

Title: Coin Carnival

Brief Overview:

This lesson takes students through different activities involving money. First, students will identify coins and their values. They will then move on to learning how to combine a number of the same coins and figure out how much money they have. Finally, students will learn how to exchange coins based on their values. This lesson allows students to learn all of these concepts through a variety of fun, carnival related activities. Come join us at the Coin Carnival!

NCTM Content Standard/National Science Education Standard:

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems
- Compute fluently and make reasonable estimates

Grade/Level:

Grades 2-3

Duration/Length:

6 days (50 – 60 minutes each)

Student Outcomes (VSC Standards-Indicators):

Standard 6.0 Knowledge of Number Relationships and Computation/Arithmetic

Knowledge of Number Relationships and Computation/Arithmetic:

Students will describe, represent, or apply numbers or their relationships or will estimate or compute using mental strategies, paper/pencil or technology.

Topic

A. Knowledge of Number and Place Value Second Grade

Apply knowledge of money

- a) Determine the value of a given set of mixed currency up to \$10
- b) Represent money amounts up to \$10
- c) Compare the value of 2 sets of mixed currency up to \$10

A. Knowledge of Number and Place Value Third Grade

Apply knowledge of money

- a) Represent money amounts in different ways
- **Assessment limit:** Use money amounts (\$0 - \$100)
- b) Determine the value of a given set of mixed currency
- **Assessment limit:** Use coins and bills (\$0 - \$100)
- c) Compare the value of two sets of mixed currency

Materials and Resources:

Lesson 1:

- The Penny Pot by Stuart Murphy
- Overhead of Hundreds Chart (Teacher Resource Sheet 1)
- Preassessment set-up (Teacher Resource Sheet 2)
 - *Teacher Preparation* - On the chalkboard: In one column place the values of different coins in the following order: 1¢, 5¢, 10¢, and 25¢. In a second column, place pictures of the different coins in the following order: quarter, dime, nickel, and penny.
- Large cut outs of coins (Teacher Resource Sheet 3)
- Sandwich board Coins (front/back) – Penny, Nickel, Dime, Quarter, Half-Dollar
 - *Teacher Preparation* - Front and back cardboard should be connected by a string, so that a student can wear them like a sandwich board with the front of coin on front, and back of coin on back.

Item	Quantity
1 cent	7
5 cents	4
10 cents	5
25 cents	2

- Cardboard “=” sign, 1¢, 5¢, 10¢, 25¢, 50¢
- Poems on chart paper (Teacher Resource Sheet 4)
- Matching Money Worksheet (Student Resource Sheet 1)
- What’s the Value? Worksheet (Student Resource Sheet 2)
 - Overhead for teacher
- Coin Kaleidoscope Worksheet (Student Resource Sheet 3)
 - Overhead for teacher
- Teacher Anecdotal Record (Teacher Resource Sheet 5)
- Scrap paper
- Crayons
- Coin Kaleidoscope Worksheet (Extension) (Student Resource Sheet 4)
- Penny, nickel, dime, and quarter manipulatives

Lesson 2:

- What’s the Value? (Part 2) (Student Resource Sheet 5)
- Hundreds Chart (Teacher Resource Sheet 1)
- If You Made A Million by David M. Schwartz
- Penny, nickel, dime, and quarter manipulatives
- Sandwich board Coins (see Lesson 1 for preparation)
- Cardboard “=” sign
- Large cut outs of coins (Teacher Resource Sheet 3)
- Let’s Count Money! Worksheet (Student Resource Sheet 6)

- 1 Money bag of coin manipulatives per pair and one for the teacher
 - bag should contain:
 - 40 pennies
 - 10 dimes
 - 20 nickels
 - 4 quarters
 - 2 half-dollars
- 1 Slink 'N' Slide Board per pair (Student Resource Sheet 7)
 - Overhead for teacher
- Slink 'N' Slide Calculation page (Student Resource Sheet 8)
- 1 overhead dice
- 1 die per pair
- 2 counters of different color per pair

Lesson 3:

- Large coin cut-outs (Teacher Resource Sheet 3)
- Math journals
- Coins in Cups – 87 pennies; 17 nickels; 8 dimes, 1 nickel, 2 pennies; 3 quarters, 1 dime, 2 pennies; 1 half-dollar, 1 quarter, 1 dime, 2 pennies.
- "Let's Go to the Coin Carnival!" (Teacher Resource Sheet 6)
- Our Quest for the Coin Carnival Worksheet (Student Resource Sheet 9) and Chart
- Stegosaurus Worksheets (make overheads for teacher)
 - Stuffy - blue (Student Resource Sheet 10)
 - Stingy – red (Student Resource Sheet 11)
 - Stinky – yellow (Student Resource Sheet 12)
 - Lou – green (Student Resource Sheet 13)
- Hundreds Chart (Teacher Resource Sheet 1)
- Coin Bags (Teacher Resource Sheet 7)
 - Teacher bag
 - Blue
 - Yellow
 - Green
 - Red
- Coin Counter Worksheet (Student Resource Sheet 14)
 - Overhead of worksheet
- What Color Am I? Worksheet (Student Resource Sheet 15)
- Summative Assessment (Student Resource Sheet 16)
- Summative Assessment Answer Key (Teacher Resource Sheet 8)

Development/Procedures:

Lesson 1

Preassessment

- Before lesson have the following display set up on the chalkboard according to preassessment setup (Teacher Resource Sheet 2). Ask students if they know the value of the coins in the second column. Allow volunteers to come to the board and move the coins next to their correct values.

Launch

- Review counting by 1, 5, 10's, 25's refer to Hundreds Chart (Teacher Resource Sheet 1). Circle 5's in blue, 10's in red, 25's in green.
- Read The Penny Pot by Stuart Murphy to the students. Show students the cover of the book and encourage them to make predictions. As you read the book, ask questions pertaining to story with regards to how much money is collecting in the jar. Essential question: How much is one-penny worth?

Teacher Facilitation

Introduction of Coins

- Explain to students that over the next unit, we're going to travel to a faraway place, where our characters are all money!

Introduce Patty Penny (Teacher Resource Sheet 3)

- Ask for a volunteer. Place sandwich board of penny on the student. Ask her to turn around, showing both sides of the coin. *Does anyone know what this coin is called?* Write the word penny on the board. Ask the class: *What is the value of the penny?* (1 cent). Have student come up and hold the one-cent card. Ask another student to hold "=" card. Have class recite, "1 Penny equals 1 cent."
- Display Patty Penny Poem from "Coin Poems" (Teacher Resource Sheet 4) on chart paper. Read "Patty Penny" poem, allowing the class to repeat. Have class read again as a group. Ask class: *How much is a penny worth?* (1 cent) Allow Patty Penny to stand aside, allow other volunteers to sit down.

Introduce Nigel Nickel: Same as Patty Penny but introduce nickel instead.

Introduce Delia Dime: Same as Patty Penny but introduce dime instead.

Introduce Quinton Quarter: Same as Patty Penny but introduce quarter instead.

Introduce Harry Half-Dollar: Same as Patty Penny but introduce half-dollar instead.

Combine Same Coins

- Have Patty Penny choose 4 other penny characters. Each new penny should wear a new penny sign. As each child wears the sign, ask students *what is the*

value of each penny? Make sure students understand that each penny is worth one cent. Put pennies into a group. Ask class *what value do we have here?* Count up to 5 orally with students while pointing to each penny.

- *How many cents do we have? (Student response: 5 cents)* Allow two more students to come up to be two more pennies. Review with students that each penny is worth one cent. *Now how many cents do we have? (Student response: 7 cents).* Count up to 7 and point to each penny as you count.
- *What did we count by to find our answer? (1's)* Allow students to make the connection that we counted by ones because each penny is worth one cent.
- Allow volunteers to sit down.
- Have Nigel Nickel choose 4 other nickel characters. The new nickels should wear new nickel signs. As each student wears the sign, ask students *what is the value of each nickel.* Make sure students understand that each nickel is worth five cents. Put all nickels into a group. Ask class *what value do we have here?* (25 cents) Count up to 25 by skip counting by 5's while pointing to each student with a nickel sign.
- *What did we count by to find our answer? (5's)* Allow students to make the connection that we counted by fives because each nickel is worth five cents.
- Allow volunteers to sit down.
- Have Delia Dime choose 4 other dime characters. The new dimes should wear new dime signs. As each student wears the sign, ask students *what is the value of each dime.* Make sure students understand that each dime is worth ten cents. Put all dimes into a group. Review with students how they counted up all the pennies and the nickels. Allow students to make the connection that they counted by 1s for pennies, and by 5's for nickels. *What do you think we need to count by to count up how much we have in our dime group? A dime is worth 10 cents so we should count by tens.* Count up to 50 by skip counting by 10's while pointing to each student with a dime sign. Refer to hundreds chart as needed.
- *What did we count by to find our answer? (10's)* Allow students to make the connection that we counted by tens because each dime is worth ten cents.
- Allow volunteers to sit down.
- Have Quinton Quarter choose 2 other quarter characters. As each student wears the sign, ask students what is the value of each quarter. Make sure students understand that each quarter is worth twenty-five cents. Put all quarters into a group. Review with students how they counted up all the

pennies, nickels, and dimes. Allow students to make the connection that they counted by 1's for pennies, 5's for nickels, and 10's for dimes. *What do you think we need to count by to count up how much we have in our quarter group? A quarter is worth 25 cents so we should count by twenty-fives.* Count up to 75 by skip counting by 25's while pointing to each student with a quarter sign. Refer to hundreds chart as needed.

