

**Math Standard:**

**Domain: Measurement and Data**

**Cluster: Measure and estimate lengths in standard units.**

**Standard: 2.MD.8** Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.

	<b>Rotation 1</b>	<b>Rotation 2</b>	<b>Rotation 3</b>
<b>Striving Learners</b>	Students will find the total value while using dimes, nickels, and pennies. Introduce the ¢ (cent sign) to students.  Dime, Nickel, and Penny Total Value Assessment	Splash Math: Penny, Nickel, Dime And Value of the Coin	Money War (Dimes, Nickels, Pennies)  Students compare point values to determine who wins.
<b>Grade Level</b>	Money War (Quarters, Dimes, Nickels, Pennies)  Students compare point values to determine who wins.	Students will find the total value while using quarters, dimes, nickels, and pennies. Students start using the ¢ (cent sign)  Dime, Nickel, and Penny Total Value Assessment	Money Math: Piggy Bank  <a href="https://www.education.com/game/money-math-piggy-bank-game/">https://www.education.com/game/money-math-piggy-bank-game/</a>
<b>High Flyers</b>	Money Math: Shopping with Penelope  <a href="https://www.education.com/game/money-math-shopping-penelope/">https://www.education.com/game/money-math-shopping-penelope/</a>	Cash Register Money Exchange  One student is the cashier and the other is the customer. They will be given items and exchange money back and forth until the customer runs out of money.	Students will use a variety of coins to pay for items you can find at the grocery store. Students will be expected to use the cent sign well paying for their items.  Grocery Store Item Assessment

**Day One**

Materials Needed:

- iPads
- Money Wars (2 different sets)
- Coins (Quarters, Dimes, Nickels, Pennies)
- Large Magnetic Money
- Whiteboards, Markers, and Erasers

- Grocery Store Item Cards
- Total Value and Grocery Store Assessment

### Striving Learners:

#### Rotation 1: Meet with Ms. Schaner

-This week we are going to be working with money. We are going to start by working with dimes, nickels, and pennies. In front of each of you are a dime, a nickel, and a penny. Please point to the nickel for me. Penny. Dime. Good work. Let's review how much each of these is worth. A penny is worth 1¢, a nickel is worth 5¢, and a dime is worth 10¢. ¢ is the cent symbol. I will be using it throughout our time together. If you feel comfortable, you may use it as well. If not, I am okay with you just focusing on the total value for now. Now, I want you to look at the magnetic money that I have on my whiteboard. Please find these coins, and using your real coins, copy what I have on my board. So if I have 2 pennies, a dime, and 3 nickels. You should have that in front of you as well. Now, I want you to add up what you have in front of you using the coin values. When you have the answer, write it on your whiteboard and flip your whiteboard over. Students will show me their whiteboards and we will do more practice problems. I would introduce a word problem to the students, but not have it written out. If I have 3 dimes, 2 nickels, and a penny. Would I have enough money to buy a sucker for 50¢?

Additional Practice Problems: 35¢, 56¢, 48¢, 29¢, 67¢ using an assortment of coins

#### Formative Assessment (Last 5 minutes of Rotation)

-Students will be adding the total value of coins using pennies, nickels, and dimes. See Appendix A Problems 1 & 2 under Striving Learners for example.

#### Rotation 2: Technology

Website: [https://www.splashmath.com/math-skills/second-grade/money/penny-nickel-and-dime?from\\_page=Home](https://www.splashmath.com/math-skills/second-grade/money/penny-nickel-and-dime?from_page=Home) <https://www.splashmath.com/math-skills/second-grade/money/value-of-coins>

Task: Students will be identifying pennies, dimes, and nickels and their coin value.

#### Rotation 3: Hands-on Practice

-Students will be playing war with coin cards. Each of the cards has a coin amount on them. The students will be with a partner and split the cards evenly between the two. They will both set down a card and add up the coins that are on their card. The person with the higher value gets to keep both of the cards. The one with the most cards at the end is the winner. These students will be playing with pennies, nickels, and dimes.

### Grade Level Learners

#### Rotation 1: Hands-on Practice

-Students will be playing war with coin cards. Each of the cards has a coin amount of them. The students will be with a partner and split the cards evenly between the two. They will both set down a card and add up the coins that are on their card. The person with the higher value gets to keep both of the cards. The one with the most cards at the end is the winner. These students will be playing with pennies, nickels, dimes, and quarters.

#### Rotation 2: Meet with the Teacher

-This week we are going to be working with money. Each of you has 4 coins in front of you. Please point to the coin that is worth 1¢. What is that coin called? Repeat for 5¢, 10¢, 25¢). ¢ is the cent sign. We use it after money values that are less than a dollar. Please draw the cent sign on your whiteboards. You will continue to use this throughout

our time together today and when you are practicing on your own. Now, I want you to look at the magnetic money that I have on my whiteboard. Please find these coins and using your real coins, copy what I have on my board. Each of you should have 1 quarter, 3 dimes, 2 nickels, and 4 pennies in front of you. Next, you are going to add up the total that you have in front of you using the coin values. Then, you are going to write the total on your whiteboard, remembering to use the cent sign and turn your whiteboard over. Once I see that everyone is done, I will have you show me your whiteboards, and we will continue to do some more practice problems. I am going to write out a word problem, and we are going to go through it together. I have 1 quarter, 2 dimes, and 4 pennies. Do I have enough money to get a 50 ¢ sucker? Get those coins out in front of you and add them together as we did with our other problems.

Additional Practice Problems: 90¢, 57¢, 26¢, 86¢, 72¢ using an assortment of coins

#### Formative Assessment (Last 5 minutes of Rotation)

-Students will be adding the total value of coins using quarters, pennies, nickels, and dimes. See Appendix A Problems 1 & 2 under Grade Level for examples.

#### Rotation 3: Technology

Website: <https://www.education.com/game/money-math-piggy-bank-game/>

Task: Students will be asked to find the total amount They will also be asked to add more coins to the total and find what the new total becomes.

### High Flyers

#### Rotation 1: Technology

Website: <https://www.education.com/game/money-math-shopping-penelope/>

Task: Students will have the opportunity to identify coins and add them up to help Penelope pay for purchases at the cash register.

#### Rotation 2: Hands On

-Students will be playing with a partner. One of them will be the cashier and the other will be the customer. The customer will get a card that says the price of the item they bought on it, and what amount of change they will give the cashier using their coins. It will be more than what the item was worth. The cashier will find the card with the same item on it which will say the price of the item, what the customer gave them, and how much they need to give back. They will continue this until the customer runs out of money. Each of the values will be given to the students. They do not have to figure this out on their own. See cash register money exchange example below.

