GRADE 2 SUPPLEMENT

Set A6  Number & Operations: Money

Includes
Activity 1: Dollar & Cents               A6.1
Activity 2: Three Spins to Win         A6.9
Independent Worksheet 1: Mr. Mole’s Money    A6.15

Skills & Concepts
★ determine the value of mixed collections of coins up to $1.00
★ describe how the cent symbol, dollar symbol, and decimal point are used to name the value of coin and bill collections
Bridges in Mathematics Grade 2 Supplement
Set A6 Numbers & Operations: Money

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Bridges in Mathematics is a standards-based K–5 curriculum that provides a unique blend of concept development and skills practice in the context of problem solving. It incorporates the Number Corner, a collection of daily skill-building activities for students.

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Set A6 ★ Activity 1

Dollars & Cents

Overview
Students use the cent and dollar symbols, as well as the decimal point, to label different amounts of money in the context of a new game, Dollars and Cents.

Skills & Concepts
★ determine the value of mixed collections of coins up to $1.00
★ describe how the cent symbol, dollar symbol, and decimal point are used to name the value of coin and bill collections

You’ll need
★ Coin & Bill Cards (pages A6.4–A6.7, see Advance Preparation)
★ Symbol Cards (page A6.8, see Advance Preparation)
★ two 3” × 5” pieces of construction paper, one red and the other blue
★ 20–25 3” × 5” index cards
★ wide-tipped felt marker
★ pocket chart
★ Pigs Will Be Pigs by Amy Axelrod (optional)

Advance Preparation
Follow the instructions at the top of the Coin & Bill and Symbol Cards (pages A6.4–A6.8) to prepare the cards for this game. It’s not necessary to laminate these cards, but the students will handle them, and they’ll hold up longer if you do. Mix the Coin & Bill Cards thoroughly and place them in a stack face-down on a desk or small table near the discussion circle. Place the Symbol Cards in the top row of your pocket chart, which should also be near the discussion circle and easily visible to all the students.

Instructions for Dollars & Cents
1. Gather the children to your discussion circle and explain that you’re going to play a new game today. Some of the playing cards are already up on the pocket chart. Ask the children to share anything they already know about these symbols.

¢ $ $¢.. . ¢ $
**Activity 1    Dollars & Cents (cont.)**

*Students   The big ones are dollar signs.*
*Those ones that look like little c's mean cents.*
*Those others are dots. I think sometimes people use dots when they write money, but I'm not sure.*
*My mom told me those dots are called decimal points. You need them with dollars, I think.*

2. Acknowledge students' comments and explain that they’ll be learning more about these symbols as they play the game today. Then divide the class into 2 teams, the Reds and the Blues, and show them the red and blue construction paper team markers you’ve prepared. Use any method you want to decide which team will start first. Place the color marker for that team on the left-hand side of the pocket chart in the second row, and the color marker for the other team on the right-hand side.

3. Call a volunteer from the starting team to come up and take the top card from the stack of Coin and Bill Cards you’ve placed near the discussion circle. Ask her to post it in the third row, below her team’s color marker. Work with the class to identify the name and value of the coin or bill. Now ask a volunteer from the other team to do the same.

4. Repeat step 3 two more times. Each time a team adds a new coin or bill to their side, ask students to count the amount of money they’ve collected so far. If students on one or both teams want to shift their cards so the bills and coins are ordered by denomination, that’s fine. When each team has drawn 3 cards and determined their total, record the amounts on index cards, 1 card per digit, as shown below.

```
1 1 5 4 0
```

5. Then call on each team to label their winnings with the proper symbols, inserting dollar signs, cent signs, and/or decimal points in the appropriate locations. Let them experiment until the display “looks right.” If none of them know how to use the symbols correctly, provide guidance to do so.

*Teacher  What does the number below the blue team’s money say?*

*Paulina  It says one hundred and fifteen.*

*David  But we didn’t get one hundred and fifteen. We got a dollar and 15 cents.*

*Teacher  True. How could you use the symbols from the top of the pocket chart to label the amount you got?*

*Hunter  Put a dollar sign before the 1 and a cent sign after the 5! Can I try it?*
Erin  That doesn’t look right. It doesn’t look like the signs at the store. Can I do it over? I think we need to take off the cents sign and put one of these dots here.