- *What did we count by to find our answer? (25's)* Allow students to make the connection that we counted by 25's because each quarter is worth 25 cents.

Student Application

- Distribute "Matching Money" (Student Resource Sheet 1). Review the names of each coin with the students by asking if they can tell you the name of the first coin, etc. Allow students to recite poems if needed. Students should complete the matching of the coins to their values on their own. After completion, review with the students using the activity used during the pre-assessment part of the lesson.
- Display overhead of What's the Value? (Student Resource Sheet 2) and pass out worksheet. Model for students how to complete 1st answer. Allow students to complete the rest of the worksheet with a partner. Review worksheet after completion.
- Display overhead of Coin Kaleidoscope (Student Resource Sheet 3) and pass out worksheet, scrap paper and crayons. Read the directions with the students. Model for students how to choose four different colors and write them on your overhead. Allow students to do the same on their worksheets. Model for students how to shade in one or two parts of the pattern. (For example: Write on the overhead or scrap paper where students can see work as you say the following: *This area says 2 dimes. I know that one dime is 10 cents. So if I have 2 dimes I have $10 + 10$ that makes 20 cents. Now I can go to my key and see that 20 cents equals red. So I will shade in this area as red.*) Make sure that students understand that they must calculate the value of the coins in order to use the key to color in the areas. Allow students to complete the worksheet on their own. Collect to use as an assessment of lesson.

Embedded Assessment

- When students are answering questions during Teacher Facilitation, observe and record answers that students give for any of the questions that are being asked on the "Anecdotal Record" (Teacher Resource Sheet 5).
- While students are completing Student Application, walk around the classroom, and make note of students who understand the concepts.

- You may use “Coin Kaleidoscope” as an assessment. Result should be a pattern.

Reteaching

- Allow students who are having trouble with calculating the value of the combination of coins to use manipulatives (coins) in order to visualize which coins they have and how much they are worth.

Extension

- Give students a blank coin kaleidoscope, with key filled in “Coin Kaleidoscope (Extension)” (Student Resource Sheet 4). Allow students to write in combinations of coins to create new patterns.

Lesson 2

Preassessment

- Distribute “What’s the Value? (Part 2)” (Student Resource Sheet 5) to assess understanding of the previous lesson.
- Last time, we learned what each coin was worth, and how to count the value of different combinations of the same coins. Ask volunteers to tell what they skip-counted by.
- Repeat skip-counting: 5’s, 10’s, 25’s, 50’s using the Hundreds Chart (Teacher Resource Sheet 1)

Launch

- Read *If You Made A Million* by David M. Schwartz to the class. As you read, use manipulatives to show the different examples given in the book (5 pennies = 1 nickel, etc).

Teacher Facilitation

- Today, we will learn how to combine different coins and calculate or figure out their value.
- Reintroduce Patty Penny by calling a student to the front and giving her the penny sign. *What is the value of a penny? (1 cent).* Ask Patty to call up her four penny friends. *What value do we have now? (5 cents).* *Is another coin that is worth the same value as Patty and her four friends? (Nickel).* Ask for two volunteers to be an equal sign and Nigel Nickel. Hand them the respective signs. Patty and her four friends stand on one side of the equal sign; Nigel stands on the other. Write **5 pennies = 1 nickel** on the chalkboard. Allow class to recite.

- Ask Patty and friends to sit down, and invite Nellie to come up giving her the nickel sign. *What is the value of Nellie? (5 cents)*. Nellie and Nigel stand next to each other. *What value do we have now? (10 cents)*. *Is another coin that is worth the same value as Nigel and Nellie together? (1 dime)*. Calls up the equal sign and Delia Dime. Nigel and Nellie stand on one side of the equal sign; Delia stands on the other. Write **2 nickels = 1 dime** on chalkboard. Ask class to recite.
- Have pennies and Delia dime stand, while all other volunteers sit down. *What is the value of Delia? (10 cents)*. Ask Nellie, Patty and friends to stand on one side of the equal sign, and Delia on the other. Count up each student's value aloud. Students should understand that 1 nickel plus 5 pennies = 10 cents. Write **1 nickel + 5 pennies = 1 dime** on the board. Ask class to recite.
- The teacher asks everyone to sit down. She asks Quinton Quarter to come up. *How much is a quarter worth? (25 cents)*. Ask Nigel to pick some dime and nickel characters to help him make 25¢. Options: **2 dimes, 1 nickel; 1 dime, 3 nickels**.
- Place coin cutouts of 1 nickel and 2 pennies on the board, in that order. Ask the class to count the value with her, drawing lines underneath each coin and placing the additive value until they reach 7¢.
- Repeat with:
 - 1 dime, 1 penny
 - 1 dime, 1 nickel, and 1 penny.
- *Did you notice the order of the coins? Can someone tell me what is special about the order? When adding coins, we always start with the highest value first, and go in decreasing value.*
- Split students into pairs and give each group a moneybag as well as the "Let's Count Money!" worksheet (Student Resource Sheet 6). Draw the following on the board:

--	--	--	--	--

_____ = _____

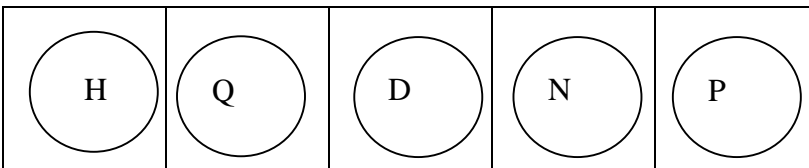
- Put 5 coin cutouts (H, Q, D, N, P) on board in random order. Allow student to pull out the same 5 coins from money bag and put them in descending order by value on worksheet. Ask a volunteer to come up and place coins in order

on board. Students should do the same on their worksheets. Model how to replace coins with drawings of coins with initials inside.

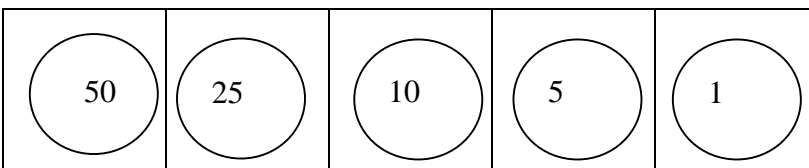
- Ordered coins should look like the following:



- Drawings of coins with values should look like the following:



- *How much is Harry Half Dollar worth? (50 cents). Write 50 on the line below the half dollar. What is the value of a quarter? (25 cents). Look at Hundreds Chart (Teacher Resource Sheet 1). What is 1 half-dollar and 1 quarter worth? (75 cents). The teacher will continue with the other coins. Students should copy this information to their worksheet as it is being completed on the board.*
- The final board/worksheet should look like the following:



50 75 85 90 91 = 91

- Have student randomly pull out 5 different coins from his/her bag, and repeat process above.
- Repeat this process one more time, asking one more student to randomly pull coins.

Student Application

- Allow students to work in pairs to complete the rest of the worksheet. Allow one student to select 5 coins. Students should place them in order on their worksheets, and complete the same process as in Teacher Facilitation in their groups. Upon completion, select a few students to share different examples of 5 coin combinations with their classmates on the board.

- Play Slink-'N'-Slide
 - Display an overhead of a "Slink 'N' Slide" board (Student Resource Sheet 7) and pass out one board to each pair of students. Also distribute "Slink 'N' Slide Calculation" page (Student Resource Sheet 8), two counters, and dice to pairs.
 - Model how to play the game: Have a volunteer come to the overhead to be the second player. Roll the die to see who goes first. The player with the highest number goes first. Place both counters on start. Player 1 rolls the dice to move forward. Move the counter according to the number of spaces. Read and follow the directions on the space where the player landed. If the space asks player to add up money, use the Slink N Slide Calculation page to figure out how much money they have. Players should keep their scores on the back of the calculation page. The game will end when one of the players reaches the end. The winner is the person who has the most money!

Embedded Assessment

- When students are answering questions during Teacher Facilitation, observe and record answers that students give for any of the questions that are being asked on the "Anecdotal Record" (Teacher Resource Sheet 5).
- While students are completing Student Application, walk around the classroom, and make note of students who understand the concepts and are playing the game appropriately.

Reteaching

- Students who have difficulty can practice creating different combinations of coins and finding the value using the Slink 'n' Slide Calculations page.
- Students can use coins in their bags in order to keep track of how much money they have.

Extension

- Students can be given different values. They must create different combinations of coins that add up to those values.

