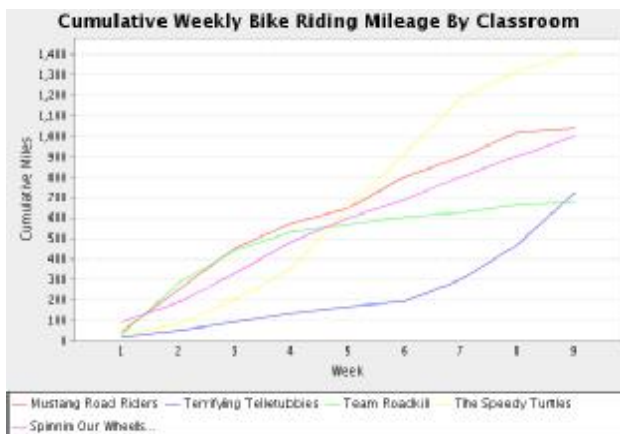


Sixth Grade Bike Riding Contest
Won by “The Speedy Turtles”
Final Report
(August 27, 2006 to October 31, 2006)

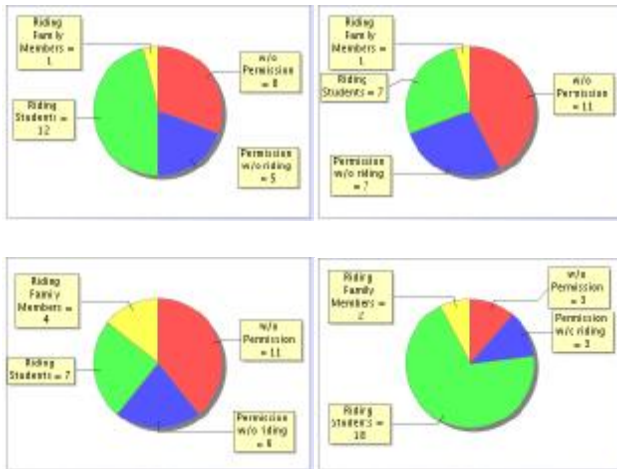
Four sixth-grade reading classes in Slinger, Wisconsin competed in a nine-week bike riding contest. Their teacher was Ms. Kelyn Meyer who instructed and inspired her students to ride. The four classes (and a small fifth group of only teachers) competed to see which could ride the most miles over the nine weeks, which started at the beginning of the school year and ended at the end of October. The purpose of the contest was to discover if the children would be motivated to ride their bikes and enjoy the contest. The children logged their riding mileage into the BikeWithMe web site, which used the data to create various graphs to be used for teaching math concepts to the students. Family members of the children were also invited to ride and post miles to be counted for their child’s classroom totals.

All four classes named their team. The winning team was The Speedy Turtles (who had even purchased a mascot) with 1,485 miles. The total mileage ridden for all the classes together over the nine-week period was 5,158 miles ridden in 624 rides! Congratulations to everyone who participated for a job well done.

Below are eight graphs of the actual mileage ridden in the contest. As the contest progressed, students quickly realized that their behavior would form the shape of these graphs. The data became *alive* for them when they anticipated how the graphs would look given the miles they would ride and post.

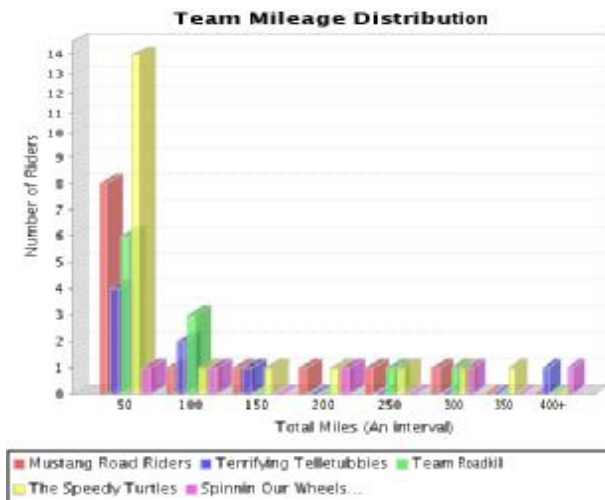


This line graph shows the contest progress and results of the five teams. Four of the five teams were very close at the five-week point. In October, the Speedy Turtles, being the most organized and having the most riders, pulled away from the rest. The Telletubbies, although behind for the entire contest, surged in the last three weeks to overtake Roadkill at the line.