Students  Yeah!
That looks better.
Now it really says 1 dollar and 15 cents.
Can I put a cent sign after our money? We don’t need a dollar sign or a dot, just one of those ones that looks like a c with a line through it.

6. Once both teams’ winnings have been properly labeled, discuss the symbols with the class. Some of your students may already be familiar with the dollar and cent signs. Work with their input to explain that people use the decimal point to separate dollars and cents. The decimal point is usually read as “and”, so $1.15 is read as, “One dollar and 15 cents.” Amounts less than a dollar are sometimes just labeled with a cents sign, but they can also be labeled using the dollar sign and the decimal point. For example, 40 cents can be expressed as $0.40, or, “Zero dollars and forty cents”.

7. If time allows, play two more rounds of the game. Have the teams take turns to go first. At the end of all 3 rounds, have the teams total their winnings. The team with the most money wins.

Extensions
- Write a greater than/less than symbol on an index card and position it correctly to show which team collected more money each time you play a new round.

- Play Dollars and Cents with your class again and/or leave the cards and the pocket chart out for students to use during Work Places. You might also have an instructional aide play the game with students who need additional help learning to count money.
- Read Pigs Will be Pigs by Amy Axelrod, to your class before or after this activity. Our second graders love the book, and it provides great opportunities to practice counting money.
Coin & Bill Cards page 3 of 4
## Symbol Cards

<table>
<thead>
<tr>
<th>Symbol Card</th>
<th>Symbol Card</th>
<th>Symbol Card</th>
<th>Symbol Card</th>
</tr>
</thead>
<tbody>
<tr>
<td>₿</td>
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<td>₿</td>
</tr>
</tbody>
</table>
Set A6 ★ Activity 2

Three Spins to Win

Overview
The teacher plays a whole-group game at the overhead to provide students with practice counting money and using the correct notation to record various collections of money.

Skills & Concepts
★ determine the value of mixed collections of coins up to $1.00
★ describe how the cent symbol, dollar symbol, and decimal point are used to name the value of coin and bill collections

You’ll need
★ Three Spins to Win Gameboard (page A6.12, see Advance Preparation)
★ Overhead Dollar Bills (page A6.13, see Advance Preparation)
★ Three Spins to Win Record Sheet (page A6.14, run a class set double-sided)
★ overhead marking pen
★ overhead coins
★ real or plastic coins and pretend dollar bills
★ pencils

Advance Preparation Use pages A6.12 and A6.13 to make overhead transparencies of the gameboard and small transparent dollar bills. Cut the bills apart and store in an envelope. Use \( \frac{1}{4} \) sections of drinking straw, regular paperclips, and brass fasteners as shown below to create an arrow for each spinner on the gameboard. Poke a small hole through the center of each spinner. Keeping the straw and the paperclip on the brass fastener, insert it into the hole. Once it has been pushed through to the back, bend each side of the fastener flat against the underside of the transparency.

Instructions for Three Spins to Win
1. Ask children to sit where they can see the screen and show them the Three Spins to Win Gameboard at the overhead. Give them a moment to examine the display. Tell them that you’ll play for Team 1 today and they’ll work together to play for Team 2. You’ll take turns spinning both spinners to collect various amount of money, and the team that collects the most after 3 turns will win.
Activity 2 Three Spins to Win (cont.)

2. Give each student a copy of the Three Spins to Win Record Sheet. Let them know that they're going to keep track of both teams' winnings on their sheets as you do so at the overhead.

3. Spin both spinners. Use the overhead coins (or bills if you spin dollars) to show the results of your spin in the Counting Box. How much money did you get?

   **Eduardo** You got 3 dimes. That's 10, 20, 30 cents.

4. Record the amount of money you spun in the appropriate box as students do so on their record sheets. What symbols do you need to write the amount properly—the cent sign or the dollar sign and a decimal point? Why?

   **Alesha** You got 30 cents. That's just cents, so you need to write a cents sign after the 30.

   **Peter** But you could also write it with the dollar sign and the dot because it's no dollars and 30 cents, right?

5. Remove any overhead coins you’ve placed in the Counting Box, and call on a helper to spin both spinners for the class. Have the helper place the designated number and type of coins or bills in the Counting Box. Ask the children to count the money and record the amount correctly on their sheets as you do so at the overhead.

