

3rd Grade

Comparing the Water Efficiency of Snow Creek to Catawba Elementary School

Third Grade students will use multiplication, division, subtraction and division to analyze several months of collected data regarding the water usage at Snow Creek Elementary School.

Students will discuss with their teachers that Catawba Elementary School and Snow Creek have the same square footage and the roughly the same number of students.

*Our water saving devices including water fountains which shut off at night, tank less hot water heaters, no irrigation systems, waterless urinals, two way toilet flushes and energy star dish washers in the kitchens contribute to water savings at Snow Creek. *

Students will be presented with the data.

Water Consumption Comparison					
Snow Creek Elementary					
Month	Year	GAL	Cost	Use/Day	Cost/Day
Mar	2010	39,943.00	\$442.48	1,479.37	\$16.39
Feb	2010	31,828.00	\$420.78	1,136.71	\$15.03
Jan	2010	31,828.00	\$420.78	1,060.93	\$14.03
Dec	2009	31,827.00	\$420.78	1,060.90	\$14.03
Nov	2009	26,820.00	\$432.38	924.83	\$14.91
Oct	2009	39,532.00	\$441.38	1,363.17	\$15.22
Catawba Elementary					
Month	Year	GAL	Cost	Use/Day	Cost/Day
Mar	2010	71,696.00	\$560.74	2,240.50	\$17.52
Feb	2010	42,075.00	\$443.52	1,357.26	\$14.31
Jan	2010	35,306.00	\$416.73	1,138.90	\$13.44
Dec	2009	45,030.00	\$455.21	1,552.76	\$15.70
Nov	2009	50,939.00	\$478.60	1,886.63	\$17.73
Oct	2009	67,058.00	\$542.38	1,972.29	\$15.95

Questions for student analysis:

1. In which month did Snow Creek use the most water?

2. Which month did Catawba use the most water?
3. What is the total cost for water in the 6 months for Snow Creek?
4. What is total cost for water in the 6 months for Catawba?
5. Which month did Snow Creek use almost as much water as Catawba?
6. What do you think are the contributing factors to saving water at Snow Creek?
7. Why do you think Snow Creek used so little water in November?
8. What could have happened in March that caused Catawba to use so much water?
9. What is the average cost of water per day for the 6 months for Catawba?
10. What is the average cost of water per day for the 6 months for Snow Creek?
11. Do you think it is possible for Snow Creek to use the exact same amount of water for January and February? What happened here?
12. Is there a pattern that you notice between the two schools and the amount of water that they are using?