Carlotta's Coins

"I won! I won!" Carlotta shouted breathlessly.
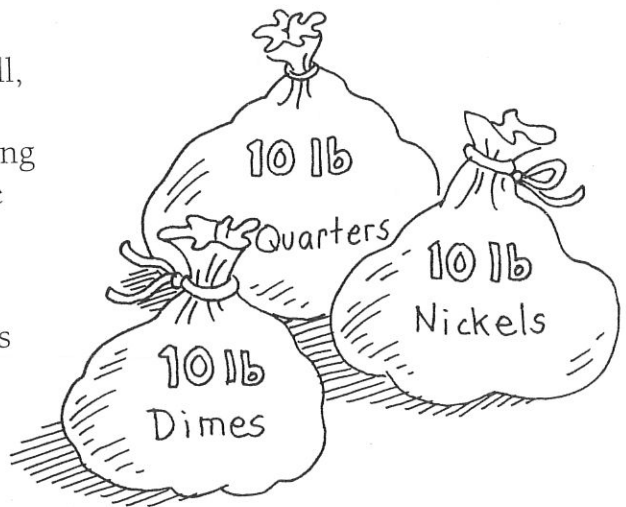
"What did you win, Carlotta?" Emma asked.

"I won 10 pounds of something," she huffed and puffed, "just for being the 10,000th customer at Shop & Go Market! It wasn't even my idea. I hate shopping. My mom sent me there for juice and milk."

"You won 10 pounds of something. Well, that's great. I guess congratulations are in order," added Will (who privately wondered what prize would be in store for the one millionth customer).

"If it were just congratulations I wanted Will, I wouldn't have barged into your office to disturb you while you're doing your detecting and all. I came to ask you to help me figure out what I've won," said Carlotta.

Carlotta had to figure out which of the following was the biggest prize—10 pounds of quarters, 10 pounds of dimes, or 10 pounds of nickels. The choice was hers. She could pick one of the three choices and walk away with the cash.

"That's a lot of coins to worry about," Carlotta worried. "I think the store manager must have been a math teacher once."

"Not as many coins as you might think," Emma said soothingly. "We'll use this postage scale here, the coins that Will's gathering, and a little proportional reasoning."

It took about 10 minutes for the twins to weigh, compute, and tally. Carlotta left their office confident of her choice and happy with the results.

> How should Carlotta take her 10 pounds of winnings? How much money would she win? Explain how you made your decision.

Name _____ Date _____

? 8 ? ? ? 4 ? 9 ? 6 ? 3 ? 1 ? 5 ? 1

Investigator's Log

Name of case _____

Restate the problem in your own words: _____

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What information do you have? _____

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What information do you need? _____

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What can you do to solve the problem? _____

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Solution: _____

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How do you know your solution makes sense? _____

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