Math Investigation Centers



2nd Grade ~ Unit 7 – Money and Time

Math and Literature

It's About Time!:

Your days are full of lots of fun. Record the times to see what you have done.

Math and Literature

Pocket Change:

Play a money game to find the least amount of coins.

Student Choice

Math and Problem Solving

Smart:

How smart are you about money?

Math and Problem Solving

Eggsactly:

Be a problem solver to find the "eggsact" time that all the chicken eggs hatch in Mrs. Farmsworth's class?

Math Investigation Center Pocket Change

Unit of Study 7

Core Correlation: 2.MD.8

DOK: 2; Proficiency Level: 4

Type of Activity: Math and Literature

Materials: Two 1-6 dice, play money (4 quarters, 10 dimes, 10 nickels, 10 pennies), counters, Pocket Change Recording Sheet, <u>The Penny Pot</u>, by Stuart J. Murphy

Introduction: Play a money game to find the least amount of coins.

Instructions:

 Read or listen to <u>The Penny Pot</u> by Stuart J. Murphy https://youtu.be/-bKXeftz7tw

As you are reading the book, pause when an amount of coins are given, and determine the least amount of coins possible.

- e.g., Miguel had 53¢. The least amount of coins to make 53¢ is two quarters and three pennies.
- Play the following game.
 - 1. Player 1 rolls the dice and creates a two-digit number. This number is the total value of a group of coins.
 - e.g., I rolled a three and a six, so I can make 36¢ or 63¢.
 - 2. Player 1 figures out which amount can be made with the fewest coins possible.
 - e.g., I can make 36¢ using three coins, and 63¢ using six coins. I will make 36¢. Next, draw your coins on the Pocket Change Recording Sheet.
 - 3. Player 2 rolls the dice and creates a two-digit number. They determine which amount can be made with the fewest coins possible.
 - In each round, the player with the fewest coins wins the round and takes one counter. Circle the player who had the fewest coins on the Pocket Change Recording Sheet.
 - 5. After five rounds, the player with the most counters wins the game.

Variation:

- Use 0-9 digit cards or 10-sided dice.
- The opposing player can steal a counter from other player if they can find a combination of coins that is fewer than what the other player chose.

Assessment:

Grade will be determined by completion of the Pocket Change Recording Sheet





Pocket Change Recording Sheet

Player 1 Name:	 		
-			
Player 2 Name:			

Player 1	Player 2
Round 1:	Round 1:
Round 2:	Round 2:
Round 3:	Round 3:
Round 4:	Round 4:
Round 5:	Round 5:

Math Investigation Center It's About Time

Unit of Study 7

Core Correlation: 2.MD.7

DOK: 2; Proficiency Level: 4

Type of Activity: Math and Literature

Materials: It's About Time! by Stuart J. Murphy, It's About Time Activity Cards, It's

About Time Recording Sheet, pencil

Introduction: Your days are full of lots of fun. Record the times to see what you have

done.

Instructions:

 Read or listen to <u>It's About Time!</u> by Stuart J. Murphy. Use the following link to access a digital copy: <u>https://www.youtube.com/watch?v=1013E8BhZJQ</u>

- Think about all the activities that you do each day. For example, eating breakfast, going to school, etc.
- On the recording sheet, list 10 activities that you do during the day. Record the time of the activity, how long the activity took, and the end time of the activity.
 Write whether or not it is a.m. or p.m.
- Cut out the It's About Time activity cards on the dashed lines. Draw the hands on the analog clock to represent the time the activity ends. Write the time on the digital clock.
- Shuffle the cards and trade them with a partner. See if the partner can put them in the correct order.

Assessment:

Grade will be determined by completion of the following:

It's About Time Recording Sheet and cards.



It's About Time



Recording Sheet

Activity	Start Time a.m. or p.m.	How long was the activity?	End Time a.m. or p.m	
Brush Teeth	8:00 a.m.	5 minutes	8:05 a.m.	