Lesson 3

Pre-Assessment

- Place the following combination of large coins on the board with the question:
- **How much money do I have?**



- Allow students to show how much money and how they got their answers by showing work or writing a couple of sentences as to how they solved the question in their journals.

Launch

- *Finally! Today we're going to go to the Coin Carnival. On our way there, we're going to have to use our knowledge of coins and their values to be able to pass different places! Once we get there, we're going to play some of the fun games – using our coin combination and adding skills we have already learned. But, best of all, we'll be using a new skill we're going to learn today – how to make the same amount of money using the fewest coins possible!*
- Distribute "Our Quest for the Carnival" worksheet (Student Resource Sheet 9). Place same chart on board.
- *To get to the Coin Carnival, we're going to have to use our best listening skills as I read a story. Follow along the path with your finger as I read. When I stop, it will be your group's job to fill in the blanks, as I'll show you on the chart when we get there.*
- Read: "Let's Go to the Coin Carnival!" (Teacher Resource Sheet 6). Make sure to pause as coins stop at the different places to combine in order to make enough money to cross at the different junctures. Work through their journey on the chart, as students work on their own worksheet.

Teacher Facilitation

- *Alright! Now that we got to the carnival we have to go on the best ride here! It's called Stuffy Stegosaurus! It's an obstacle course! As you climb up the dinosaurs back you have to put in coins at different spots. You need eight coins to pass through the whole obstacle course. But he only takes in coins in order from high to low. And at the end, in order to get off the course you have to be able to say how much money you used to go through the obstacle course. Luckily, you all don't have to use your own money, the school gave us different bags of money for you to use!*

- Put students into groups. Hand out Dinosaur Worksheets (Student Resource Sheets 10 - 13) and a different color coin bag to each group. (Refer to "Coins in Bag" (Teacher Resource Sheet 7) for number of coins in bags). Display Stuffy Stegosaurus Overhead. Tell students that Stuffy has 3 cousins. Each group will have to count the coins that are in the corresponding bag before they can proceed to the next game at the carnival. Recall with students the rules for combining/adding money:
 1. Place in order – high to low.
 2. Write Coin Capital Letter (H, Q, D, N, P) inside circle.
 3. On lines above circles, students will add to amounts as they add coins.
 4. Encourage use of hundreds chart.
 5. When finished, pass along to next group.
- Model how to work through the Stuffy Worksheet using the coins in the teacher bag. Show students each step above when trying to solve how much money is in the teacher bag.
- Have groups begin working together, monitoring for assistance and informal assessment. Each bag corresponds to a different dinosaur noted at the top right corner of the worksheet. When students are finished figuring out the value of one bag, they should pass the bag to another group, and use the next worksheet to figure out how much money is in the new bag. When all groups have completed the Stegosaurus worksheets, bring class together again.
- Review responses on overhead.
- *Now, let's pretend that each of you have 87 cents in your piggybank, and that's how much you want to take to the carnival for your own spending. Now understand it's a very long way to the Coin Carnival (20 blocks). How many pennies would it take for me to have 87cents? (87 pennies). Allow a student to come to the front of the room. Hand him/her 87 pennies. Would you want to carry **all this all the way**? (can't!)*
- *What might I be able to do? I really need to take this money with me to the arcade! (less coins!). Allow first student to sit down; call on another volunteer.*
- *What if I had almost all nickels? How many would I have? Skip count with me – as children are skip-counting, teacher will count out coins into hand... 17 Nickels - 85¢, 2 pennies – 87¢. Still pretty heavy, right?*
- *What about dimes? Skip count by 10's. 8 Dimes, 1 Nickel, 2 Pennies – this is still a lot, isn't, but better, no? Do you think you might lose some along the way?*

- *How about quarters?* Skip count by 25's. 3 Quarters, 1 Dime, 2 Pennies
- *What about using a half-dollar?* 1 Half-Dollar, 1 Quarter, 1 Dime, 2 Pennies
- *So, do we want to take all those pennies with us? What would be reasonable to carry in your hands or pockets? (1 Half-Dollar, 1 Quarter, 1 Dime, 2 Pennies)*
- *Now the carnival directors want to make a smaller Stuffy for the really little kids to use. They don't want to have eight stops; they want to make the new obstacle course as small as possible. We're going to help with the planning. Stuffy and his cousins just spit out all that money. Do you want to be carrying all that change around as you go through the Coin Carnival? What can we do? We need to reduce it into manageable amounts, just like we did our 87¢!*
- *We're going to work in groups to figure out the least amount of coins for each amount the Stegosauruses spit out. To do this, we're going to have to use our coin ordering, skip counting, and other adding skills. What coin do we always start out with? (half-dollar). Let's do 87¢ again together.*
- Model on overhead: 1 half-dollar (H), 1 quarter (Q), 1 dime (D), 2 pennies (P), (P). Total Amount: 87¢. *How many coins?* (5)

Student Application

- Display Coin Counter Overhead. Hand out Coin Counter Worksheet (Student Resource Sheet 14). Ask students to turn to their Stuffy Worksheet (blue money bag). *What were the coins that you used to pass through Stuffy?* Write the coins on the Coin Counter Overhead under First Number of Coins (Blue Bag).

Coin 1	Coin 2	Coin 3	Coin 4	Coin 5	Coin 6	Coin 7	Coin 8	Total Amount
Ⓚ	Ⓚ	Ⓓ	Ⓓ	Ⓓ	Ⓝ	Ⓟ	Ⓟ	
25 ¢	50 ¢	60 ¢	70 ¢	80 ¢	85 ¢	86 ¢	87 ¢	87 ¢

- Point to second grid (**Least Number of Coins (Blue Bag)**). Ask students *what the largest coin is.* (half-dollar). *What is it equal?* (50¢). *Is 50 < 87?* (Yes). Write the first coin/abbreviation on second grid as H. Ask *if they can figure out if there are any coins here that we can replace with other coins. I know that two quarters is 50 cents. So I can tell that both quarters can be replaced by a half-dollar!* Go to first grid, and put a slash through two quarters. *How*

much money is left? Let's count on using our coin values to find out. Count with students to 37¢. Can another half-dollar fit here? No, because $50 > 37$. I now need to go to the next largest coin. What is that? (A quarter = 25¢.) Write the second coin/abbreviation on second grid as Q. Point back up to the first grid. Which coins equal 25 cents? (2 dimes, 1 nickel). What can I replace those coins with? (quarter). Slash through two dimes and one nickel. Let's count up again to see how much money is left. Remember, we'll use our coin values. Count up to 12¢ with students. Can I add another quarter? (No). Why? ($12 < 25$). What is the next largest coin value? (Dime = 10¢). Is $10 < 12$? (Yes). On first grid, slash through dime and place D on second grid. What do we have on our new grid (count up with students)? (85¢). What do we have left on first grid? (2¢). What is the next largest coin? (Nickel = 5¢). Can I put a nickel on this grid (pointing to second grid)? (No). Why? ($2 < 5$). What shall I put? (2 pennies). That's right, we'll count up to 87¢.

Least Number of Coins (Blue Bag)

Coin 1	Coin 2	Coin 3	Coin 4	Coin 5	Coin 6	Coin 7	Coin 8	Total Amount
H	Q	D	P	P				
<u>50</u> ¢	<u>75</u> ¢	<u>85</u> ¢	<u>86</u> ¢	<u>87</u> ¢	_____ ¢	_____ ¢	_____ ¢	<u>87</u> ¢

- Ask students to work in groups to figure out the least amount of coins for each dinosaur value. When the groups are finished, review as a whole class.
- Hand out What Color Am I? Worksheet (Student Resource Sheet 15) and indicate that the coins from the Coin Counter WS (completed based on dinosaur color) should be transferred to the different shapes, depending on the value's least number of coins. The bag color matches the dinosaur color. This worksheet can be collected to use as a lesson assessment.
- At the end of lesson administer the summative assessment.

Embedded Assessment

- Summative assessment as well as What Color Am I worksheet.

Reteaching/Extension

- Have other bags of different coins available for both reteaching and extension.

Summative Assessment:

- Administer the summative assessment (Student Resource Sheet 16). Answers may be found on Teacher Resource Sheet 8.

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Teacher Resource Sheet 1

Hundred Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Teacher Resource Sheet 2

Place the following display on the chalkboard.

1¢



5¢



10¢



25¢



Teacher Resource Sheet 3



Coin Poems

Patty Penny Poem

Patty, penny,
Easily spent
Copper brown
and worth one cent.

Nigel Nickel Poem

Nigel, nickel,
Thick and fat,
You're worth five cents.
I know that.

Delia Dime Poem

Delia, dime,
Little and thin,
I remember,
You're worth ten.

Quinton Quarter Poem

Quinton, quarter
Big and bold,
You're worth twenty-five
I am told!

Adapted from <http://www.teachers.net/lessons/posts/138.html>

Name: _____ Date: _____

Matching Money

Directions: How much is each coin worth? Draw a line from the coin to its correct value.