#### Rotation 3: Meet with Teacher

-This week we are going to be working with money. In front of you, I have a pile of coins. Please order them from greatest to least. Least is the coin that is worth the smallest amount of money, and greatest being the coin that is worth the largest amount of money. Go over the name of each coin and how much it is worth. Draw the cent sign. Does anyone know what this sign means? We use it after money values that are less than a dollar. I would like all of you to draw it on your whiteboard and continue to use it when you are writing a money value below a dollar. Today I will be holding up item cards. I want you to use your coins to give me the right amount of money for the item that you would like to buy. If I hold up an item that is worth 78¢, you would have to use your coins to create a combination equal to 78¢. Some of you may not have enough quarters to create 75¢, so you may have to use different combinations to come up with 78¢ rather than using 3 quarters and 3 pennies. Let's do another one together. I have a popsicle

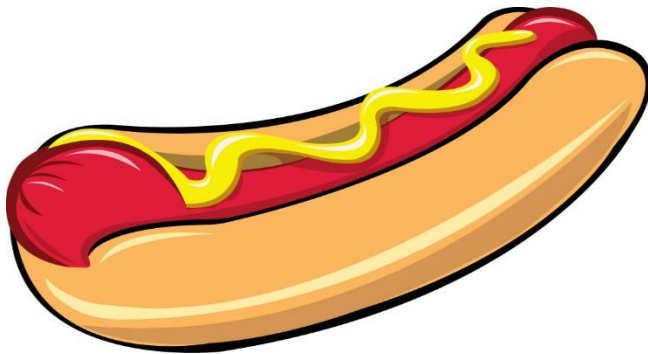
worth 65¢. Use your coins to create a combination that you can pay for your popsicle using exact change. The exact change means you are paying with that exact amount and will not get any money back from the cashier. Look around you. Some of you used different combinations of coins but got the same answer as your peers. This tells us that there is more than one way to show the total amount. We will get into that later this week. These items usually cost more at a store, but for this activity, we are going to use different amounts. For the last 3 practice problems, show students how to draw the coin values by drawing a circle and writing the coin value inside it. This is also what they will be doing for their assessment.

Additional Practice Problems: Chocolate Bar 46¢, Gum 29¢, Small Bag of Chip 93¢, Fruit Snacks 37¢, Water 99¢

**Formative Assessment (Last five minutes of rotation)**

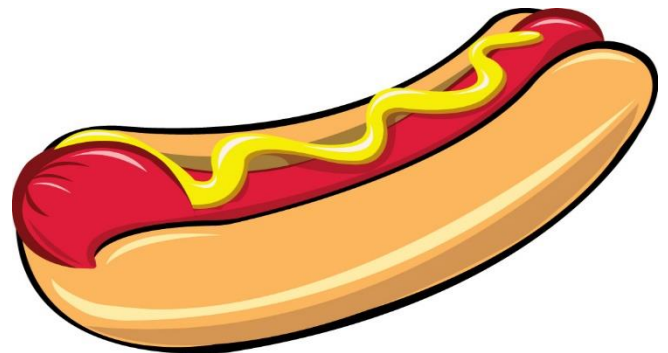
-Students will be given a few grocery items and use their coin drawing to create the total value to pay for their item. See Appendix B.

### Cash Register Money Exchange Example



Hot Dog: 49¢

Customer Pays: 68¢



Hot Dog: 49¢

Customer Pays: 68¢

Cashier Gives Back: 19¢

	<b>Rotation 1</b>	<b>Rotation 2</b>	<b>Rotation 3</b>
<b>Striving Learners</b>	Students will find the total value and solve simple word problems using quarters, dimes, nickels, and pennies.  Simple Word Problem Assessment	Splash Math: Count Money	I Have, Who Has Quarters, Dimes, Nickels, Pennies  Students will have to add the total on their card in order to make the correct sequence.
<b>Grade Level</b>	Alligator Crunch: Comparing two amounts using $<$ , $>$ , or $=$	Students will compare amounts by finding the total value for each group of coins. Introduce the half dollar. They will solve word problems that ask them to compare two amounts.  Compare Amounts Word Problem Assessment	Splash Math: Compare Amounts
<b>High Flyers</b>	Splash Math: Make Amounts	Matching Game  Two cards will have the same amount on them but shown with different coins. Students will try to find the pairs that go together.	Students will be showing me the same amount in two different ways using coins and dollars. Students will solve word problems that ask for two different ways to show the same amount.  Showing Amounts in Two Ways Word Problem Assessment

## Day Two

### Materials Needed:

- iPads
- Simple Word Problem Assessment
- Compare Amounts Word Problem Assessment
- Showing Amounts in Two Ways Word Problem Assessment
- I Have, Who Has Striving Learners
- Alligator Crunch Grade Level
- Match Game High Flyers
- Coins (25¢, 10¢, 5¢, 1¢) and Dollars (\$1)
- Paper Coins and Dollars (if you do not have enough)
- Plastic Grocery Items
- Big Bag that you are not able to see through
- Whiteboards, Markers, and Erasers
- Chop Sticks

## Striving Learners:

### Rotation 1: Meet with Ms. Schaner

-Yesterday, we were working with dimes, nickels, and pennies. Today, we are going to add the quarter. Can you find a quarter in the pile? How much is a quarter worth? We are going to do an activity similar to yesterday, but this time I am going to have you reach into my bag and grab out a grocery item. On the item, there will be a price tag. You will look at the price and gather the correct coins to pay for your item. I will go first to show you how it works. I will reach into the bag and pick out an item. For example, this time I got a banana that is worth 35¢. When I go to pay for my banana, I am going to use a quarter and a dime. Is this correct? Now, you can try it. Have students reach into your bag and pay the correct amount. While one student is going, the other students could be showing the amount as well, so they are following along. I would go around the circle until each student has picked 3 items. Now, we are going to look at a couple of word problems that relate to our grocery store items. “Tom has 1 quarter, 2 dimes, and 1 nickel. Does Tom have enough money to buy a baseball card for 75¢?” Let’s review this problem. We know that he has 1 quarter, 2 dimes, and 1 nickel, so we can grab those from our piles and place them in front of us. Now, let’s calculate the total. How much money does Tom have? Tom has 46¢. Do not forget the cent sign. Does he have enough money to buy a baseball card? No, he does not. Please remember that the items are at this price at the grocery store. They are only this price at Ms. Schaner’s Store.

Grocery Items: Bread 79¢, Cheese 48¢, Celery 65¢, Candy Bar 54¢, Gum 12¢, Lettuce 87¢, Cereal 97¢, Beans 32¢

Word Problems: Carol has 2 quarters, 1 dime, 1 nickel, and 4 pennies. Does she have enough money to buy a toy for 67¢?