It's About Time



Activity Cards

11 12 1 10 2 9 • 3 8 4,	•	11 12 1 10 2 19 • 3 8 4,7 6 5	•
11 12 1 10 2 9 • 3 8 4,	•	11 12 1 10 2 9 • 3 8 4 7 6 5	•
11 12 1 10 2 9 • 3 8 4,	•	11 12 1 10 2 9 • 3 8 4 7 6 5	•
11 12 1 10 2 19 • 3 8 4,	•	11 12 1 10 2 9 • 3 8 4,	•
11 12 1 10 2 9 • 3 8 4, 7 6 5	•	11 12 1 10 2 9 • 3 8 4,	•

Math Investigation Center Smart

Unit of Study 7

Core Correlation: 2.MD.8

DOK: 3; Proficiency Level: 4

Type of Activity: Math and Problem Solving

Materials: Smart by Shel Silverstein, presentation materials

Introduction: How smart are you about money?

Instructions:

 Read or listen to the poem, <u>Smart</u> by Shel Silverstein. https://www.youtube.com/watch?v=g8QpsV7BThc

- Create a presentation to show what actually happened when the boy began trading his money. For example, PowerPoint, storyboard, video, etc.
- Explain what the boy did not understand about money.
- Why do you think his dad closed his eyes and shook his head at the end of the poem?

Assessment:

Grade will be determined by the following:

Presentation and answers to questions.



Smart



My dad gave me one dollar bill 'Cause I'm his smartest son, And I swapped it for two shiny quarters 'Cause two is more than one! And then I took the quarters And traded them to Lou For three dimes -- I guess he didn't know That three is more than two! Just then, along came old blind Bates And just 'cause he can't see He gave me four nickels for my three dimes, And four is more than three! And then I took the nickels to Hiram Coombs Down at the seed-feed store, And the fool gave me five pennies for them, And five is more than four! And then I went and showed my dad, And he got red in the cheeks And closed his eyes and shook his head --Too proud of me to speak!

-Shel Silverstein

Math Investigation Center Eggsactly

Unit of Study 7

Core Correlation: 2.MD.7

DOK: 3; Proficiency Level: 4

Type of Activity: Math and Problem Solving

Materials: pencil, Eggsactly Recording Sheet; Eggsactly Time Sheet

Introduction: Be a problem solver to find the "eggsact" time that all the chicken eggs

hatch in Mrs. Farmsworth's class?

Instructions:

Solve the following problem on the Eggsactly Recording Sheet:

There are 12 chicken eggs in Mrs. Farmsworth's classroom incubator. The 1st egg hatches at 11:00, the 2nd egg hatches at 11:20, the 3rd egg hatches at 11:41, and the 4th egg hatches at 12:03. If this rate continues, what time will it be when all 12 eggs hatch? Show how you figured this out.

Assessment:

Grade will be determined by the following:

Completion of Eggsactly Recording Sheet and Time Sheet



EggsactlyRecording Sheet



Name

There are 12 chicken eggs in Mrs. Farmsworth's classroom incubator. The 1st egg hatches at 11:00, the 2nd egg hatches at 11:20, the 3rd egg hatches at 11:41, and the 4th egg hatches at 12:03. If this rate continues, what time will it be when all 12 eggs hatch? Show how you figured this out.

Eggsactly Time Sheet



Name	

Draw the time the each egg was hatched.

	Egg 3	Egg 4
11 12 1 10 2 9 • 3 8 4 7 6 5	11 12 1 10 2 9 • 3 8 4 7 6 5	11 12 1 10 2 9 • 3 8 4 7 6 5
Egg 6	Egg 7	Egg 8
11 12 1 10 2 9 • 3 8 4 7 6 5	11 12 1 10 2 9 • 3 8 4 7 6 5	11 12 1 10 2 9 • 3 8 4 7 6 5 Time:
Egg 10	Egg 11	Egg 12
11 12 1 10 2 9 • 35 8 4 7 6 5	11 12 1 10 2 19 • 3 8 4 7 6 5	11 12 1 10 2 9 • 3 8 4 7 6 5
	Egg 6 Time: Egg 10 Egg 10	9