S. It can be interesting to note that in other countries bills are sometimes different colors and sizes.

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**GUIDED EXPLORATION**

Discovering the Purpose of Money

15 MINUTES

After learning about money and looking at examples of what money used to look like on the Timeline: The History of Money slide, share with students that they will have the chance to create their own story about money. Give each student a piece of construction paper and have them fold it in half. On the top have students finish the sentence starter, “I would spend money today on ___________.” On the bottom half have students complete the sentence “I would like to save money for__________.”

**Grade Level Modifications:**

**Pre-K–K:** Assist children by cutting out magazine pictures to paste on the paper instead of writing. They may also narrate their story for the teacher or classroom volunteer to record.

**Grades 1–2:** Have students create a short narrative story using the sentence starters and the additional prompt: What would you do if you found $10? $100?

Optional: Read the book One Cent, Two Cents, Old Cent, New Cent: All About Money by Bonnie Worth. While reading the story, ask students to share what The Cat in the Hat discovers about money. Students can also compare illustrations to what they discovered on the Timeline: The History of Money slide.

Ask:

*What does it look like in different places?*

*What was used as money in the past?*

*How does it look different today?*
Using Coins and Bills

20 MINUTES

As a class, play a whole-group game “I Am Going on a Shopping Trip” to spark a connection between coins and bills and their value. Each student may take a turn sharing “I am going on a shopping trip and I am going to buy __________.”

Grade Level Modifications:
Pre-K–K: Record each student’s answer on chart paper, modeling writing.

Grades 1–2: Share each student’s previous answer, adding a memory element to the game.

After congratulating the class on all the wonderful ideas shared, provide each student with a Play Money handout. Provide art supplies so that they can design their own bills. Handouts can be sent home and completed as homework. When finished, they may cut out their bill and coins to go on pretend shopping trips at home. Explain that saving can also be a way to use some of their money.

Short video: Designing Money, PreK-2, Kids design, create and name their own currency. They also get to decide what their currency is worth! Read a Good Book: Currency/KIDS Clubhouse Adventures, Iowa Public Television.

https://whut.pbslearningmedia.org/resource/a8879ce0-5c0d-420a-8e11-72adf8f9adf0/read-a-good-book-currency-iptv-kids-clubhouse/

Grade Level Modifications:
Pre-K–K: Have students practice cutting skills as they maneuver scissors around the coins and their designed bill. They may describe the coins and bill as they cut, comparing the images to how real coins and bills look and feel.

Grades 1–2: Have students look at examples of U.S. bills and bills from around the world noting colors and images. Images of different currencies can be accessed online. Bills tend to stick to either warm (red, yellow, gold) or cool colors (blue, green, purple). Encourage students to decorate their bill with images that represent the people or places that are important to them and to use either warm or cool colors.
Counting Coins
10 MINUTES

Students may use small bags of real or play change for whole-class problem solving such as imaginary shopping and making small purchases. This activity can be explored repeatedly over the course of the year, giving students the chance to develop comfort and confidence identifying cents and dollars. **Play coins should be larger than 2 inches in diameter to reduce the risk of choking.**

Grade Level Modifications:
Pre-K–K: Practice sorting coins by size and color. Ask students to show you a penny, a nickel, a dime, a quarter. Ask students to count how many pennies they have and share with a partner.

Grades 1–2: Practice sorting by value. Imagine going shopping for an item and ask students to create that amount or make change for a purchase.

For example: **You had 50 cents and spent 30 cents. How much do you have?** Represent different numbers using coins or bills. For example, today is the 16th: use cents and bills to represent the number 16.

WRAP UP
Class Reflection
5 MINUTES

Ask students: **What do you now know about money?**

Invite them to share their responses. Check for understanding and possibly introduce extended exploration centers for exploring the topic further.
Extended Exploration

**Note:** Use the following activities to extend the lesson topic throughout the year. Activities can be completed as a class, in small groups, or during center time. Duration of activities will vary.

**LITERACY CENTER**

**Possible Book Selections:**

**Note:** Read books with your class that focus on the lesson’s financial literacy topic. Below are suggestions, but you may find other selections in your library that can be used to generate a similar discussion. For pre-literate students, read books aloud or have students do a picture walk – examining imagery and detail to preview the story before introducing text.

- *The Penny Pot* by Stuart J. Murphy: In this book, join a group of children at the school fair. Can Jessie save enough pennies to have her face painted?
  
  **Discussion Question:** Why didn’t Jessie have enough money to get her face painted? How did she solve her problem?

- *The Coin Counting Book* by Rozanne Lanczak Williams: Explore the world of coins and bills through catchy rhymes and detailed photographs. Move from identifying pennies to making a dollar.
  