Lisa has 3 dimes, 4 nickels, and 9 pennies. Does she have enough money to buy chips for 50¢?

### Formative Assessment (Last 5 minutes of Rotation)

- Students will find the total value to solve simple word problems by using the coins at the table as a visual. Remind the students to write the cent sign. See Appendix C Problems 1 & 2.

### Rotation 2: Technology

Website: <https://www.splashmath.com/math-skills/second-grade/money/count-money>

Task: Students will calculate the amount of money using only pennies, nickels, and dimes as a review from yesterday.

### Rotation 3: Hands-on Practice

-I Have, Who Has is a game where all the students in the group will gather together and choose a card. They will have to calculate the total amount on their card. It says “You Start” on the player’s card that goes first. For example, they will say, “I have 49¢, who has 57¢?” Then the person with 57¢ will say, “I have 57¢, who has 82¢?” The pattern will continue until they get to the end. When they get to the end they will grab a new set of cards and start again. See example in Appendix C.

## Grade Level Learners

### Rotation 1: Hands-on Practice

-For Alligator Crunch, the students will sit in a circle. The students will choose two cards from their pile and put them on their whiteboard. They will add up the total of each card writing the first total on the left, the second on the right, and a circle in between. Then,

they write whether it is  $<$ ,  $>$ , or  $=$  in the circle. The card that is greater will be placed at the bottom of the pile of the student on the right. The card that is less will be placed at the bottom of the pile of the student on the left. If the cards are equal, the student will keep both of them. The student always chooses from the top of their pile. Students will erase their boards and go on to the next problem.

#### Rotation 2: Meet with the Teacher

- Yesterday, we worked with finding the total amount using quarters, dimes, nickels, and pennies. Today, you already worked on comparing two amounts. How did that go? If you were struggling, do not worry we are going to work on it more right now. First, I am going to introduce you to the half dollar. What do you think the half dollar is worth? It is worth  $50\text{¢}$ . As we are comparing amounts today, you may see some half dollars. I have some at the table that you can look at and refer to when you see the amounts on your cards. Comparing change is a lot like comparing numbers, the higher number means that you have more money. The smaller number means that you have less money. If your numbers are the same, you have the same amount of money. Today, I also have chopsticks for you to use when you are creating your greater than, less than, or equal to signs. Here is how this will work. I am going to show you a card with some coins on it. You are going to write the total on the left side of your whiteboard. Then, I will show you the next card, and the total will go on the right side of your whiteboard. We are going to look at the two totals and decide if the first one is greater than, less than, or equal to the second. Remember that the alligator eats the bigger number. After we all have an answer, you can do the alligator chop with your chopsticks. Here is the first card. Please write the total on the left side of your board ( $82\text{¢}$ ). Here is the second card. Please write the total on the right side of your board ( $64\text{¢}$ ). Now, use your chopsticks to create the greater than, less than, or equal to sign (greater than is the answer). Once all the students are done, have them “chomp/chop”  $82\text{¢}$ , erase their boards, and get ready for the next problem. Do a couple more examples ( $56\text{¢} < 70\text{¢}$ ,  $33\text{¢} = 33\text{¢}$ ,  $88\text{¢} > 87\text{¢}$ ). Now, let's try some word problems. Nichole had 1 half dollar and 3 pennies. Jimmy had 2 quarters and 3 pennies. Does Nichole have more money, less money, or the same amount of money compared to Jimmy? Please write out your problem. Do a few more examples.

#### Formative Assessment (Last 5 minutes of Rotation)

- Students will compare two amounts to find the answer to a word problem. See Appendix D Problem 1 under Grade Level.

#### Rotation 3: Technology

Website: <https://www.splashmath.com/math-skills/second-grade/money/compare-amounts>

Task: Students will practice comparing different amounts of money (includes word problems).

### High Flyers

#### Rotation 1: Technology

Website: <https://www.splashmath.com/math-skills/second-grade/money/make-amounts>

Task: Students will practice making specified amounts in different ways using pennies, nickels, dimes, quarters, and half dollars.

#### Rotation 2: Hands On

- Students will lay out all of the cards. If they want to really challenge themselves, they can put the cards face down. Students can start by finding the total amount of the first card, then they will search for the card that also equals that amount. Once they find both cards that equal the same amount, these two cards can be set to the side as a pair.

### Rotation 3: Meet with Teacher

-Yesterday, we were using a variety of coins to pay for items from the grocery store. Today, we are going to find two different ways to come up with the same amount of coins. Did you know that you were already doing this when you were playing your matching game? Did anyone come across a new coin during the first rotation today, what was it called? It is half a dollar. How much is a half dollar? It is  $50\text{¢}$ . You may want to use a half dollar today as you are making the same amount in two different ways. Let's do one together first. Show me one way to make  $45\text{¢}$ . You may get a variety of ways from the students and be able to point them out if not, have them show you another way to make  $45\text{¢}$ . The two ways that I used were 4 dimes and a nickel, and 1 quarter and 2 dimes. These both equal  $45\text{¢}$ , but I was not using the same coins both times. Let's try some more ( $67\text{¢}$ ,  $22\text{¢}$ ,  $89\text{¢}$ ). Now let's try a word problem. Jackie wants two CDs that are each  $77\text{¢}$ . She has broken her piggy bank to try to find some change. Can you help her find two different combinations she can use to make  $77\text{¢}$ ? So, the amount is  $77\text{¢}$ , and they are asking us to find that amount in two different ways. You can use the coins on the table to help you find two different ways. Go over a couple more word problems.

### Formative Assessment (Last five minutes of rotation)

- Students will be given word problems based on finding the same amount in two different ways. See Appendix D Problem 1 under High Flyers. Students will cut out paper coins to glue to the paper to create two combinations.



