Real-World Problems Grade 4

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**Our Life by the Numbers**

**Math/SS**

Goal: Students will research and compare the relationship between their personal life and numbers to create a class/school poster. Students will analyze the impact of these numbers on their life/future.

Concept: Comparative Research Using Numbers

Materials needed: Presidents by the Numbers poster (attached)

Student-created questionnaire

Activity: Distribute Presidents by the Numbers poster. Analyze the data presented. Discuss the relationship between the Presidents and numbers. Brainstorm ways to transfer this concept to students own life. Talk about the types of data to be collected and documented, questions to pose. Be sure to encourage the collection of both positive and negative data in order to provoke later discussion of impact on their families living in Bellmore.

1. Divide children into groups of 3. Have them create topics, for data collection, that would be of high interest to their peers. Try to use a variety of numbers that include height, money, years, hours etc…

This data will be averaged and reported in a poster format.

Examples:

* Monthly dollar amount spent by Winthrop families to purchase school lunch for students
* Number of students born during a specific month/season
* Number of students report cheating on a test
* Number of children who are left-handed
* Number of days Bellmore experienced 90° temperatures during the year grandparents were born compared to year student was born
* Amount raised by PTA parents over their academic lifetime
* Number of days spent on taking school assessments
* Number of hours spent in front of a screen (computer TV etc)
* Number of children who actually read each night
* Number of families who recycle
* Number of students who have a cell phone

1. Have students formulate questions from topics chosen. Allow students time to collect data from student body.
2. Reconvene to pool and compute averages. Discuss results with students. Was there any data that surprised or shocked you? Did students feel that peers responded in an honest manner? Talk about the validity of the data. Explore the impact, both positive and negative, of the results (see examples).

Examples:

* If the results show that most families do not recycle, how will that affect the future of our planet?
* If the results show that most children actually do read every night, how will that impact them on college entrance exams, in general conversation with employers?

1. Have students design and create a postertitled **Our Life by the Numbers** for hallway display. Be sure to include thought-provoking facts along with numbers that will cause viewers to stop and think about the results as it also relates to their personal life.

