

Mr. Goldman's Good Idea

Objective

Students will read about Sylvan Goldman, the inventor of the shopping cart, create their own inventions, and solve math problems related to grocery shopping.

Background

Long before there were supermarkets, people shopped for their groceries in specialty shops. They would go to the butcher shop to get their meat, the bakery to get their bread, the produce store to get fresh fruit and vegetables and to the pharmacy for toothpaste and other non-food items. In the 1800s, some merchants began to open general stores where customers could buy several different kinds of things under the same roof. A clerk would measure an assortment of goods—flour, coffee, fabric, nails, garden seeds, etc.— according to how much the customer needed. By the early 1900s these general stores had evolved into small neighborhood grocery stores where clerks were still available to gather groceries and measure them out in the amount each customer requested.

Clarence Saunders opened the first self-service store in Memphis, Tennessee, in 1916. Shoppers walked through four aisles to view the store's 605 items. Goods were sold in packages and were organized into departments. Many people didn't like the self-service grocery stores at first. They felt that gathering their own groceries was demeaning. Early self-serve grocers had to convince customers they would save money by getting their own groceries.

Sylvan Goldman and his brother were some of the first grocers to open self-service grocery stores in Oklahoma. Like other self-service stores at that time, the Goldmans' stores had wicker or wire market baskets piled in bins for customers to use. These baskets became heavy as they were filled with food items. Grocers in other parts of the country had tried to solve this problem in various ways. One grocer had even designed a steel cart for customers to use. However, this cart did not fold and took up so much space that the grocer was unable to provide them for all his customers.

When open, Goldman's shopping cart was 24 inches long, 18 inches wide and 36 inches tall. The baskets had to be removed when the cart was folded, but they were designed so they could be stacked and took up very little space. Goldman added a baby seat to his design a year later.

A more recent invention that has changed the grocery business is the Universal Product Code (UPC) scanner. A UPC code, or bar code, is printed on each pre-priced item. When the checkout clerk passes the code over a scanner, a computer selects the appropriate price and description from its memory bank and causes this information to be printed on the cash register tape. At the same time, the computer deducts the item from the store

Oklahoma Academic Standards

GRADE 3

Speaking and Listening: R.1,2,3; W.1,2. Reading and Writing Process: R.1,3. Critical Reading and Writing: R.6,7; W.2. Vocabulary: R.1,3,5. Research: R.1,2,3,4; W.1,2,3. Economics: 1,3. Geography: 1.1AC. Oklahoma History: 10. Interdependence of Science, Engineering and Technology: 2-4. Numbers & Operations: 2.5,7. Algebra: 2.1

GRADE 4

Speaking and Listening: R.1,2,3; W.1,2. Reading and Writing Process: R.1,3,4. Critical Reading and Writing: R.6,7; W.2. Vocabulary: R.1,3,5. Research: R.1,2,3; W.1,2,3. Geography: 1A. Interdependence of Science, Engineering and Technology: 3-4. Numbers & Operations: 1.4,5. Algebra: 2.2

Materials

folding chair
borrowed shopping cart
groceries with prices
marked
market-sized shopping
basket

inventory, which is carried in its memory. This system improves efficiency at the checkout counter, reduces errors and assists inventory control.

US supermarkets had \$584.4 billion in sales during 2011. The United States has 36,569 supermarkets with annual sales of \$2 million or more. The median square footage of a supermarket was 46,000 in 2011, more than 8,000 square feet larger than a decade earlier. In 2010, the average-sized supermarket carried more than 38,718 different items for sale.

In recent years, conventional supermarkets have begun to have competition from superstores, a supermarket with at least 30,000 square feet and 25,000 items. This type of store offers an expanded selection of nonfoods. In addition, online grocery shopping has also become a trend.

Ironically, there is also a trend toward smaller convenient stores catering to specialty markets. Many food retailers are building smaller stores that emphasize fresh and prepared meals. Other offerings for niche retail stores include organic, ethnic and gourmet foods.