■

■ 25¢



■

■ 10¢



■

■ 1¢





■

■ 5¢

Name: _____ Date: _____

What's the Value?

Directions: What is the value of each set of coins? Write your answer on the line provided. Tell how you got your answer.

 <p>I counted by ____'s.</p>	<p>_____ ¢</p>
 <p>I counted by ____'s.</p>	<p>_____ ¢</p>
 <p>I counted by ____'s.</p>	<p>_____ ¢</p>
 <p>I counted by ____'s.</p>	<p>_____ ¢</p>

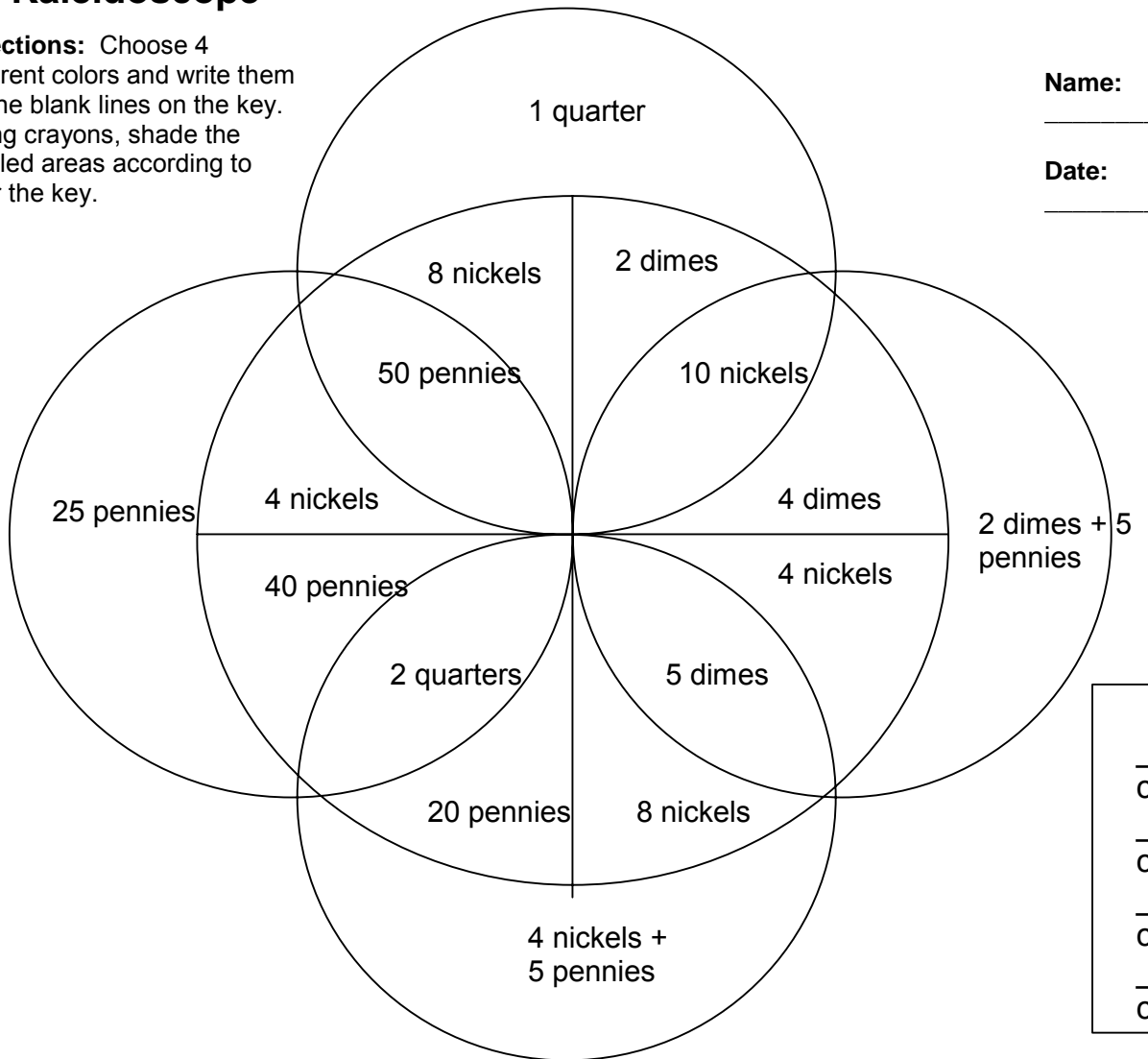
Coin Kaleidoscope

Directions: Choose 4 different colors and write them on the blank lines on the key. Using crayons, shade the labeled areas according to your the key.

Student Re

Name: _____

Date: _____



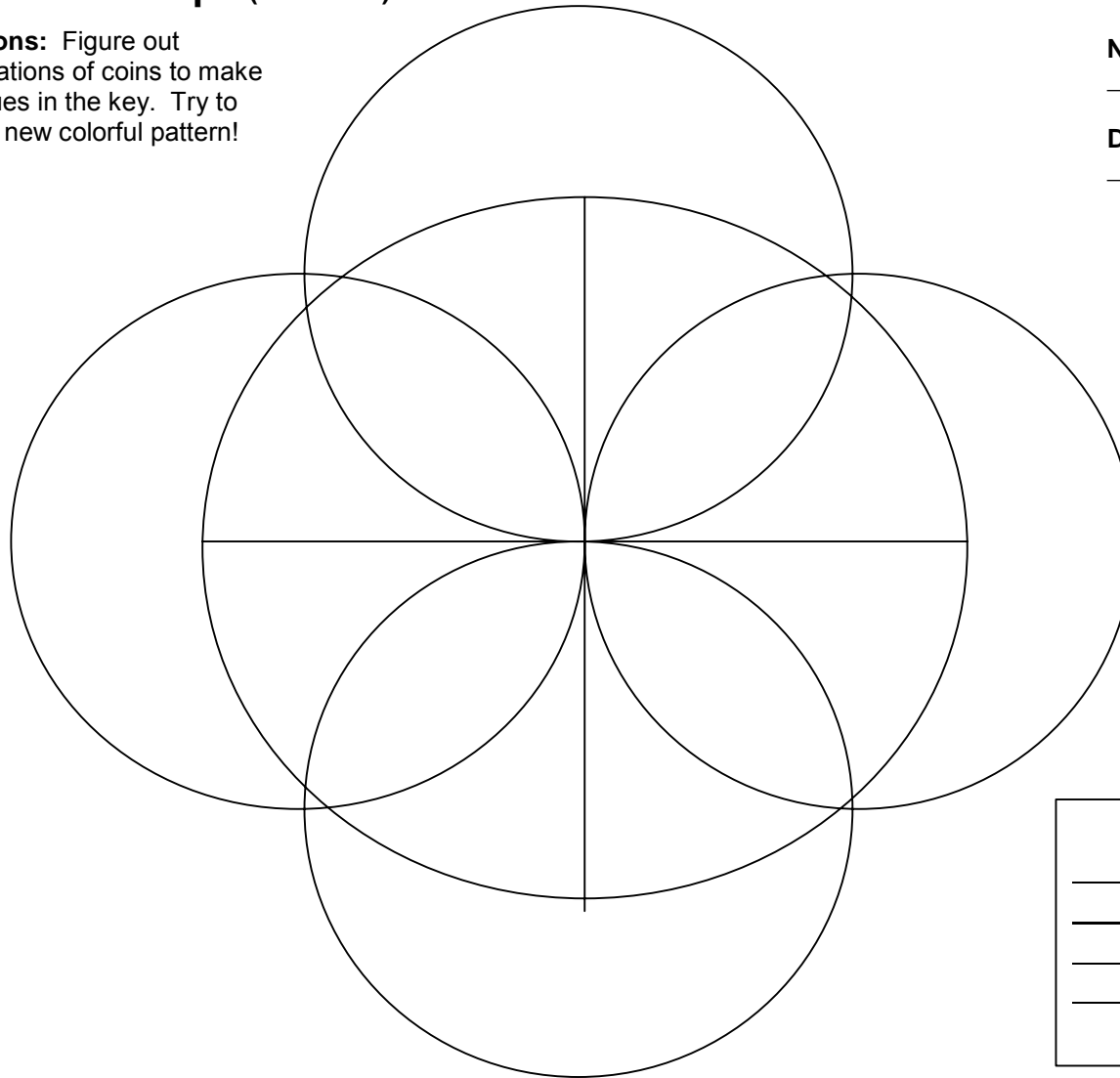
_____	cents
_____	cents
_____	cents
_____	cents

Anecdotal Record

Subject: _____ Lesson: _____

Coin Kaleidoscope (Extension)

Directions: Figure out combinations of coins to make the values in the key. Try to make a new colorful pattern!



Student Resource Sheet 4

Name:

Date:

Key

blue = 50 cents

red = 20 cents

green = 40 cents



yellow = 25 cents

Name: _____

Date: _____

What's the Value? (Part 2)

Directions: What is the value of each set of coins?

