EI-3063
Grades K+
Ages 5+

# Big Money

## Magnetic Coins and Bills

## Guide


**⚠ WARNING:**
CHOKING HAZARD—Small parts.
Not for children under three (3) years.

# INTRODUCTION

The *Big Money Magnetic Coins and Bills* set is designed to teach students the following:

- coin and bill identification
- coin and bill values
- coin and bill equivalences
- adding and subtracting money
- making change
- fractions, decimals, and place value with money
- problem-solving skills

*Big Money Magnetic Coins and Bills* can be used on any magnetic surface, such as magnetic whiteboards and filing cabinets. The set can also be used on flat surfaces such as tables and desks. Each of the 50 super-realistic money pieces is correctly formed with accurate detailing to help students identify real coins and bills. Oversized for easy-viewing from anywhere in the classroom, the *Big Money Magnetic Coins and Bills* set is perfect for small and large group instruction, as well as for centers and independent learning.

| **Contents:** | 10 pennies | 2 half-dollars | 2 $20 bills |
|---|---|---|---|
| | 10 nickels | 5 $1 bills | 1 $50 bill |
| | 10 dimes | 2 $5 bills | 1 $100 bill |
| | 5 quarters | 2 $10 bills | Activity guide |

# GETTING STARTED

Depending on the age and experience of your students, have them do the following activities:

- Place the coins on the magnetic whiteboard. Help the students identify each coin. Have them notice their color and size. (Ask: What color is each coin? Which coin is the smallest? Which coin is the largest?)

- Have students state the value of each coin (e.g. penny = 1 cent, nickel = 5 cents, dime = 10 cents, quarter = 25 cents, and half-dollar = 50 cents).

**penny**

**nickel**

**dime**


**quarter**


**half-dollar**

- Place the bills on the magnetic whiteboard and ask students to identify each one.
- Have students state the value of each bill. (For example, the one dollar bill equals 1 dollar or 100 cents.)


**one dollar bill**


**five dollar bill**


**ten dollar bill**


**twenty dollar bill**


**fifty dollar bill**


**one hundred dollar bill**

- Show students that money amounts can be written using the cent sign (¢) and the dollar sign ($). For example, the value of a penny can be written as 1¢ or $.01. Explain that the cent sign indicates the number of cents while the dollar sign indicates the number of dollars. One penny is worth 1 cent or $\frac{1}{100}$ of a dollar, two pennies are worth 2 cents or $\frac{2}{100}$ of a dollar, etc. (You may wish to show your students that $\frac{2}{100}$ = $ .02 = 2 cents. Use this as an introduction to the terms *fraction* and *decimal*.) Then put some coins on the magnetic board and have students practice writing the amounts using the cent sign and the dollar sign.

# CLASSROOM ACTIVITIES

## Teaching Money with the Date

Starting on the first day of school, and everyday thereafter, place a penny on the board (under the date) to represent another day of school. When five days of school have passed, replace the five pennies with a nickel. After one hundred days of school, you should have a dollar bill on the board. This is a great way to quickly review money concepts every day of the school year.

*Examples of "Money Dates"*

| | |
|---|---|
| **Tuesday, 9/8/09** **(First day of school)**  | **Monday, 9/14/09**  |
| **Wednesday, 9/9/09**  | **Tuesday, 9/15/09**  |
| **Thursday, 9/10/09**  | **Monday, 10/12/09** **(25 days)**  |
| **Friday, 9/11/09**  | **Wednesday, 11/10/09** **(46 days)**  |

## Identify the Pattern and the Coin

Put a pattern of magnetic coins on the board (e.g. penny, nickel, penny, nickel, etc.). Leave a blank space (or draw a line) in place of one of the coins. Ask students to identify the missing coin. Then, ask a student to come up to the board, find the correct coin, and place it in the pattern.

*For example:*

## Show Money in Order of Value

Display a variety of coins in random order. Ask students to arrange the coins in least to greatest order according to their value (e.g. penny, nickel, dime, quarter, half-dollar). Repeat the activity with bills.