	<b>Rotation 1</b>	<b>Rotation 2</b>	<b>Rotation 3</b>
<b>Striving Learners</b>	Students will compare two values using quarters, dimes, nickels, and pennies and solve word problems finding the total value.  Compare Amounts Assessment	<b>Math Games: Which Picture Shows More?</b>	<b>Alligator Crunch for Striving Learners</b>  The amounts generally stay below 50¢.
<b>Grade Level</b>	<b>Matching Game</b>  Find the two cards that represent the same amount with a partner. These cards will not include dollars.	Students will find total value with coins and dollars. They will show an amount in two ways with quarters, dimes, nickels, and pennies.  Total Value/Two Way Assessment	<b>Math Games: Equivalent Amounts of Money</b>  <a href="https://www.mathgames.com/skill/2.25-equivalent-amounts-of-money">https://www.mathgames.com/skill/2.25-equivalent-amounts-of-money</a>
<b>High Flyers</b>	<b>Math Games: Equivalent Coins II</b>  <a href="https://www.mathgames.com/skill/2.27-equivalent-coins-ii">https://www.mathgames.com/skill/2.27-equivalent-coins-ii</a>	<b>Money Scoot: Cards will be hanging up around the room with money amounts on them.</b> Students will have a minute at each card. They will write the answer in the box that correlates to the letter on the card.	Students will be using amounts greater than a dollar to find the total value and solve word problems.  Greater Than \$1 Assessment

### Day Three

Materials Needed:

- iPads
- Whiteboards, Markers, and Erasers
- Compare Amounts Assessment
- Total Value/Two Way Assessment
- Greater Than \$1 Assessment
- Money Scoot Cards and Play Boards
- Matching Game
- Alligator Crunch Cards

### Striving Learners:

**Rotation 1: Meet with Ms. Schaner**

- Today, we are going to go back to greater than, less than, or equal to, but this time we are going to be comparing money. Money is just like regular numbers. When you have more money than someone else, your total is greater than. When you have less money

than someone else, your total is less than. When you have the same amount of money as someone else, your total is equal to the amount of the other person. Just like we have been doing the last few days, we are going to start by finding the total value using the coins. The first total we are going to find is 2 quarters, 1 dime, 2 nickels, and 3 pennies. Write that total on the left side and put a circle in the middle to indicate where your sign needs to go. The second total is 1 quarter, 3 dimes, 2 nickels, and 7 pennies. This will be written on the right side. What is the first total?  $73\text{¢}$ , make sure you have your  $\text{¢}$ . What is the second total?  $72\text{¢}$ , I have it written on my whiteboard. Please check to see if your whiteboard looks like mine. Is  $73\text{¢}$  greater than, less than, or equal to  $72\text{¢}$ ? In other words, we could cover the cent sign and decide if 73 is greater than, less than, or equal to 72. When you have the answer you can show me your boards. Remember the alligator always chomps the bigger number. Students will either be able to erase or you may have to talk them through it again or have them look at it again. I would do a few more practice problems with the students ( $56\text{¢} < 77\text{¢}$ ,  $82\text{¢} = 82\text{¢}$ ,  $45\text{¢} > 22\text{¢}$ ,  $98\text{¢} > 88\text{¢}$ ,  $67\text{¢} = 67\text{¢}$ ). Today, we are also going to look over some more word problems, but these will involve comparing numbers. "Scott has 2 quarters, 2 nickels, and 4 pennies. Bill has 1 quarter, 2 dimes, and 6 pennies. Add up the total amount of each and determine whether Scott's total is greater than, less than, or equal to Bill's total.

Additional Word Problem: Sara has 1 quarter, 1 dime, 3 nickels, and 5 pennies. Her sister has 2 quarter, 7 nickels, and 9 pennies. Write each of the totals on your whiteboard. Making sure Sara's total is on the left. Determine whether Sara's total is  $>$ ,  $<$ , or  $=$  her sister's total.

#### Formative Assessment (Last 5 minutes of Rotation)

- Students will have to compare two totals using  $>$ ,  $<$ , or  $=$  using word problems and pictures. See Appendix E.

#### Rotation 2: Technology

Website: <https://www.mathgames.com/skill/2.30-which-picture-shows-more>

Task: Students will be given two groups of coins and will have to determine which group has a greater total value.

#### Rotation 3: Hands-on Practice

- For this version of Alligator Crunch, the students will be with a partner. Each of the students will choose a card from their pile and place it in front of them. Each pair will share a whiteboard and be sitting knee to knee. The students will find the total value on their card and write it on their side of the board. One of the students will draw a circle in the middle. Then, they will determine as a pair whether it is  $<$ ,  $>$ , or  $=$  in the circle. The students will put those cards off to the side, erase their boards, and draw a new card from their pile repeating the process with their partner.

### Grade Level Learners

#### Rotation 1: Hands-on Practice

- Students will lay out all of the cards with a partner. If they want to really challenge themselves, they can put the cards face down. One student will start by finding the total amount of the first card, then their partner will search for the card that also equals that amount. Once they find both cards that equal the same amount, these two cards can be set to the side as a pair. The other partner will choose the first card this time and find the total. Then, their partner will find the card that has the same amount on it.

### Rotation 2: Meet with the Teacher

- Today, we are going to be working with dollars and cents. Can you show me what a dollar sign looks like? When we are writing out dollars, we put the dollar sign in the front instead of in the back where the cent sign was. We also write a decimal point to separate the dollars and the cents. When we adding cents and reach 100, we now have a dollar and need to write it like this \$1.00. You shouldn't have any more than two digits on the cents side. If I have 3 \$1 dollars, 2 quarters, and 1 penny. How would I write the total? \$3.51, once you have the dollar sign in the front, you no longer put the cent sign behind the number. We will work on more of that in a little bit, but I also wanted to show you a skill today that you already worked on a little yesterday. We are going to show the same amount in two different ways. Show me two ways to create 50¢, this would be like showing me two totals with the equal to sign between them from yesterday. What did you come up with? They could use 2 quarters, 5 dimes, 10 nickels, 50 pennies. Let's practice with both of the new ideas we learned today. When we do not have coins we can also draw them out by drawing a circle and putting the value of the coin inside like this. Let's try that for a few.

Total Value Practice: \$2.34, \$4.12, \$3.77

Two Ways: 67¢, 43¢, 75¢

### Formative Assessment (Last 5 minutes of Rotation)

- Students will show me that they can calculate the total value using dollars and cents and find two ways to show the same amount using cents. See Appendix F.

### Rotation 3: Technology

Website: <https://www.mathgames.com/skill/2.25-equivalent-amounts-of-money>

Task: Students will find the total amount of a group of coins and determine which other group has the same amount of money.

## High Flyers

### Rotation 1: Technology

Website: <https://www.mathgames.com/skill/2.27-equivalent-coins-ii>

Task: Students will be given a question listing a number of coins and need to determine which of the coins listed below is equal to that amount. There are no pictures used in this game.

### Rotation 2: Hands On

- There will be cards hanging up around the room with coins on them. The students will have one minute to find the total of the card. The students will have a play board with boxes and a letter of the alphabet in each box. Each card will be labeled with a letter. The students will write the answer to that card in the box corresponding to the letter on their card. You do not have to use all of the letters. Each student will start at one card and rotate to the next card after one minute recording their answers on their play boards.