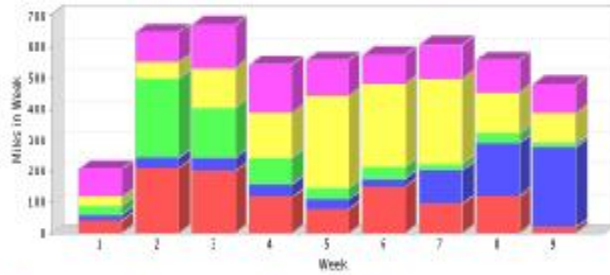


Pie charts show the levels of participation by class. Here, the Speedy Turtles dominated the contest by having the greatest level of riding participation. 75% of the class posted miles. Overall, 46% of the students participated.

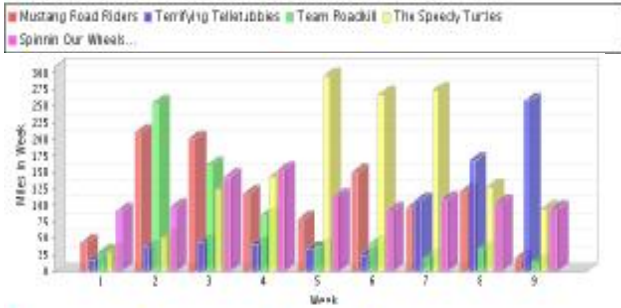
Individual counts for this competition				
Team	Number of Students	Students with Permission Slips (note 1)	Riding Students (have posted miles)	Riding Family Members (nonStudents who have posted miles)
Mustang Road Riders	25	17	12 (48.0%)	1
Terrifying Telletubbies	25	14	7 (28.0%)	1
Team Roadkill	24	13	7 (29.2%)	4
The Speedy Turtles	24	21	18 (75.0%)	2
4Spinnin Our Wheels...	4	4	3 (75.0%)	2
Totals	102	69	47 (46.1%)	10



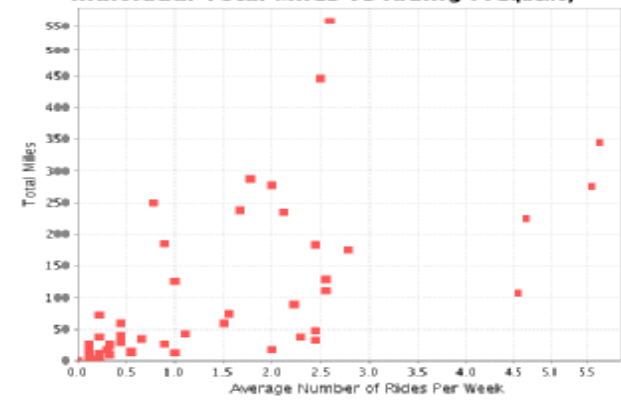
This histogram depicts the riding distribution color-coded by class. It shows how many riders for each class posted a mileage total falling within an interval. The power of the Speedy Turtles greater participation is quite evident, as they had 14 riders riding up to 50 miles. The math concept taught is frequency counting within an interval.



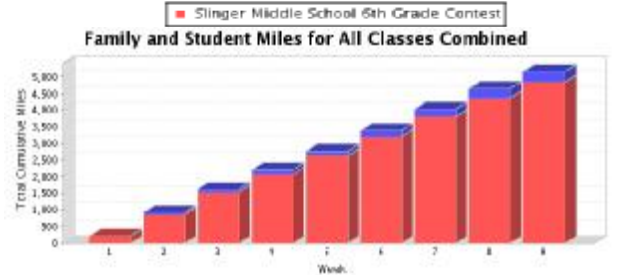
These two graphs show weekly mileage by class. The first is a vertical stacked bar graph; the second a vertical bar graph grouped by class. The graphs clearly show how different classes became most active during different periods of the contest. The surge by the Telletubbies at the end is clear. Students learn how these graphs work by drawing relationships between them.



Individual Total Miles vs Riding Frequency



This scatter point graph shows each riding student their personal point according to total miles ridden (y-axis) versus the average number of rides per week (x-axis). Students were encouraged to ride at least three times per week, the region for living a healthy cycling lifestyle. Since the students could locate their own point, this graph became the topic of much conversation (and motivation)!



This stacked bar graph shows the mileage contribution from family members. The math concept taught is the accumulation of separate but naturally grouped categories.



This graph shows an individual's riding mileage (vertical bar) and 7 day average mileage (line) by date. The moving average line gives a single measure for both the distance ridden and how often one rides. Students are encouraged to keep the moving average line flat for a healthy lifestyle.