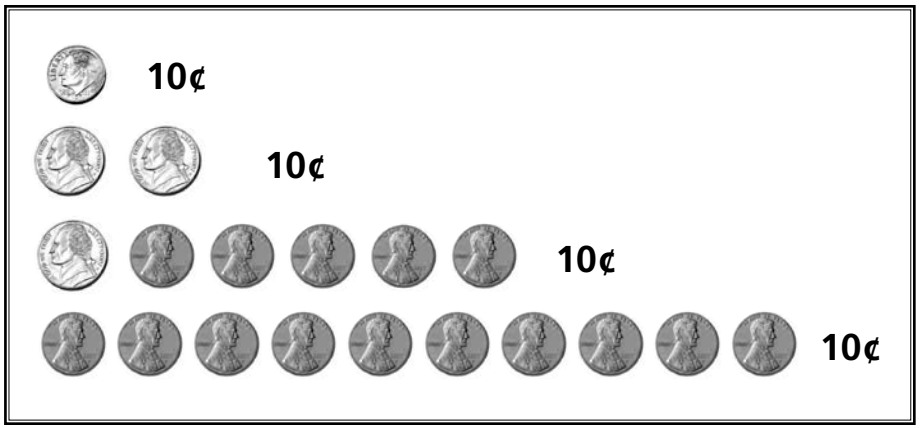
## Sort and Count Coins

Display coins on a magnetic surface. Ask students to sort the coins into groups of pennies, nickels, dimes, and quarters. Have students skip count to determine the value of each group of coins. (For example, if there are 5 nickels, students might say, "5, 10, 15, 20, 25. That's 25 cents!")

## How Many Different Ways?

Challenge students to show the value of a coin or dollar bill in as many ways as possible using other coins and bills.

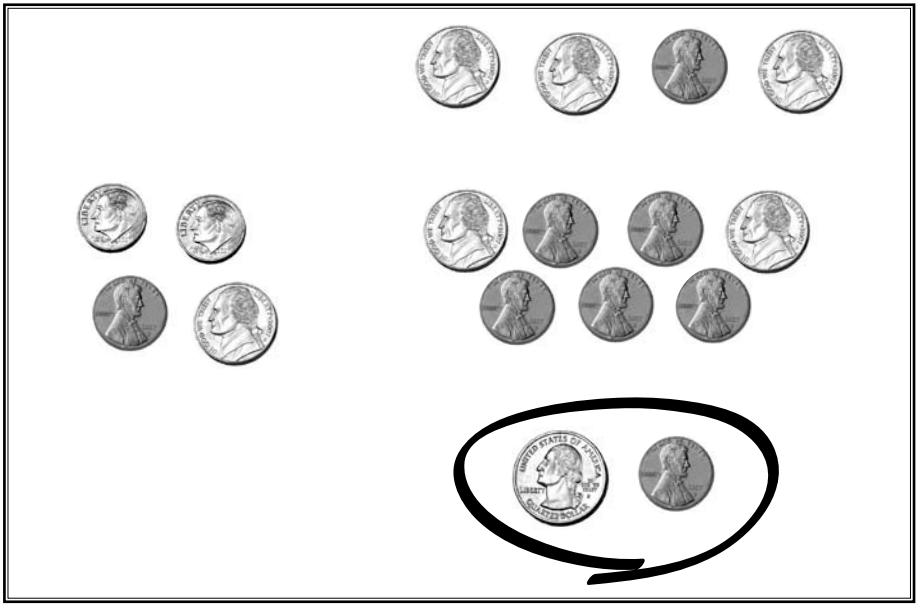
*For example:*



## Showing Equivalent Value

Place a group of coins on the magnetic whiteboard. To the right of this group, place three more groups of coins, making sure that at least one group is equal to the group on the left. Instruct students to find the group(s) on the right that are equivalent to the one on the left. Have a student come up to the board and circle the equivalent group(s), using a dry-erase marker.

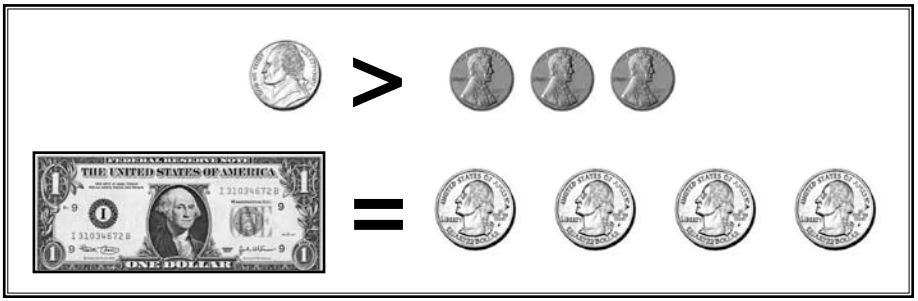
*For example:*



## More, Less, Equal?

Display two groups of coins on the magnetic whiteboard. Using a dry-erase pen, have students place a **>**, **<**, or **=** sign between them.