### Rotation 3: Meet with Teacher

-Today, we are going to be solving word problems with amounts that are greater than a dollar. How do I show that an amount is over 99¢? Once I reach a dollar, how does my total change? We need to add a dollar sign and get rid of the cent sign, and we need to put a decimal point between the dollars and the cents. If I have 6 dollars, 2 quarters, 2 dimes, and 1 nickel. How would I write it? Show me on your whiteboards. It should be \$6.75. Now let's look at some word problems. Elizabeth gave 1 dime, 3 nickels, 1 quarter, and 3 \$1 bills to her sister. How much money did she give her sister?

Additional Practice Problems: Nellie has three \$1 bills, 1 dime, and 5 pennies in her pocket. How much money does Nellie have in her pocket?  
 Jake has 3 quarters, 2 nickels, and 2 \$1 bills to buy a donut. How much money does Jake have?

**Formative Assessment (Last five minutes of rotation)**

- Students will find the total value and solve word problems with amounts greater than \$1. See Appendix G.

	<b>Rotation 1</b>	<b>Rotation 2</b>	<b>Rotation 3</b>
<b>Striving Learners</b>	Students will show an amount in two ways using coins. Students will find total value using coins and dollars. Students will use the information they have learned to solve word problems.  Total Value/Two Way Assessment	<b>Math Games: Purchases: Do you have enough money?</b>	<b>Money Scoot: Dollars and Cents</b>  Cards will be hanging around the room, but the students will not have a time limit to determine the total value of the card is.
<b>Grade Level</b>	<b>Dollar Dice Game</b>  The goal of the game is to get exactly one dollar. The first player rolls the die and gets to pick a coin after they roll based on the chart.	Students will compare amounts that are greater than a dollar. Students will solve word problems with amounts greater than a dollar.  Amounts Greater Than \$1 Assessment	<b>Math Games: How Much More to Make a Dollar?</b>
<b>High Flyers</b>	<b>Math Games: Add and Subtract Money</b>	<b>Coin Riddles: What's in Your Wallet?</b>  The riddle will tell the student how many coins are in the wallet and what the specific value of the coins is. Students will try to determine which coins are in the wallet.	Students will add and subtract money to help solve word problems.  Add and Subtract Money Assessment

**Day Four**

Materials Needed:

- iPads
- Money Scoot: Dollars and Cents

- Total Value/Two Way Assessment
- Amounts Greater Than \$1 Assessment
- Add and Subtract Money Assessment
- Plastic/Paper or Real Coins and Wallet
- Dice, Dice/Money Chart, Plastic/Paper or Real Coins
- Whiteboards, Markers, and Erasers
- Number and Money Stamps

### Striving Learners:

#### Rotation 1: Meet with Ms. Schaner

- Today, we are going to be working with dollars and cents. (Teacher should write a dollar sign on their whiteboard. Can anyone tell me what this is? When we are writing out dollars, we put the dollar sign in the front instead of in the back where the cent sign was. We also write a decimal point to separate the dollars and the cents. When we adding cents and reach 100, we now have a dollar and need to write it like this \$1.00. You shouldn't have any more than two digits on the cents side. If I have 3 \$1 dollars, 2 quarters, and 1 penny. How would I write the total? \$3.51, once you have the dollar sign in the front, you no longer put the cent sign behind the number. We will work on more of that in a little bit, but I also wanted to show you a skill today that you already worked on a little yesterday. We are going to show the same amount in two different ways using stamps. I will give you a value and using the coin stamps I want you to show me two ways to show this amount. We will also use the number stamps today to show our total value with dollars and cents. Show me two ways to create 50¢, this would be like showing me two totals with the equal to sign between them from yesterday. What did you come up with? They could use 2 quarters, 5 dimes, 10 nickels, 50 pennies. Let's practice with both of the new ideas we learned today. When we do not have coins or money stamps, we can also draw them out by drawing a circle and putting the value of the coin inside like this. Let's try that for a couple.

Total Value Practice: \$2.34, \$4.12, \$3.77

Two Ways: 67¢, 43¢, 75¢

#### Formative Assessment (Last 5 minutes of Rotation)

- Students will show me that they can calculate the total value using dollars and cents and find two ways to show the same amount using cents by using their number and money stamps. See Appendix F. Special Instructions for Striving Learners to complete the formative assessment. Students are allowed to use their number and money stamps to visualize the problem.

#### Rotation 2: Technology

Website: <https://www.mathgames.com/skill/2.32-purchases-do-you-have-enough-money>

Task: Students are given a word problem stating the cost of an item. They need to determine if they will have enough money to buy it if they have the coins below.

#### Rotation 3: Hands-on Practice

- There will be cards hanging up around the room with coins and dollars on them. The students will not be timed while they are trying to determine the total amount on the card. The students will have a play board with boxes and a letter of the alphabet in each box. Each card will be labeled with a letter. The students will write the answer to that card in the box corresponding to the letter on their card. You do not have to use all of the letters. Each student will start at one card and rotate to the next card when they are ready making

sure that they are recording the answers in the correct box on their card. To modify this, even more, you could send two students to the same card and have them work on their own but compare their answers before moving on to the next card.

## Grade Level Learners

### Rotation 1: Hands-on Practice

- The object of the game is to get exactly one dollar. The first player will roll the dice. You will get to take a coin after you roll based. You will use the chart to determine which coin you take. (See Below) Then, the next player rolls and takes a coin. Players will take turns until someone gets exactly one dollar. If the player rolls an amount that would bring their total greater than one dollar, then they would not take any coins that turn. They need to get it exact.

If you roll.....	You get to take a....
1	Penny
2	Nickel
3	Dime
4	Quarter
5	Any Coin
6	Lose Turn

### Rotation 2: Meet with the Teacher

- Today, we will be comparing amounts that are greater than \$1 and solving word problems using these amounts. Comparing amounts greater than one dollar is similar to comparing numbers greater than 100. If we remove the dollar sign and the decimal point, it is like comparing numbers. You guys will be using the money stamps to help us solve our problems. Let's start like this. Please stamp two \$1 bills, 2 quarters, 1 nickel, and 3 pennies onto your paper. Use the stamps to help you find the total value. Write out the total and do not forget the dollar sign and decimal point. Let's do a couple more practice problems and add in some word problems. Nellie has three \$1 bills, 1 dime, and 5 pennies in her pocket. How much money does Nellie have in her pocket?

Jake has 3 quarters, 2 nickels, and 2 \$1 bills to buy a donut. How much money does Jake have? Lisa gave her sister 2 \$1 bills, 3 quarters, 10 pennies, and 1 dime. How much money did Lisa give her sister?