	<p>_____ ¢</p>
	<p>_____ ¢</p>
	<p>_____ ¢</p>
	<p>_____ ¢</p>

Name: _____ Date: _____

Let's Count Money!

--	--	--	--	--

_____ = _____

--	--	--	--	--

_____ = _____

--	--	--	--	--

_____ = _____

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_____ = _____

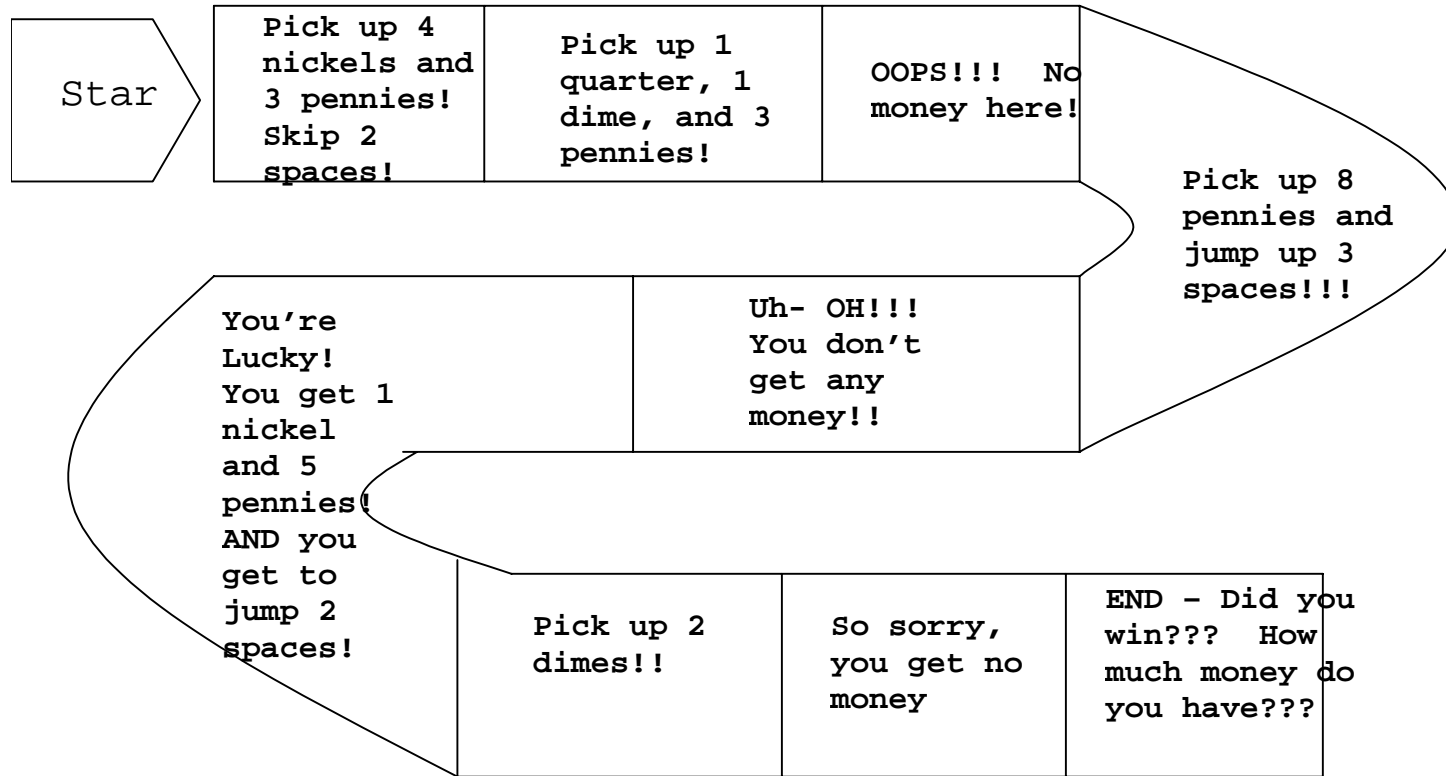
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_____ = _____

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_____ = _____

Slink 'N' Slide



Directions: Put your counters on start. Roll the die to see who goes first. The player with the highest number goes first. Player 1 rolls the die to move forward. Move the counter according to the number of spaces. Read and follow the directions on the space you landed on. If the space asks player to add up money, use the Slink N Slide Calculation page to figure out how much money you have. Players should keep their score on the back of the calculation page. The game will end when one of the players reaches the end. The winner is the person who has the most money!

Let's Go to the Coin Carnival!

Once upon a time, there was a little girl named "Patty Penny". She wanted so badly to go to the Coin Carnival, but all her friends were away. She had no one to go with, so she sadly went to bed, dreaming that tomorrow, her friends would return, and they could all go together!

Patty stood looking over a pretty field of fancy flowers, seeing a mountain over the horizon. She started walking through the blue bouquets, knowing that it would lead her to the Coin Carnival. As she reached the halfway point, who should appear but the Ghastly Gatekeeper! "Without 5¢, you shall not pass!" he cried.

Penny, again sad and lonely, closed her eyes and wished again for her friends. Suddenly, her friends Peter Penny, Paula Penny, Prescott Penny, and Pamela Penny stood in front of her! Happily, they joined hands, walked past the Ghastly Gatekeeper, and through the rest of the field.

Tired after that walk, they approached a beautiful flowing river, resting for a while at the riverbank. Wondering how they could possibly get across this seemingly endless river, they saw Fred the Ferry steering his boat towards them. Eagerly, they ran towards him, clamoring for his attention. "Please, please, will you take us across the river? We want so much to get to the Coin Carnival to play the games!" Fred, fearful of people, shrunk back, and quietly said, "I'm so sorry, but for me to take you, I'll need 10¢!" The Pennies' faces dropped, disheartened by his words. Discouraged, they turned away, and ran smack into Nigel the Nickel. "Hello!" he said. "Hi!" they said back in unison. They all talked together at once, and found out that Nigel, too, was going to the carnival. "Perhaps we can all go together", said Penny hopefully. The neat man Nigel nicely agreed. Holding hands once again, they all carefully climbed aboard Fred's Ferry and crossed the river.

As they departed the ferry, they waved good-bye to Fred, and turned towards the Monstrous Mountain they saw in the not so short distance. Not having worn their boots, again they worried how they could possibly climb

such a steep height to get to Coin Carnival. Nigel wisely said, "Worrying won't get us anywhere. Let's go!" So, off they went. Walking towards the mountain, they met up with Delia the Dime. "Hi!" she said. "What are you doing?" Once they told Delia their strong desire to go to the Coin Carnival, she asked to go, too. Always agreeable, Nigel invited her along. It was a long way to the bottom of the mountain. As they approached, off in the distance they saw Hallie the Helicopter, her blades slowing as she lowered herself to their position.

"Where are you going?" asked Hallie? "Why", said Patty Penny, "we're trying to travel to the Coin Carnival. We just don't know how we're going to get up and over Monstrous Mountain!" Hallie hesitantly replied, "Well, I can certainly take you all, but it's very expensive for me to run my helicopter. I'll have to charge 25¢ to take you up and over this mountain!" The friends all conferred, and decided that, amongst them, they had 20¢. What were they to do?

Just when they thought they would have to turn back, Nellie the Nickel jumped out of the helicopter and said, "I'll go back to the carnival! Will that help you all?"

Gleefully, they all piled into the helicopter, and slowly lifted off. What a view they saw. The mountains were blue-purple, snow-capped at the top. On the other side, they saw that the mountain was full of trees, beautiful, lush, and green. As Hallie found a spot to land, they saw in front of them a desert area - very dry and hot, they thought. She dropped them off, and the 8 friends (Patty, Peter, Paula, Prescott, Pamela, Nigel, Nellie, and Delia) thought about beginning their walk. Delia, however, was cautious, and realized that the walk would be difficult for them without something to drink. Magically, a Double Drink stand appeared, with Danny at the helm.

"Hello", Danny said. "What can I get for you?" The friends talked and decided that they should share four large liters of water. The cost? 50¢! Not as disappointed as before, the friends looked around, expectantly, hoping upon hope that another new friend would suddenly appear. And, of course, he did! As they quickly turned around, Quinton the Quarter spun towards them. Screeching to a halt at their feet, he said, "As you know, I'm here to join you to make sure your journey is a safe and healthy one! Please,

let's join hands and together, we'll buy our four large liters of water, and cross this desert!

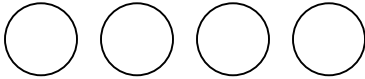

Well, as you probably suspected, they almost made it across the desert when, lo and behold, they ran into Samuel the Snake. Hissing at them, he more than indicated that there was just NO WAY they would be able to pass! Begging and pleading, knowing that they were SO CLOSE to the Coin Carnival, they offered him the rest of their water. The offer did not sway him. They chattered together again, hoping to come up with a solution to their dilemma. "Is there no way we can pass?" asked Quinton? Sammy the Snake, finally and grudgingly, told them that if they could pay him \$1.00, they could be on their way. You see, he had just swallowed Harry the Half-Dollar, and wasn't feeling that entire well. His proposal: if they helped him bring Harry back out of his stomach, they could all pass.