6. Take turns until both teams have had three turns. After each spin, show the amount in the Counting Box and ask students to explain the notation needed to record it correctly. Continue to reinforce the fact that the decimal point is used to separate dollars and cents, and that any amount less than a dollar can be written in two different ways.

7. At the end of the game, have the students add the money in each column and then add the totals to arrive at a “grand total” for each team. Some students may need to use real or plastic coins and pretend dollar bills to do this, while others may not. Help them count and add the amounts at the overhead if necessary.
Activity 2 Three Spins to Win (cont.)

8. Ask students to use the greater than/less than sign to compare the teams' winnings at the bottom of their record sheets.

9. Have students turn their record sheets over while you erase the overhead and play the game again if time allows.

Extensions

- There are 3 boxes under each coin on the record sheet to provide for the possibility that a team might get the same denomination on all 3 turns (e.g., 3 dimes, 5 dimes, and 4 dimes). This is unlikely, but you may want to take advantage of the extra boxes by playing until one team has filled all 3 boxes under one of the coins. This might involve considerably more than 3 turns for each team, and more money as well.

- Play Three Spins to Win with your class again another day and/or leave the materials and extra record sheets out for students to use during Work Places. You might also have an instructional aide play the game with students who need additional help learning to count money or write money amounts correctly.

INDEPENDENT WORKSHEET

See Set A6 Independent Worksheet 1 for more practice counting and recording amounts of money using the correct symbols.
### Three Spins to Win Gameboard

**Team 1**

<table>
<thead>
<tr>
<th>How much money?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Grand Total**

**Totals**

---

**Team 2**

<table>
<thead>
<tr>
<th>How much money?</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Grand Total**

**Totals**
Overhead Dollar Bills
Three Spins to Win Record Sheet

<table>
<thead>
<tr>
<th>Team 1</th>
<th>$0.01</th>
<th>$0.05</th>
<th>$0.10</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much money?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team 2</th>
<th>$0.01</th>
<th>$0.05</th>
<th>$0.10</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much money?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mr. Mole’s Money

Mr. Mole digs tunnels every day. Sometimes he finds money buried in the ground. Count the money he found on Monday, Tuesday, and Wednesday. Circle the correct amount in each box.

**Example**

- $125
- $1.25
- 12.5¢
- $12.5

**a Monday**

- $0.60
- $6.00
- $0.06
- $0.75

**b Tuesday**

- $3.51
- $41.00
- 5¢
- 41¢

**c Wednesday**

- $3.31
- $35.0
- $347
- $3.47
2 Mr. Mole needs help! He is still a little mixed up about how to use the dollar sign, the cent sign, and the decimal point. Count the money in each box and write the amount correctly.

**example**

```
<table>
<thead>
<tr>
<th>Thursday</th>
<th>$1.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
</tr>
</tbody>
</table>
```

**a Thursday**

```
<table>
<thead>
<tr>
<th>Thursday</th>
<th>$1.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
</tr>
</tbody>
</table>
```

**b Friday**

```
<table>
<thead>
<tr>
<th>Thursday</th>
<th>$1.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
</tr>
</tbody>
</table>
```

**c Saturday**

```
<table>
<thead>
<tr>
<th>Thursday</th>
<th>$1.20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
</tr>
</tbody>
</table>
```

3 Circle the day Mr. Mole found the most money.

Monday  Tuesday  Wednesday  Thursday  Friday  Saturday

4 Put the amounts of money in order from least to greatest on the 6 lines below. Don't forget to use the dollar sign, the decimal point, and the cents sign wherever you need them.

```
________,  __________,  __________,  __________,  __________,  __________
least                   greatest
```

(Continued on next page.)
Independent Worksheet 1  Mr. Mole’s Money (cont.)

5 On Sunday, Mr. Mole found 25¢. Draw 3 different collections of coins worth $0.25 in the boxes below. (Hint: Use real or plastic coins to help.)

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CHALLENGE

6 There are more than 3 different ways to make $0.25 using pennies, nickels, dimes and quarters. See how many you can find and use pictures, numbers, and/or words to show each below.