Total Value Practice Problems: \$3.33, \$1.24

### Formative Assessment (Last 5 minutes of Rotation)

- Students will find the total value and solve word problems with amounts greater than \$1 using number and money stamps. See Appendix G. Special Instructions for Grade Level: Students are able to use number and money stamps to create visuals to help them solve.

### Rotation 3: Technology

Website: <https://www.mathgames.com/skill/2.33-how-much-more-to-make-a-dollar>

Task: Students are given a picture of the number of coins they have. They need to decide which out of the two sets has the number of coins they need to make a dollar.

## High Flyers

### Rotation 1: Technology

Website: <https://www.mathgames.com/skill/2.29-add-and-subtract-money>

Task: Students are given word problems where they need to either add or subtract the money amounts to solve.

### Rotation 2: Hands On

- Students will be with a partner. Their partner will place a few coins into a wallet. They will say “I have \_\_\_\_\_ coins. They total \_\_\_\_\_ cents. What coins do I have?” Using the paper or plastic coins, their partner will try to manipulate the coins to determine which coins their partner used. Then the pair will switch roles, and the other person will place coins in the wallet for their partner to become the “guesser.”

### Rotation 3: Meet with Teacher

- Today, we are going to be adding and subtracting money. It is very similar to the adding and subtracting we already know how to do. We just need to remember that we have to line up the decimal point. We are going to be using number stamps today to set up your problem, and then, we will use our pencils to solve. Let’s start by looking at this word problem. Addy has 3 quarters, 2 nickels, and 2 \$1 bills to buy a muffin. The muffin is \$1.25. How much money does Addy have left? First, we need to find how much money Addy started. Use the money stamps, so you can organize the coins and dollars in a way that makes it easier to calculate for you. With the number stamps, show me how much money Addy started with. Did you guys get \$2.85? Now under that, we are going to write how much Addy paid for her muffin making sure we line up the decimal points. Are we adding or subtracting? Since we are subtracting, we need to use our detective eyes to look at the one's place and decide if there is more on the bottom and we need to borrow or there is more on the top and we can subtract right away. The numbers are the same! What is 5 minus 5? Look at the rest on your own and then, we can go over the answer together. Addy has \$1.60 left. Let’s look at some more problems.

Additional Practice Problems: Susanne has \$2.13. Her brother gives her \$3.43 to help her buy a stuffed animal. How much money does Susanne have now?

AJ has \$4.32. He pays \$2.14 for a lion stuffed animal. How much money does AJ have left?

Ricky has \$2.88. He found \$1.10 on the ground at the grocery store. How much money does Ricky have now?

### Formative Assessment (Last five minutes of rotation)

- Students will review adding and subtracting money to help them solve word problems. See Appendix H.

	<b>Rotation 1</b>	<b>Rotation 2</b>	<b>Rotation 3</b>
<b>Striving Learners</b>	<p>Students will solve word problems using amounts that are greater than a dollar. Students will use the ¢ and \$.</p> <p>Totals Great Than a Dollar Word Problem Assessment</p>	<p>Fruit Shoot Dollars and Cents</p>	<p>Money Tic Tac Toe With Sand</p> <p>Students will create the tic tac toe board in the sand. They will draw a card and write the value in the sand with either an X over it or an O around it to mark their spot.</p>
<b>Grade Level</b>	<p>I Have, You Have, We Have</p> <p>Students determine if they are able to pay for an item using a combination of their money and their partners.</p>	<p>Students will solve word problems by adding and subtracting money values. Students will use the ¢ and \$.</p> <p>Adding and Subtracting Money Word Problem Assessment</p>	<p>Math Games: Add and Subtract Money Up to \$1</p>
<b>High Flyers</b>	<p>Math Games: Making Change Up to \$5</p>	<p>Loose Change</p> <p>Students will be given plastic cups to distribute change in and write a money amount on.</p>	<p>Students will solve word problems by adding and subtracting money and being able to make change. Students will use the ¢ and \$.</p> <p>Making Change Word Problem Assessment</p>

## Day Five

Materials Needed:

- iPads
- Loose Change: Plastic Cups, Play Money, Marker
- I Have, You Have, We Have Cards
- Sensory Table with sand (Can substitute)
- Totals Greater Than a Dollar Word Problem Assessment
- Adding and Subtracting Money Word Problem Summative Assessment
- Making Change Word Problem Summative Assessment
- Fake Cash Register and Money

### Striving Learners:

**Rotation 1: Meet with Ms. Schaner**

-Students are going to be looking at word problems that involve amounts that are greater than a dollar. The students will need to be using the dollar sign and the cent sign in order for their answers to be correct. Today, we are going to get straight into some word



problems. Today, you will not have pictures of the coins to help you, but we have talked about strategies you can use like drawing the coins out on your own to help you. Go over a bunch of word problems as a group.

Word Problems:

Harold has one \$1 bills, 2 quarters, 1 dime, and 5 pennies in his coat. How much money does Harold have in his coat?

Kolton has 2 quarters, 2 pennies, 1 dime, 3 nickels, and 3 \$1 bills to buy a donut. How much money does Kolton have?

Heather gave her daughter 4 \$1 bills, 2 quarters, 2 nickels, 12 pennies, and 1 dime. How much money did Heather give her daughter?

Carrie was walking and found 2 \$1 bills, 1 quarter, 3 dimes, and 6 pennies on the ground. How much money did she find?

Gabriella paid for a toy using 3 \$1 bills, 2 quarters, 2 dimes, and 16 pennies. How much was the toy?

Alex has 2 quarters, 1 dime, and 4 pennies. How much money does Alex have?

#### Summative Assessment (Last 5 minutes of Rotation)

- Students will solve word problems that have totals that are greater than one dollar. The students will use the dollar sign and the cent sign. See Appendix I.

#### Rotation 2: Technology

Website:

[https://www.sheppardsoftware.com/mathgames/money/fruit\\_shoot\\_dollars\\_and\\_cents.htm](https://www.sheppardsoftware.com/mathgames/money/fruit_shoot_dollars_and_cents.htm)

Task: Students get to choose their level of difficulty and speed. After teaching my lesson, I would guide them to the level I think they are ready for. They would be able to move to a higher level if they think they are ready. Fruit Splat gives the students an amount using dollars and cents, and they have to find a fruit that corresponds to that amount. When they find the fruit, they click on (splat it) to get points.

#### Rotation 3: Hands-on Practice

- For Money Tic Tac Toe, students will draw a Tic Tac Toe Board in the sand. The students will draw a card from the pile and write the total in the spot that they want in the sand. Then, the student will either put an X over the total or put an O around it. Then, their partner will take their turn in use the other mark to mark their spot after they found the total. That means that if the first person uses the X, their partner needs to use an O.