*For example:*



## Adding and Subtracting Coins

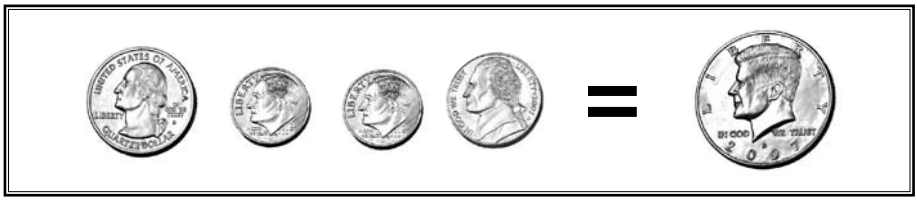
Place any combination of coin groups on a magnetic whiteboard. Using a dry-erase pen, write an addition (or subtraction) sign between the two groups, followed by an equals sign. Ask students to add (or subtract) the following groups of coins, showing the answers using the fewest coins possible.

| Coin Group | +/– | Coin Group | = | Answer |
|---|---|---|---|---|
| 1 penny | + | 4 pennies | = | 1 nickel |
| 1 nickel | + | 5 pennies | = | 1 dime |
| 1 dime | – | 1 nickel | = | 1 nickel |
| 4 nickels | + | 3 dimes | = | 1 half-dollar |
| 1 dime | – | 1 nickel, 4 pennies | = | 1 penny |
| 1 penny, 1 nickel | – | 5 pennies | = | 1 penny |
| 1 half-dollar | – | 1 quarter | = | 1 quarter |
| 1 half-dollar | – | 4 dimes | = | 1 dime |
| 1 dime | + | 2 nickels | = | 2 dimes |
| 1 quarter, 2 dimes | + | 2 quarters, 1 nickel | = | 2 half-dollars |
| 2 pennies | + | 2 nickels | = | 1 dime, 2 pennies |
| 1 quarter | – | 2 nickels | = | 1 dime, 1 nickel |
| 1 half-dollar | – | 10 pennies, 2 nickels | = | 1 quarter, 1 nickel |
| 3 dimes | – | 1 nickel, 2 pennies | = | 2 dimes, 3 pennies |

## Reducing a Group Down to One

Place various rows of coins on a magnetic whiteboard. (Select groups of coins that will add up to an amount that can be represented by one coin.) Students should determine the value of each row using one coin to represent its total value. Repeat this activity using bills.

*For example:*



## Counting Money

Display groups of coins, groups of bills, or groups of coins and bills on a magnetic surface or flat table. Have students write the total value for each group on a sheet of paper or on the whiteboard. Note: Ask students to work with mixed groupings only after they have mastered the groupings of coins and bills separately. Make sure students understand that they should begin counting with the coin or bill of the greatest value and end with the coin of least value.

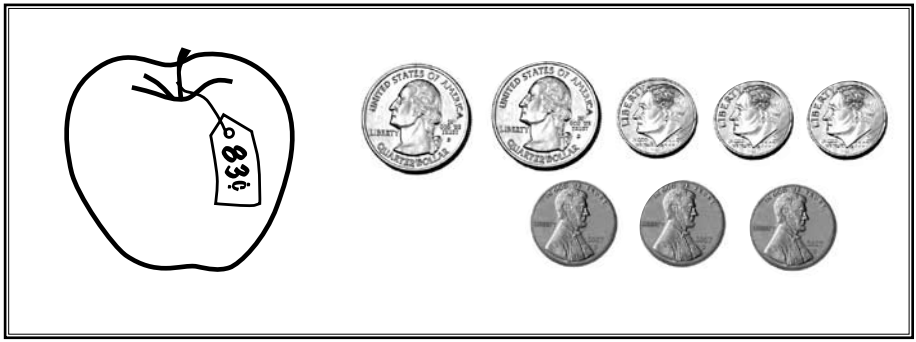
*For example:*


Alternatively, you can put up a group of coins with an equals sign and the answer, but leave out one of the coins. The students must identify the missing coin. In the example above, you might leave out the nickel. Once students have identified the missing coin, ask a student to come up to the board and add a nickel to the coin group.

## Showing Cash Value

Bring in real products (toys, household items, groceries, etc.) or magazine pictures and have students label each with a price. Instruct students to show the value using coins or a combination of coins and bills.