  **Discussion Question:** What coins does it take to make a dollar?

- *If You Made a Million* by David M. Schwartz: Have you ever wanted a million dollars? Discover ways to make and spend a lot of money with Marvelosissimo the Mathematical Magician and his friends.
  
  **Discussion Question:** What would you do with a million dollars?

**Speaking, Listening & Writing Prompts:**

Explore the following prompts through a themed show-and-tell, circle time discussions, partner pair-share discussions, or writing.

**Grade Level Modifications:**

**Pre-K–K:** Provide students with a visual or real-world object to support exploration of the prompt. Pre-literate students may discuss pictures and objects while having their stories recorded through modeled or guided writing as a small group or with the class.

**Topic:** If you had $5, how would you use it? Would you spend it or save it? Why?

**Grades 1–2:** Students may explore the following writing prompt by journaling or as independent writing assignments.

**Topic:** What are some ways you can spend money? What are ways you can save money?
MATH CENTER

Math Station:
Using the materials below, students can explore the following math station activities independently or as part of a small group. These could be used during classroom centers or as a choice for students who finish assignments early.

Grade Level Modifications:
Pre-K–K: Materials: Pennies, dice, or a number cube.
Instructions: Have students roll the number cube and count coins to match the number.

Grades 1–2: Materials: Coins, dice, or a number cube, paper and pencil. Instructions: Have students roll the number cube and write down the number. They may then represent the number using coins of the appropriate value. For increased difficulty, they may roll the number cube twice and create two-digit numbers.

Story Problems:
Display the Story Problems: Counting Coins slides. Problems can be printed or projected then explored and solved as a whole class, a small collaborative group, or individually. The first problem listed, Challenge 1, is more appropriate for young students. Challenge 2 will provide more difficulty.

Grade Level Modifications:
Pre-K–K: Solve step-by-step problems developing students’ critical thinking and deductive reasoning during circle time or as a small group. Each challenge involves using or creating a visual with students and discussing small steps to solve a problem. Students may match the picture with play coins then solve each challenge using the physical coins to answer.

Grades 1–2: Using the provided challenges as inspiration, create personal story problems and exchange them with classmates to solve. Students may use a printed version of the problem to label the coins and solve each challenge.

TECHNOLOGY CENTER

Games and Online Activities:
Exploring money through online games or educational apps is a powerful way to extend classroom learning.

- The U.S. Currency Education Program: Check out fun “You’d Be Surprised” videos, vocabulary lessons, and play money resources.
  www.uscurrency.gov/educational-materials/classrooms/lesson-plans/
SOCIAL STUDIES CENTER

To celebrate the 100th day of school, students can collaborate to represent the number 100 with as many variations of coins as possible.

Presidents’ Day can be celebrated by discussing which coins or bills feature which presidents.

Take a virtual or in-person field trip to a museum exhibit on money. [http://americanhistory.si.edu/exhibitions/value-money](http://americanhistory.si.edu/exhibitions/value-money)

ARTS & DRAMATIC PLAY CENTER

Dramatic Play:
Explore using money through a variety of classroom dramatic play areas, including a flower shop, grocery store, or bank.

Sensory Activities:
Make coin impressions with clay or dough. Older students can identify the value, and then remold clay and create new impressions.

Art Project:
Create coin rubbings by laying a piece of white paper over the top of several coins and rubbing a crayon on the top of the sheet.

- **Currency Academy for Kids**: Have fun finding out how money gets made. [www.uscurrency.gov/educational-materials/classrooms/currency-academy](http://www.uscurrency.gov/educational-materials/classrooms/currency-academy)

- **Story of Money**: Discover how money has changed over time with a walk through historical currency exhibits. [www.frbatlanta.org/about/tours/story-of-money.aspx](http://www.frbatlanta.org/about/tours/story-of-money.aspx)

- **Pig’s Money Counter**: Identify, count, and sort money with Peter the Pig. [www.practicalmoneyskills.com/play/peter_pigs_money_counter](http://www.practicalmoneyskills.com/play/peter_pigs_money_counter)

- **Money Factory**: Students see how money is created at the Bureau of Engraving and Printing. [http://kids.usa.gov/watch-videos/money/money-factory/index.shtml](http://kids.usa.gov/watch-videos/money/money-factory/index.shtml)

- **History of Money**: Students choose the correct form of currency as they travel through different historical periods. [http://duckiedeck.com/play/history-of-money](http://duckiedeck.com/play/history-of-money)
Design your own bill. Money usually has a person on it. Who will you add to your bill? Don’t forget to add numbers. Color in then cut out the play money.