### Grade Level Learners

#### Rotation 1: Hands-on Practice

- I Have, You Have, We Have is a game where students will work with a partner to determine if they have enough money to buy an item. The students will draw a card from the pile. On one side of the card, it will say how much the first student has using dollars and coins. On the other side of the card, it will say how much the second student has using dollars and coins. Then, the students will add their totals together to see if they have enough money to buy an item together. The item they are trying to buy and the price will be on the back of the card.

Front:

I Have:

1 \$1 Bill  
2 Dimes  
5 Pennies

You Have:

2 Quarters  
5 Nickels  
7 Pennies

Together we have.....

Can we buy.....



Price: \$2.87

#### Rotation 2: Meet with the Teacher

- Today, we are going to be adding and subtracting money. It is very similar to the adding and subtracting we already know how to do. We just need to remember that we have to line up the decimal point. Let's start by looking at this word problem. Addy has 3 quarters, 2 nickels, and 2 \$1 bills to buy a muffin. The muffin is \$1.25. How much money does Addy have left? First, we need to find how much money Addy started. Draw your money, so you can organize the coins and dollars in a way that makes it easier to

calculate for you. With your drawings, show me how much money Addy started with. Did you guys get \$2.85? Now under that, we are going to write how much Addy paid for her muffin making sure we line up the decimal points. Are we adding or subtracting? Since we are subtracting, we need to use our detective eyes to look at the one's place and decide if there is more on the bottom and we need to borrow or there is more on the top and we can subtract right away. The numbers are the same! What is 5 minus 5? Look at the rest on your own and then, we can go over the answer together. Addy has \$1.60 left. Let's look at some more problems.

Additional Practice Problems:

Susanne has \$2.13. Her brother gives her \$3.43 to help her buy a stuffed animal. How much money does Susanne have now?

AJ has \$4.32. He pays \$2.14 for a lion stuffed animal. How much money does AJ have left?

Ricky has \$2.88. He found \$1.10 on the ground at the grocery store. How much money does Ricky have now?

#### Summative Assessment (Last 10 minutes of Rotation)

- Students will review adding and subtracting money to help them solve word problems. Appendix J.

#### Rotation 3: Technology

Website: <https://www.mathgames.com/skill/2.28-add-and-subtract-money-up-to-1>

Task: Students are given equations and are able to add and subtract amounts less than \$1.

### High Flyers

#### Rotation 1: Technology

Website: <https://www.mathgames.com/skill/2.34-making-change-up-to-5>

Task: Students will be given a scenario stating the cost of an item and the amount the customer paid. They will see a picture of the change the customer received back and be asked to determine if they received the correct amount of change.

#### Rotation 2: Hands On

- Students will be given a few plastic cups (6-10). They will distribute their money (real or play) randomly into each cup. Then, they will write different money totals on each of the cups. The students will grab each cup and find which coins they need to remove or add using their extra change to make the amount of change in the cup correct. The students should have a partner check their work to make sure the amount written on the cup is equal to the total inside.

#### Rotation 3: Meet with Teacher

-Today, you are going to use your knowledge from adding and subtracting money yesterday to help you learn how to make change today. We are going to trade money back and forth today with our friends. One of you will be the cashier and the other will be the customer. The students will have the entire word problem in front of them, but act it out together. The customer is going to use the purchase amount that tells them how much they are going to pay for an item (this will not be the exact price of the item). The cashier will have the exact price of the item and need to subtract the amount the customer paid to decide how much they need to give back to the customer. Then, the partners will trade spots.

Word Problems:

Tina went to the store and bought a bag of chips. She paid the cashier \$3.12, but the bag of chips was only \$2.44. How much money will Tina get back from the cashier?

Devin went to the video game store and bought a game that was \$3.15. He paid the cashier \$5.36. How much money does Devin get back from the cashier?

Ben went to the movies. He paid the cashier \$6.45 for a snack, but he only needed to pay him \$4.56. How much money will Ben get back from the cashier?

Easton gave his mom \$4.18. He only owed her \$2.98. How much money will Easton give back to his mom?

#### **Summative Assessment (Last 10 minutes of rotation)**

- Students will be given word problems. They will be allowed to use the money to work through the problem, but need to have the work and the answer written on their paper.

The teacher is the only one who can be their customer, not their friends. Appendix K.

Management: When the student's are doing their technology rotation, they will be able to sit anywhere around the room as long as they are spread out and are not distracted by anyone else. These students will be to have their headphones in, so their only focus should be on their technology. The hands-on group in the classroom will either work with another teacher or be trusted to work well together. The school I am currently at has a full-time para in each classroom. If this is not an option, the students will have my trust until they lose it. This means that the students will be allowed to do the fun hands-on activities with partners and groups unless I see that they are not able to handle it. Then, they will have to try to complete these activities on their own without talking to any of their partners or other students in their group. I would make sure that these students are where I can see them. I want them close enough to me where I can hear their conversations but they are also not a distraction to the group that is meeting with me. It will have to be a good compromise. I also found out very quickly working in the classroom and elementary school students that there is usually a student that will tell you if other students are not doing their job. I would make sure to check in with each group at the beginning of our meeting time to see how their hands on activities are going and if their groups are going well.

Appendix A  
Striving Learners Day 1:

1.



2.



Grade Level Day 1:

1.



2.

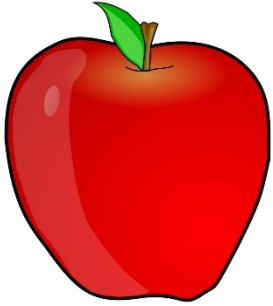


Appendix B

High Flyers Day 1:

1. 47¢

Payment:



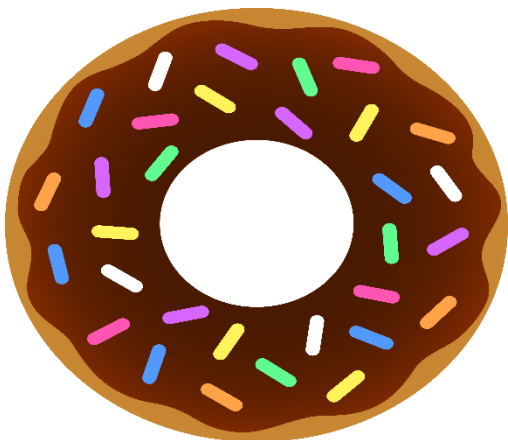
2. 78¢

Payment:



3. 29¢

Payment:



Appendix C

Striving Learners Day 2:

1. Noah has 2 quarters, 1 dime, 1 nickel, and 6 pennies. How much money does Noah have? Do not forget to label.

\_\_\_\_\_

2. Suzy has 1 quarter, 2 dimes, 4 nickels, and 2 pennies. How much money does Suzy have? Does she have enough money to buy socks for 62¢?