Well, the friends got on either side of him, and pushed and pushed and pushed. WOW! Out popped Harry! Sammy the Snake was so grateful, and the new group of friends, including Harry the Half-Dollar, walked around Sammy and went on their way towards Coin Carnival, seen in the distance.

The friends reached the Coin Carnival shortly thereafter. And, in they went!

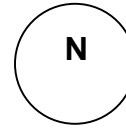
Look! The most popular game appeared to be playing with Stuffy the Stout Stegasaurus! Inspecting him closely, the friends realized that above his spikes were magic holes that they could throw money into. IF they threw the right coins into each hole, and then figured out how much money they had thrown in, Stuffy would spit out the correct value. Stuffy would then tell them that they next needed to go to Stingy, his cousin, to play the game again. Before they could go on to their next adventure, they must also play with Stinky and Lou, Stuffy's other two cousins.

Our Quest for the Coin Carnival

A. **P**  



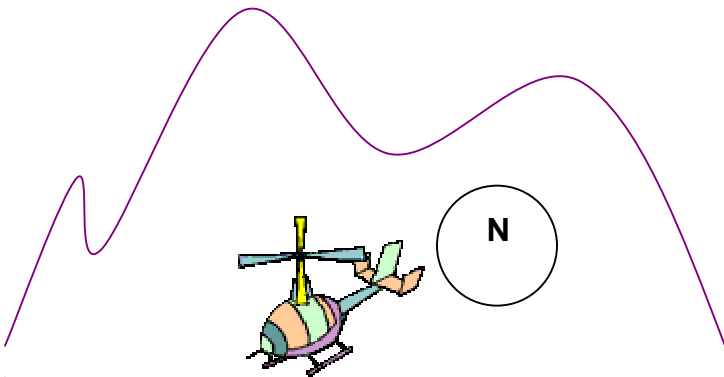
_____ ¢ _____ ¢

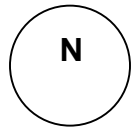
N 

B.



_____ ¢



N 

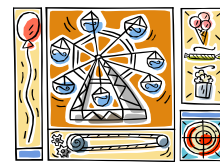
_____ ¢

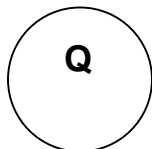
D 

C.

_____ ¢

D.

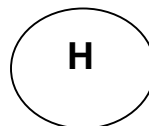


Q 

_____ ¢

E.