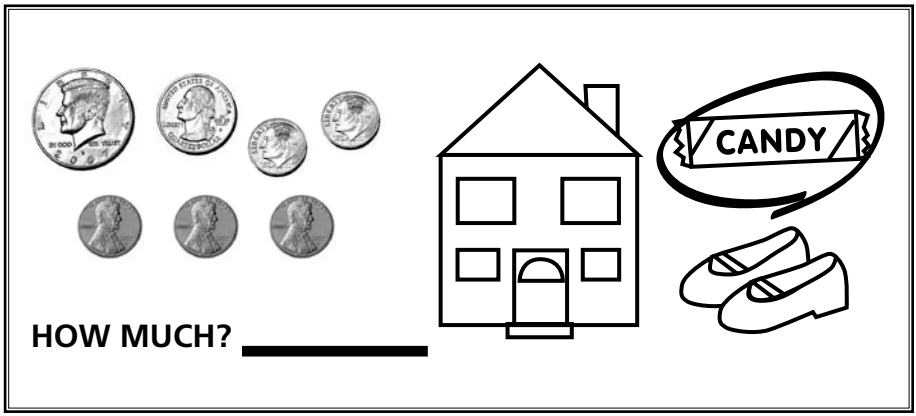
*For example:*



## Estimating Price

Display a group of coins and bills on a magnetic whiteboard. Then, place three photos of objects next to the money. Students should identify the item that would most likely have that price. For example: put a half-dollar, a quarter, two dimes, and three pennies on the board. On the right, show a picture of a house, a candy bar, and a pair of shoes. Students should be able to identify the candy bar as the most likely to have the displayed price of $.98.

*For example:*




## Making Change

Create a class "grocery store" using magazine clippings, coupons, or real food products from home. Label each item with a price. Divide the students so that some are store employees and others are grocery shoppers. Ask the "shoppers" to use the coins and bills to pay for the products, and have the "employees" give them the correct change. Then have students switch roles.

*For example:*

## Place Value

Draw a place value chart on the magnetic whiteboard. Include hundreds, tens, ones, tenths, and hundredths columns. Place bills and coins in their respective columns. Then, have students record the money values on their paper. Discuss the numbers in each column with your students. For example, the pennies are in the hundredths column because they're $\frac{1}{100}$ of a dollar. Repeat with different monetary values. In some cases, leave one column blank in the middle (e.g. no dimes: $2.08) so students can see that zero place-holders are used.

*For example:* **$111.41**

| PLACE VALUE CHART | | | | |
|---|---|---|---|---|
| **$100.00** | **$10.00** | **$1.00** | **$.10** | **$.01** |
|  |  |  |  |  |

Alternatively, write the monetary amount on the whiteboard and ask a student to select the correct coins and bills and place them in their respective place value columns to equal that amount.

*The following Piggy Bank Puzzles are great logical thinking activities that build on students' money knowledge.*

## Piggy Bank Puzzle I

Draw a picture of a piggy bank on the board or bring in a real one. Then give students the following clues:

- There are three coins in the piggy bank.
- One of the coins is twice the value of the other.
- The coins add to 40 cents

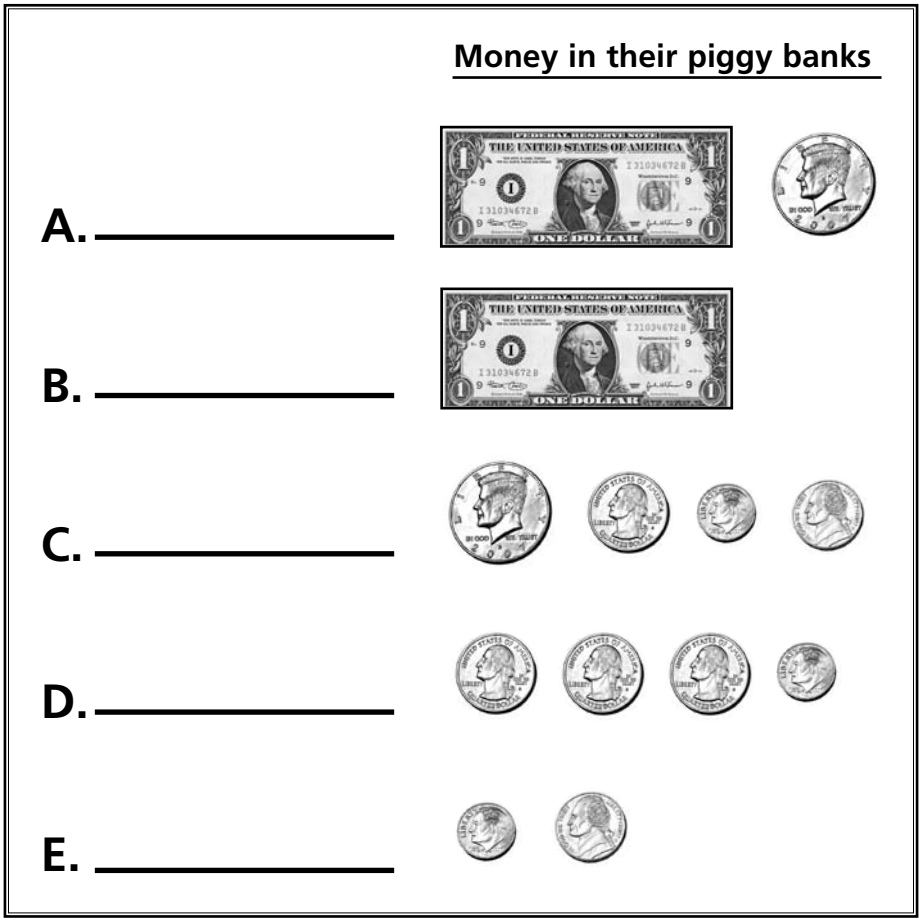
What are the coins? (answer: nickel, dime, quarter)