Materials

- folding chair
- borrowed shopping cart
- groceries with prices marked
- market-sized shopping basket

Procedures

1. Read and discuss background and vocabulary.
 - Ask students where their families shop for groceries (supermarket, superstore, specialty markets, farmers markets, food cooperatives, etc.). Discuss the advantages and disadvantages of each.
 - Discuss other innovations to grocery shopping not mentioned in the background (e.g., self-checkout, shopping online).
2. Read with your students the story “Mr. Goldman’s Good Idea.” If possible, bring a folding chair into the classroom so students can visualize Sylvan Goldman’s idea.
 - Review story structure.
 - Hand out student worksheets for students to complete.
3. Invite a local grocer to your class to talk about the grocery business, or arrange a field trip to a grocery store.
 - Students will prepare questions ahead of time about the origins of the food, how much food comes from local farmers and food processors and whether the store is part of a chain or is independently-owned and buying through a cooperative.
 - After visiting the grocery store, students will mark on a map where the various foods come from and find the distance the food travels to Oklahoma. What bodies of water does the food travel across? What landforms does the food cross?
4. As a class, students will brainstorm to develop a list of inventions similar to the shopping cart.
 - Each student will choose one of the inventions to research.
 - Students will use online search engines or library references to find informa-

tion about the inventor of the selected invention

5. Students will develop their own inventions, based on common items like the folding chair.
 - Students will name their inventions and write paragraphs explaining why their inventions would be useful and why people would want to buy them.
6. If possible, borrow a shopping cart from a local grocery store and fill it with a variety of groceries. Make sure each item has a price marked on it.
 - Students will assume they each have \$10 to spend and follow USDA MyPlate guidelines to choose items from the cart that are nutritionally balanced.
7. Each student will plan a meal for his or her family.
 - Students will estimate the cost of the planned meals.
 - As a homework assignment, students will go to a grocery store to find the actual cost of the planned meal.
8. Bring a market-sized basket to class along with enough groceries (flour, canned goods, etc.) to fill it.
 - Students will take turns carrying the basket around to see how difficult it would have been to shop without shopping carts.
 - Provide scales so students can weigh the basket filled with groceries.
 - Students will weigh their backpacks filled with books to compare with the weight of the shopping basket.

Extra Reading

Baretta, Gene, *Now & Ben: The Modern Inventions of Ben Franklin*, Square Fish, 2008.

Hopkins, Lee Bennett, *Incredible Inventions*, Greenwillow, 2009.

Jango-Cohen, Judith, *The History of Food (Major Inventions Through History)*, 21st Century, 2005.

Minden, Cecilia, *Grocery Shopping by the Numbers*, Cherry Lake, 2007.

Reilly, Kathleen, and Samuel Carbaugh, *Food: 25 Amazing Projects: Investigate the History and Science of What We Eat (Build It Yourself Series)*, Nomad, 2010.

Vocabulary

bins—large containers used to store smaller items

general store—a store that carries a variety of goods

self-service grocery store—grocery stores, first opened in 1916, in which customers were required to walk through and gather their own prepackaged groceries instead of having a clerk measure them out

specialty store—a store that carries only certain goods.

For example, a butcher shop carries meats; an Asian food market carries foods used in Asia cuisine, and a health food store carries vitamins, herbs and foods not carried in most supermarkets.

supermarket—a large self-service food store, usually selling more than \$2 million worth of products a year from at least 20,000 square feet of floor area

superstore— a supermarket with at least 30,000 square feet and 25,000 items

Universal Product Codes (UPC)—a bar code that appears on products that can be scanned by a store clerk so the store's computer can select the appropriate price and description from its memory bank and print the information on the receipt

Mr. Goldman's Good Idea

Sylvan Goldman shook his head as he watched Mrs. Thompson struggle with a wicker basket bulging with groceries.

"Here, let me take care of those for you," he said, as he handed the woman another basket from a bin at the front of the store. "Thank you," Mrs. Thompson said, as she rubbed her sore arm and gratefully accepted the empty basket.