\_\_\_\_\_

Circle: Yes or No



I Have:

A collection of coins on a blue background. There is one quarter (Washington), two dimes (Roosevelt), three nickels (Lincoln), and one penny (Lincoln).

Who Has:

37¢

Appendix D

Grade Level Day 2:

1. Joe has 1 half dollar, 2 dimes, 1 nickel, and 4 pennies. Kim has 1 quarter, 4 dimes, 1 nickel, and 3 pennies. Fill in the totals for Joe and Kim. Circle  $<$ ,  $>$ , or  $=$ . Remember to use a label.

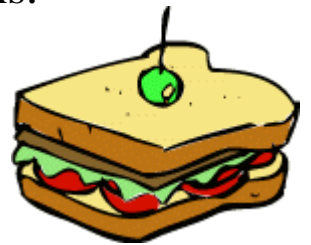
Joe: \_\_\_\_\_  $<$ ,  $>$ , or  $=$  Kim: \_\_\_\_\_



High Flyers Day 2:

1. Johnny wants to buy two sandwiches that are each 98¢. He has 1 half dollar, 4 quarters, 6 dimes, 5 nickels, 10 pennies in his pocket. Can you find two different ways to make 98¢ for Johnny to get two sandwiches using the change he has in his pocket? Cut out the coins and create two combinations.

Combination 1:



Combination 2:



Appendix E

Striving Learners Day 3:

1. Joe has 2 dimes, 1 nickel, and 4 pennies. Kim has 1 quarter, 4 dimes, 1 nickel, and 3 pennies. Fill in the totals for Joe and Kim. Circle  $<$ ,  $>$ , or  $=$ . Remember to use a label.

Joe: \_\_\_\_\_  $<$ ,  $>$ , or  $=$  Kim: \_\_\_\_\_



2. Jack has 2 quarter, 1 dime, and 13 pennies. Derik has 3 dimes, 2 nickels, and 6 pennies. Fill in the totals for Jack and Derik.

Circle  $<$ ,  $>$ , or  $=$ . Remember to use a label.

Jack: \_\_\_\_\_  $<$ ,  $>$ , or  $=$  Derik: \_\_\_\_\_

3. Lucy has 1 quarter, 2 dimes, 1 nickel, and 4 pennies. Elise has 2 quarters, 1 dime, 2 nickels, and 2 pennies. Fill in the totals for Lucy and Elise.

Circle  $<$ ,  $>$ , or  $=$ . Remember to use a label.

Lucy: \_\_\_\_\_  $<$ ,  $>$ , or  $=$  Elise: \_\_\_\_\_



Appendix F

Grade Level Day 3 and Striving Learners Day Four (Special Instructions):



1. Carlee buys a pencil for 65¢. Draw coins to show two different ways to pay 65¢.



2. Martin buys a movie for 87¢. Draw coins to show two different ways to pay 87¢.



3.



Total \_\_\_\_\_

Do not forget your label.



Appendix G

High Flyers Day 3 and Grade Level Day 4 (Special Instructions):

1. Ryan has 3 \$1 bills, 1 quarter, and 1 nickel. What is the total value of the money? Do not forget to label.



---

2. Carol has 2 \$1 bills, 2 quarter, 2 dimes, and 5 pennies. What is the total value of the money? Do not forget to label.

---

3. Sue has six \$1 bills, 1 quarter, 2 dimes, 1 nickel and 5 pennies in her pocket. How much money does Sue have in her pocket?

---

4. Lexi has 2 \$1 bills, 2 quarters, 3 nickels, and 3 pennies to buy a treat. How much money does Jake have?

---



Appendix H

High Flyers Day 4:

1. Josie has \$3.27. Her friend gives her \$1.19 to help her buy a rose for her grandma. How much money does Josie have now?

2. Liz has 4.87. She pays \$1.34 for an ice cream cone. How much money does Liz have left?

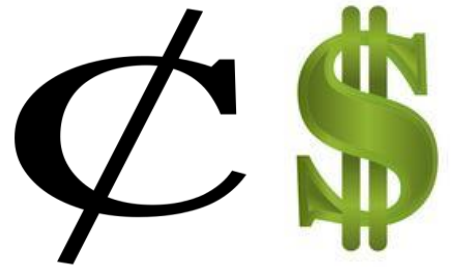


3. Minnie has \$1.53. She found \$3.54 on the ground at the movie. How much money does Minnie have now? Does she have enough to buy some popcorn for \$5.00?



Appendix I

Striving Learners Day 5:



1. Tommy has 4 \$1 bills, 1 quarter, 2 dimes, and 3 nickels in his wallet. How much money does Tommy have in his wallet?

\_\_\_\_\_

2. Wrigley has 1 quarter, 7 pennies, 2 dimes, 2 nickels, and 2 \$1 bills to buy a burger. How much money does Wrigley have?

\_\_\_\_\_

3. Mickey gave Donald 6 \$1 bills, 2 quarters, 3 nickels, 2 pennies, and 1 dime. How much money did Mickey give her Donald?

\_\_\_\_\_

4. Ali has 3 quarters, 1 dime, and 8 pennies. How much money does Ali have?

\_\_\_\_\_





Appendix J

Grade Level Day 5:

1. Mr. Incredible has \$6.43. He found \$2.17 in his super suit. How much money does Mr. Incredible have now?

---

2. Dash has \$2.66. He pays \$3.32 for a toy rocket. How much money does Dash have left?

---

3. Jack Jack has \$4.22. He spends \$2.65 to buy a cookie. How much money does Jack Jack have now?

---

4. Elastic Girl has \$2.46. She takes \$3.09 from Mr. Incredible's wallet. How much money does she have now?

---



Appendix K

High Flyers Day 5



1. Scooby Doo paid \$3.23 for a Scooby Snack, but the snacks were only \$2.53. How much money will Scooby Doo get back?

---

2. Shaggy went to the snack shack and bought food that was \$4.87. He paid the cashier \$5.98. How much money does Shaggy get back from the cashier?

---

3. Velma went to buy glasses. She paid the cashier \$8.99 for them, but she only needed to pay him \$5.67. How much money will Velma get back from the cashier?

---

4. Daphne gave Fred \$7.47 for buying her makeup. She only owed him \$4.65. How much money will Daphne get back from Fred?

---

