

WHERE DOES THE MONEY GO? A CHILDREN'S SURVEY

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The project of keeping track of money spent in the month of December was first tried about four years ago. At that time it won a blue ribbon at the Research and Development forum for the Shawnee Mission School. I had forgotten about it until this year when a parent whose child I had taught previously asked that I repeat the project. This year the project won the Best of Show for Math Department at the Research and Development Forum, public showcase for the best projects produced by the students of the Shawnee Mission School District. Over 5,000 entries are displayed for judging each year.

Four years ago I chose the categories and did the preparation. This year I felt students would feel more ownership and show more interest if they did this preparation. I surveyed the students to determine on which items most of their money was spent. The students decided on the following categories: food, snacks, entertainment, clothes, savings, and miscellaneous. Students started keeping track on December first and continued until December nineteenth. Budget entries were checked each Monday to determine the total amount of money spent each week. After the first week, a subtotal was kept until the end of the project.

During the time of recording data the students studied how to find percentages and graph information. They also studied ratio so they could compare data.

At the end of the collection period the teacher also rechecked all data, and the students started to compute the percentages for each area. They had to make a line,

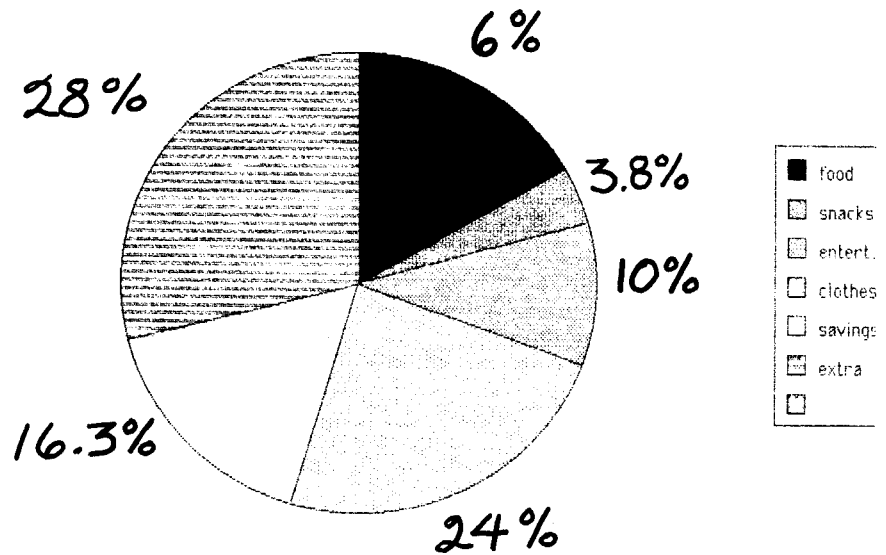
bar, and circle graph of their data. Graph paper and calculators were used to more closely simulate a real-life situation. The grading was done on neatness and the accuracy of percentage computation on the graphs. The data for each class were totaled, and compiled information was graphed so a comparison could be made among classes. Finally, all the information was combined so students could see the class as a whole, and see how they, individually, compared with their classmates, and other classes.

The final step was answering questions about their survey. These questions were written by students for students. A committee of four students (one from each hour) met and studied the information and wrote the questions they felt were relevant to the student. A set of questions for parents to answer about the spending pattern of their child was also completed by the committee. The results of the survey given were surprising to many of the students who weren't aware of the amount they spent. Parents were surprised by the money their child was spending but were pleased with the type of questions asked of them. It has already been recommended we do this study over two different months so comparison of holiday spending and regular spending can be made.

On the whole the students really enjoyed this project. They were proud of what they had done and learned. I invited parents to speak to various classes about how they use math in their work. Many of the parents commented that this project is closely related to what they do each day not only in work but in personal record keeping. So it has doubly reinforced that records must be kept and used.

TOTAL FOR ALL CLASSES	CLASS	FOOD	SNACK	ENTER.	CLOTHES	SAVINGS	EXTRA	TOTAL
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	3rd	204.52	72.36	93.50	563.09	390.75	587.62	1,911.84
	4th	666.77	94.73	251.33	696.51	540.88	1,008.73	3,258.95
	5TH	354.03	103.58	464.52	436.63	309.00	680.00	2,347.76
	6TH	324.24	80.17	118.52	520.90	264.36	394.90	1,703.09
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	ALL CLASSES	1,549.56	350.84	927.87	2,217.13	1,504.99	2,671.25	9,221.64
	PERCENT	16.8	3.8	10.0	24.0	16.3	28.9	99.9

