



"The Soda Bottle School" by Laura Kutner and Suzanne Slade

This book tells the story of how a town came together to address a pressing need to construct a new school building. Rather than spend money, they developed a plan to reuse and recycle, making the project more affordable. This exercise will provide the opportunity to:

1. Weigh options when evaluating a want or need;
2. Define the terms of opportunity cost and benefit; and
3. Practice evaluating the cost and benefits of decisions.

Time Limit: 40 minutes



Supplies Needed:

- *The Soda Bottle School* by Laura Kutner and Suzanne Slade
- Crayons or colored pencils
- Worksheet copies for all students

Think Creatively When You Save

(1) (5 minutes) Have you ever seen something that you really want or feel like you need? *Ask students for examples of an item or object that they've asked for as a gift.* Have you ever saved money to buy something you really like? *Take brief responses.* What if you don't have the money to purchase what you need? *Take brief responses.* Some people can't or haven't been able to save up enough money to reach a spending goal. But that doesn't necessarily mean they can't find other ways to save and reach success.

(2) (10 minutes) Today I'm going to read you a story about a teacher who taught classes at a school in Guatemala. Some of the students struggled to learn because their school lacked the space and walls to separate classrooms. I want you to think about how the teacher and her students used their creativity and developed a plan to reach their goal of building a new room for their class. *Read the story.*

(4) Go to page 7. It's sometimes helpful to think about spending decisions by breaking them into two categories: Wants and needs. Wants and needs are very different. A "want" is something someone enjoys and would like, but could live without. On the other hand, a "need" is something that you need to survive or a necessity to accomplish a goal. Do you think Seño Laura and her students "wanted" or "needed" the classroom improvements?

Answer: They needed the classroom for students to learn.

(5) Go to page 9. Building a school classroom could cost hundreds of thousands of dollars. That's a lot of money! Seño Laura knew that it would be hard to come up with the money to build the school. That's where her creativity came in.

(6) Go to page 15. Since the school didn't have enough money to finish a school classroom, the students and residents worked together. What did they collect to build the school?



Answer: Empty bottles and trash.

(7) Go to page 16. Seño Laura figured out that the empty bottles and trash could be combined to replace the cost of buying traditional building supplies. What is a “cost?”

Answer: A cost is what we must give up to get something.

The cost that you pay is usually for a benefit. A “benefit” is something that is advantageous or good. What was the benefit of building the school out of recycled materials?

Answer: They were able to build the school without the expense of building materials.

(8) Go to page 27 of the book. The model of building a school out of bottles has been used in many other communities where they lack funds to use conventional building materials. For these communities, the opportunity cost of applying their time and energy is a more beneficial decision. “Opportunity cost” is a benefit, profit, or value of something that must be given up to acquire or achieve something else.

(8) (5 minutes) Pass out copies of the *What's a Bottle Worth to You? Worksheet*. We don't usually think of empty bottles and trash as being valuable, but in some states, including Vermont, bottles can be redeemed for a 5¢ per bottle deposit. **Have students work on the worksheet together.**

5) (5 minutes) Review the worksheet answers. As you can see, the value of bottles is a relatively small amount of money compared to building a school, which could cost hundreds of thousands, if not millions, of dollars. Do you think Seño Laura's creative idea was the best investment that the town could have made to address its school need?

For Younger Students browse the photos on www.hugitforward.org before distributing the *What Would You Build Drawing Worksheet*. Discuss the creativity it takes to build a structure from bottles. Once complete, have students draw out their ideal soda bottle school.

For Older Students have them work on the *How Big of an Opportunity? Worksheet*. If the students need a challenge, direct them to the final bonus question, which will ask them to quantify how many bottle schools Vermont's annual recycled bottles could support (assuming it takes 6,000 bottles to build a school). The answer is a whopping 40,324 schools! This question requires some extensive long division, so you may opt to do so on the white board so everyone can participate.