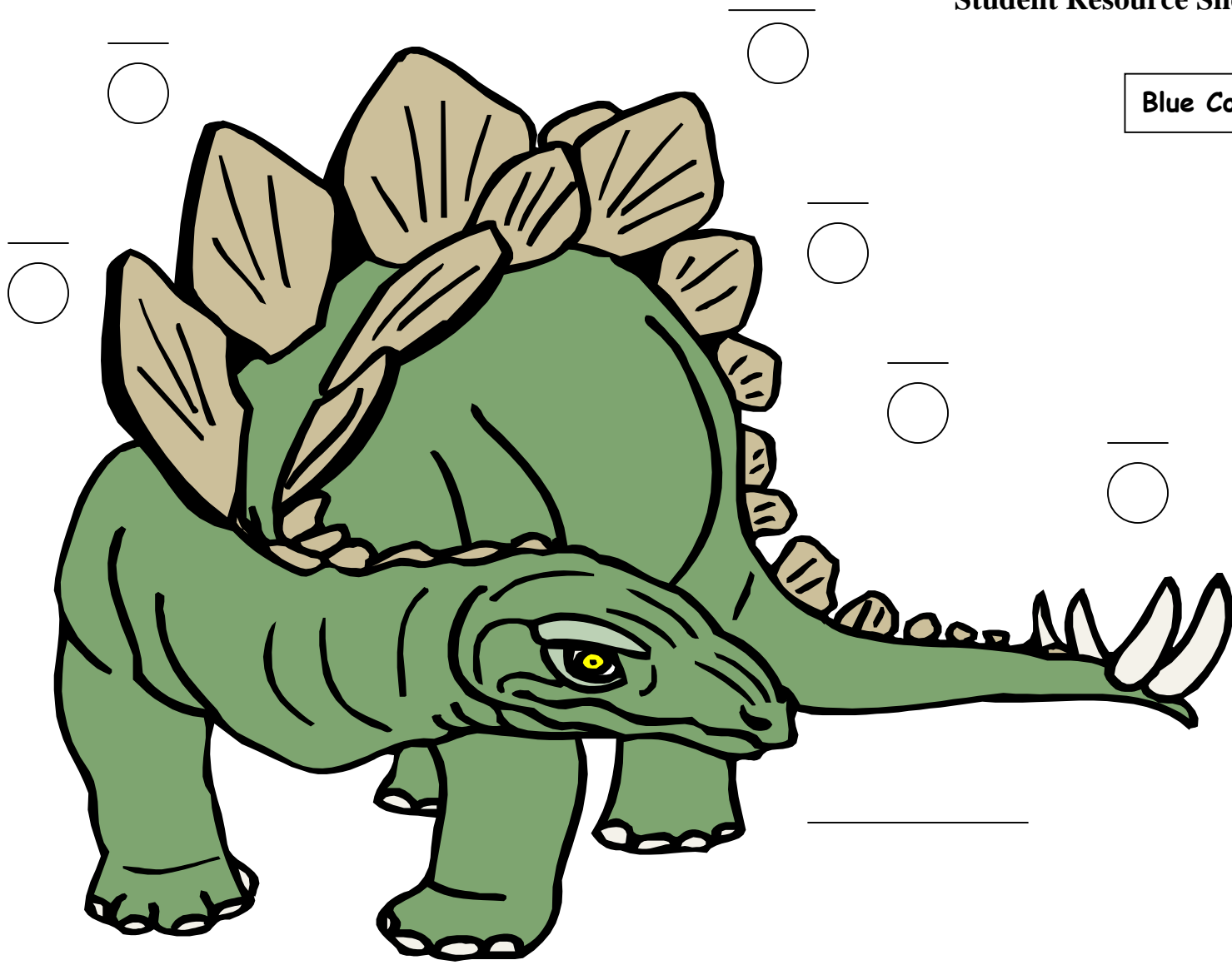


H 

_____ ¢

Stuffy

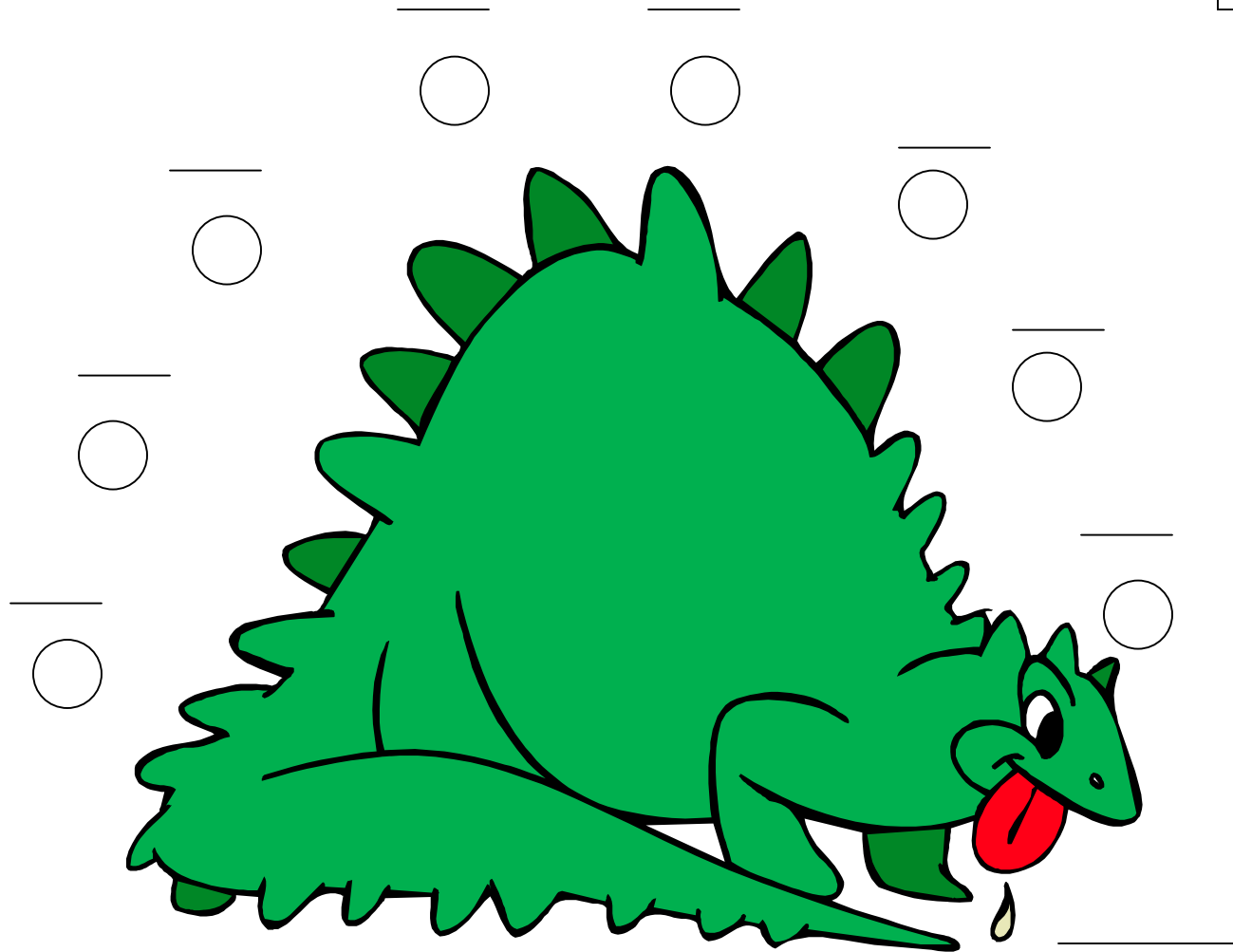
Blue Coin Bag



Directions: Decide which coin goes on which circle. Then, write in the circle: H for half-dollar, Q for quarter, D for dime, N for nickel, and P for penny. Next, add the coins up. Finally, write the total amount below Stuffy's mouth!

Stingy

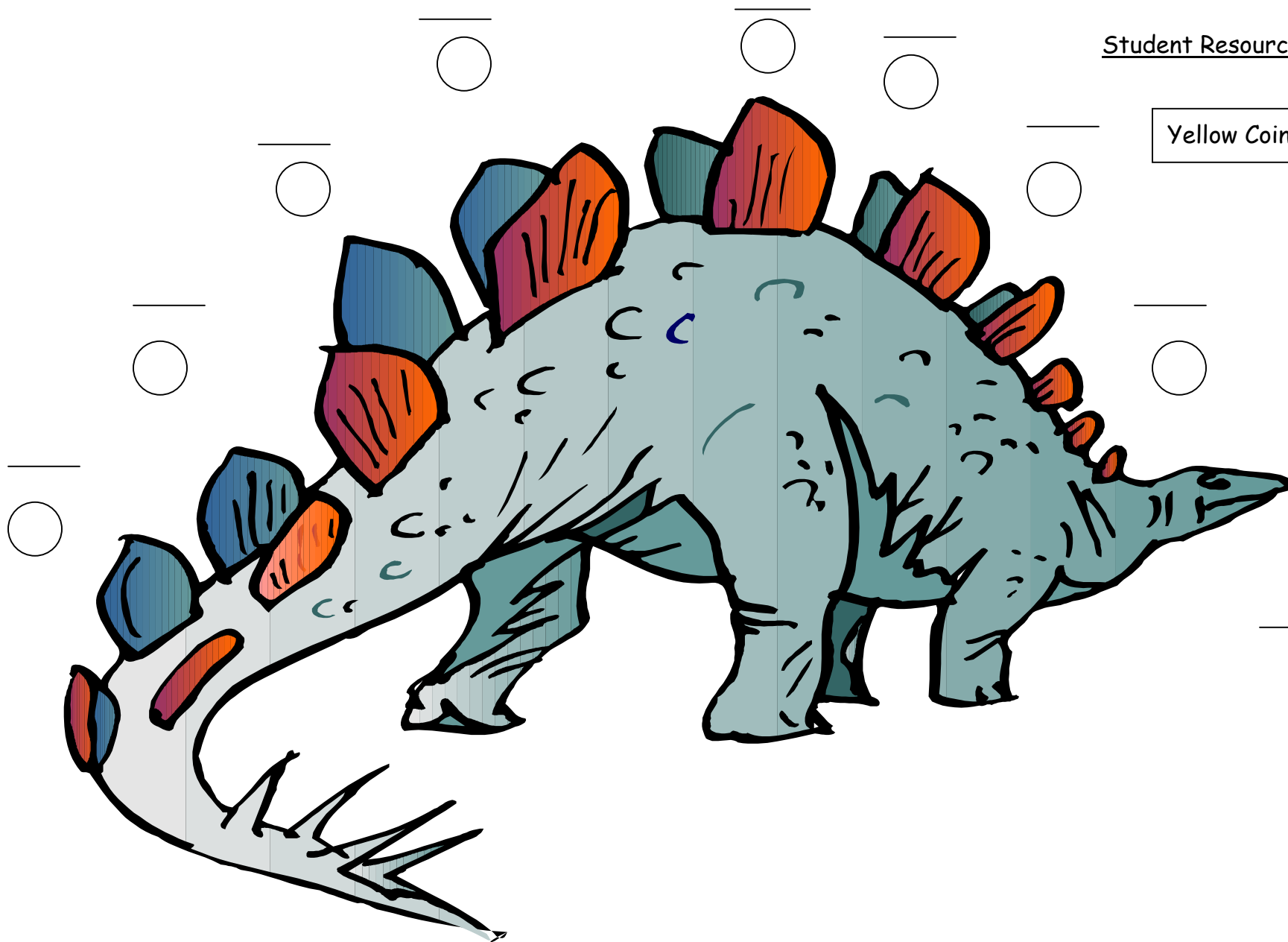
Red Coin Bag



Directions: Decide which coin goes on which circle. Then, write in the circle: H for half-dollar, Q for quarter, D for dime, N for nickel, and P for penny. Next, add the coins up. Finally, write the total amount below Stingy's mouth!

Stinky

Yellow Coin Bag

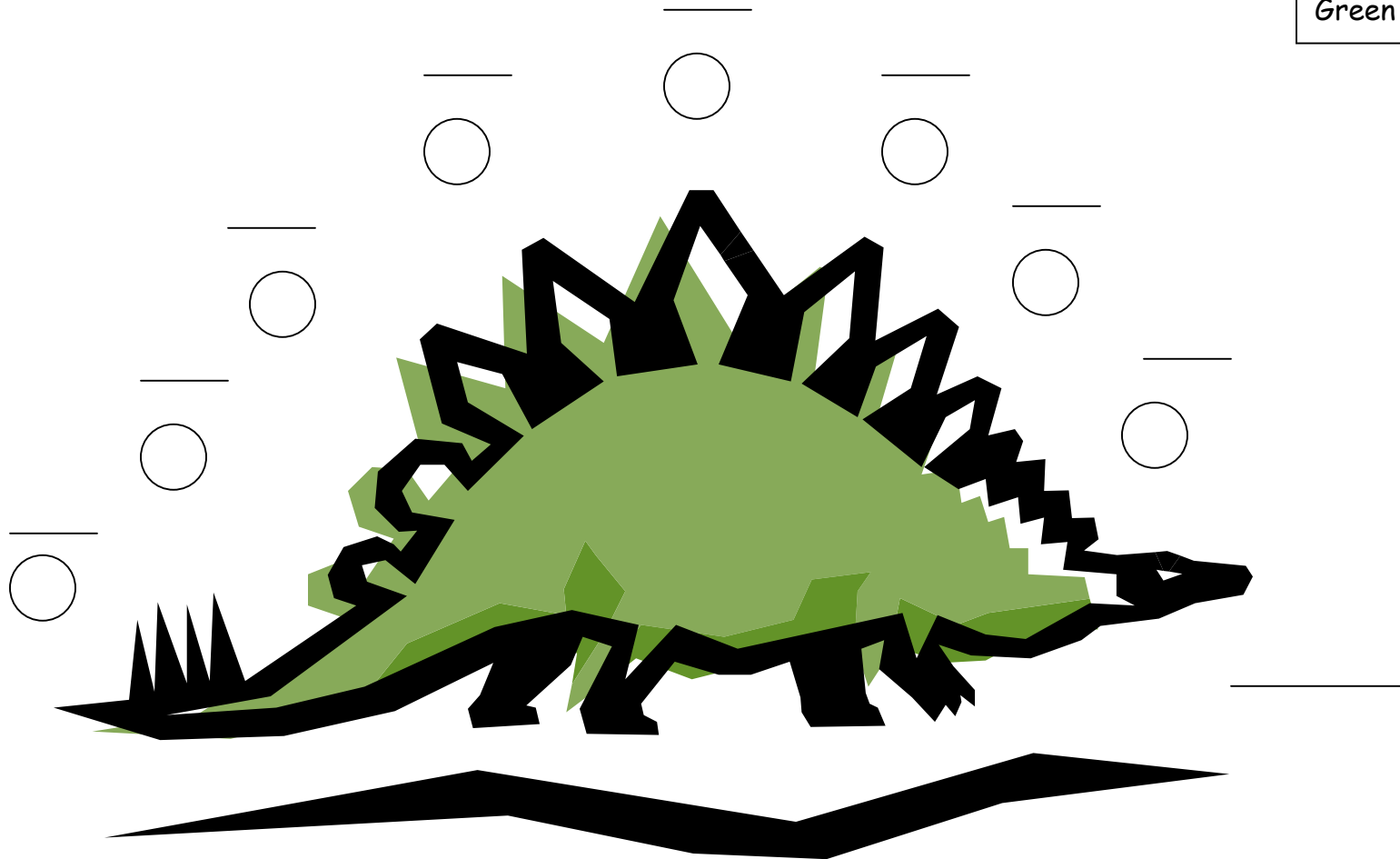


Directions: Decide which coin goes on which circle. Then, write in the circle: H for half-dollar, Q for quarter, D for dime, N for nickel, and P for penny. Next, add the coins up. Finally, write the total amount below Stinky's mouth!