Mr. Goldman placed Mrs. Thompson's groceries on a counter already crowded with other customers' full baskets. He handed another empty basket to one of his employees and pointed in the direction of another customer whose basket was sagging under the weight of canned vegetables, a bottle of milk, bags of flour and cornmeal and fresh produce.

That evening, as he sat in his office paying bills, his eyes rested on two folding chairs sitting nearby. Suddenly he thought of a way to save his customers' sore arms.

"If I could raise the seat of that chair and place another seat underneath it, I could put a basket on each seat. Then I could add wheels to the legs so it would roll," he thought.

The next day, Mr. Goldman sent for Fred Young. Fred was a maintenance man and carpenter who worked for the chain of grocery stores Mr. Goldman owned in Oklahoma City. As Mr. Goldman explained his idea, Fred's eyes lit up. He picked up one of the folding chairs, threw it into the back of his truck, and headed to his workshop.

For several months, Fred and Mr. Goldman worked on the invention. Finally, on June 4, 1937, the first carts were ready for customers to use. Mr. Goldman had one of his employees stand at the door and offer carts to customers as they came in. To his disappointment, very few would even give the new carts a try. "Thank you, but I've had enough of pushing baby carriages," some of the women said. The men were insulted.

"You mean you don't think these arms are strong enough to carry a little basket," they said.

Mr. Goldman wouldn't give up. He knew if he could just get the customers to try the carts they would never struggle with baskets again. For each of his stores he hired a handful of men and women of all ages to push the baskets around the store and pretend they were shopping.

The plan worked. Soon all the customers in all of Mr. Goldman's stores were using the baskets—and buying more groceries.

Mr. Goldman's idea changed the way people shop forever. And it made him rich. Soon stores all over the world were providing shopping carts for their customers to use. Today there are 25 million shopping carts in the world. Next to the automobile, it is the most-used item on four wheels.



Name _____

Mr. Goldman's Good Idea

Read the story on the Reading Page to find answers to the questions below. Answer the questions in complete sentences.

1. What is the setting for this story? _____
2. In what city does this story take place? _____
3. Who is the main character? _____
4. What is the occupation of the main character? _____
5. What other character plays an important part in this story? _____
6. Why is this character important? _____

7. What is the central problem in the story? _____
8. How is it resolved? _____

9. What is the story's central purpose? _____

10. What is the author's point of view? _____

11. Mr. Goldman's invention has been called "the cart that changed the world." Discuss how grocery shopping would be different if there were no shopping carts. _____

Name _____

Mr. Goldman's Good Idea (answers)

Read the story on the Reading Page to find answers to the questions below. Answer the questions in complete sentences.

1. What is the setting for this story? The story is set in a grocery store.
2. In what city does this story take place? The story takes place in Oklahoma City, Oklahoma.
3. Who is the main character? The main character in this story is Sylvan Goldman.
4. What is the occupation of the main character? The main character is a grocer.
5. What other character plays an important part in this story? Fred Young is another important character in the story.
6. Why is this character important? Fred Young built Sylvan Goldman's first shopping cart.
7. What is the central problem in the story? Shoppers had to carry their groceries in baskets, and the baskets got too heavy.
8. How is it resolved? Sylvan Goldman invented a shopping cart so shoppers could wheel their baskets of groceries around instead of carrying them.
9. What is the story's central purpose? The central purpose of the story is to inform the reader about the invention of the shopping cart.
10. What is the author's point of view? The author thinks the shopping cart was an important invention.
11. Mr. Goldman's invention has been called "the cart that changed the world." Discuss how grocery shopping would be different if there were no shopping carts. Grocery stores would probably not be so large without the shopping cart because people would not want to carry heavy loads so far. There would probably not be so many items sold in large packages. People would have to buy smaller amounts of groceries and would have to go to the grocery store more often.

Oklahoma Ag in the Classroom is a program of the Oklahoma Cooperative Extension Service, the Oklahoma Department of Agriculture, Food and Forestry and the Oklahoma State Department of Education.