Have students solve the problem and then ask a volunteer to display the corresponding (magnetic) money on the board. There may be more than one answer, in which case students may display multiple magnetic coin groupings on the board. Continue the activity with other questions and clues.

## Piggy Bank Puzzle II

Draw blanks on the magnetic whiteboard. Label them *A*, *B*, *C*, *D,* and *E*. Next to each blank, place the magnetic coins and bills as shown in the picture below. Then, write the following problem with clues on the board and have students solve the puzzle by filling in the correct name on the blank next to the magnetic currency. Here are the problem and clues:

Jenny, Ernesto, Kwan, LaShondra, and Darrel have piggy banks. Read the clues. Write each name next to the correct collection of money in that child's bank.
1. Jenny has 3 quarters and 1 dime.
2. Ernesto has 70 cents less than Jenny.
3. Kwan has the equivalent of 6 quarters.
4. Ernesto and Jenny together have the same amount as Darrel.
5. How much money does LaShondra have?




(Answers: A = Kwan, B = Darrel, C = LaShondra, D = Jenny, and E = Ernesto)

Make up additional problems for your students, adjusting the difficulty level as needed. For fun, use your students' names!

# EXTENSION ACTIVITIES

Here are some money activities across the curriculum.

## Social Studies

- Show a map of the world and ask where American money is regularly used. Students should know that the same money is used in every U.S. state as well as U.S. territories, such as Puerto Rico, American Samoa, and Guam.

- Discuss the U.S. Mint and its function in the production of U.S. coins as well as The Bureau of Engraving and Printing which makes our paper bills. Show students pictures, brochures, or videos or take them on a real tour or virtual visit (see **www.usmint.gov** and **www.moneyfactory.gov** for more information).

- Research some of the people and symbols shown on our money, such as George Washington, Benjamin Franklin, or the phrase *E Pluribus Unum*.

- Have students bring in foreign currency. Discuss which countries the money came from and compare their values to those of our bills.

## Art

Have students trace the outline of the coins and bills onto paper as patterns for designing their own currency. What values would their coins and bills have? Whose face would they put on the money? They can even bring in photos of themselves, their family, or their pets to put on the bills!

## Language Arts

- Make a list of other names for coins students have heard (e.g. change, cents, piece).

- Discuss and list other names for paper money (e.g. bills, dollars, cash, notes, currency). For fun, talk about the slang terms for money; some examples might include: dough, moolah, greenbacks, bucks, bread, green stuff, *dinero*. *Dinero* is the Spanish word for money and is a great way to connect with English Language Learners whose first language is Spanish.

- Explain to students that the word 'quarter' refers to the fact that this coin is one-quarter ($\frac{1}{4}$) of a dollar. A half dollar is one-half ($\frac{1}{2}$) of a dollar. Show students that 'three quarters of a dollar' means of $\frac{3}{4}$ of 1 and can be represented with 3 quarters.

- Ask students to list words containing the prefix or root "cent." Some examples might include: century, percent, centipede, centennial, centimeter, and centigrade. Point out that all of these words have something to do with the number one hundred. Discuss the meaning of cent as $\frac{1}{100}$ and its origin from the Latin *centum*, meaning "100." Ask, "What does a dollar have to do with one hundred?" (It's one hundred cents!)

**Check out these other great money teaching materials:**

EI-3149 Presto Change-O
EI-3059 Coins and Bills Deluxe Play Money Set
EI-2762 Hot Dots Money Flash Cards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