

Cafeteria Consumption and Costs

A Develop Understanding Task

Sometimes Elvira hosts after school events in the cafeteria as clubs and teams celebrate their accomplishments. Frequently she orders too much food for such events—and occasionally not enough. For example, she has noticed that the chess club eats less than the football team, but more than the cheerleaders.



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Elvira has asked you to help her sort through her records for the past few years, hoping she can better plan on how much food to order for the upcoming soccer team and drama club events. Unfortunately, Elvira kept most of her records on Post-It Notes, and now everything is out of order. Fortunately, she used a different color of Post-It Notes each year, so you at least have a place to start.

- Here is the information you have identified from the past three years for the soccer team and drama club events. The blue Post-It Notes are from three years ago, the yellow from two years ago, and the pink from last year's events. Organize the data for each year in such a way that it can be combined with similar data from other years.

Blue Post-It Note Ordered 10 packages of chips for the soccer team— Way too much!	Yellow Post-It Note Ordered 6 packages of chips for the soccer team— Definitely not enough!	Blue Post-It Note Ordered 3 dozen cookies for the drama club— Should have ordered more
Blue Post-It Note Ordered 4 gallons of drinks for the soccer team. They poured some on their coach! (big mess)	Pink Post-It Note Ordered 8 packages of chips for the soccer team—My neighbor is on the team!	Yellow Post-It Note Ordered 5 dozen cookies for the drama club— I really like those kids!
Pink Post-It Note Ordered 10 packages of chips for the drama club—They talked a lot with fake accents	Blue Post-It Note Ordered 5 gallons of drinks for the drama club (they talk a lot and seem to get thirsty!)	Pink Post-It Note Ordered 4 dozen cookies for the drama club—Too much drama, too little character!
Blue Post-It Note Ordered 8 packages of chips for the drama club— Needed more!	Pink Post-It Note Ordered 8 dozen cookies for the soccer team—slipped a few extra to my neighbor.	Pink Post-It Note Ordered 4 gallons of drinks for the soccer team—Watched the players like a hawk!
Pink Post-It Note Ordered 4 gallons of drinks for the drama club— Seemed about right	Yellow Post-It Note Ordered 4 gallons of drinks for the soccer team—Warned them not to repeat last year's prank!	Yellow Post-It Note Ordered 3 gallons of drinks for the drama club—drinks were gone long before the chips



Yellow Post-It Note Ordered 7 dozen cookies for the soccer team— Should I have ordered more?	Yellow Post-It Note Ordered 12 packages of chips for the drama club— Sent extra home with kids	Blue Post-It Note Ordered 6 dozen cookies for the soccer team— Could have ordered more
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2. You suggest to Elvira that for each event she should order the average amount of each item based on what she has ordered over the past three years. How might you represent this year's order in a concise, organized way? Describe in detail how you calculated the amount of each item to be ordered for each event so Elvira can follow your description when planning for future events.
3. Elvira just informed you that the soccer team won the state championship and the drama club took major awards at the Shakespearean Festival competition. Consequently, both groups have decided to allow each member of the team or club to invite two guests to accompany them to their celebration events. Elvira assumes that each of the guests will consume about the same amount of food as the team or club members they accompany. Explain to Elvira how to use your representation of the original amount of food to order to determine the new amount of food to order.
4. Elvira can order food from either *Mainstreet Market* or *Grandpa's Grocery*, and she has given you a list of the prices at each store for each item to be purchased. She would like you to create a representation of the total cost of purchasing the recommended amount of food for each event from each store. Elvira knows that for some events it might be best to purchase the food from *Mainstreet Market* and for other events it may be better to purchase the food from *Grandpa's Grocery*. She also realizes that it is too time consuming to purchase some items from one store and some from another. Since you will eventually want to determine a procedure Elvira can use when calculating the cost of future events, you will need to keep track of the details of your computations for the total cost of purchasing food for the soccer team from either store, and for purchasing food for the drama club from either store.

	<i>Mainstreet Market</i>	<i>Grandpa's Grocery</i>
Cost per package of chips	\$2.50	\$2.00
Cost per dozen cookies	\$3.00	\$4.00
Cost per gallon of drink	\$2.00	\$1.50

