Community Engagement Project Based on the Creamery

by B300 and B312

Creamery

$$Pricing$$

Mathematical Goals of the Lesson

Our goal for our class is to extend their knowledge of addition by having them add more than two numbers, and being able to apply mathematics to real life situations. Most students will be using the method of repeated addition to solve the problem, others (who may be above level) may realize that multiplication can be another method to solve this problem, and/or other students may draw pictures to represent the number of scoops to solve the problem.

Tasks

BEFORE	DURING	AFTER
Mrs. Scott, Ms. Agnant, and Ms. Kapes go to the creamery. Each teacher gets four scoops of ice cream. How many scoops did they have in all?	Your soccer team that has 11 players goes to the creamery after winning the final game. Each player gets 3 scoops of ice cream. Some of the flavors they get are chocolate, cotton candy, and cookies n cream. How many scoops of ice cream did the team get in all?	If each scoop cost 50 cents, how much did all the scoops altogether?

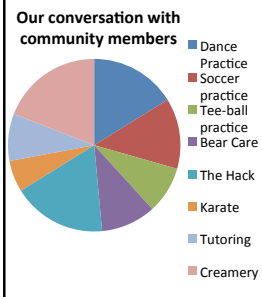
Questions

- What do our children like to do after school?
- Where do our children go with their families?
- Where is a place most or all of our children visit/spend their time?
- What extra curricular activities do our students take part in?

Why we chose to investigate

We chose to ask the previous questions because from our observations in class, and our interviews with our case study students, we found out that extra curricular activities are a large part in our student's lives. We were curious to see what the children did after school because it didn't seem like there were many facilities in the surrounding area. We observed that the school was a mostly upper middle class area and there was a lot of parent involvement , so we wanted to see how the kids interacted with their families after school.

Our findings



For this data we went out into the community to talk with community members and find out what they and their children did for extra curricular activities. The following are the activities that were mentioned to us.

Continued…

Most Popular Flavors

- Cotton Candy
- Cookies 'n' Cream
- Chocolate

Interview Questions

We asked the people who worked at the creamery some questions on what type of customers came to the creamery, what were the favorite ice cream types, etc. We wanted to learn as much as we could so that we could make a problem that related more to the students.

Who normally comes to the creamery? *Families with young children, teenagers on dates, teams and clubs (soccer, ballet etc)*

When are you open? *They are open all year long.*

When are you busiest? *Spring and summer*

What else do you offer? *During Spring and summer we have birthday parties, parents bring in food and kids do arts and crafts, get to see the cows, make their own ice cream Sunday.*

Data we used for our extension problem!

- We saw that ice cream was 51 cents an ounce, since our children are familiar with using quarters, and counting money we decided to use pricing in our extension problem. We only focused on the ounce price, since we didn't want to confuse them with all the other options.

A review of the community reflection

- **When conducting the community visits and conducting the interviews, we found out that the Woodside Creamery was the most popular place in terms of where our students go after school either with a group (like with sport teams) and/or with their families after school or on the weekends. Nevertheless, we decided that the creamery would be the best location to use because it is very close to the school (approximately one mile), it was one of the most popular sites children went to (from learning in the interviews), and we felt that most (if not all of the children) could relate to this problem. Also, we chose this setting because we felt it was flexible to substitute, just in case if a child never to the actually creamery, we could still engage them in the fact they have seen, eaten, and/or know about ice cream.**
- **We used soccer teams in our task because many children are involved in this extra curricular sport, and when they finish with their games, they always go to the creamery as a team to celebrate (even if they lose).**
- **We incorporated the three most popular flavors which were cookies 'n' cream, chocolate, and cotton candy into our task, and we did find this out by interviewing one of the employee's.**
- **For our price extension, we had the children find out how much it would cost in all if scoop cost 50 cents. Now the original price at the creamery was 51 cents per ounce, but since we had first graders, we altered the extension to still have them extend in their thinking, but also meet first grade standards of mathematics.**

What our Students Learned

About 18 out of 22 of our students developed systematic ways to explore problems. We know this because of what our students wrote on their papers, and from what we observed walking around the classroom. About 7 of the students used blocks to figure out the problem. They used one color block to represent the ice cream cones of the 11 different players. Then they added a red block to every cone to the represent the first scoop, then another color block for the second scoop, then another block for the third scoop. These students then counted all the blocks that represented the scoops to get 33 scoops in all. 3 of the students were familiar with multiplication and wrote 11X3 on their papers. When we asked them what their numbers represented they were able to say the 11 players had three scoops so you multiple so get all the scoops. Another 5 of the students drew pictures on their paper to show how they got the answers. They drew some version of 11 stick figures, dashes, X's to represent the players and then drew three circles next to each player. They then counted all the circles to get the total number of scoops. The last three of our students used repeated addition. They added 3+3+3+3+3+3+3+3+3+3+3=11. I saw one of these students using her fingers to count. The others I did not see if they were able to group, but this was what they had written on their paper.