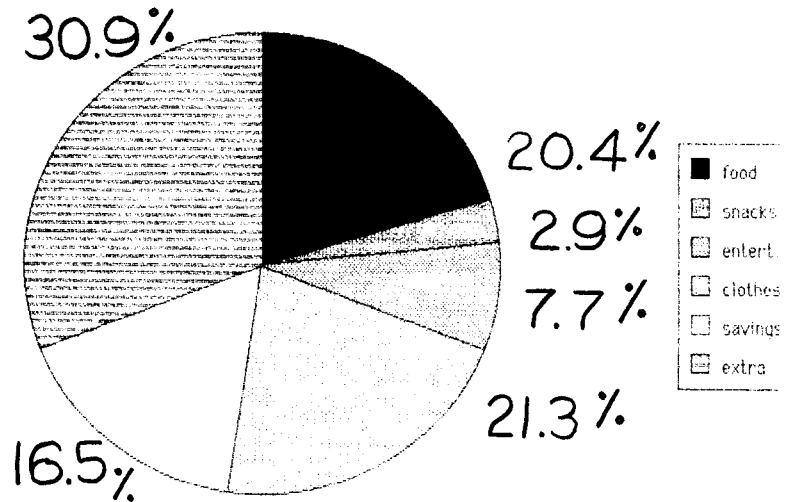
PERCENT TOTAL FOR ALL CLASSES



4th HOUR

STUDENT	FOOD	SNACK	ENTER.	CLOTHES	SAVINGS	EXTRA	TOTAL
1	47.94	6.90	24.50	33.00	1.50	22.14	135.98
2	39.16	2.90	10.20	0.00	0.00	33.00	85.26
3	20.05	2.20	19.50	0.00	0.00	0.00	41.75
4	21.00	19.15	10.00	45.00	0.00	22.66	117.81
5	27.17	6.12	0.00	54.61	7.00	77.08	171.98
6	33.97	5.41	6.25	44.19	21.19	0.00	111.01
7	30.08	6.06	19.07	40.00	0.00	88.38	183.59
8	89.14	9.25	11.75	177.38	0.00	71.50	359.02
9	11.55	5.63	0.00	0.00	0.00	12.19	29.37
10	34.02	0.80	37.00	59.00	98.00	40.18	269.00
11	28.10	3.45	2.00	0.00	6.19	46.31	86.05
12	45.15	7.90	3.00	35.87	0.00	0.00	91.92
13	164.52	3.60	58.06	36.00	253.00	534.57	1,049.75
14	57.53	9.97	38.00	161.46	154.00	42.72	463.68
15	17.39	5.39	12.00	10.00	0.00	18.00	62.78
TOTAL BY STUDENT	666.77	94.73	251.33	696.51	540.88	1,008.73	3,258.95
PERCENT OF CLASS	20.4	2.9	7.7	21.3	16.5	30.9	99.9

PERCENT TOTAL FOR 4th HOUR



STUDENTS' QUESTIONS

Dear Parents,

During December, seventh-grade math students charted the money they spent. Then they made graphs depicting their spending. In conjunction with this project, they have made a list of questions they would like you to answer and return. Thank you for your cooperation.

Sincerely,
Heather Morrow

1. Do you think your child spent his/her money wisely? Explain.
2. Did you realize how much money your child spent in the month of December? Explain.
3. Do you approve of how much money your child has spent? Explain.
4. Do you realize that you gave your child over $\frac{1}{2}$ the money he/she spent? Explain.
5. If your child spent this much money in one month, how much would he/she spend in one year?
6. Do you think this project has let you know anything about how your child spends money, both his/her own and yours? Explain.

Student Questions

1. Are you aware of how much money you spend in one month? If so, would you ever spend it on the same things again? Explain.
2. How do you think your parents would feel about this? Explain.
3. What was the most money spent on in 3rd, 4th, 5th, and 6th hours? How does your budget compare with those hours?
4. What was the least money spent on in 3rd, 4th, 5th, and 6th hours? How does your budget compare with those hours?
5. Which hour spent the most money on food, snacks, entertainment, clothes, savings, and extra? How does this compare with your budget?
6. Which hour spent the least money on food, snacks, entertainment, clothes, savings, and extra? How does this compare with your budget?
7. Who spent the most money in 3rd, 4th, 5th, and 6th hours?
8. Who spent the least money in 3rd, 4th, 5th, and 6th hours?
9. Compare who spent the most money in each class to who spent the least money in each class.