Lou

Student Resource Sheet 13

Green Coin Bag



Directions: Decide which coin goes on which circle. Then, write in the circle: H for half-dollar, Q for quarter, D for dime, N for nickel, and P for penny. Next, add the coins up. Finally, write the total amount below Lou's mouth!

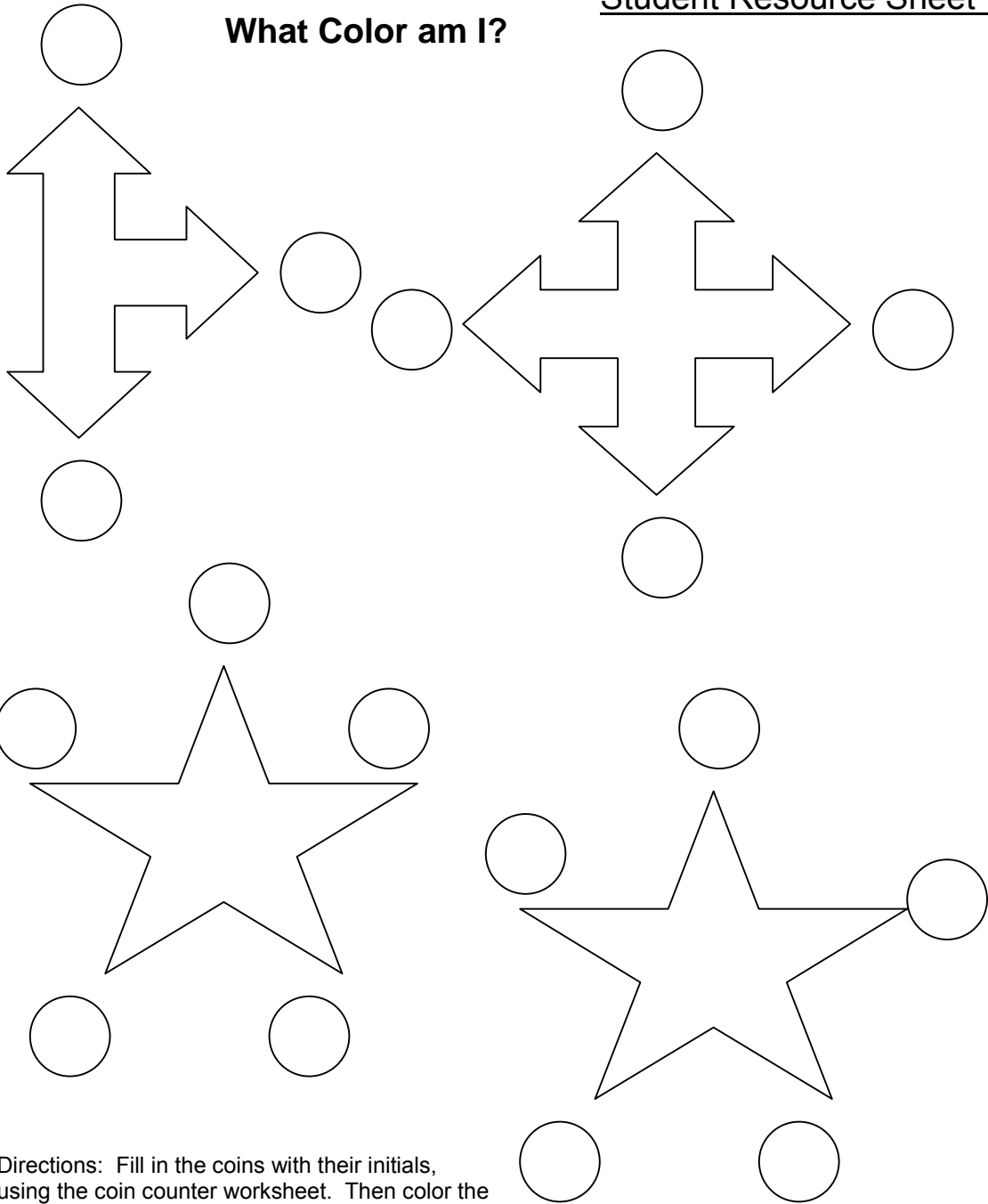
Coins in Bag

Bag	H	Q	D	N	P	T
Blue		2	3	1	2	87¢
Red		1	2	1	4	54¢
Yellow		1	2	4	1	61¢
Green			3	2	6	46¢
Teacher Bag		2	3	1	2	87¢

Least Number of Coins

Bag	H	Q	D	N	P	T
Blue	1	1	1		2	87¢
Red	1				4	54¢
Yellow	1		1		1	61¢
Green		1	2		1	46¢
Teacher Bag	1	1	1		2	87¢

What Color am I?



Directions: Fill in the coins with their initials, using the coin counter worksheet. Then color the shape the same color as its dinosaur. Make sure you figure out which shape goes with which dinosaur!

Name: _____ Date: _____

Coin Carnival Assessment - Selected Response

1. Which set of coins represents 40¢?

A 

B 

C 

D 

2. What is the value of the coins below?



57¢

72¢

82¢

87¢

A

B

C

D

3. Using your answer from question 3, which least amount of coins will equal its value?



Questions 4 and 5

Harry Half-Dollar had just 50¢. He begged Quinton Quarter to lend him 3 pennies, 1 nickel, and 1 dime.

4. Assuming Quinton lent Harry the money, how much money did he lend him?

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 18¢ | 38¢ | 68¢ | 88¢ |
| A | B | | |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

5. How much money did Harry have after borrowing Quinton's money?

- | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 63¢ | 68¢ | 78¢ | 88¢ |
| A | B | C | D |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Name: _____ Date: _____

Coin Carnival Assessment - Brief Constructed Response

Patty Penny was exhausted after her day at the Coin Carnival. She was so tired that she almost didn't realize there was money on the ground! She picked up a penny, 2 nickels, 3 dimes, and 1 quarter.

Step A

What was the total amount of money that Penny found?

What coins would equal the least number of coins of the same amount?

Step B

Use what you know about combining coin values to the least number to explain why your answer is correct. Use words and/or numbers in your explanation.

Name: _____ Date: _____

Coin Carnival Assessment - Selected Response (Answer Key)

1. Which set of coins represents 40¢?

A 

B 

C 

D 

2. What is the value of the coins below?



57¢

72¢

82¢

87¢

A

B

C

D

3. Using your answer from question 3, which least amount of coins will equal its value?



Questions 4 and 5

Harry Half-Dollar had just 50¢. He begged Quinton Quarter to lend him 3 pennies, 1 nickel, and 1 dime.

4. Assuming Quinton lent Harry the money, how much money did he lend him?

18¢ 38¢ 68¢ 88¢

A B

5. How much money did Harry have after borrowing Quinton's money?

63¢ 68¢ 78¢ 88¢

A **B** C D

Name: _____ Date: _____

Coin Carnival Assessment - Brief Constructed Response

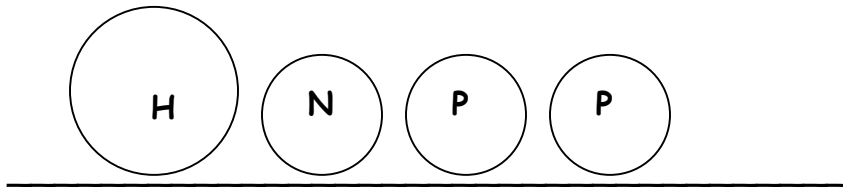
Patty Penny was exhausted after her day at the Coin Carnival. She was so tired that she almost didn't realize there was money on the ground! She picked up a penny, 2 nickels, 3 dimes, and 1 quarter.

Step A

What was the total amount of money that Penny found?

57¢

What coins would equal the least number of coins of the same amount?



Step B

Use what you know about combining coin values to the least number to explain why your answer is correct. Use words and/or numbers in your explanation.

To find out the least number of coins I have to first know the largest coin that will go into the total amount. 1 half-dollar = 50¢. I know $50¢ < 57¢$, so I chose a half-dollar first. Next, I counted up from 50 to the total amount and needed 7 more cents. The largest coin less than 7¢ is a nickel = 5¢, so I chose a nickel next and got 55¢. Finally, I counted up 2 to 57¢. 1 penny = 1¢, so I added two pennies to get my total amount of 57¢.

